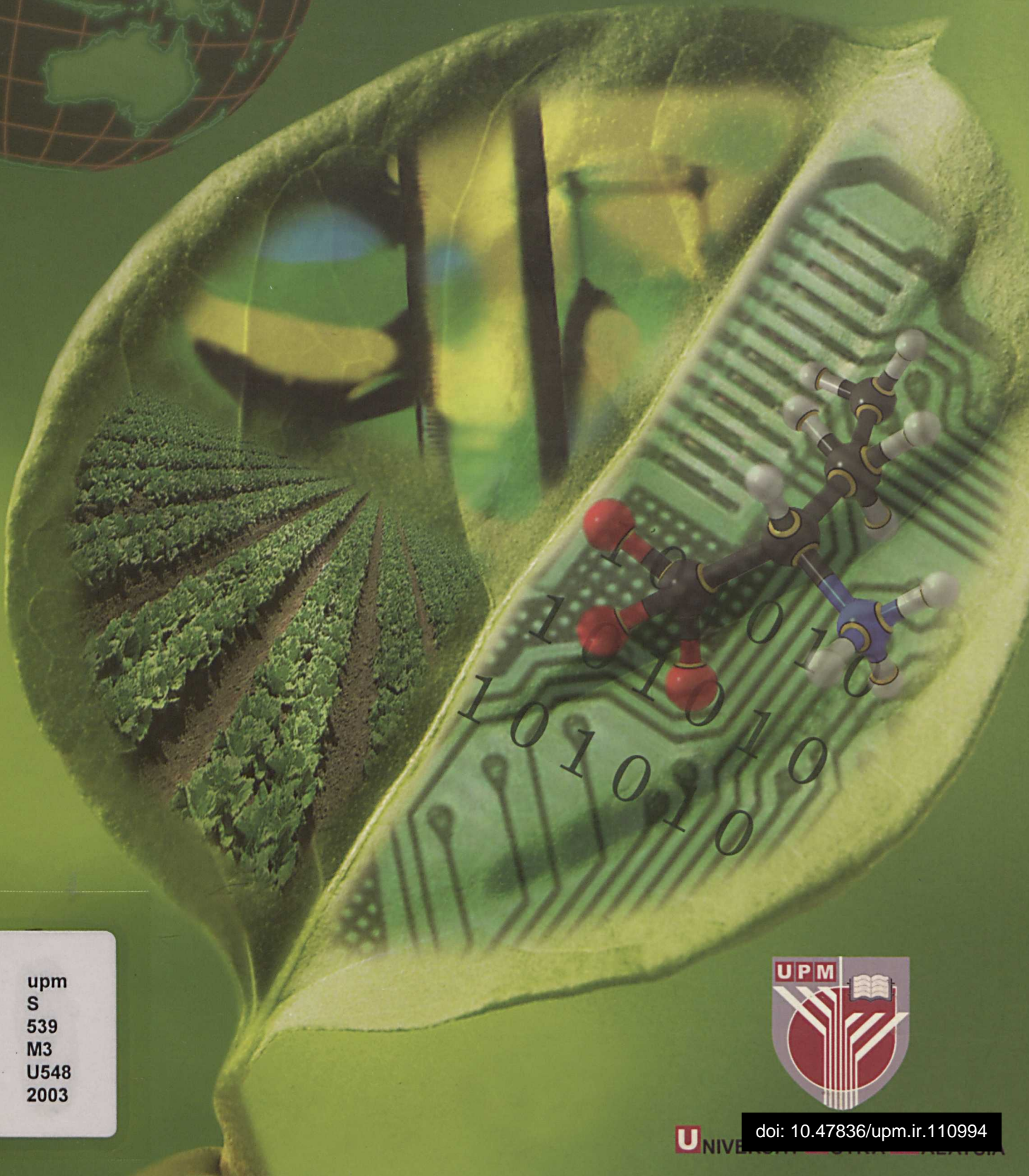


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Towards a World Class University



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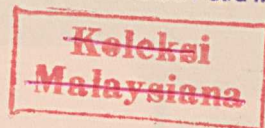
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mission

mission

mission

Wawasan Universiti ialah untuk menjadi Universiti Bertaraf Dunia

Misi Universiti adalah menjadi Pusat Pembelajaran dan Penyelidikan yang unggul yang memberikan sumbangan bukan sahaja kepada kemajuan manusia dan penerokaan ilmu tetapi juga kepada pembentukan kekayaan dan pembangunan negara.

mission

The University's vision is to be a world class University

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The University's mission is to be a leading Centre of Learning and Research, contributing not only towards human advancement and discovery of knowledge but also to the creation of wealth and nation building.

matlamat

UPM telah menetapkan lapan matlamat untuk merealisasikan wawasannya. Setiap matlamat berikut mempunyai objektif khusus, iaitu dalam bentuk yang boleh diukur pencapaiannya. Pencapaian setiap objektif bergantung kepada pelaksanaan strategi dan pelan tindakan masing-masing. Kelapan-lapan matlamat tersebut adalah seperti berikut :

- Melahirkan graduan yang berkualiti, berdaya saing dan berupaya untuk terus maju melalui pembelajaran yang berterusan;
- Menjadikan UPM, Universiti yang terkemuka dalam bidang penyelidikan;
- Meningkatkan keupayaan UPM sebagai pusat pengajian dan perkhidmatan

pertanian dan biosumber terkemuka di peringkat antarabangsa;

- Memantapkan sistem pengurusan berkualiti yang cekap dan berkesan, telus dan mesra pelanggan;
- Membangunkan sumber manusia serta persekitaran profesional yang cemerlang;
- Membudayakan teknologi maklumat dan komunikasi (ICT) melalui e-Universiti;
- Menjana dan mengurus sumber kewangan Universiti secara cekap dan berkesan; dan
- Meningkatkan kedudukan UPM sebagai Pusat Perkhidmatan Pembangunan Profesional dan Pendidikan Lanjutan

goals

UPM has established eight (8) goals to realize its vision. Each goal has its own specific objectives. The achievement of each objective depends on the execution of respective action plan. The eight goals are as follows:

- To produce quality graduates who are competitive and resilient through lifelong learning;
- To transform UPM into a renowned research university;
- To upgrade UPM as a renowned centre of learning, agricultural and bio-resources services internationally;
- To enhance a quality management

system that is effective, efficient, transparent and client-friendly;

- To develop and create excellent human resources and professional environment;
- To promote an Information and Communication Technology (ICT) culture through e-University;
- To effectively generate and manage Financial Resources; and
- To establish UPM as a Centre of Professional Development Services and Continuing Education.

matlamat goals

DASAR KUALITI

Kami, staf Universiti Putra Malaysia beriltizam ke arah kecemerlangan melalui penerapan budaya kualiti dalam pengajaran, penyelidikan dan perkhidmatan profesional untuk memenuhi ekspektasi pelanggan.

ETIKA KERJA

Takrif

Etika kerja merupakan prinsip dan panduan tingkah laku yang menjadi pegangan oleh setiap staf Universiti Putra Malaysia yang berlandaskan nilai murni sejagat.

Objektif

- Menanamkan sifat positif dalam melaksanakan tugas yang diberi serta dapat meningkatkan kualiti perkhidmatan
- Meningkatkan disiplin diri bagi menghasilkan perkhidmatan cemerlang dengan memenuhi kehendak pelanggan dan organisasi
- Memberikan sumbangan positif yang berterusan kepada negara

Prinsip

Etika Kerja Universiti Putra Malaysia perlu dilaksanakan dan dihayati berdasarkan prinsip yang berikut:

- Niat yang betul
- Perlakuan yang baik
- Penggerak ke arah kebaikan
- Memperkotakan apa yang dikatakan
- Beradab
- Kekitaan, kesetiaan, syura dan muafakat

Nilai Murni

Terdapat dua belas nilai murni yang menyokong Etika Kerja Universiti Putra Malaysia, iaitu:

- Amanah
- Adil
- Benar dan Telus
- Bijaksana
- Bersyukur dan Sabar
- Cekap, Cepat dan Tepat
- Ikhlas
- Penyayang
- Berdisiplin
- Jujur
- Bertanggungjawab
- Berdedikasi

QUALITY POLICY

We, the staff of Universiti Putra Malaysia are committed towards excellence through the inculcation of quality culture in teaching, research and professional service, to fulfil the expectations of our clients.

WORK ETHICS

Definition

Work ethics is the behavioural and conduct principles and guidance that are based on good universal values adhered by every staff of Universiti Putra Malaysia.

Objectives

- To instil positive attitude in discharging given tasks/duties that will improve the quality of service
- To improve self-discipline towards producing excellent services that meet the needs of the clients as well as the organisation
- To provide continuous positive contributions to the nation

Principles

Universiti Putra Malaysia Work Ethics should be implemented and practised based on the following principles:

- Having the right intention
- Showing good conduct
- Promoting goodness in society
- Executing work as promised
- Exhibiting good manners
- Upholding the spirit of loyalty, togetherness, consensus and unity

Value

The Universiti Putra Malaysia Work Ethics is based on 12 good values:

- Trustworthy
- Just
- Truthful and Transparent
- Wise
- Grateful and Patient
- Efficient, Prompt and Accurate
- Sincere
- Compassionate
- Disciplined
- Honest
- Responsible
- Dedicated



CANSELOR / CHANCELLOR

DYMM Sultan Sharafuddin Idris Shah Ibni Almarhum
Sultan Salahuddin Abdul Aziz Shah Alhaj



PRO-CANSELOR / PRO-CHANCELLOR
Y. Bhg. Tan Sri Dato' Thong Yaw Hong



PRO-CANSELOR / PRO-CHANCELLOR
Y. Bhg. Tan Sri Dato' Dr. Nayan Arifin
(mulai 1 Oktober 2003/
from 1 October 2003)



PRO-CANSELOR / PRO-CHANCELLOR
Y. Bhg. Tan Sri Dato' Haji Hashim Aman
(hingga /until 30 September 2003)

Lembaga Pengarah Board of Directors



PENGERUS / CHAIRMAN

1. Y.Bhg. Datuk Ramly Ahmad

NAIB CANSOLOR / VICE CHANCELLOR

2. Y. Bhg. Profesor Dato' Dr. Ir. Mohd Zohadie Bardaie

AHLI / MEMBERS

3. Y. Bhg. Dato' Ambrin Buang
4. Dr. Wan Abdul Aziz Wan Abdullah
5. Y. Bhg. Datuk Dr. Abdul Aziz Sheikh Abdul Kadir
6. Y. Bhg. Datuk Haji Isahak Mohd. Yusuf
7. Y. Bhg. Tan Sri Dato' Lee Shen Cheng
8. Y. Bhg. Datuk Patrick Lim Soo Kit

SETIAUSAHA / SECRETARY

9. Encik Kamalul Aripin Musa (**Pendaftar / Registrar**)

PENGERUSI / CHAIRMAN

Y.Bhg. Prof. Dato' Dr. Ir. Mohd Zohadie Bardaie
Naib Canselor
Vice Chancellor

AHLI / MEMBERS

Prof. Dr. Hj. Muhamad Awang
Timbalan Naib Canselor (Akademik)
Deputy Vice-Chancellor (Academic)

Prof. Madya Dr. Hj. Makhdzir Mardan
Timbalan Naib Canselor (Pembangunan)
Deputy Vice-Chancellor (Development)

Prof. Dr. Abdullah Al-Hadi Hj. Mohamed
Timbalan Naib Canselor (Hal Ehwal Pelajar)
Deputy Vice-Chancellor (Student Affairs)

Prof. Dr. Mohd Yusof Husin
Provos, UPM Kampus Bintulu (mulai Mei)
Provos, UPM Bintulu Campus (Beginning May)

Prof. Dr. Shaik Mohd. Noor Alam S.M. Hussain
Dekan, Fakulti Bahasa Moden dan Komunikasi
Dean, Faculty of Modern Languages and Communication

Prof. Dr. Rozumah Baharuddin
Dekan, Fakulti Ekologi Manusia
Dean, Faculty of Human Ecology

Prof. Dr. Nik Mustapha Raja Abdullah
Dekan, Fakulti Ekonomi dan Pengurusan
Dean, Faculty of Economics and Management

Prof. Dr. Mohd Zamri Saad
Dekan, Fakulti Perubatan Veterinar (mulai Disember)
Dean, Faculty of Veterinary Medicine (Beginning December)

Prof. Ir. Dr. Radin Umar Radin Sohadi
Dekan, Fakulti Kejuruteraan
Dean, Faculty of Engineering

Prof. Madya Dr. Zakaria Kasa
Dekan, Fakulti Pengajian Pendidikan
(mulai Disember)
Dean, Faculty of Educational Studies (Beginning December)

Prof. Madya Dr. Mohd Hamami Sahri
Dekan, Fakulti Perhutanan (mulai April)
Dean, Faculty of Forestry (Beginning April)

Prof. Madya Dr. Mohd. Khanif Yusop
Dekan, Fakulti Pertanian
Dean, Faculty of Agriculture

Prof. Madya Dr. Mustafa Kamal Mohd Shariff
Dekan, Fakulti Rekabentuk dan Senibina
Dean, Faculty of Design and Architecture

Prof. Madya Dr. Abd. Azim Abdul Ghani
Dekan, Fakulti Sains Komputer dan Teknologi Maklumat
Dean, Faculty of Computer Science and Information Technology

Prof. Dr. Jinap Selamat
Dekan, Fakulti Sains Makanan dan Bioteknologi
(mulai Disember)
Dean, Faculty of Food Science and Biotechnology (Beginning December)

Prof. Dr. Azhar Md. Zain
Dekan, Fakulti Perubatan dan Sains Kesihatan
(mulai Mei)
Dean, Faculty of Medicine and Health Sciences (Beginning May)

Prof. Dr. Wan Md. Zin Wan Yunus
Dekan, Fakulti Sains dan Pengajian Alam Sekitar
Dean, Faculty of Science and Environmental Studies

Prof. Dr. Aini Ideris
Dekan, Sekolah Pengajian Siswazah
Dean, School of Graduate Studies

Prof. Madya Hj. Zainal Abidin Kidam
Dekan, Sekolah Pengajian Siswazah Pengurusan
Dean, Graduate School of Management

Prof. Dr. Dahlan Ismail
Dekan, Fakulti Sains Pertanian dan Makanan (UPMKB)
Dean, Faculty of Agriculture and Food Science (UPMKB)

Prof. Madya Dr. Iskandar Abdullah
Dekan, Fakulti Sains Sosial dan Pengurusan (UPMKB)
Dean, Faculty of Social Science and Management (UPMKB)

Prof. Dr. Abu Bakar Salleh
Pengarah, Institut Biosains
Director, Institute of Bioscience

Prof. Ir. Dr. Wan Ishak Wan Ismail

Pengarah, Institut Teknologi Maju (ITMA)
Director, Institute of Advanced Technology (ITMA)

Dr. Azizan Asmuni

Pemangku Pengarah, Institut Pendidikan dan Pembelajaran
 Jarak Jauh (IDEAL)
Acting Director, For Distance Education And Learning (IDEAL)

Prof. Dr Syed Tajuddin Syed Hassan

Pengarah, Akademi Hutan Hujan
Director, Academic Rain Forest

Prof. Madya Dr. Abdul Aziz Sahari

Pengarah, Pusat Program Luar
Director, Centre for External Programs

Prof. Dr. Rahim Md Sail

Pengarah, Institut Pengajian Komuniti dan Keamanan (PEKKA)
Director, Institute for Community and Peace Studies (PEKKA)

Prof. Dato' Dr. Kamel Ariffin Mohd Atan

Pengarah, Institut Penyelidikan Matematik (INSPEM)
Director, Institute of Mathematical Research (INSPEM)

Prof. Dr. Borhanuddin Mohd Ali

Pengarah, Institut Multimedia dan Perisian (IMP)
Director, Institute of Multimedia and Software

Puan Kamariah Abdul Hamid

Ketua Pustakawan
Chief Librarian

Y.M. Prof. Madya Dr. Tengku Aizan

Tengku Abdul Hamid
 Pengarah, Institut Gerontologi
Director, Institute of Gerontology

Prof. Dr Rosli Mohamad

Prof. Dr. Salmah Yusof
Prof. Ir. Dr. Shahnnon Basri
Prof. Dr. Zakariah Abdul Rashid
Prof. Ir. Dr. Desa Ahmad
Prof. Dr. Mohd Ali Hassan
Prof. Dr. Fatimah Mohd. Arshad
Prof. Dr. Annuar Md Nassir
Prof. Dr. Wan Omar Abdullah
Prof. Dr. Mohamed Ismail Abdul Karim
Prof. Dr. Abdul Rahman Md. Aroff
Prof. Dr. Sariah Meon
Prof. Dr. Mohd Yusof Sulaiman
Prof. Dr. Mohamed Shariff Mohamed Din
Prof. Dr. Kamaruzaman Jusoff
Prof. Dr. Mad Nasir Shamsudin
Prof. Dr. Md. Nordin Hj. Lajis
Prof. Dr. Kaida Khalid

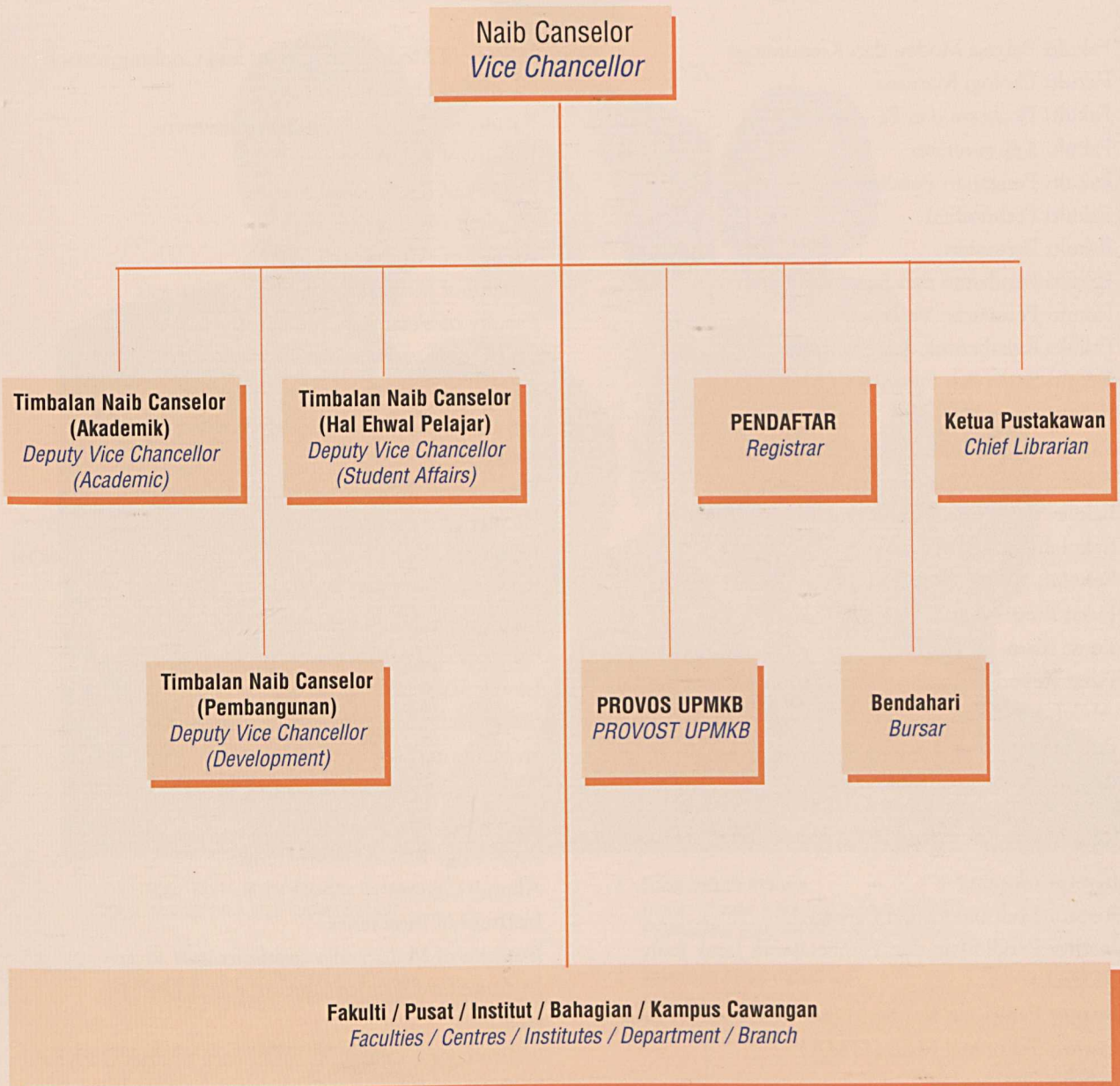
SETIAUSAHA / SECRETARY

Puan Chek Zan Kasah

Ketua Bahagian Akademik
Head of Academic Section

Struktur Organisasi

Organisational Structure



**Fakulti / Pusat / Institut /
Bahagian / Kampus Cawangan**

Fakulti Bahasa Moden dan Komunikasi
 Fakulti Ekologi Manusia
 Fakulti Ekonomi dan Pengurusan
 Fakulti Kejuruteraan
 Fakulti Pengajian Pendidikan
 Fakulti Perhutanan
 Fakulti Pertanian
 Fakulti Perubatan dan Sains Kesihatan
 Fakulti Perubatan Veterinar
 Fakulti Rekabentuk dan Senibina
 Fakulti Sains dan Pengajian Alam Sekitar
 Fakulti Sains Komputer dan Teknologi Maklumat
 Fakulti Sains Makanan dan Bioteknologi
 Fakulti Sains Pertanian dan Makanan (UPMKB)
 Fakulti Sains Sosial dan Pengurusan (UPMKB)
 Sekolah Pengajian Siswazah
 Sekolah Pengajian Siswazah Pengurusan
 Pusat Program Luar
 Pusat Islam
 Pusat Kebudayaan dan Kesenian Sultan Salahuddin
 Abdul Aziz Shah
 Pusat Pengurusan Penyelidikan
 Pusat Pembangunan Perniagaan
 Pusat Pengurusan Ilmu
 Pusat Alumni
 Institut Biosains
 Institut Multimedia dan Perisian
 Institut Pendidikan dan Pembelajaran Jarak Jauh
 (IDEAL)
 Institut Pengajian Komuniti dan Keamanan (PEKKA)
 Institut Teknologi Maju (ITMA)
 Institut Gerontologi
 Institut Penyelidikan Matematik
 Taman Pertanian Universiti
 Kampus Cawangan Bintulu

**Faculty / Centres / Institutes / Department /
Branch Campus**

Faculty of Modern Languages and Communication
 Faculty of Human Ecology
 Faculty of Economics and Management
 Faculty of Engineering
 Faculty of Educational Studies
 Faculty of Forestry
 Faculty of Agriculture
 Faculty of Medicine and Health Sciences
 Faculty of Veterinary Medicine
 Faculty of Design and Architecture
 Faculty of Science and Environmental Studies
 Faculty of Computer Science and Information
 Technology
 Faculty of Food Science and Biotechnology
 Faculty of Agriculture and Food Science (UPMKB)
 Faculty of Social Science and Management (UPMKB)
 School of Graduate Studies
 Graduate School of Management
 Centre for External Program
 Islamic Centre
 Sultan Salahuddin Abdul Aziz Shah Arts
 and Cultural Centre
 Research Management Centre
 University Business Centre
 Knowledge Management Centre
 Alumni Centre
 Institute of Bioscience
 Institute of Multimedia and Software
 Institute for Distance Education and Learning
 (IDEAL)
 Institute for Community and Peace Studies (PEKKA)
 Institute of Advanced Technology
 Institute of Gerontology
 Institute of Mathematical Research
 University Agriculture Park
 Bintulu Branch Campus

Pihak Pengurusan Universiti

University Management



1 Prof. Dato' Dr. Ir. Mohd Zohadie Bardaie
NAIB CANSOLOR / VICE CHANCELLOR

2 Prof. Dr. Muhamad Awang
TIMBALAN NAIB CANSOLOR (AKADEMIK)
DEPUTY VICE CHANCELLOR (ACADEMIC)

3 Prof. Madya Dr. Makhdzir Mardan
TIMBALAN NAIB CANSOLOR (PEMBANGUNAN)
DEPUTY VICE CHANCELLOR (DEVELOPMENT)

4 Prof. Dr. Abdullah Al-Hadi Mohamed
(mulai 1 Feb 2003 / from Feb 2003)
TIMBALAN NAIB CANSOLOR / DEPUTY VICE CHANCELLOR

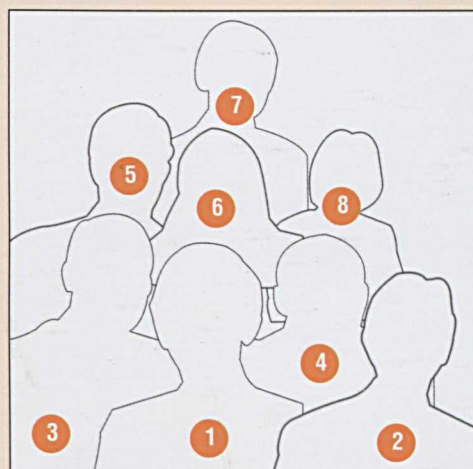
Prof. Madya Datuk Dr Idris Abdol
(sehingga Januari 2003 / until January 2003)
TIMBALAN NAIB CANSOLOR (HEP) /
DEPUTY VICE CHANCELLOR (HEP)

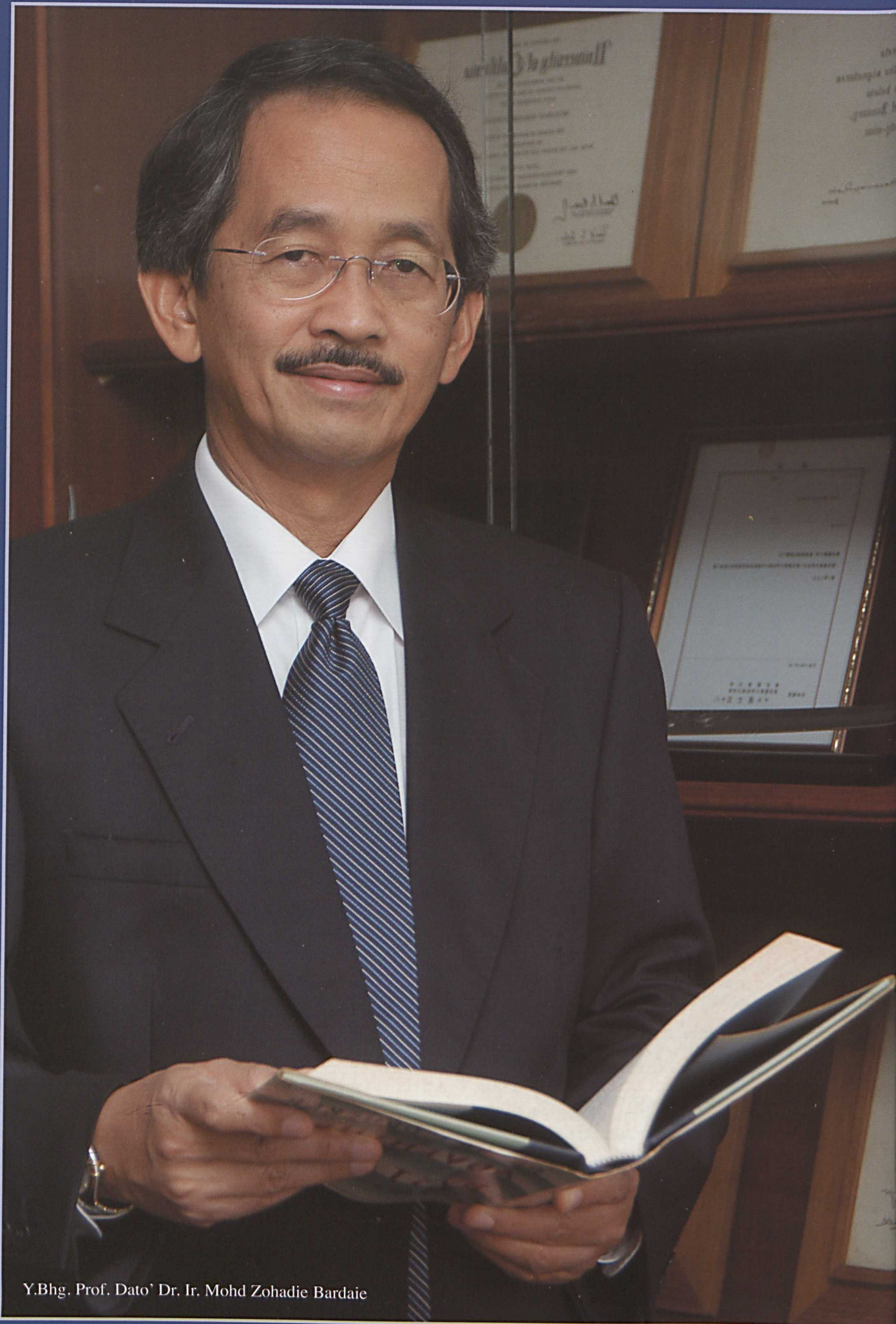
5 Kamalul Aripin Musa
PENDAFTAR / REGISTRAR

6 Hajjah Noormah Haji Mohamed
(sehingga 22 Julai 2003 / until 22 July 2003)
BENDAHARI / BURSAR

7 Encik Zulkifli Othman
(mulai 23 Julai 2003 / from 23 July 2003)
PEMANGKU BENDAHARI / BURSAR ELECT

8 Kamariah Abdul Hamid
KETUA PUSTAKAWAN / CHIEF LIBRARIAN





Y.Bhg. Prof. Dato' Dr. Ir. Mohd Zohadie Bardaie

Laporan Naib Canselor
Vice Chancellor's Report

Laporan Naib Canselor Vice Chancellor's Report

Pendahuluan

Tahun 2003 adalah tahun kegemilangan buat seluruh warga Universiti Putra Malaysia (UPM). Pada tahun ini pelbagai usaha telah dilakukan untuk universiti mencapai misi dan wawasannya berdasarkan matlamat yang digariskan. Wawasan universiti untuk menjadi Universiti Bertaraf Dunia bukan lagi fantasi malah seluruh usaha telah digembelngkan untuk berada di tahap yang sepatutnya.

Enrolmen dan Pengambilan Pelajar

Pada tahun 2003 UPM telah membuat pengambilan pelajar Bacelor dan Diploma sebanyak dua sesi iaitu untuk semester Mei dan November. Pengambilan pelajar untuk semester Mei adalah berjumlah 5,494 orang untuk program Bacelor dan 777 orang di peringkat diploma. Manakala untuk semester November, UPM mengambil seramai 104 orang pelajar peringkat Bacelor dan 130 Pelajar Diploma menjadikan keseluruhan jumlah pengambilan pelajar UPM di peringkat Bacelor dan Diploma berjumlah 6,505 orang.

BILANGAN PENGAMBILAN PELAJAR BACELOR DAN DIPLOMA 2003/2004			
BIL	PROGRAM	SEMESTER MEI	SEMESTER NOVEMBER
1.	Pelajar Bacelor	5,494	104
2.	Pelajar Diploma	777	130
JUMLAH BESAR		6,271	234

Pengambilan peringkat Pasca Siswazah menunjukkan peningkatan berbanding tahun lepas. Usaha ini sedang giat dilakukan bagi memastikan nisbah pelajar Pasca

Introduction

2003 was truly a glorious year for everyone at the Universiti Putra Malaysia (UPM). This year, various efforts were initiated by the University to fulfil its mission and vision based on its outlined objectives. The University's vision of becoming a World-Class University is no longer a fantasy given the intense efforts and measures initiated to take it to the desired level.

Student Intake and Enrolment

In 2003, UPM had two Bachelor's Degree and Diploma student intakes for the May and November semesters. The May semester intake saw 5,494 students being enrolled for the Bachelor's program and 777 students for the Diploma level. For the November semester, UPM enrolled 104 students at Bachelor's level and 130 candidates for the Diploma program. The total student intake for the Bachelor's Degree and Diploma program in 2003 was 6,505.

BACHELOR'S DEGREE & DIPLOMA LEVEL STUDENT INTAKE 2003/2004		
NO. PROGRAM	MAY SEMESTER	NOVEMBER SEMESTER
1. Bachelor's Students	5,494	104
2. Diploma Students	777	130
GRAND TOTAL	6,271	234

The intakes for Post-graduate student showed a marked improvement compared to the previous year. Greater efforts are being made to attain a 1:2 ratio between postgraduate and undergraduate students, which we envisage to reach by 2010. In 2003, there were 317



Siswazah dan Pra Siswazah iaitu 1:2 dapat dicapai menjelang 2010. Dalam tahun 2003 seramai 317 pelajar Doktor Falsafah (Ph.D) dan 1,602 pelajar Master yang mendaftar untuk mengikuti pengajian di UPM.

Dari segi enrolmen pelajar, UPM mempunyai seramai 23,377 pelajar untuk semester Mei 2003/2004 manakala enrolmen untuk semester November 2003/2004 adalah seramai 20,734 orang. Jumlah ini tidak termasuk pelajar Pendidikan Jarak Jauh, Program Pengajian Siswazah dan Program Eksekutif.

Penyelidikan dan Pembangunan

Dalam Rancangan Malaysia Kelapan (RMK-8) iaitu bagi tempoh 2001-2005, jumlah geran penyelidikan IRPA yang diterima UPM setakat Disember 2003 ialah RM160,974,842. Ini boleh dikatakan suatu pencapaian yang cemerlang memandangkan RMK-8 baru sahaja tiga tahun (2001-2003) dilaksanakan. Masih ada dua tahun lagi untuk penyelidik di UPM mengambil peluang untuk memperoleh geran yang lebih banyak sehingga tamat RMK-8.

Geran *Top Down National Biotechnology* juga merupakan dana yang di perolehi daripada Kementerian Sains, Teknologi dan Alam Sekitar (MOSTE) walaupun bukan di bawah kategori IRPA. Jumlah penerimaan dana UPM ialah RM9,954,594 dengan jumlah 8 projek kesemuanya. Dana Geran Penyelidikan Fundamental yang diterima daripada Kementerian Pendidikan Malaysia pula menunjukkan peningkatan dari setahun ke setahun iaitu sebanyak RM3 juta pada 2002 dan RM4.7 juta pada tahun 2003. Sementara projek-projek yang melibatkan dana daripada agensi luar (Kebangsaan/ Antarabangsa) juga amat menggalakkan dengan jumlah setakat tahun 2003 ialah sebanyak RM52,554,948.

Doctor of Philosophy (Ph.D) candidates and 1,602 Masters students registered to pursue their studies at UPM.

In terms of student enrolment, UPM has 23,377 students for the May 2003/2004 semester and a total of 20,734 students for the November 2003/2004 semester. This figure excludes students from the Distance Learning Program, Postgraduate Program and Executive Program.

Research and Development

Under the 8th Malaysia Plan (EMP) for the 2001-2005 period, UPM received IRPA (Intensification of Research Priority Areas) research grants totalling RM160,974,842 as at December 2003. Given the fact that the EMP has only been in effect for three years, this is a significant achievement for UPM. This gives UPM researchers two more years to secure more grants before the expiry of EMP.

Although not categorised under the IRPA, The Top Down National Biotechnology Grant is another source of funds obtained from the Ministry of Science, Technology & Environment (MOSTE). The total funds received by UPM was RM9,954,594 to fund 8 projects.

The Fundamental Research Grant funds received from the Ministry of Education, Malaysia also showed an improvement from RM3 million in 2002 to RM4.7 million in 2003. Meanwhile, projects involving funds from external agencies (National/International) are also very encouraging with a total of RM52.554,948 million for the ending 2003.

As a University that is striving to become a world-class research institution, UPM has increased its focus on



Sebagai sebuah universiti yang berusaha untuk muncul sebagai sebuah institusi penyelidikan bertaraf dunia, UPM telah mempertingkatkan tumpuan kepada mengkomersialkan hasil penyelidikan dan penemuan baru. Sebanyak 18 produk penyelidikan telah berjaya dikomersialkan dan ia merupakan satu pencapaian yang amat membanggakan. Selain itu, pada tahun 2003 juga terdapat 3 produk berjaya dipatenkan termasuk dua di United Kingdom dan satu di Amerika Syarikat. Malah pada 6 Mei 2003 produk ciptaan Profesor Madya Dr Hussaini Omar adalah produk pertama IPTA di Malaysia yang berjaya dipatenkan di Amerika Syarikat.

Bagi menggalakkan persekitaran penyelidikan, UPM telah memperkenalkan beberapa pendekatan untuk memusatkan lagi aktiviti penyelidikan dan pembangunan universiti. Pada 2003 juga UPM bersetuju memperuntukkan rizab sebanyak RM1 juta untuk mengadakan Skim Penyelidik Khas khusus untuk melantik penyelidik yang hanya menjalankan tugas dalam penyelidikan.

Anugerah dan Pencapaian

Sepanjang 2003 UPM berjaya meraih pelbagai anugerah di peringkat nasional mahu pun antarabangsa. Anugerah ini bukan sahaja melonjakkan reputasi universiti malah memberi suntikan semangat untuk para penyelidik terus berusaha menghasilkan penemuan baru serta penyelidikan bermutu.

UPM berjaya mencatat dua sejarah tersendiri dan paling bermakna apabila UPM memenangi 10 pingat dalam Pameran Antarabangsa Teknologi, Inovasi dan Reka Bentuk Industri (I-TEX 2003) pada 15 Mei 2003. UPM berjaya memenangi 2 emas 2 perak dan 6 gangsa. Manakala pada Ekspo S&T 2003 yang berlangsung pada 7 Ogos 2003 di PWTC penyelidik UPM sekali lagi

commercialisation of research findings and new discoveries. Thus far, 18 research products have been commercialised – a truly remarkable feat indeed. Apart from this, the year 2003 saw three products patented – two in United Kingdom and one in America. In fact, on 6 May 2003, an invention of Associate Professor Dr. Hussaini Omar was the first PIHL (Public Institutes of Higher Learning) product in Malaysia to be patented in the United States of America.

To stimulate the research environment, UPM has introduced several new initiatives to further boost research activity and development of the University. In 2003, UPM also agreed to allocate a reserve fund of RM1 million towards a Special Research Scheme specifically to appoint researchers who will only carry out research work.

Awards and Achievements

Throughout 2003, UPM won numerous awards at both national and international levels. These accolades not only enhanced the University's reputation but also injected a renewed sense of spirit in our researchers to strive for new discoveries and greater quality of research.

UPM succeeded in creating a historic milestone when it won 10 medals in the I-TEX 2003 (International Technology, Innovation and Industrial Design Exhibition) on 15 May 2003. It won 2 gold, 2 silver and 6 bronze medals. Meanwhile at the S&T 2003 Expo, which was held on 7 August 2003 at PWTC, UPM researchers once again achieved great success by winning 30 medals. Apart from the 10 gold, 13 silver and 7 bronze medals they won, UPM were also awarded the "Best Booth" title at the expo.

In August 2003, two UPM researchers won the coveted



mencipta kejayaan besar apabila memenangi 30 pingat iaitu 10 emas, 13 perak dan 7 gangsa. Dalam ekspo ini juga booth UPM diumumkan sebagai booth terbaik.

Pada bulan Ogos dua penyelidik UPM berjaya memenangi anugerah Inovasi Perkhidmatan Awam 2003 melalui produk Dedak Beras Daripada Bahan Buangan Kepada Produk Kesihatan yang dihasilkan oleh Prof. Madya Dr. Maznah Ismail dari Fakulti Perubatan dan Sains Kesihatan. Inovasi kedua yang memenangi anugerah tersebut ialah Alat CVD (Chemical Vapour Deposition) untuk penyelidikan Nanoteknologi. Ia dihasilkan oleh Profesor Madya Dr Fakhru Razi Ahmadun dari Fakulti Kejuruteraan.

Pada bulan Oktober selain berjaya menjadi penganjur bersama dengan Kementerian Pendidikan dalam Pameran Penyelidikan dan Pembangunan IPTA 2003 para penyelidik UPM mengungguli pungutan pingat berbanding IPTA lain. Sebanyak 12 hasil penyelidikan UPM telah memenangi pelbagai pingat dan anugerah yang dipertandingkan sepanjang pameran tersebut.

Penerbitan

Jumlah keseluruhan bilangan penerbitan bagi tahun 2003 adalah 2827 iaitu meningkat berbanding dengan penerbitan pada tahun 2002 iaitu sebanyak 2507. Daripada jumlah tersebut penerbitan prosiding persidangan mencatat peratusan tertinggi iaitu 35 %, diikuti lain-lain penerbitan sebanyak 33 %, Jurnal (29%) dan buku (3%). Selain itu, Penerbit UPM juga ada menerbitkan 30 judul buku karya asli, 5 terbitan berkala dan 7 prosiding persidangan IPTA 2003.

Konvokesyen

Sepanjang 2003, UPM berjaya mengeluarkan seramai 13,027 graduan dalam pelbagai bidang pengajian sama

Public Service Innovation 2003 Award through their Rice Bran – Transforming a Waste Product to Health Product by Associate Professor Dr. Maznah Ismail from the Faculty of Medicine and Health Sciences. The second award winning innovation was a Chemical Vapour Deposition (CVD) Device for Nanotechnology research, which was created by Associate Professor Dr. Fakhru Razi Ahmadun from the Faculty of Engineering.

In October, apart from being co-organisers with the Ministry of Education in the PIHL 2003 Research and Development Expo, UPM researchers fared significantly better than the other PIHLs at the Expo with 12 of its research initiatives winning various awards and accolades.

Publications

The total number of publications for 2003 was 2,827, a significant improvement over 2,507 publications in 2002. From this total, conference proceeding publications comprised the highest percentage at 35%, followed by other publications at 33%, journals (29%) and books (3%). Apart from that, UPM Publications also published 30 original book titles, 5 serial publications and 7 PIHL conference proceedings.

Convocation

Throughout 2003, UPM had successfully produced 13,027 students in various disciplines at both graduate and postgraduate levels. From this total, UPM had three sittings for its 27th Convocation Ceremony to confer graduates with their respective degrees. The First Sitting was held from 19 to 21 April 2003, wherein a total of 4,514 graduates received their degrees. The Second Sitting held on 24 and 25 May 2003 saw 4,092 graduates passing out while the Third Sitting on 19 October 2003 produced 4,421 successful graduates. The entire 27th Convocation



ada di peringkat siswazah dan pra siswazah. Daripada jumlah graduan tersebut, UPM telah mengadakan sebanyak tiga sidang Majlis Konvokesyen yang ke-27 bagi pengurniaan ijazah masing-masing. Pada Sidang Pertama yang berlangsung pada 19 hingga 21 April 2003, di mana seramai 4,514 graduan berjaya dilahirkan. Sidang Kedua pula diadakan pada 24 dan 25 Mei 2003. Sidang Kedua ini menyaksikan seramai 4,092 graduan manakala Sidang Ketiga yang berlangsung pada 18 dan 19 Oktober 2003 seramai 4,421 graduan berjaya menamatkan pengajian. Kesemua Majlis Konvokesyen Ke-27 berlangsung di Pusat Kebudayaan dan Kesenian Sultan Salahuddin Abdul Aziz Shah, UPM Serdang.

Daripada jumlah graduan yang dilahirkan sepanjang 2003, seramai 153 orang telah mendapat ijazah kepujian kelas pertama, 3,542 orang ijazah kepujian kelas kedua tinggi, 5,914 orang ijazah kepujian kelas kedua rendah dan 602 orang ijazah kelas ketiga. Pada Majlis Konvokesyen ke-27 juga menyaksikan pertambahan bilangan graduan dalam program ijazah lanjutan. Program Master mencatat jumlah seramai 1,542 orang dan program Doktor Falsafah (Ph.D) seramai 112 orang berbanding 89 orang pada tahun sebelumnya.

Pada 2003 juga UPM menganugerahkan Ijazah Kehormat kepada tiga tokoh Negara yang berjaya dalam bidang masing-masing. Tiga tokoh yang terlibat ialah Yang Berbahagia Tan Sri Dato' S.M Salim (Sidang Pertama), Yang Berbahagia Tan Sri Dato' Ahmad Johan (Sidang Kedua) dan Yang Berbahagia Dato' Haji Mohd Sidek Abdullah Kamar (Sidang Ketiga). Penganugerahan ini adalah satu penghargaan daripada UPM atas sumbangan bakti tokoh-tokoh tersebut dalam memajukan bidang masing-masing untuk manfaat seluruh masyarakat. Kesemua anugerah telah

Ceremony was held at the Sultan Salahuddin Abdul Aziz Shah Culture and Arts Centre, UPM Serdang.

Out of the total UPM graduates in 2003, 153 obtained First Class Honours Degree, 3,542 secured Second Class Upper Honours Degree while 5,914 earned Second Class Lower Honours Degree and 602 managed to obtain Third Class Degree. The 27th Convocation Ceremony also witnessed an increase in the number of graduates in postgraduate programs. The Masters Program enrolled 1,542 candidates and the Doctor of Philosophy (Ph.D) 112 candidates compared to 89 the previous year.

In 2003, UPM also conferred Honorary Doctorates to three distinguished individuals who have been highly successful in their respective fields of endeavour. The recipients are Yang Berbahagia Tan Sri Dato' S.M. Salim (First Sitting), Yang Berbahagia Tan Sri Dato' Ahmad Johan (Second Sitting) and Yang Berbahagia Dato' Haji Mohd Sidek Abdullah Kamar (Third Sitting). This conferment by UPM is to honour the invaluable contribution of these three individuals in their respective disciplines for the benefit of society. The Chancellor of UPM who is also the Sultan of Selangor, His Royal Highness Sultan Sharafuddin Idris Shah Ibni Al-Marhum Sultan Salahuddin Abdul Aziz Shah conferred these awards.

Appointment of Pro-Chancellor

The year 2003 saw the appointment of Yang Berbahagia Tan Sri Dato' Dr. Nayan Ariffin, the former Vice-Chancellor of UPM as the new Pro Chancellor replacing the outgoing Yang Berbahagia Tan Sri Dato' Haji Hashim Aman, whose term of service expired. His term began with effect from 1 October 2003 on a three-year



disampaikan oleh Canselor UPM, D.Y.M.M Sultan Sharafuddin Idris Shah Ibni Al-Marhum Sultan Salahuddin Abdul Aziz Shah yang juga Sultan Selangor.

Pelantikan Pro Canselor

Tahun 2003 menyaksikan pelantikan bekas Naib Canselor UPM, Yang Berbahagia Tan Sri Dato' Dr Nayan Ariffin dilantik sebagai Pro Canselor menggantikan Yang Berbahagia Tan Sri Dato' Haji Hashim Aman yang telah tamat tempoh perkhidmatannya. Pelantikan beliau mulai berkuat kuasa pada 1 Oktober 2003 untuk tempoh selama tiga tahun iaitu sehingga 30 September 2006. Selain itu Pro Canselor, Yang Berbahagia Tan Sri Dato' Thong Yaw Hong disambung perkhidmatannya untuk tempoh tiga tahun mulai 1 Julai 2003 sehingga 30 Jun 2006.

Hubungan Luar dan Kerjasama

Untuk muncul sebagai universiti bertaraf dunia, UPM perlu meningkatkan jalinan dan hubungan kerjasama dengan pihak luar terutamanya melibatkan industri dan institusi yang lebih terkedepan. Kerjasama ini meliputi bidang pengajaran, pembelajaran, penyelidikan dan pembangunan teknologi. Untuk tujuan itu sebanyak 9 Memorandum Persefahaman Antarabangsa telah ditandatangani sepanjang tahun 2003. Antara institusi dan agensi luar Negara yang terlibat ialah Cornell University, South Dakota University, University of Massachusetts, University of Joensuu, Finland, Tamar University dan banyak lagi. Selain daripada tujuan pengajaran, pembelajaran dan penyelidikan kerjasama ini adalah juga untuk memperkukuhkan citra universiti di peringkat global. Selain itu, sebanyak lima Memorandum Persefahaman di antara agensi-agensi tempatan telah dimeterai. Antara agensi terbabit ialah FRIM, DBKL, Pusat Zakat Selangor, Airod Sdn Bhd dan Kementerian Pembangunan Usahawan.

tenure expiring on 30 September 2006. Apart from this, tenure of Pro-Chancellor, Yang Berbahagia Tan Sri Dato' Thong Yaw Hong was extended for another three years from 1 July 2003 to 30 June 2006.

External Linkages and Collaboration

To become a world-class university, UPM needs to improve ties and collaborative relationships with external parties especially in industries and institutions that are more advanced. This collaboration will encompass the fields of teaching, learning, research and technological development. Nine (9) International Memorandum of Understanding have been signed throughout 2003 for this purpose. These external institutions and agencies, among others include Cornell University, South Dakota University, University of Massachusetts, University of Joensuu, Finland, Tamar University. Apart from the purpose of cooperation in the areas of learning, teaching and research, these alliances are also aimed at enhancing the global stature of the University. In addition, a total of five (5) Memorandums of Understanding have been forged with local agencies, namely FRIM, DBKL, Pusat Zakat Selangor, Airod Sdn Bhd and the Entrepreneurial Development Ministry.

UPM also received a total of 109 visits from various external agencies including schools, Institutes of Higher Learning (IHL), Corporate Bodies and NGOs among others. There were also visits from overseas delegations from nations such as Sudan, Japan, Saudi Arabia, Vietnam, USA, Australia, Indonesia, Thailand as well as from other countries. In 2003, UPM participated in 18 local educational exhibitions in addition to several international educational exhibitions. These exhibitions promote UPM as a premier institution of higher education offering various fields of studies from undergraduate levels right up to postgraduate studies.



Dalam pada itu UPM juga telah menerima sebanyak kira-kira 109 kunjungan dan lawatan daripada pelbagai agensi luar termasuk sekolah, IPT, badan korporat, NGO dan lain-lain. Terdapat juga kunjungan daripada delegasi luar Negara seperti Sudan, Jepun, Arab Saudi, Vietnam, USA, Australia, Indonesia, Thailand dan banyak lagi. Pada 2003 juga UPM berjaya menyertai 18 pameran pendidikan di peringkat tempatan dan beberapa siri pameran pendidikan antarabangsa turut disertai. Pameran pendidikan ini bertujuan untuk mempromosikan UPM sebagai sebuah institusi pendidikan tinggi yang menawarkan pelbagai program pengajian sama ada di peringkat prasiswazah dan pasca siswazah.

Pengurusan Berkualiti

UPM telah memulakan usaha untuk membentuk sistem pengurusan yang berkualiti dan diiktiraf di peringkat antarabangsa melalui persijilan MS ISO 9000. Setakat 2003, tiga Fakulti telah berjaya mendapat pengiktirafan ISO 9000 iaitu Fakulti Perubatan Veterinar (2000), Fakulti Kejuruteraan (2001) dan Fakulti Sains dan Pengajian Alam Sekitar (2003). Di samping itu, pada 2003 juga Fakulti Kejuruteraan berjaya memenangi hadiah utama Anugerah Kualiti Ketua Setiausaha Negara 2003 dalam siri Anugerah Kualiti Perkhidmatan Awam (AKPA) dan tempat kedua bagi Anugerah Kualiti Y.A.B Menteri Besar Selangor 2002. Fakulti Sains dan Pengajian Alam Sekitar turut mencatat kejayaan apabila memenangi tempat ketiga Anugerah Kualiti Yang Berhormat Setiausaha Kerajaan Selangor 2003 (kategori Sektor Awam) sempena Bulan Kualiti Peringkat Negeri Selangor Tahun 2003. Selain itu, Bahagian Keselamatan UPM juga diiktiraf sebagai perkhidmatan keselamatan pertama di Malaysia dan IPTA yang berjaya mendapat persijilan MS ISO 9001:2000.

Quality Management

UPM has initiated efforts to establish a quality management system, which is acknowledged internationally via the MS ISO 9000 certification. Up to 2003, three faculties have successfully attained ISO 9000 certification namely, the Faculty of Veterinary Medicine (2000), the Faculty of Engineering (2001) and the Faculty of Science and Environmental Studies (2003). Besides this, the Faculty of Engineering won the top prize in the Ketua Setiausaha Negara 2003 Quality Award in the Public Services Quality Award Series (AKPA) and garnered second place in the YAB Menteri Besar Selangor 2002 Quality Award. The Faculty of Science and Environmental Studies also secured third place in the YB Setiausaha Kerajaan Selangor 2003 Quality Award (Public Sector Category). Apart from this, UPM's Security Department was also the first PIHL and security services in Malaysia to obtain the MS ISO 9001:2000 certification.

Human Resource Management

In 2003, 432 persons were recruited to fill various vacancies. From this total, 307 were Academic Officers, 39 Officers from Professional and Management Group and 86 Officers from the Support Group. UPM had also appointed 12 contract staff.

Throughout 2003, a total of 77 UPM staff were promoted, 109 retired and 162 were given study leave to further their studies in Masters (85) and Doctor of Philosophy (91) locally and abroad. Sabbatical leave was also approved for 24 academic staffs.

Eighty-seven officers from the Professional and Management Group and 221 from the Support Group received the Excellent Service Award in 2003. Apart from that, UPM had also introduced three new awards beginning 2003



Pengurusan Sumber Manusia

Pada tahun 2003, seramai 432 orang telah dilantik mengisi pelbagai kekosongan jawatan. Daripada jumlah itu, seramai 307 orang pegawai akademik, 39 orang pegawai dari Kumpulan Pengurusan Profesional dan 86 orang pegawai Kumpulan Sokongan. UPM juga telah melantik seramai 12 orang tenaga dagang.

Sepanjang tahun 2003 juga, seramai 77 orang pegawai UPM telah dinaikkan pangkat, 109 orang telah bersara dan 162 orang telah diluluskan cuti belajar bagi melanjutkan pelajaran dalam bidang Sarjana (85) dan Doktor Falsafah (91) di dalam dan luar Negara sepanjang tahun. Di samping itu, seramai 24 orang pegawai akademik telah diluluskan cuti sabatikal.

Seramai 87 orang yang terdiri dari orang Kumpulan Pengurusan dan Profesional dan 221 orang Kumpulan Sokongan telah menerima Anugerah Khidmat Cemerlang tahun 2003. Selain itu, UPM juga memperkenalkan tiga anugerah lain mulai 2003 iaitu Anugerah Setia Putra kepada 186 orang pegawai, Anugerah Jasa Putra kepada 103 orang pegawai dan Anugerah Jasamu Dikenang kepada 11 orang pegawai. Anugerah-anugerah ini diberi sebagai menghargai jasa para pegawai UPM yang telah berkhidmat lebih dari 20 tahun, meninggal dunia semasa bertugas dan yang telah bersara. Selain itu 7 orang pegawai telah dianugerahkan Anugerah Fellowship Naib Canselor. Bersesuaian dengan penstrukturan semula Sistem Saraan Baru (SSB) ke Sistem Saraan Malaysia (SSM), seramai 3,382 orang pegawai telah memilih SSM sementara 35 orang pegawai kekal dalam Sistem Saraan Baru.

Kemudahan ICT

Selaras dengan Matlamat Ke-6 Pelan Strategi UPM untuk membudayakan teknologi maklumat dan

namely, Setia Putra Award to 186 officers, Jasa Putra Award to 103 officers and Jasamu Dikenang Award to 11 officers. These awards are a gesture of appreciation from UPM to officers who have served for more than 20 years, those who have died while on duty or those who have retired. In the same year, 7 officers received the Vice-Chancellor's Fellowship Award.

Under the restructuring of the New Remuneration System (NRS) to the Malaysian Remuneration System (MRS), 3,382 officers have opted to join the MRS while 35 officers have chosen to remain with the NRS.

ICT Facilities

In line with UPM's 6th objective in UPM's Strategic Plan to inculcate an information technology and communication (ICT) oriented culture through e-University, UPM is constantly striving to enhance ICT facilities and user expertise in the campus. This effort was greatly rewarded when the October 2003 issue of Management Information System magazine ranked UPM as Malaysia's largest IT user and the 22nd largest in Asia. In the education sector, UPM is ranked as the 6th largest IT user in Asia.

Graduate Studies

UPM's Graduate Studies program is rapidly gaining acceptance both among the local society and overseas students. In 2003, a total of 6,155 students enrolled for the Graduate Studies Program. This comprised 5,000 Masters level students and 1,155 Ph.D level candidates. UPM has also managed to attract students from 51 nations across the world. Efforts are being intensified to ensure a postgraduate and undergraduate ratio of 1:2 is achieved by 2010 with 10,000 students.

In 2003, UPM restructured its studies programmes to a new structure involving thesis-based and non-thesis



komunikasi (ICT) melalui e-Universiti, UPM sentiasa melagang usaha untuk meningkatkan kecekapan penggunaan dan kemudahan ICT dalam kampus. Usaha ini memperlihatkan hasil yang ketara bila majalah *Management Information System* keluaran Oktober 2003 telah meletakkan UPM sebagai pengguna IT terbesar di Malaysia dan ke-22 terbesar di Asia keseluruhannya. Dari sudut sektor pendidikan pula tinjauan tersebut juga mendapati UPM merupakan pengguna IT ke-6 terbesar di Asia.

Pengajian Siswazah

Program pengajian siswazah di UPM semakin mendapat tempat di kalangan masyarakat tempatan dan pelajar luar negara. Pada 2003 jumlah enrolmen pelajar program siswazah ialah seramai 6,155 orang. Jumlah ini terdiri daripada 5,000 pelajar peringkat Master dan 1,155 pelajar di peringkat Ph.D. UPM juga berjaya menarik minat pelajar daripada pelbagai negara apabila daripada jumlah keseluruhan pelajar adalah mewakili 51 buah negara. Usaha juga sedang giat dilaksanakan untuk memastikan nisbah pelajar pasca siswazah dan pra siswazah iaitu 1:2 dapat dicapai menjelang 2010 dengan bilangannya seramai 10,000 orang.

Pada 2003 juga UPM menukar struktur program pengajian kepada struktur baru terdiri daripada program dengan tesis dan program tanpa tesis. Selain itu, dua bidang baru bagi program Master tanpa tesis turut diperkenalkan pada 2003 iaitu Master Pengurusan Kejuruteraan dan Pembuatan dan Master Kejuruteraan Sistem Pembuatan. Sebanyak 409 bidang pengajian bagi program dengan tesis ditawarkan manakala program tanpa tesis berjumlah 49 bidang.

programs. Apart from this, two new courses for the non-thesis Masters program were introduced in 2003 namely the Master of Engineering and Production Management as well as the Master of Production System Engineering. UPM offered a total of 409 courses for thesis-based programs and 49 courses for non-thesis programs. There were a total of 1,654 graduates in 2003 with 1,542 receiving their Masters Degrees and 112 obtaining their Ph.Ds.

Graduate School of Management

Our finest moment recorded in 2003 was when the Graduate School of Management (GSM) was listed in the August 2003 issue of *AsiaIn* as the 7th best-ranked MBA School in Asia. The finding also indicated that UPM was the best MBA School in Malaysia.

In 2003, GSM had three intakes i.e. January, May and September to attain a total enrolment of 249 students. Out of this, 3.61% were foreign students. There were 250 GSM graduates in 2003.

Physical Development

The rapid physical development of the campus was evident throughout 2003. Several development projects and campus beautification work for the comfort and convenience of UPM staff and students were duly completed and ready for use. A total of 12 development projects at the Serdang and Bintulu campuses covering new building projects, upgrading works, renovation and purchase of major equipment were completed in 2003. The funding for these projects amounting to more than RM31 million came from the Eighth Malaysia Plan grants and the UPM Development Fund.



Jumlah graduan yang menerima ijazah sepanjang tahun 2003 ialah 1,654 orang. Daripada jumlah tersebut seramai 1,542 orang menerima ijazah Master dan 112 orang adalah penerima Ph.D.

Pengajian Siswazah Pengurusan

Kejayaan paling manis dicatatkan pada 2003 apabila Sekolah Pengajian Siswazah Pengurusan (GSM) tersenarai di kedudukan ke-7 dalam senarai Sekolah MBA Terbaik di Asia oleh majalah *Asialnc* keluaran Ogos 2003. Tinjauan tersebut juga mendapati GSM, UPM sebagai Sekolah MBA terbaik di Malaysia.

Pada 2003, GSM telah membuat pengambilan sebanyak tiga kali iaitu pada Januari, Mei dan September menjadikan jumlah keseluruhan pelajar di GSM seramai 249 orang. Daripada jumlah tersebut sebanyak 3.61 peratus adalah pelajar antarabangsa. Jumlah pelajar GSM yang bergraduasi pada 2003 ialah seramai 250 orang.

Pembangunan Fizikal

Kerancangan pembangunan fizikal kampus dapat dilihat sepanjang 2003. Beberapa projek pembangunan dan pengindahan kampus untuk keselesaan warga UPM berjalan lancar dan siap untuk digunakan. Sebanyak 12 projek pembangunan di Kampus Serdang dan Bintulu berjaya disiapkan sepanjang 2003 yang meliputi projek pembinaan baru, kerja menaik taraf, pengubahsuaian dan perolehan peralatan utama. Daripada jumlah projek yang disiapkan tersebut ia melibatkan peruntukan wang lebih RM 31 juta yang diperolehi daripada peruntukan Rancangan Malaysia Kelapan dan ditampung oleh Kumpulan Wang Pembangunan UPM.

Among UPM's major projects include the upgrading of the Lebu Silikon, the new Faculty of Design and Architecture building, the UPM-MARDI Road construction, the additional building of the Faculty of Human Ecology and the construction of the Serdang Campus main entrance known as Anjung Putra. Apart from this, UPM completed several other projects in 2003 including the additional building for the Faculty of Modern Languages and Communication, Phase 2B of the Faculty of Engineering Complex, the Students Hostel and the R&D Complex. The UPM Medical and Health Science Complex is the largest building project costing RM202 million. It began in 12 September 2003 and is expected to be completed in 2006.

New Centre

January 2003 also saw the establishment of the Professional Development Centre (PACE), a new centre headed by Associate Professor Dr. Musa Abu Hassan. PACE was established to manage all activities related to professional development and continuing studies to both campus residents and the society at large towards cultivating a k-society.

Changes to Alumni Centre Functions

Realising that the Alumni Centre needs to widen its scope of service to cover activities that result in substantial benefit to students via networking with the alumni, UPM has made functional changes and renamed this centre as "Centre for Career and Alumni Services" with effect from 1 August 2003. With this change, the Centre for Career and Alumni Services shall not only coordinate and strengthen alumni activities but shall also pioneer career opportunities for the students.



Antara projek utama yang boleh disebutkan di sini ialah projek menaik taraf Lebuh Silikon, Bangunan baru Fakulti Rekabentuk dan Senibina, pembinaan Jalan UPM-MARDI, Bangunan Tambahan Fakulti Ekologi Manusia, serta pembinaan pintu masuk utama ke kampus Serdang yang dikenali sebagai Anjung Putra. Selain itu, pada 2003 UPM rancang menyiapkan beberapa projek termasuk pembinaan Bangunan tambahan Fakulti Bahasa Moden dan Komunikasi, Kompleks Fakulti Kejuruteraan Fasa 2B, Perumahan Pelajar Siswazah dan Kompleks R & D. Paling besar ialah pembinaan Kompleks Perubatan dan Sains Kesihatan UPM yang menelan belanja RM 202 juta. Ia dimulakan pada 12 September 2003 dan dijangka siap pada 2006.

Pusat Baru

Januari 2003 juga menyaksikan penubuhan sebuah pusat baru iaitu Pusat Pemajuan Profesional (PACE) yang di ketuai Prof Madya Dr Musa Abu Hasan. Penubuhan PACE bertujuan untuk mengelolakan segala aktiviti yang berkaitan pembangunan profesional dan pendidikan lanjutan kepada warga kampus dan masyarakat luar ke arah melahirkan k-masyarakat.

Perubahan Fungsi Pusat Alumni

Menyedari bahawa Pusat Alumni seharusnya melebarkan perkhidmatan meliputi pelaksanaan aktiviti yang memberikan faedah yang substantif kepada pelajar menerusi rangkaian dengan para alumni, UPM telah membuat perubahan fungsi dan nama Pusat ini kepada 'Pusat Perkhidmatan Kerjaya dan Alumni' berkuat kuasa pada 1 Ogos 2003. Dengan perubahan tersebut Pusat Perkhidmatan Kerjaya dan Alumni bukan sahaja menyelaraskan dan memperkukuh aktiviti alumni tetapi juga meneroka peluang-peluang kerjaya untuk pelajar.

Penutup

Merenung kembali kepada usaha yang telah dilaksanakan sepanjang tahun 2003, memperlihatkan beberapa petunjuk positif yang dicapai oleh UPM dalam laluan untuk menjadi Universiti Bertaraf Dunia. Di samping itu ia telah banyak menambahkan pengalaman dan kematangan warga UPM dalam menghadapi persaingan global. Apa yang dilakukan juga adalah ke arah yang lebih baik dalam melaksanakan tugas pengajaran, penyelidikan serta memberi perkhidmatan yang profesional. Semoga kejayaan yang dicapai sepanjang 2003 dapat diulangi dan digandakan untuk tahun-tahun yang akan datang.

Conclusion

Looking back at the efforts and initiatives carried out in 2003, there are several positive indicators in terms of UPM's achievements as it embarks on its course towards becoming a World-Class University. This has also enhanced the experiences and maturity of UPM staff in competing effectively on the global front. Our initiatives have taken us forward in carrying out our tasks of teaching, research and providing a more professional service. Let us strive towards attaining greater heights of success beyond our significant achievements in 2003 in the years to come.



Pengajaran Dan Pembelajaran
Teaching and Learning

Pengajaran Dan Pembelajaran Teaching And Learning

Bermula dengan hanya menawarkan dua program iaitu pengajian diploma dan kursus sijil tujuh dekad lalu, UPM kini memperkembangkan program akademiknya kepada 15 fakulti 7 pusat dan 7 institut yang membantu mempertingkatkan perkembangan akademik serta kemajuan bidang penyelidikan dan pembangunan.

Melalui Pelan Strategi 2001-2010, UPM menasarkankan bilangan pelajar peringkat ijazah pertama dan ijazah lanjutan adalah mengikut nisbah 1:2. Dengan itu usaha UPM ke arah meningkatkan pengambilan pelajar siswazah menjadi 10,000 orang manakala pelajar pra siswazah seramai 20,000 orang.

Fakulti-fakulti di UPM

- Fakulti Perubatan dan Sains Kesihatan
- Fakulti Ekologi Manusia
- Fakulti Perubatan Veterinar
- Fakulti Ekonomi dan Pengurusan
- Fakulti Perhutanan
- Fakulti Kejuruteraan
- Fakulti Pengajian Pendidikan
- Fakulti Sains Makanan dan Bioteknologi
- Fakulti Sains dan Pengajian Alam Sekitar
- Fakulti Pertanian
- Fakulti Bahasa Moden dan Komunikasi
- Fakulti Rekabentuk dan Senibina
- Fakulti Sains Komputer dan Teknologi Maklumat
- Fakulti Sains Sosial dan Pengurusan (UPM Kampus Bintulu)
- Fakulti Sains Pertanian dan Makanan (UPM Kampus Bintulu)

Institut

- Institut Pendidikan dan Pembelajaran Jarak Jauh (IDEAL)
- Institut Biosains

Having begun seven decades ago by just offering two programs in the form of Diploma and Certificate courses, UPM has now expanded its academic programs to 15 faculties, 7 centres and 7 institutes that have helped enhance its academic growth as well as developed its research and development sectors.

Through the 2001-2010 Strategic Plan, UPM is targeting a undergraduate and postgraduate student ratio of 1:2. Given this, UPM's efforts are geared towards increasing its graduate intake to 10,000 students and its undergraduate intake to 20,000 students.

Faculties at UPM

- Faculty of Medicine and Health Sciences
- Faculty of Human Ecology
- Faculty of Veterinary Medicine
- Faculty of Economics and Management
- Faculty of Forestry
- Faculty of Engineering
- Faculty of Educational Studies
- Faculty of Food Science and Biotechnology
- Faculty of Science and Environmental Studies
- Faculty of Agriculture
- Faculty of Modern Languages and Communication
- Faculty of Design and Architecture
- Faculty of Computer Science and Information Technology
- Faculty of Social Sciences and Management (UPM Bintulu Campus)
- Faculty of Agricultural and Food Science (UPM Bintulu Campus)

Institutes

- Institute for Distance Education and Learning (IDEAL)
- Institute of Bioscience
- Institute of Advanced Technology (ITMA)



- Institut Teknologi Maju (ITMA)
- Institut Multimedia dan Perisian (IMP)
- Institut Pengajian Keamanan dan Komuniti (PEKKA)
- Institut Penyelidikan Matematik (INSPEM)
- Institut Gerontologi

Akademi

- Akademi Hutan Hujan

Pusat Pengajaran, Pembelajaran dan Penyelidikan

- Sekolah Pengajian Siswazah (GSO)
- Sekolah Pengajian Siswazah Pengurusan (GSM)
- Pusat Program Luar (PPL)
- Pusat Pengajian Umum (PPU)
- Pusat Islam
- Pusat Kebudayaan dan Kesenian Sultan Salahuddin Abdul Aziz Shah
- Pusat Pengurusan Ilmu
- Pusat Pembangunan Perniagaan (UBC)
- Pusat Pengurusan Penyelidikan (RMC)

Sehingga kini UPM menawarkan 69 program bachelors dan 8 program diploma. Program berkenaan adalah seperti berikut :

Program Pengajian

Fakulti Perubatan dan Sains Kesihatan

- Doktor Perubatan
- Bachelors Sains (Sains Bioperubatan)
- Bachelors Sains (Pemakanan dan Kesihatan Komuniti)
- Bachelors Sains (Kesihatan Persekitaran dan Pekerjaan)
- Bachelors Kejururawatan

Fakulti Ekologi Manusia

- Bachelors Muzik
- Bachelors Sains (Pembangunan Manusia)
- Bachelors Sains (Pembangunan Manusia dan Pengurusan)

- Institute of Multimedia and Software (IMP)
- Institute for Community and Peace Studies (PEKKA)
- Institute for Mathematics Research (INSPEM)
- Institute of Gerontology

Academy

- Rainforest Academy

Centres for Teaching, Learning and Research

- School of Graduate Studies (GSO)
- Graduate School of Management (GSM)
- External Program Centre (PPL)
- General Studies Centre (PPU)
- Islamic Centre
- Sultan Salahuddin Abdul Aziz Shah Culture and Arts Centre
- Knowledge Management Centre
- University Business Centre (UBC)
- Research Management Centre (RMC)

Today, UPM offers 69 Bachelor's and 8 Diploma programs. The programs are as listed below:

Study Programs

Faculty of Medicine and Health Sciences

- Doctor of Medicine
- Bachelor of Science (Biomedical Sciences)
- Bachelor of Science (Nutrition and Community Health)
- Bachelor of Science (Environmental and Occupational Health)
- Bachelor of Nursing

Faculty of Human Ecology

- Bachelor of Music
- Bachelor of Science (Human Development)
- Bachelor of Science (Human Development and Management)



- Bacelor Sains (Pembangunan Manusia dan Teknologi Maklumat)
- Bacelor Sains (Sains Pengguna)
- Diploma Pembangunan Manusia

Fakulti Ekonomi dan Pengurusan

- Bacelor Ekonomi
- Bacelor Perakaunan
- Bacelor Pentadbiran Perniagaan
- Bacelor Perakaunan dengan Pendidikan

Fakulti Perhutanan

- Bacelor Sains Perhutanan
- Diploma Perhutanan

Fakulti Perubatan Veterinar

- Doktor Perubatan Veterinar

Fakulti Kejuruteraan

- Bacelor Kejuruteraan (Awam)
- Bacelor Kejuruteraan (Elektrik dan Elektronik)
- Bacelor Kejuruteraan (Kimia)
- Bacelor Kejuruteraan (Biologi dan Pertanian)
- Bacelor Kejuruteraan (Mekanikal)
- Bacelor Kejuruteraan (Aero Angkasa)
- Bacelor Kejuruteraan (Proses dan Makanan)
- Bacelor Kejuruteraan (Sistem Komputer dan Komunikasi)

Fakulti Pengajian Pendidikan

- Bacelor Pendidikan (Pendidikan Jasmani)
- Bacelor Pendidikan (Bimbingan dan Kaunseling)
- Bacelor Pendidikan (Pengajaran Bahasa Malaysia sebagai Bahasa Pertama)
- Bacelor Pendidikan (Pengajaran Bahasa Inggeris sebagai Bahasa Kedua)

- Bachelor of Science (Human Development and Information Technology)
- Bachelor of Science (Consumer Science)
- Diploma in Human Development

Faculty of Economics and Management

- Bachelor of Economics
- Bachelor of Accounting
- Bachelor of Business Administration
- Bachelor of Accounting with Education

Faculty of Forestry

- Bachelor of Forestry Science
- Diploma in Forestry

Faculty of Veterinary Medicine

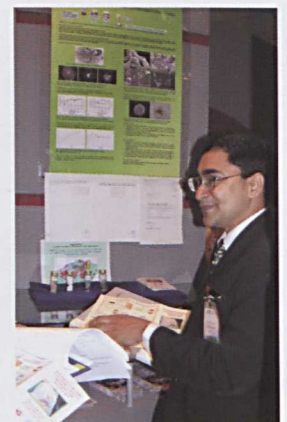
- Doctor of Veterinary Medicine

Faculty of Engineering

- Bachelor of Engineering (Civil)
- Bachelor of Engineering (Electrical and Electronic)
- Bachelor of Engineering (Chemical)
- Bachelor of Engineering (Biological and Agricultural)
- Bachelor of Engineering (Mechanical)
- Bachelor of Engineering (Aerospace)
- Bachelor of Engineering (Process and Food)
- Bachelor of Engineering (Computer Systems and Communication)

Faculty of Educational Studies

- Bachelor of Education (Physical Education)
- Bachelor of Education (Guidance and Counselling)
- Bachelor of Education (Teaching of Bahasa Malaysia as a First Language)
- Bachelor of Education (Teaching of English as a Second Language)



- Bacelor Pendidikan (Sains Rumahtangga)
- Bacelor Pendidikan (Sains Pertanian)
- Bacelor Sains (Pembangunan Sumber Manusia)
- Bacelor Pendidikan (Teknologi Maklumat)

Fakulti Sains dan Pengajian Alam Sekitar

- Bacelor Sains (Alam Sekitar)
- Bacelor Sains (Kepujian)
 - Major Biologi
 - Major Matematik
 - Major Statistik
 - Major Fizik
 - Major Biokimia
 - Major Mikrobiologi
 - Major Kimia
 - Major Kimia Perindustrian
 - Major Kimia Petroleum
 - Major Sains Bahan
 - Major Sains Instrumentasi

Bacelor Sains dengan Pendidikan (Kepujian)

- Major Biologi
- Major Fizik
- Major Kimia
- Major Matematik
- Major Statistik

Fakulti Pertanian

- Bacelor Sains (Perniagaan Tani)
- Bacelor Sains Pertanian
- Bacelor Sains Hortikultur
- Diploma Pertanian
- Diploma Kesihatan Haiwan dan Peternakan
- Diploma Pengurusan Perladangan Makanan

Fakulti Bahasa Moden dan Komunikasi

- Bacelor Sastera

- Bachelor of Education (Home Science)
- Bachelor of Education (Agricultural Science)
- Bachelor of Science (Human Resource Development)
- Bachelor of Education (Information Technology)

Faculty of Science and Environmental Studies

- Bachelor of Science (Environment)
- Bachelor of Science (Honours)
 - Biology Major
 - Mathematics Major
 - Statistics Major
 - Physics Major
 - Biochemistry Major
 - Microbiology Major
 - Chemistry Major
 - Industrial Chemistry Major
 - Petroleum Chemistry Major
 - Material Science Major
 - Instrumentation Science Major

Bachelor of Science with Education (Honours)

- Biology Major
- Physics Major
- Chemistry Major
- Mathematics Major
- Statistics Major

Faculty of Agriculture

- Bachelor of Science (Agribusiness)
- Bachelor of Agricultural Science
- Bachelor of Horticultural Science
- Diploma in Agriculture
- Diploma in Animal Health and Production
- Diploma in Food Estate Management

Faculty of Modern Languages and Communication

- Bachelor of Arts



- Pengkhususan Bahasa Inggeris
- Pengkhususan Bahasa & Linguistik Melayu
- Pengkhususan Kesusasteraan Melayu
- Pengkhususan Kesusasteraan Bahasa Inggeris
- Pengkhususan Bahasa Asing
 - Bahasa Mandarin
 - Bahasa Arab
 - Bahasa Perancis
 - Bahasa Jerman
- Bacelor Komunikasi

Fakulti Rekabentuk dan Senibina

- Bacelor Seni Bina Landskap
- Bacelor Rekabentuk (Senibina)
- Bacelor Rekabentuk (Rekabentuk Perindustrian)

Fakulti Sains Komputer dan Teknologi Maklumat

- Bacelor Sains Komputer
 - Pengkhususan Sistem Komputer
 - Pengkhususan Multimedia
 - Pengkhususan Kejuruteraan Perisian
 - Pengkhususan Rangkaian Komputer

Fakulti Sains Makanan dan Bioteknologi

- Bacelor Sains (Bioteknologi)
- Bacelor Sains dan Teknologi Makanan
- Bacelor Sains (Pengajian Makanan)

Fakulti Sains Pertanian dan Makanan (UPM Kampus Bintulu)

- Bacelor Sains Bioindustri
- Diploma Pertanian
- Diploma Perhutanan
- Diploma Kejuruteraan (Kecemasan dan Keselamatan)
- Diploma Perikanan

Fakulti Sains Sosial dan Pengurusan (UPM Kampus Bintulu)

- Bacelor Pentadbiran Perniagaan

- English Major
- Malay Language and Linguistics Major
- Malay Literature Major
- English Literature Major
- Foreign Language Major
 - Mandarin Language
 - Arabic Language
 - French Language
 - German Language
- Bachelor of Communication

Faculty of Design and Architecture

- Bachelor of Design and Landscape
- Bachelor of Design (Architecture)
- Bachelor of Design (Industrial Design)

Faculty of Computer Science and Information Technology

- Bachelor of Computer Science
 - Computer Systems Major
 - Multimedia Major
 - Software Engineering Major
 - Computer Network Major

Faculty of Food Science and Biotechnology

- Bachelor of Science (Biotechnology)
- Bachelor of Science and Food Technology
- Bachelor of Science (Food Studies)

Faculty of Agriculture and Food Science (UPM Bintulu Campus)

- Bachelor of Bioindustrial Science
- Diploma in Agriculture
- Diploma in Forestry
- Diploma in Engineering (Emergency and Safety)
- Diploma in Fisheries

Faculty of Social Science and Management (UPM Bintulu Campus)

- Bachelor of Business Administration



- Diploma Pengurusan Perniagaan
- Diploma Sains Komputer

Penawaran Program Baru

Terdapat beberapa program baru mulai ditawarkan di beberapa fakulti mulai sesi Mei dan November 2003. Antara fakulti yang terlibat dengan penawaran program baru ialah:

Fakulti Ekologi Manusia

- Bachelo Sains (Pembangunan Manusia & Pengurusan)
- Bachelo Sains (Pembangunan Manusia & Teknologi Maklumat)

Kedua-dua program baru tersebut adalah hasil daripada penstrukturan semula program Bachelo Sains (Pembangunan Manusia) 100 kredit yang mula ditawarkan pada semester November 2003/2004. Pelajar pertama program ini adalah seramai 50 orang.

UPM Kampus Bintulu, Sarawak

Diploma Perikanan (ditawarkan mulai Sem. November 2003 / 2004) pengambilan pertama 27 orang.

Fakulti Pertanian

Fakulti Pertanian telah mula menyusun kembali program pengajian untuk menyesuaikan dengan kehendak dan keperluan semasa. Usaha juga dipertingkatkan lagi untuk melahirkan graduan yang mempunyai kemahiran dan pengetahuan selaras dengan keperluan negara yang mulai mengorak langkah memajukan sektor pertanian. Dengan itu, Fakulti Pertanian telah menawarkan semula Program Bachelo Sains Pertanian dan Bachelo Sains Hortikultur. Di peringkat Diploma satu program baru diperkenalkan iaitu Diploma Pengurusan Perladangan. Kesemua program tersebut telah memulakan pengambilan pelajar pada semester Mei 2003/2004.



- Diploma in Business Management
- Diploma in Computer Science

New Courses

Several faculties offered new programs beginning May and November 2003 sessions. Among the faculties involved with the offering of new programs are:

Faculty of Human Ecology

- Bachelor of Science (Human Development & Management)
- Bachelor of Science (Human Development & Information Technology)

Both these new programs are a result of restructuring the 100-credit Bachelor of Science (Human Development) program that was first offered in the November 2003/2004 semester. The first intake saw a total of 50 students.

UPM Bintulu Campus, Sarawak

The first Diploma in Fisheries (first offered in the November 2003/2004 semester) intake comprised 27 students.

Faculty of Agriculture

The Faculty of Agriculture has begun restructuring its program content to suit current needs and demands. Efforts are being increased to produce skilled and knowledgeable graduates in tandem with the nation's efforts to develop the agricultural sector. With this, the Faculty of Agriculture is reintroducing the Bachelor of Agricultural Science and Bachelor of Horticultural Science programs. At the Diploma level, a new program, the Diploma in Estate Management has been introduced. Student intakes for all these programs have begun in the the May 2003/2004 semester.



Program Pengajian Siswazah

Pengajian Siswazah merupakan salah satu kekuatan di UPM. Ia boleh menyumbang kepada keaktifan aktiviti penyelidikan dan pembangunan melalui penglibatan pelajar-pelajar Master dan Ph.D. Selain itu, program ini juga berjaya menarik minat pelajar-pelajar dari seluruh dunia. Pada tahun 2003 terdapat seramai 833 orang pelajar antarabangsa yang mewakili 51 buah negara. Sekolah Pengajian Siswazah dan Sekolah Pengajian Siswazah Pengurusan bertanggungjawab ke atas penawaran program peringkat siswazah di UPM. Satu pencapaian yang amat membanggakan dicatat pada 2003 apabila Sekolah Pengajian Siswazah Pengurusan tersenarai di kedudukan ke-7 dalam senarai Sekolah MBA Terbaik di Asia oleh majalah *AsiaInc* keluaran Ogos 2003. Tinjauan tersebut juga mendapati sekolah tersebut sebagai Sekolah MBA terbaik di Malaysia.

Sekolah Pengajian Siswazah Pengurusan (GSM)

Antara program yang ditawarkan di sekolah ini ialah:

- M.B.A - Master Pentadbiran Perniagaan
- M.M. - Master Pengurusan
- MSc - Master Sains
- Ph.D. - Doktor Falsafah

Sekolah Pengajian Siswazah (GSO)

Antara Program yang ditawarkan di sekolah ini ialah:

- Doktor Falsafah (Ph.D)
- Master Sains Pertanian (M.Agric.Sc.)
- Master Sastera (M.A)
- Master Ekonomi (M.Econ)
- Master Alam Sekitar (M.Env.)
- Master Senibina Landskap (M.L.A)
- Master Pengurusan (M.M)
- Master Sains (M.S.)
- Master Sains Veterinar (M.V.Sc.)
- Master Perubatan Veterinar (M.V.M)
- Diploma Lulusan Ijazah Perubatan Reproduksi

Postgraduate Studies Program

Postgraduate studies are one of UPM's major strengths, contributing to the fervent research activity and development via the participation of Masters and Ph.D. level students. This program has also attracted the interest of students from around the world. In 2003, there were 833 students representing 51 nations. The School of Graduate Studies and Graduate School of Management oversee the postgraduate studies programs offered at UPM. In 2003, UPM attained a significant achievement when its School of Graduate Studies was ranked 7th among the Best MBA Schools in Asia by the August 2003 edition of the *AsiaInc* Magazine. It also indicated that the school was the Best MBA School in Malaysia.

Graduate School of Management (GSM)

Among the programs offered by this school are:

- M.B.A – Master of Business Administration
- M.M. – Master of Management
- MSc – Master of Science
- Ph.D. – Doctor of Philosophy

School of Graduate Studies

Among the programs offered by this school are:

- Doctor of Philosophy (Ph.D.)
- Master of Agricultural Science (M.Agric.Sc.)
- Master of Arts (M.A.)
- Master of Economics (M.Econ)
- Master of Environmental Studies (M.Env)
- Master of Landscape Design (M.L.A.)
- Master of Management
- Master of Science (M.S.)
- Master of Veterinary Science (M.V.Sc.)
- Master of Veterinary Medicine (M.V.M)
- Postgraduate Diploma in Reproductive Medicine



Program PJJ

UPM turut menawarkan Program Pendidikan Jarak Jauh (PJJ) di peringkat Bacheloer dan Master. Program ini dikelola oleh Institut Pendidikan dan Pembelajaran Jarak Jauh (IDEAL). Program ini mendapat tempat di kalangan individu berkerjaya yang ingin mempertingkatkan kelulusan akademik masing-masing.

Sehingga 2003 IDEAL menawarkan program-program seperti berikut:

- Bacheloer Komunikasi
- Bacheloer Sains (Pembangunan Manusia)
- Bacheloer Sains (Pembangunan Sumber Manusia)
- Bacheloer Sains Komputer
- Bacheloer Pentadbiran Perniagaan
- Bacheloer Pendidikan
 - Pengajaran Bahasa Inggeris sebagai Bahasa Kedua (TESL)
 - Bimbingan dan Kaunseling
- Bacheloer Sastera
 - Bahasa dan Linguistik Melayu
 - Bahasa Inggeris
- Master Sains (Pembangunan Sumber Manusia)
- Master Sains (Komunikasi Korporat)
- Master Sains (PBMP)
- Master Sastera (BM)
- Master Sains (Pengurusan Sumber Lestari)

Program Kerjasama UPM-IPTS

Satu lagi pendekatan yang diperkenalkan untuk memberi peluang kepada masyarakat melanjutkan pengajian di peringkat tinggi ialah melalui program kerjasama UPM dan Institusi Pengajian Tinggi Swasta. Melalui kaedah ini peluang masyarakat untuk mendapat pendidikan tinggi lebih terbuka dan jaminan terhadap kualiti sesebuah IPTS dapat dikawal sepenuhnya. Pusat Program Luar (PPL) merupakan satu entiti yang diberi amanah untuk

Distance Learning Programs

UPM also offers Distance Learning Programs at both Bachelor's and Masters levels. These programs are administered by the Institute for Distant Education and Learning (IDEAL) and suitable for working individuals who wish to upgrade their academic qualification.

As at 2003, IDEAL offers the following programs:

- Bachelor of Communications
- Bachelor of Science (Human Development)
- Bachelor of Science (Human Resource Development)
- Bachelor of Computer Science
- Bachelor of Business Administration
- Bachelor of Education
 - Teaching of English as a Second Language
 - Guidance and Counselling
- Bachelor of Arts
 - Malay Language and Linguistics
 - English Language
- Master of Science (Human Resource Development)
- Master of Science (Corporate Communications)
- Master of Science (Teaching of Bahasa Malaysia as a First Language)
- Master of Arts (Malay Language)
- Master of Science (Sustainable Resource Management)

UPM-IPTS Collaborative Programs

Collaborative programs between UPM and private higher learning institutions (IPTS) provide another avenue for the general public to pursue higher education. This provides a flexible educational route to the public while enabling total control of the



mengendalikan program kerjasama ini. Terdapat pelbagai program yang ditawarkan melalui program kerjasama, meliputi program di peringkat Diploma dan Bachelor.

Program Kerjasama

- Bachelor Sastera (Bahasa Melayu)
- Bachelor Sastera (Bahasa Inggeris)
- Bachelor Sains Komputer
- Bachelor Pentadbiran Perniagaan
- Bachelor Kejuruteraan Mekanikal
- Bachelor Kejuruteraan Elektrik dan Elektronik
- Bachelor Kejuruteraan Awam
- Bachelor Kejuruteraan Sistem Komputer dan Komunikasi
- Bachelor Kejuruteraan Kimia
- Diploma Sains Komputer
- Diploma Pembangunan Manusia
- Diploma Pengurusan Perniagaan
- Diploma Pertanian
- Diploma Perhutanan
- Diploma Kejuruteraan Mekanikal
- Diploma Kejuruteraan Elektronik
- Diploma Kejuruteraan Teknologi Multimedia
- Diploma Kejuruteraan Awam

Senarai IPTS yang Bekerjasama dengan UPM

- Institut Teknologi A.N.S.
- Kolej Informasi Teknologi Cosmospect
- Institut Pembangunan Sumber Manusia (Kolej Kamunting)
- Kolej Teknologi Ikram
- Kolej Teknologi Timur
- Kolej SAL
- Kolej Poly-Tech MARA (KPTM)
- Kolej Teknologi Cybernetics
- Kolej Karisma
- Kolej Negeri Sembilan

quality of an IPTS. Institute for Distant Education and Learning (IDEAL) is an entity that has been entrusted to oversee these collaborative programs. Various programs are offered through this collaborative programs at Diploma and Bachelor's levels.

Collaborative Programs

- Bachelor of Arts (Malay Language)
- Bachelor of Arts (English Language)
- Bachelor of Computer Science & Communication Engineering
- Bachelor of Business Administration
- Bachelor of Mechanical Engineering
- Bachelor of Electrical and Electronic Engineering
- Bachelor of Civil Engineering
- Bachelor of Computer Science and Communication
- Bachelor of Chemical Engineering
- Diploma in Computer Science
- Diploma in Human Development
- Diploma in Business Management
- Diploma in Agriculture
- Diploma in Forestry
- Diploma in Mechanical Engineering
- Diploma in Electronic Engineering
- Diploma in Multimedia Technology
- Diploma in Civil Engineering

List of Collaborating IPTS

- A.N.S. Institute of Technology
- Cosmospect College of Information Technology
- Institute of Human Resource Development (Kamunting College)
- Ikram College of Technology
- Timur College of Technology
- SAL College
- Poly-tech MARA College (KPTM)
- Cybernetics Technology College



- Kolej UNITI
- Kolej Yayasan Melaka
- Kolej RISDA, Melaka
- Institut Kota Melaka
- Kolej INSTEDT
- Kolej Islam Yayasan Pelajaran Johor
- Pusat Pembangunan Kemahiran Pahang (PSDC)
- Institut Informasi Multimedia
- Kolej Shahputra
- Kolej Teknologi Bestari (KTB)
- Kolej Chermaj Jaya (KCJ)
- Institut Teknologi SARA

Program Eksekutif

Dalam tahun 2003 terdapat 2 buah fakulti yang menawarkan program eksekutif antaranya ialah Fakulti Ekonomi dan Pengurusan dan Fakulti Bahasa Moden dan Komunikasi. Ia juga merupakan satu alternatif untuk individu yang berkerjaya dan menyambung pengajian secara separuh masa.

Program-program yang ditawarkan ialah:

Fakulti Ekonomi dan Pengurusan

- Bachelo Ekonomi
- Bachelo Pentadbiran Perniagaan
- Bachelo Perakaunan

Fakulti Bahasa Moden dan Komunikasi

- Bachelo Sastera (Bahasa dan Linguistik Melayu)
- Bachelo Sastera (Bahasa Inggeris)
- Bachelo Sastera (Bahasa Asing)
- Bachelo Komunikasi

Perpustakaan Sultan Abdul Samad

Selaras dengan perkembangan teknologi maklumat dan

- Karisma College
- Negeri Sembilan College
- UNITI College
- Yayasan Melaka College
- RISDA College, Melaka
- Kota Melaka Institute
- INSTEDT College
- Johore Islamic Students Foundation College
- Pahang Skills Development Corporation (PSDC)
- Multimedia Information Institute
- Shahputra College
- Bestari Technology College (KTB)
- Chermaj Jaya College (KCJ)
- SARA Institute of Technology

Executive Programs

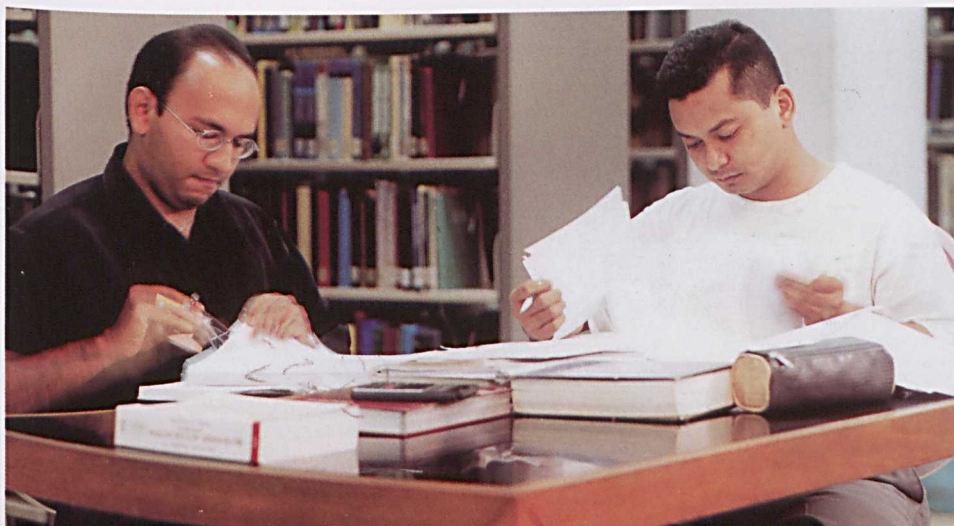
In 2003, two faculties offered executive programs namely, the Faculty of Economics and Management as well as the Faculty of Modern Languages and Communication. This served as an alternative for working individuals to further their education on a part-time basis. The programs offered include:

Faculty of Economics and Management

- Bachelor of Economics
- Bachelor of Business Administration
- Bachelor of Accounting

Faculty of Modern Languages and Communications

- Bachelor of Arts (Malay Language & Linguistics)
- Bachelor of Arts (English Language)
- Bachelor of Arts (Foreign Language)
- Bachelor of Communications



komunikasi (ICT), Perpustakaan Sultan Abdul Samad (PSAS), UPM berusaha untuk memastikan sistem pengurusan bahan dan perkhidmatannya berkembang selaras perkembangan berkaitan. Ini dibuat untuk membolehkan warga UPM menggunakan teknologi terkini bagi memenuhi keperluan maklumat dalam pengajaran, pembelajaran dan penyelidikan.

Koleksi

Koleksi Perpustakaan berkembang terus dengan penambahan bahan-bahan baru untuk menyokong program-program yang sedia ada dan juga program-program baru. Sehingga 2003, jumlah keseluruhan koleksi Perpustakaan UPM, termasuk koleksi di Perpustakaan Fakulti Perubatan dan Sains Kesihatan dan Perpustakaan Fakulti Perubatan Veterinar ialah sebanyak 438,006 naskhah. Jumlah ini meliputi semua koleksi buku dan jurnal berjilid. Dalam tempoh yang sama, koleksi bahan pandang dengar berjumlah 71,144 unit yang meliputi 39,209 judul. Bagi jurnal, Perpustakaan sentiasa berusaha untuk meningkatkan langganan kepada "e-journals" untuk memudahkan pengguna mengakses jurnal yang mereka minati. Dalam tahun 2003, sebanyak 6 judul bercetak dan 4 judul elektronik langganan baru telah dibuat sementara 107 langganan jurnal bercetak dibatalkan.

Keahlian

Keahlian perpustakaan meningkat setiap tahun dengan bertambahnya pengambilan pelajar. Sehingga Disember 2003, jumlah ahli bagi semua kategori ialah 51,505.

Perkhidmatan

Sehingga Disember 2003 transaksi peminjaman/pemulangan buku dan jurnal berjumlah 212,881; bahan pandang dengar 43,507 dan bagi alat pandang dengar pula ialah 4,345. Sehingga akhir Disember 2003, sebanyak 1,078 permohonan untuk mendapatkan

Sultan Abdul Samad Library

In line with the rapid advancement of Information and Communications Technology (ICT), UPM's Sultan Abdul Samad Library (PSAS), is endeavouring to ensure that its resources management system and services grow in tandem with this development. This is to ensure that users at UPM can utilise the latest technology to fulfil their teaching, learning and research needs.

Collection

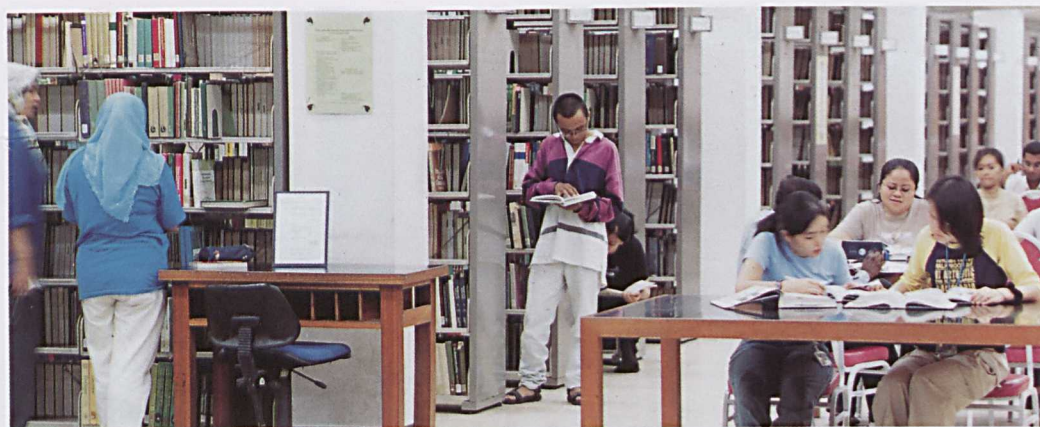
The library's collection has continued to grow with the addition of new materials to support both existing and new programs. As at 2003, the total number of UPM Library's collection including the Faculty of Medicine and Health Sciences Library as well as the Faculty of Veterinary Medicine Library stands at 438,006 copies. This total covers the entire collection of books and journal series. For the same period, its collection of audio-visual materials totalled 71,144 units covering 39,209 subject titles. As for journals, the Library is always enduring to increase its e-journal subscriptions to facilitate users to access their preferred journals conveniently. In 2003, 6 printed titles and 4 new electronic subscriptions were made while 107 printed journal subscriptions were cancelled.

Membership

The Library's membership increases every year with the student intake. As at December 2003, there were 51,505 members from all categories.

Services

Until December 2003, there were 212,881 borrowing / return transactions for books with 43,507 for audio-visual materials and 4,345 for audio-visual equipment. Until end of December 2003, there were a total of 1,078 applications to secure materials from other libraries by



bahan dari perpustakaan lain telah diterima daripada pelajar dan staf UPM, dan 795 telah dapat dipenuhi, iaitu 73.7%. Dalam tempoh yang sama, 1,558 permohonan diterima daripada perpustakaan luar untuk mendapatkan bahan daripada koleksi perpustakaan, jika ada. Daripada jumlah ini sebanyak 907 telah dapat dipenuhi, iaitu 58.2%.

Penggunaan Perpustakaan

Mengikut bacaan meter di pintu keluar Perpustakaan, dalam tempoh Januari hingga Disember 2003, sebanyak 870,651 kunjungan telah dibuat.

Pangkalan data dalam talian

Perkembangan ICT terkini telah membolehkan pengguna mengakses maklumat /makalah dalam jurnal dan lain-lain sumber maklumat dalam talian melalui INTERNET. Sehubungan dengan itu, Perpustakaan telah melanggan beberapa pangkalan data untuk membolehkan warga UPM mengakses seluas mungkin sumber maklumat. Sehingga Disember 2003, Perpustakaan telah melanggan pangkalan data dalam talian berikut:

Academic Search Premier, ACM Digital Library, Business Source Premier, Blackwell Synergy, Cambridge Scientific Abstracts, Computer Database, ERIC, Emerald Fulltext, Euromonitor, Family and Society Studies Worldwide, Institute of physics Electronic Journal, IEEE Xplore, Kluwer Online Journals, Lecture Notes in Computer Science, LINK (Springer- Verlag OnlineJournal), Lippincott Williams & Wilkins, OVID: Evidence Based Medical Reviews, OVID: Medline, ProQuest ABI/INFORM Global, ProQuest Agricultural Journals, ProQuest Digital Dissertations, ProQuest Education Complete, ProQuest Medical Library, Psyc Info, Psyc Articles, Science Direct dan World Scientific Computer E Journal.

students and staff of UPM. 73.7% or 795 of these requests were fulfilled. In the same period, 1,558 applications were received from external libraries to secure materials (if available) from UPM's Library. Of these, 58.2% or 907 requests were fulfilled.

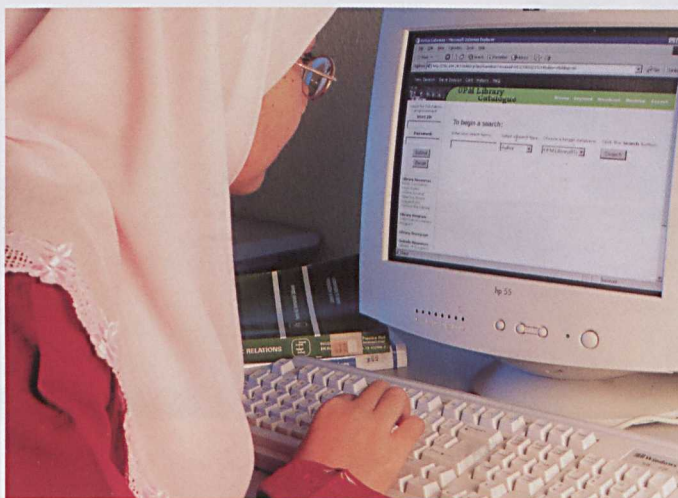
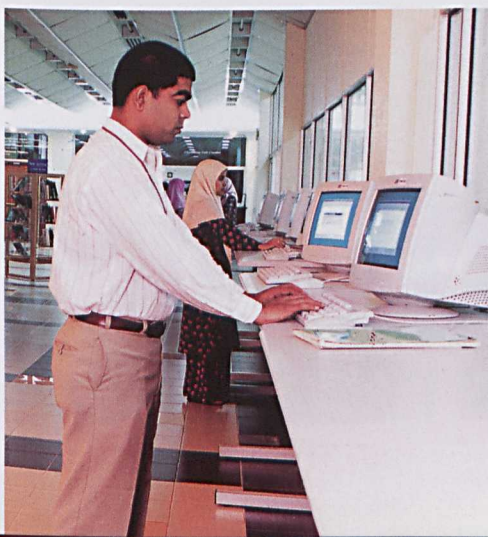
Library Usage

According to the meter reading at the Library's exit door, there were 870,651 visits from January to December 2003.

Online Database

The latest developments in ICT have enabled users to access information/contents of journals and other sources of information online via INTERNET. In relation to this, the Library has subscribed to various databases to enable UPM users to access wide sources of information. As at December 2003, the Library has subscribed the following online databases:

Academic Search Premier, ACM Digital Library, Business Source Premier, Blackwell Synergy, Cambridge Scientific Abstracts, Computer Database, ERIC, Emerald Fulltext, Euromonitor, Family and Society Studies Worldwide, Institute of Physics Electronic Journal, IEEE Xplore, Kluwer Online Journals, Lecture Notes in Computer Science, LINK (Springer-Verlag Online Journal), Lippincott Williams & Wilkins, OVID: Evidence Based Medical Reviews, OVID: Medline, Proquest Digital Dissertations, ProQuest Education Complete, ProQuest Medical Library, Psyc Info, Psyc Articles, Science Direct and World Scientific Computer E-Journal.



Keseluruhan pangkalan data ini membolehkan pengguna mengakses lebih 16,500 jurnal antarabangsa; sama ada mendapat maklumat mengenai judul, pengarang dan abstrak atau pun artikel itu sepenuhnya.

Selain daripada itu, warga UPM terus boleh mengakses pangkalan data dalam negara seperti MASTIC Link, NSTP E-media, PALMOILIS dan SIRIMLINK.

Pangkalan data CD-ROM

Perpustakaan kini mempunyai 23 judul pangkalan data dalam bentuk CD-ROM dalam berbagai bidang pengajaran dan penyelidikan, termasuk pangkalan data yang dihasilkan oleh Commonwealth Agricultural Bureau International (CABI) dan Institute for Scientific Information (ISI). Pangkalan-pangkalan data tersebut ialah:

ASFA, Biological Abstracts, CA on CD (Chemical Abstracts), CAB Abstracts, Current Contents on CD-ROM with Abstracts: Agriculture, Biology and Environmental Sc., Current Contents on CD-ROM with Abstracts: Clinical Medicine, Current Contents on CD-ROM with Abstracts: Engineering, Technology & Applied Sc., Current Contents on CD-ROM with Abstracts: Life Sc., Current Contents on CD-ROM with Abstracts: Physical, Chemical & Earth Sc., Current Contents on CD-ROM with Abstracts: Social & Behavioral Sc., FSTA, MLA International Bibliography, MUSE, POPLINE, Science Citation Index with Abstracts, Social Science Citation Index with Abstracts, Sport Discuss, TROPAG and Rural, UN Statistical Yearbook, Women's Indicator & Statistics Database, WTO International Trade Statistics

This entire database enables users to access more than 16,500 international journals; whether obtaining information according to titles, authors and abstracts or entire articles.

Apart from this, UPM users can also access local online databases such as MASTIC Link, NSTP E-media, PALMOILIS and SIRIMLINK.

CD-Rom Database

The library now has 23 database titles in various fields of subjects and research, including the database that was produced by Commonwealth Agricultural Bureau International (CABI) and Institute for Scientific Information (ISI) in CD-ROM format. These titles are as follows:

ASFA, Biological Abstracts, CA on CD (Chemical Abstracts), CAB Abstracts, Current Contents on CD-ROM with Abstracts: Agriculture, Biology and Environmental Sc., Current Contents on CD-ROM with Abstracts: Clinical Medicine, Current Contents on CD-ROM with Abstracts: Engineering, Technology & Applied Sc., Current Contents on CD-ROM with Abstracts: Life Sc., Current Contents on CD-ROM with Abstracts: Physical, Chemical & Earth Sc., Current Contents on CD-ROM with Abstracts: Social and Behavioural Sc., FSTA, MLA International Bibliography, MUSE, POPLINE, Science Citation Index with Abstracts, Social Science Citation Index with Abstracts, Sport Discuss, TROPAG and Rural, UN Statistical Yearbook, Women's Indicator & Statistics Database, WTO International Trade Statistics.



Pendidikan pengguna

Program Orientasi Perpustakaan untuk pelajar baru telah diadakan bagi pelajar peringkat Ijazah dan Diploma bagi sesi Mei dan November, merangkumi 80 Sesi; sementara Orientasi Perpustakaan bagi program pendidikan jarak jauh telah diadakan sebanyak 25 sesi.

Selain program untuk pelajar baru, Perpustakaan juga telah meneruskan sesi Strategi Pencarian Maklumat yang dibuat atas permintaan fakulti, selalunya untuk pelajar tahun akhir. Sebanyak 93 sesi telah diadakan. Sesi pendidikan pengguna kepada individu atau kumpulan-kumpulan kecil juga diteruskan; dan sebanyak 227 sesi telah dijalankan dari Januari hingga Disember 2003.

Pingat Emas Pak Rashid

Majlis Konvokesyen UPM ke- 27 (Sidang Ketiga) telah memperkenalkan Anugerah Pingat Emas Yayasan Pak Rashid kepada graduan peringkat Bachelo yang cemerlang dalam akademik dan kurikulum. Hadiah di peringkat universiti ini memberikan pengiktirafan tertinggi dan terbuka kepada semua pelajar UPM yang cemerlang dalam akademik dan kepimpinan dalam khidmat masyarakat.

Nama Pingat Emas Yayasan Pak Rashid dipilih sempena penubuhan Yayasan Pak Rashid yang dilancarkan pada 17 November 2000. Ia merupakan seorang tokoh yang tidak asing lagi di Serdang iaitu Allahyarham Mohd Rashid Ahmad yang lebih dikenali sebagai Pak Rashid atau Cikgu Rashid.

Pemenang anugerah tersebut akan menerima sebutir pingat emas yang dianugerahkan bernilai RM2,000 bersama cek bernilai RM3,000 serta sijil penghargaan.

User Education

The Library Orientation Program for new students was held for Degree and Diploma level students for the May and November sessions encompassing 80 sessions. There were 25 Library Orientation Program sessions for the Distance Learning Program.

Apart from programs for new students, the Library also continued its Information Finding Strategy sessions that were held on faculty request, primarily for final year students. A total of 93 sessions were held. The user education sessions for individuals and small groups were also continued. 227 sessions were held from January to December 2003.

Pak Rashid Gold Medal

The Third Sitting of UPM's 27th Convocation Ceremony saw the introduction of the Pak Rashid Foundation Gold Medal Award to outstanding graduates at Bachelor's level who excel in academic and curriculum activities. This university-level award signifies the highest honour and is open to all UPM students who excel in academic studies and leadership in community service.

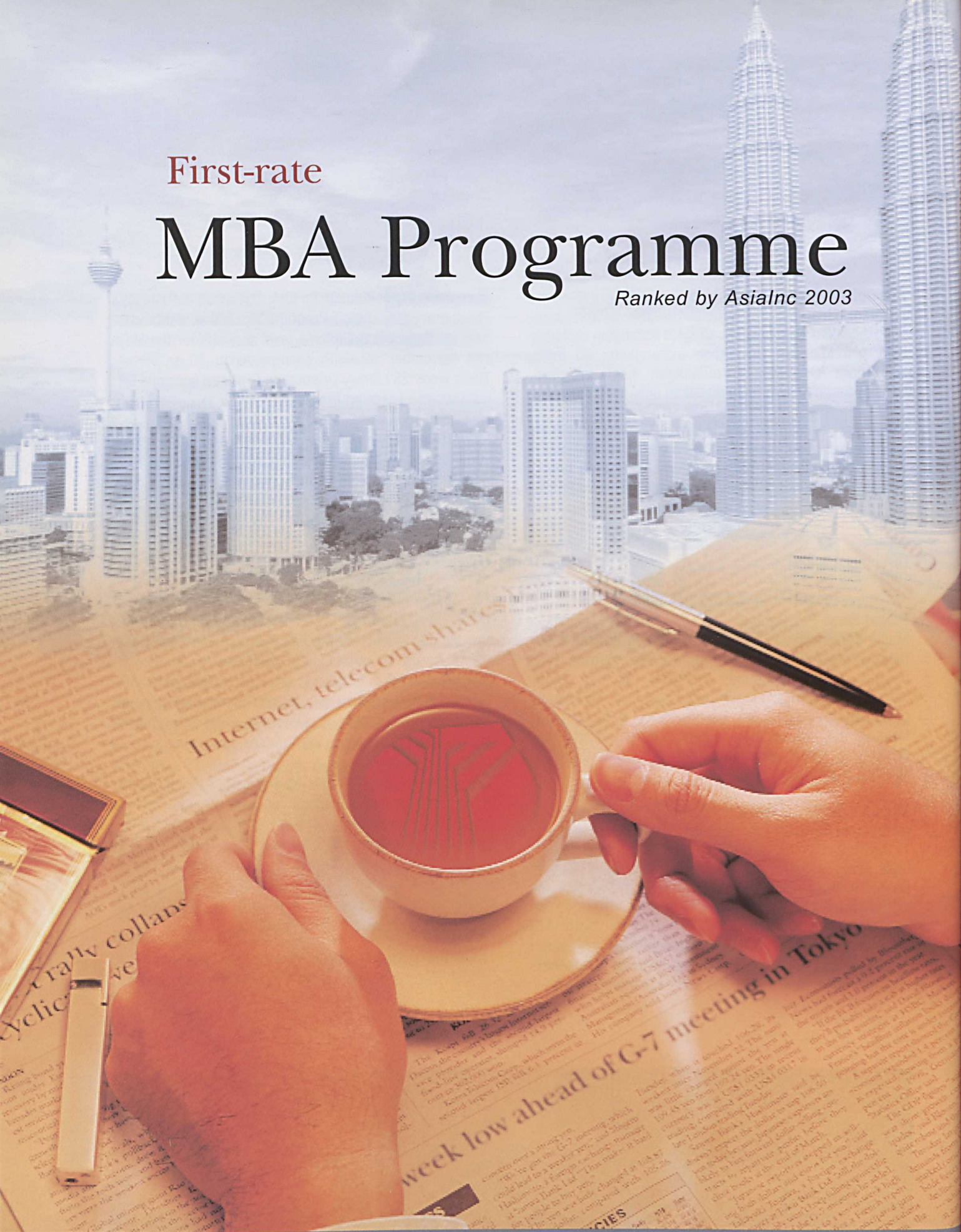
The name for the Pak Rashid Foundation Gold Medal Award was chosen in conjunction with the Pak Rashid Foundation, which was launched on 17 November 2003. It honours a prominent figure in Serdang, the Late Mohd Rashid Ahmad, better known as Pak Rashid or Cikgu Rashid. The winner of this award will receive a gold medal worth RM2,000 and a cheque for RM3,000 in addition to a certificate of appreciation.



First-rate

MBA Programme

Ranked by Asialnc 2003



Started as School of Agriculture in 1931

Upgraded to College of Agriculture in 1947

Elevated to University of Agriculture in 1971

Renamed



UNIVERSITI



PUTRA



MALAYSIA

in 1997



Pembangunan Mahasiswa
Student Development

Pembangunan Mahasiswa Student Development

Kegiatan Kemahasiswaan

Pada 2003 Universiti Putra Malaysia (UPM) telah melaksanakan pelbagai program serta aktiviti bagi meningkatkan kecemerlangan akademik dan pembangunan sahsiah setiap mahasiswa. Setiap program yang dirangka serta dilaksanakan mestilah mencakupi bidang akademik, kemasyarakatan, kerohanian, ekonomi, kesenian dan kebudayaan, sukan dan rekreasi dan juga sosial.

Bersesuaian dengan matlamat utama universiti iaitu 'melahirkan graduan yang berkualiti, berdaya saing dan berupaya untuk terus maju melalui pembelajaran yang berterusan', menjadi tanggungjawab dan peranan utama Bahagian Hal Ehwal Mahasiswa (B'HEM) untuk menjadi pemangkin ke arah pembentukan kecemerlangan, kewibawaan dan keterampilan mahasiswa melalui pelaksanaan program yang menekankan aspek akademik dan kokurikulum.

Dalam merencanakan pembangunan mahasiswa yang sebenar, bermula 2003 juga B'HEM telah menggariskan tiga fungsi utamanya iaitu:

- Kecemerlangan kemajuan akademik mahasiswa
- Kecemerlangan sahsiah dan kepimpinan mahasiswa
- Kecemerlangan kebajikan mahasiswa

Berlandaskan tiga fungsi utama ini, UPM mengorak langkah pro aktif dalam menyediakan pelbagai perkhidmatan kepada mahasiswa sepanjang tempoh pengajian mereka di kampus.

Aktiviti Sepanjang Tahun

Sepanjang 2003 sebanyak 322 aktiviti mahasiswa yang berdaftar dengan B'HEM berjaya dilaksanakan. Daripada jumlah tersebut sebanyak 7 program khidmat masyarakat

Student Activities

In 2003, Universiti Putra Malaysia (UPM) carried out several programs and activities to improve the academic excellence and personality development of its students. Each program that was designed and carried out had to cover academic, spiritual, economic, arts and culture, sports and recreation as well as social areas.

In line with the University's objective "To produce graduates of quality, competitive and capable of progressing forward through lifelong learning", it is the responsibility and main function of the Students Affairs Division (B'HEM) to be the catalyst in shaping student excellence, influence and advancement through programs that emphasise on academic and co-curricular aspects.

In planning the actual development of students, B'HEM outlined three of its primary functions beginning in 2003, namely:

- Excellence in students' academic development
- Excellence in students' personality and leadership
- Excellence in students' welfare

Based on these three primary functions, UPM has undertaken pro-active steps in facilitating various services to students throughout the duration of their studies at the campus.

Year long Activities

Throughout 2003, 322 student activities that were registered with B'HEM were carried out successfully. Out of this, 7 social service activities were carried out in various districts throughout the nation including



atau bakti siswa telah berlangsung di beberapa daerah seluruh negara termasuk Sri Aman, Sarawak, Jitra, Kuala Nerang dan Langkawi di Kedah, Jelevu dan Seremban di Negeri Sembilan. UPM juga berjaya menjadi tuan rumah dan menganjurkan program-program yang berprestij seperti Program Kepimpinan Mahasiswa IPTA, Kongres Mahasiswa Antarabangsa 2003 dan Festival Seni Tari MAKUM 2003.

Di samping itu juga, UPM turut menggalakkan mahasiswanya melibatkan diri dalam program bersifat global. Hasil daripada itu sebanyak 7 program peringkat antarabangsa disertai oleh mahasiswa termasuk lawatan sambil belajar, pertandingan debat dan pertukaran budaya. Dalam bidang kepimpinan, kebanyakan mahasiswa terdedah dengan pelbagai aktiviti terutamanya di peringkat kolej, universiti dan ada yang menjangkau peringkat antarabangsa seperti Konvensyen Antarabangsa Golden Key.

Anugerah Naib Canselor

Seramai 67 orang mahasiswa berjaya menerima Anugerah Naib Canselor 2003 yang mengiktiraf kecemerlangan mahasiswa dalam akademik dan kokurikulum. Seramai 138 mahasiswa telah dicalonkan bagi merebut anugerah yang paling berprestij di kalangan mahasiswa. Kriteria anugerah ini juga berdasarkan ketokohan, kewibawaan, prestasi unggul dan kesungguhan yang tinggi di dalam menjalankan aktiviti kepimpinan, kemasyarakatan serta menggalakkan penghayatan budaya ilmu ke arah mencerna pemupukan minda positif. Calon-calon juga mesti mempunyai Purata Nilai Mata Timbunan (CGPA) 3.0 ke atas dan tidak pernah dikenakan sebarang tindakan tatatertib.

Sri Aman, Sarawak, Jitra, Kuala Nerang and Langkawi in Kedah, Jelevu and Seremban in Negeri Sembilan. UPM also successfully hosted and organised prestigious programs such as IPTA Students' Leadership Program, 2003 International Students' Conference and MAKUM 2003 Dance Arts Festival.

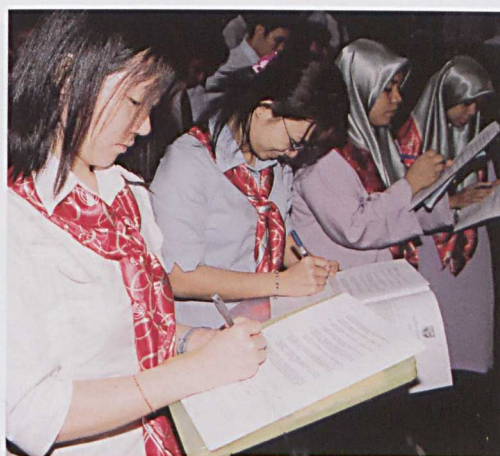
Apart from this, UPM also encouraged its students to participate in global-oriented programs. This resulted in students participating in 7 international level programs including educational visits, debates and cultural exchanges. In terms of leadership activities, the majority of the students were exposed to various activities at college and university levels while some even reaching international level in events such as the International Golden Key Convention.

Vice-Chancellor's Award

A total of 67 students received the 2003 Vice-Chancellor's Award, which acknowledged excellence in academic studies and co-curriculum. A total of 138 students were nominated for this prestigious award. The selection criteria were based on leadership, responsibility, outstanding performance and diligence in carrying out leadership and social activities as well as encouraging a knowledge-oriented culture towards cultivating positive mindsets. Candidates must also have a Cumulative Grade Point Average (CGPA) of 3.0 and above as well as be free from having any disciplinary action taken against them.

Sports Award

44 students received the Sports Award in various categories. In 2003, national sprint champion, Nazmizan Muhammad was chosen as Sportsman while the



Anugerah Sukan

Seramai 44 orang mahasiswa telah menerima Anugerah Sukan dalam pelbagai kategori. Pada 2003, jaguh pecut negara, Nazmizan Muhamad dipilih sebagai Olahragawan manakala Ketua Pasukan Hoki Wanita negara, Nor Saliza Ahmad Soobni sebagai Olahragawati. Bagi Anugerah Sukan ia melibatkan mahasiswa yang aktif dalam kegiatan sukan serta mencatat kejayaan dan mengharumkan nama UPM ketika menyertai kejohanan di peringkat kebangsaan atau antarabangsa.

Kecermerlangan akademik pelajar seiring dengan kemajuan dalam bidang kokurikulum. Paling menyerlah ialah penglibatan mahasiswa UPM dalam Kejohanan Sukan SEA 2003 di Vietnam. Seramai 17 atlet UPM berjaya membawa cabaran negara dan yang paling manis kejayaan berganda mahasiswa Fakulti Ekologi Manusia Nazmizan Mohamad yang dinobatkan Raja Pecut Asia Tenggara setelah memenangi dua pingat emas melalui acara 100 meter dan 200 meter. Secara keseluruhan atlet UPM menyumbang sebanyak 4 emas, 8 perak dan 6 gangsa.

Kebajikan

UPM memberi penumpuan khusus dalam hal kebajikan mahasiswa melalui beberapa program dan aktiviti yang dirancang. Pada 2003 seramai 264 mahasiswa UPM membuat pinjaman melalui Tabung Pendahuluan yang dianggarkan bernilai RM 155,800. Menerusi Tabung Kebajikan Pelajar pula UPM membelanjakan sebanyak RM6,200 untuk membantu mahasiswa yang memerlukan.

Selain itu, kemudahan pengurusan jenazah turut disediakan di samping Skim Perlindungan Insurans

Sportswoman was National Women's Hockey Team Captain, Nor Saliza Ahmad Soobni. The Sports Award involves students who are active in sports and achieve outstanding success at national or international levels, bringing honour to UPM.

The academic prowess of students has been in tandem with the progress made in co-curriculum activities. Participation of UPM students in the 2003 SEA Games in Vietnam was the highlight of the year. A total of 17 athletes from UPM carried the nation's challenge at the Games. The outstanding achievement was the success of Nazmizan Mohamad from the Faculty of Human Ecology who was crowned the ASEAN Sprint King by virtue of his 2 gold medals from victories in the men's 100 meter and 200 meter sprint events. Overall, UPM athletes obtained 4 gold, 8 silver and 6 bronze medals.

Welfare

UPM places specific emphasis on students' welfare through several well-planned activities and programs. In 2003, a total of 264 UPM students secured loans of approximately RM155,800 through the Advance Fund. UPM also spent RM6,200 from its Students' Welfare Fund to help needy students.

Apart from this, funeral management facilities were also offered besides the UPM Students' Group Protection Insurance Scheme. In 2003 alone, RM122,977.05 was received by students and their families from insurance claims. The insurance facilities covered natural death, permanent disability, accidental



Berkelompok Siswa UPM. Pada 2003 sahaja sebanyak RM 122,997.05 dapat dimanfaatkan oleh mahasiswa dan keluarga atas pelbagai tuntutan insurans yang dikemukakan. Kemudahan insurans tersebut meliputi kematian biasa, keilatan kekal seluruh tubuh badan, kematian kemalangan, perbelanjaan pengebumian dan perbelanjaan perubatan (akibat kemalangan).

Bermula 2003 juga UPM meningkatkan lagi perkhidmatan bimbingan dan kaunseling kepada mahasiswa melalui kaedah elektronik atau lebih dikenali sebagai E-Bika (Elektronik Bimbingan dan Kaunseling). Menurut statistik seramai 2,942 orang mahasiswa telah menggunakan perkhidmatan yang disediakan ini sepanjang 2003. Selain itu, UPM turut menyediakan klinik kaunseling, sesi kaunseling dan bimbingan secara konvensional.

Penginapan

Kampus UPM Serdang menawarkan sebanyak 14 Kolej Kediaman untuk mahasiswa manakala Kampus di Bintulu menawarkan satu kolej kediaman. Pada 2003 seramai 14,418 (sumber Semester November 2003) mahasiswa telah menetap di dalam kampus manakala selebihnya di kawasan berhampiran dengan kampus termasuk rumah sendiri dan rumah yang disewa. Mulai 2003 juga UPM memperkenalkan sistem 'cluster' dalam menentukan penginapan setiap mahasiswa. Sistem ini mengagihkan setiap pelajar mengikut pengelasan program pengajian masing-masing. Untuk memastikan urusan mahasiswa di kolej kediaman berjalan lancar pihak universiti juga melantik seramai 91 orang felo di kalangan Pegawai Akademik dan Pegawai Profesional Universiti.

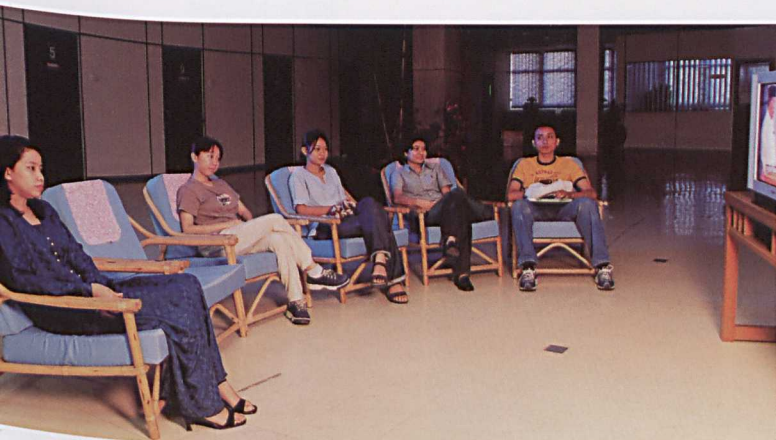
death, funeral expenses and medical expenses (accident related).

Beginning 2003, UPM also upgraded its guidance and counselling services to students via electronic methodology better known as E-Bika (Electronic Guidance and Counselling). Statistics indicate that 2,942 students used this service in 2003. Apart from this, UPM also offers counselling clinics, counselling sessions and conventional guidance.

Accommodation

The UPM Serdang Campus offers 14 Residential Colleges for students while the Bintulu Campus offers 1 residential college. In 2003, 14,418 (Source: November 2003 Semester) students resided in these campuses while the rest stayed in the surrounding areas in either own or rented premises. Beginning in 2003, UPM introduced a cluster system in determining the accommodation of students. This system allocates accommodation to each student according to their respective fields of study. To ensure that student affairs at the residential colleges are proceeding smoothly, the University has appointed 90 fellows amongst Academic and Professional University Officers.

UPM has also formed an Off-Campus Student Committee to coordinate off-campus student activities. Among the significant efforts include a study on problems encountered by off-campus undergraduates.



Jadual bilangan pelajar mengikut Kolej Kediaman			Student Breakdown According to Residential Colleges		
Bil	Kolej	Jumlah Mahasiswa	No.	College	Total Undergraduates
1.	Kolej Mohamad Rashid	580	1.	Mohamad Rashid College	580
2.	Kolej Kedua	697	2.	Second College	697
3.	Kolej Tun Dr. Ismail	702	3.	Tun Dr. Ismail College	702
4.	Kolej Canselor	633	4.	Chancellor College	633
5.	Kolej Kelima	816	5.	Fifth College	816
6.	Kolej Keenam	743	6.	Sixth College	743
7.	Kolej Sultan Alaeddin Suleiman Shah	813	7.	Sultan Alaeddin Suleiman Shah College	813
8.	Kolej Tun Perak	750	8.	Tun Perak College	750
9.	Kolej Pendeta Za'ba	810	9.	Pendeta Za'ba College	810
10.	Kolej Kesepuluh	832	10.	Tenth College	832
11.	Kolej Kesebelas	850	11.	Eleventh College	850
12.	Kolej Kedua Belas	2606	12.	Twelfth College	2,606
13.	Kolej Ketiga Belas	786	13.	Thirteenth College	786
14.	Kolej Keempat Belas	2800	14.	Fourteenth College	2,800
JUMLAH KESELURUHAN MAHASISWA		14,418	GRAND TOTAL UNDERGRADUATES		14,418

PEMBAHAGIAN FAKULTI DAN KOLEJ MENGIKUT SISTEM "CLUSTER"			DIVISION OF FACULTY AND COLLEGE BY CLUSTER SYSTEM		
BIL	KOLEJ	KLUSTER FAKULTI	NO.	COLLEGE	FACULTY CLUSTER
1.	Kolej Mohamad Rashid	Fakulti Perubatan Fakulti Ekologi Manusia	1.	Mohamad Rashid College	Faculty of Medicine Faculty of Human Ecology
2.	Kolej Kedua	Fakulti Sains dan Pengajian Alam Sekitar Fakulti Pengajian Pendidikan	2.	Second College	Faculty of Science and Environmental Studies Faculty of Educational Studies
3.	Kolej Tun Dr. Ismail	Fakulti Sains dan Pengajian Alam Sekitar	3.	Tun Dr. Ismail College	Faculty of Science and Environmental Studies
4.	Kolej Canselor	Fakulti Pengajian Pendidikan Fakulti Bahasa Moden dan Komunikasi Fakulti Ekologi Manusia	4.	Chancellor College	Faculty of Educational Studies Faculty of Modern Languages and Communication Faculty of Human Ecology
5.	Kolej Kelima	Fakulti Ekologi Manusia	5.	Fifth College	Faculty of Human Ecology
6.	Kolej Keenam	Fakulti Pengajian Pendidikan	6.	Sixth College	Faculty of Educational Studies
7.	Kolej Sultan Alaeddin Suleiman Shah	Fakulti Sains dan Pengajian Alam Sekitar Fakulti Perubatan dan Sains Kesihatan	7.	Sultan Alaeddin Suleiman Shah College	Faculty of Science and Environmental Studies Faculty of Medicine and Health Sciences
8.	Kolej Tun Perak	Fakulti Ekologi Manusia	8.	Tun Perak College	Faculty of Human Ecology
9.	Kolej Pendeta Za'ba	Fakulti Bahasa Moden dan Komunikasi	9.	Pendeta Za'ba College	Faculty of Modern Languages and Communication
10.	Kolej Kesepuluh	Fakulti Kejuruteraan Fakulti Rekabentuk dan Senibina	10.	Tenth College	Faculty of Engineering Faculty of Design and Architecture
11.	Kolej Kesebelas	Fakulti Kejuruteraan Fakulti Rekabentuk dan Senibina	11.	Eleventh College	Faculty of Engineering Faculty of Design and Architecture
12.	Kolej Kedua Belas	Fakulti Sains Komputer dan Teknologi Maklumat Fakulti Perubatan Veterinar Fakulti Sains dan Pengajian Alam Sekitar	12.	Twelfth College	Faculty of Computer Science and Information Technology Faculty of Veterinary Medicine Faculty of Science and Environmental Studies
13.	Kolej Ketiga Belas	Fakulti Perhutanan Fakulti Bahasa Moden dan Komunikasi Fakulti Pengajian Pendidikan	13.	Thirteenth College	Faculty of Forestry Faculty of Modern Languages and Communication Faculty of Educational Studies
14.	Kolej Keempat Belas	Fakulti Ekonomi dan Pengurusan Fakulti Sains Makanan dan Bioteknologi	14.	Fourteenth College	Faculty of Economics and Management Faculty of Food Sciences and Biotechnology

UPM turut menubuhkan Jawatankuasa Mahasiswa Luar Kampus bagi menyelaraskan aktiviti dan kegiatan mahasiswa luar kampus. Antara aktiviti yang telah dijalankan ialah membuat kajian terhadap permasalahan yang dihadapi oleh Mahasiswa Luar Kampus.

Pengangkutan

UPM memperkenalkan perkhidmatan bas pengantara di dalam kampus dan sekitar Taman Sri Serdang dan Stesen Komuter Serdang bermula 2002. Walau bagaimanapun perkhidmatan ini telah ditingkatkan dengan penambahan bilangan bas menjadi 31 buah. Pada 2003 sahaja sebanyak 9 buah bas baru diperkenalkan bagi meningkatkan perkhidmatan sedia ada. Sistem ini diperkenalkan bertujuan untuk mengelakkan kesesakan dalam kampus dengan pertambahan jumlah kenderaan pelajar yang boleh mendatangkan suasana tidak selesa terutama pencemaran, keselamatan dan kesihatan.

Kesihatan

UPM mempunyai Pusat Kesihatan Mahasiswa yang bertanggungjawab memberi perkhidmatan rawatan perubatan, kesihatan dan pergigian di samping khidmat lain yang bersangkutan kepada mahasiswa, pasca siswazah, staf dan warga universiti untuk memastikan status kesihatan mereka berada dalam keadaan baik selaras dengan piawaian perubatan yang digunapakai ke arah meningkatkan masa tumpuan dan produktiviti pembelajaran dan pengajaran. Kesihatan Mahasiswa dikendalikan oleh 9 orang doktor perubatan 3 orang doktor pergigian dan 73 orang kakitangan sokongan yang lain. Sepanjang tahun 2003, seramai 60,624 kes telah dirujuk kepada Pusat Kesihatan Mahasiswa untuk mendapatkan rawatan lanjut. Manakala untuk rawatan pergigian sebanyak 7,084 kes berjaya dikendalikan

Transportation

UPM has introduced a shuttle bus service between the campus and around Sri Serdang and the Serdang Commuter Station since 2002. This service has now been upgraded with the number of buses increased to 31. In 2003 alone, 9 new busses were added to further improve existing service. This system was introduced to reduce traffic congestion in the campus especially with the increasing number of students' vehicles that can contribute to pollution and other safety and health hazards.

Health

UPM has a Student Health Centre that is responsible for offering medical, health and dental treatment as well as other services to undergraduates, postgraduates and staff at UPM to ensure that their health status is on par with existing medical standards in order to improve their focus as well as teaching and learning productivity. 9 medical doctors, 3 dentists and 73 other support staff operate this Centre. Throughout 2003, a total of 60,624 cases were referred to the Student Health Centre for further treatment. A total of 7,084 dental cases were handled, taking the total number of patients for the year to 67,708 compared to 71,776 for 2002.

From June 2003, the Student Health Centre utilised a computerised system to manage the treatment of patients. This computerised system was known as e-Clinic.



menjadikan jumlah keseluruhan kedatangan pesakit ke pusat tersebut adalah seramai 67,708 berbanding seramai 71,776 pada 2002.

Mulai Jun 2003 Pusat Kesihatan Mahasiswa telah merealisasikan penggunaan sistem berkomputer dalam menguruskan perawatan pesakit. Sistem pengurusan berkomputer ini dikenali sebagai e-Klinik.

Kewangan dan Penajaan

Pada tahun 2003 sebanyak 252 penaja terlibat memberi sumbangan kepada kemajuan akademik mahasiswa UPM sama ada dalam bentuk biasiswa, derma siswa mahu pun pinjaman. Satu unit khas iaitu Unit Kewangan Mahasiswa ditubuhkan di B'HEM bagi menguruskan aspek tersebut supaya mahasiswa mendapat sumber bantuan kewangan bagi meneruskan pengajian.

Pilihan Raya Kampus

Tahun 2003 menyaksikan perubahan baru dalam format Pilihan Raya Kampus UPM. Kaedah elektronik yang dikenali sebagai E-Vote dipraktikkan sepenuhnya dan berjaya meningkatkan peratusan mahasiswa keluar mengundi. Sebanyak 90.12 peratus iaitu 22,044 mahasiswa mengundi untuk memilih 45 orang ahli Majlis Perwakilan Pelajar (MPP) berbanding 50.47 peratus iaitu 12,621 mahasiswa pada tahun lepas. Kaedah yang pertama kali diperkenalkan di IPTA Lembah Klang ini turut membantu mengatasi masalah undi rosak. Di samping itu, keputusan pilihan raya juga dapat diketahui lebih awal kerana dikira secara elektronik.

Sistem pengundian secara talian terus (on-line) merupakan suatu sistem menanda atau memangkah secara elektronik di dalam komputer. Seseorang mahasiswa dikehendaki menandakan atau memangkah terhadap calon yang dipilih dalam ruang yang disediakan di skrin komputer.

Funds and Sponsorship

In 2003, a total of 252 sponsors were involved in providing sponsorship to UPM's student academic development either by way of scholarships, donations or loans. The Student Finance Unit was formed by B'HEM to manage this aspect to enable students to receive financial aid in order to continue their education.

Campus Election

2003 saw new changes in the UPM Campus Election format. The electronic E-Vote method was introduced fully and yielded a greater percentage of student voters. A total of 90.12% or 22,044 students voted to choose 45 Student Representative Council members. The E-Vote method has significantly reduced the number of spoilt votes in the first time it has been introduced at Klang Valley IPTAs. Besides this, the results were also derived much earlier with the electronic vote calculation method.

The online voting method used electronic 'direct tick' or 'crossing' via computers. Students were required to tick or cross the given space beside their candidate as indicated on their computer screens.

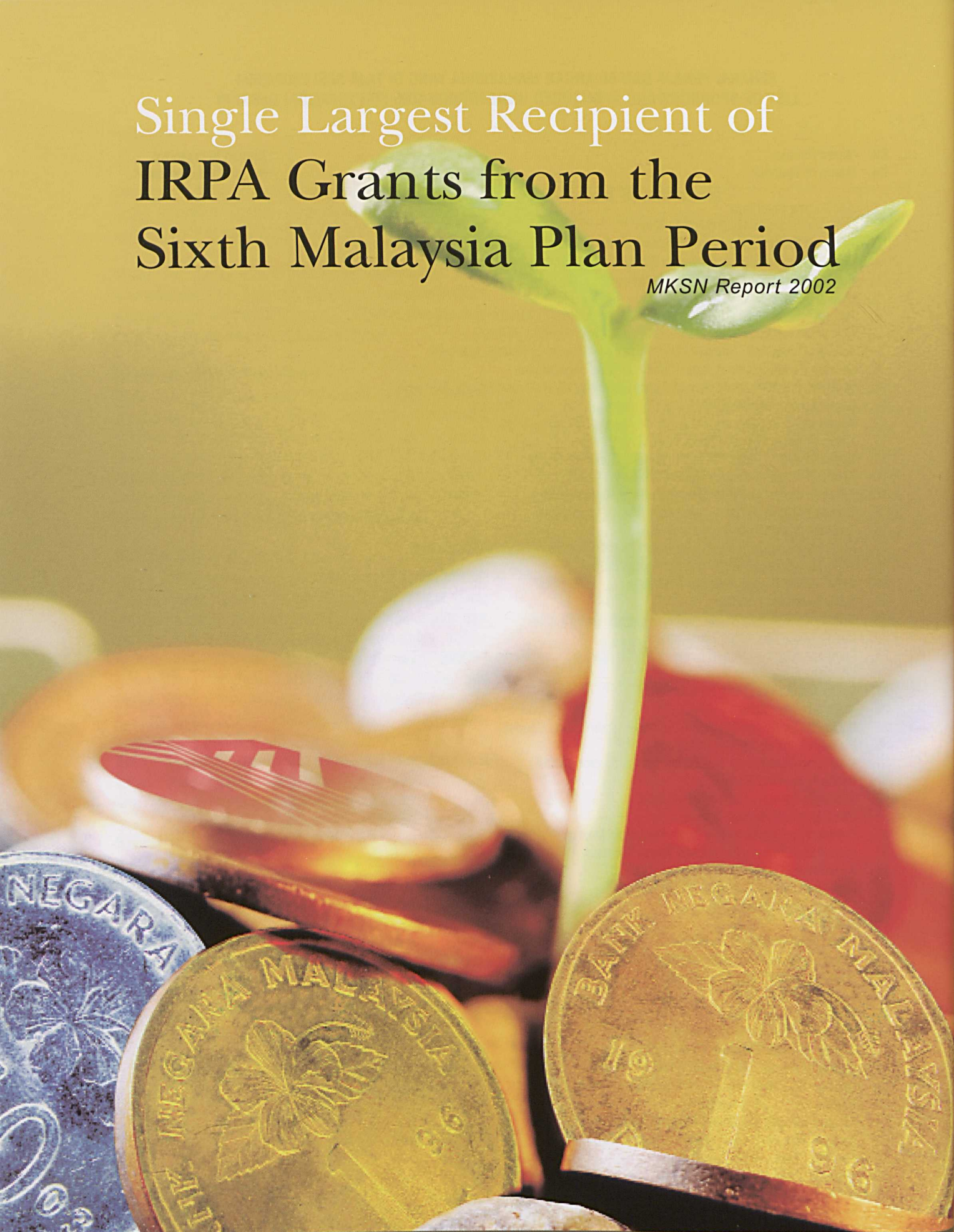


SENARAI PENAJA DAN BILANGAN MAHASISWA YANG DI TAJA SESI 2003/2004
LIST OF SPONSORS AND SPONSORED UNDERGRADUATES FOR 2003/2004 SESSION

Bil. No.	Nama Penaja Name of Sponsor	Jumlah Mahasiswa No. of Undergraduates
1.	Alif Society Mauritius	15
2.	Bank Kerjasama Rakyat (M) Sdn Bhd	3
3.	Biasiswa Kumpulan Wang Simpanan Pekerja / Employees Provident Fund Scholarship	1
4.	British America Tobacco Malaysia Foundation	1
5.	Calon Persendirian / Private Candidates	757
6.	Dewan Bahasa dan Pustaka Malaysia	1
7.	Institut Penyelidikan dan Kemajuan Pertanian Malaysia (MARDI) / Malaysian Agricultural Research & Development Institute (MARDI)	1
8.	Jabatan Orang Asli Malaysia / Department of Indigenous People, Malaysia	2
9.	Jabatan Perkhidmatan Awam / Public Services Department	1697
10.	Kementerian Belia dan Sukan Malaysia / Ministry of Youth and Sports, Malaysia	24
11.	Kementerian Pendidikan Malaysia / Ministry of Education, Malaysia	1086
12.	Kementerian Pertahanan Malaysia / Ministry of Defence, Malaysia	29
13.	Kerajaan Negeri Perak / Perak State Government	11
14.	Kerajaan Negeri Pulau Pinang / Penang State Government	9
15.	Kerajaan Negeri Sabah / Sabah State Government	75
16.	Kerajaan Negeri Sarawak / Sarawak State Government	40
17.	Kerajaan Negeri Selangor / Selangor State Government	81
18.	Kerajaan Sudan / Government of Sudan	1
19.	Kesatuan Guru-Guru Melayu Kelantan / Kelantan Malay Teachers' Association	2
20.	Koperasi Kebangsaan Permodalan Tanah Berhad	5
21.	KPM – Skim Tenaga Pengajar Politeknik	25
22.	Kuok Foundation Berhad	23
23.	KWSP- Caruman Ibu Bapa / EPF – Parents Contribution	29
24.	Lee Yan Lian Charitable Foundation	5
25.	Lembaga Biasiswa Negeri Kedah / Kedah State Scholarship Foundation	3
26.	Lembaga Pertubuhan Peladang	7
27.	Majlis Agama Islam Negeri Johor	1
28.	Majlis Amanah Rakyat MARA	250
29.	Majlis Sukan Negeri Selangor / Selangor State Sports Council	1
30.	Malayan Banking Berhad (Maybank)	1
31.	Malaysian Community and Education Foundation (MCEF)	1
32.	Nestle Products Sdn Bhd	1
33.	Nichimen Forestry Scholarship Fund	1
34.	OCBC Bank (Malaysia) Berhad	1
35.	Pejabat Penyimpan Mohor Besar Raja-Raja Melayu	3
36.	Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)	16295
37.	Pertubuhan Keselamatan Sosial (PERKESO)	5
38.	Petroleum Nasional Berhad (Petronas)	38
39.	Sarawak Shell Berhad	1
40.	Shell	10
41.	Sime Darby Berhad	6
42.	Tabung Amanah Pendidikan Negeri Melaka (TAPNM) / Malacca State Education Trust Fund (TAPNM)	19
43.	Tan Sri Lee Loy Seng Foundation	11
44.	Tenaga Nasional (TEN)	6
45.	Tenaga Nasional Berhad	3
46.	Yayasan Felda / Felda Foundation	14
47.	Yayasan Guthrie / Guthrie Foundation	1
48.	Yayasan Kelantan Darul Naim (YAKIN) / Kelantan Darul Naim Foundation (YAKIN)	8
49.	Yayasan KL – Kepong / KL-Kepong Foundation	2
50.	Yayasan Lee / Lee Foundation	5
51.	Yayasan Negeri Sembilan / Negeri Sembilan Foundation	10
52.	Yayasan Pelajaran Johor (YPJ) / Johore Students' Foundation (YPJ)	6
53.	Yayasan Perak / Perak Foundation	4
54.	Yayasan Sabah / Sabah Foundation	6
55.	Yayasan Sarawak / Sarawak Foundation	7
56.	Yayasan Selangor / Selangor Foundation	14
57.	Yayasan Telekom Malaysia / Telekom Malaysia Foundation	19
58.	Yayasan Terengganu / Terengganu Foundation	4
59.	Yayasan Tun Tan Cheng Lock / Tun Tan Cheng Lock Foundation	16
60.	Yayasan Wilayah Persekutuan / Federal Territory Foundation	3
61.	Yayasan Biasiswa Sarawak Tunku Abdul Rahman / Tunku Abdul Rahman Sarawak Scholarship Fund	9
JUMLAH MAHASISWA / TOTAL UNDERGRADUATES		20716

Single Largest Recipient of IRPA Grants from the Sixth Malaysia Plan Period

MKSN Report 2002



Started as School of Agriculture in 1931

Upgraded to College of Agriculture in 1947

Elevated to University of Agriculture in 1971

Renamed

UNIVERSITI **P**UTRA **M**ALAYSIA in 1997



Penyelidikan & Pembangunan
Research & Development

Penyelidikan Dan Pembangunan Research And Development

Universiti Putra Malaysia (UPM) merupakan institusi penyelidikan yang terkenal dalam pembangunan produk baru dan penemuan saintifik yang dapat menyumbang kepada kesejahteraan Negara. Terdapat pelbagai faktor yang menyemarakkan lagi aktiviti penyelidikan di kampus UPM yang sememangnya terkenal dalam melahirkan saintis yang berwibawa. Adalah menjadi hasrat UPM untuk muncul sebagai sebuah 'Universiti Penyelidikan' yang terkemuka di rantau Asia dengan memberi tumpuan kepada penyelidikan dalam bidang-bidang terpilih.

Geran Penyelidikan

UPM adalah penerima geran IRPA dari pihak Kementerian Sains, Teknologi dan Alam Sekitar (MOSTE) yang terbanyak berbanding dengan institusi yang lain. Pencapaian cemerlang ini adalah berdasarkan kejayaan dalam Rancangan Malaysia Kelapan. (RMK-8).

Peruntukan Rancangan Malaysia Kelapan (RMK-8)

Tempoh : 2001-2005 (Setakat 2003)

Sumber dana dari Kerajaan (MOSTE)	
IRPA- EAR (416)	RM 63,331,668.00
IRPA- SR (7 projek)	RM 57,642,750.00
IRPA PR (34 projek)	RM 35,000,424.00
Top Down National Biotechnology (8 projek)	RM 9,954,594.00
Sumber dana dari Kerajaan (Kementerian Pendidikan Malaysia)	
Geran Penyelidikan Fundamental (104 projek)	RM 4,027,624.04

JUMLAH RM 169,957,060.04

Sumber Dana dari agensi Kebangsaan/Antarabangsa (Selain IRPA)

Geran Kebangsaan	23,552,337
Geran Antarabangsa	29,002,611

JUMLAH 52,554,948

Rajah 1: Peruntukan Geran bagi RMK-8 yang diterima UPM

Universiti Putra Malaysia (UPM) is a renowned research institution in the field of new product development and scientific discoveries that have contributed to the national well being. There are various factors which further encourage the research activities at UPM which is well-known in producing scientists of calibre. It is UPM's aim to become one of Asia's premier "Research Universities" with focus on research in selected fields.

Research Grants

UPM is the biggest recipient of IRPA grants from the Ministry of Science, Technology and the Environment (MOSTE) compared to other institutions. This outstanding achievement is based on the success attained in the 8th Malaysia Plan (EMP).

8th Malaysia Plan (EMP) Allocation

Period: 2001 – 2005 (As of 2003)

Funding from Government (MOSTE)	
IRPA – EAR (416)	RM63,331,668.00
IRPA – SR (7 Projects)	RM57,642,750.00
IRPA – PR (34 Projects)	RM35,000,424.00
Top Down National Biotechnology (8 Projects)	RM9,954,594.00
Funding from Government (Ministry of Education, Malaysia)	
Fundamental Research Grants (104 Projects)	RM4,027,624.04

TOTAL RM169,957,060.04

Funding from National/International Agencies (Excluding IRPA)

National Grants	RM23,552,337
International Grants	RM29,002,611

TOTAL RM52,554,948

Figure 1: 8th Malaysia Plan (EMP) IRPA Allocation received by UPM



Nota:

- IRPA – Intensification of Research in Priority Areas
- EAR – Experimental Applied Research
- PR – Prioritised Research
- SR – Strategic Research

Untuk kategori IRPA, Dalam Rancangan Malaysia Ketujuh (RMK-7) bagi tahun 1996-2000, pihak UPM hanya memperolehi geran penyelidikan sebanyak RM185,500,000.

Bagi RMK-8 (bagi tempoh 2001-2005), jumlah peruntukan IRPA setakat Disember 2003 ialah **RM160,974,842**. Ini boleh dikatakan suatu pencapaian yang cemerlang memandangkan RMK-8 baru sahaja tiga tahun (2001-2003) dilaksanakan. Masih ada dua tahun lagi untuk penyelidikan di UPM mengambil peluang memperolehi geran yang lebih banyak sehingga tamat RMK-8.

Geran *Top Down National Biotechnology* juga merupakan dana yang diperolehi dari MOSTE walaupun bukan di bawah kategori IRPA. Jumlah penerimaan dana dari UPM ialah **RM 9,954,594** dengan jumlah 8 projek kesemuanya. Dana Geran Penyelidikan Fundamental yang diterima daripada Kementerian Pendidikan Malaysia pula menunjukkan peningkatan dari setahun ke setahun iaitu sebanyak RM3 juta pada tahun 2002 dan **RM4.7 juta** pada tahun 2003.

Sementara projek-projek yang melibatkan dana dari agensi luar (Kebangsaan/ Antarabangsa) juga amat menggalakkan dengan jumlah setakat tahun 2003 ialah sebanyak **RM52,554,948**.

Notes:

- IRPA – Intensification of Research in Priority Areas
- EAR – Experimental Applied Research
- PR – Prioritised Research
- SR – Strategic Research

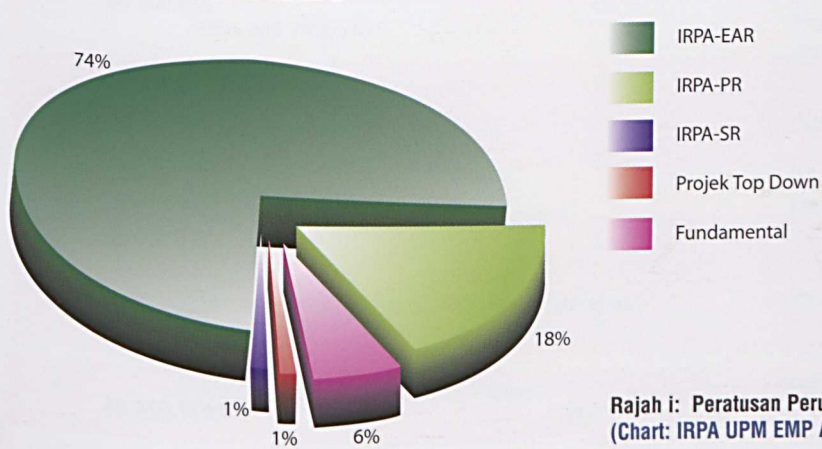
For the IRPA category, UPM only received research grants worth RM185,500,000 under the 7th Malaysia Plan (SMP) from 1996-2000.

For EMP (2001-2005 period), the total IRPA grants received up to December 2003 stood at **RM160,974,842**. This is a significant achievement since EMP has only been in effect for three years (2001 – 2003). UPM researchers have two more years to secure more grants until the expiry of EMP.

The Top Down National Biotechnology Grant is also a source of funding received from MOSTE, although it does not come under the IRPA category. The total grants received by UPM from this funding are **RM9,954,594** with a total of eight projects. The Fundamental Research Grant from the Ministry of Education has increased from year to year with **RM4.7 million** in 2003 compared to RM3 million in 2002.

The projects involving funding from external agencies (National/International) are also highly encouraging with a total of **RM52,554,948** as at 2003.

Peruntukan IRPA UPM RMK-8



Rajah i: Peratusan Peruntukan Projek IRPA yang diterima UPM dalam RMK-8 (Chart: IRPA UPM EMP Allocation)

**Kelulusan Geran Penyelidikan Projek IRPA (EAR/PR/SR RMK8) Mengikut Sektor
IRPA Research Project Grant Approval (EAR/PR/SR EMP) by Sector**

Bil No	Sektor Sector	Jumlah Peruntukan (RM) Total Allocation (RM)	Bil No	Sektor Sector	Jumlah Peruntukan (RM) Total Allocation (RM)
1	Agro-industry	20,035,664.00	8	Manufacturing & Construction	9,114,702.00
2	Economic	2,646,819.00	9	Nanotechnology & Precision Engineering	55,774,350.00
3	Education & Training	509,424.00	10	Plant Production and Primary Products	3,872,000.00
4	Energy, Mineral & Geo-Science	676,622.00	11	Science and Engineering	26,059,378.00
5	Environmental	2,671,168.00	12	Services & IT	2,183,720.00
6	Health	13,519,896.00	13	Social	6,215,791.00
7	Manufacturing	17,695,308.00			
JUMLAH / TOTAL					160,974,842.00

**Agihan Peruntukan Geran Penyelidikan Fundamental 2003 berdasarkan Fakulti / Institut
2003 Fundamental Research Grant allocation by Faculty / Institute**

Bil. No.	Fakulti / Institut Faculty / Institute	Bil. Projek No. of Projects	Jumlah Peruntukan (RM) Total Allocation (RM)
1	Fakulti Bahasa Moden dan Komunikasi <i>Faculty of Modern Language & Communication</i>	9	151,553.00
2	Fakulti Ekonomi dan Pengurusan <i>Faculty of Economics & Management</i>	12	429,043.24
3	Fakulti Kejuruteraan <i>Faculty of Engineering</i>	11	396,000.00
4	Fakulti Pengajian Pendidikan <i>Faculty of Educational Studies</i>	4	142,140.00
5	Fakulti Perhutanan <i>Faculty of Forestry</i>	1	48,411.80
6	Fakulti Pertanian <i>Faculty of Agriculture</i>	10	262,500.00
7	Fakulti Perubatan dan Sains Kesihatan <i>Faculty of Medicine and Health Sciences</i>	8	395,750.00
8	Fakulti Perubatan Veterinar <i>Faculty of Veterinary Medicine</i>	2	70,000.00
9	Fakulti Rekabentuk dan senibina <i>Faculty of Design and Architecture</i>	2	59,544.00
10	Fakulti Sains dan Pengajian Alam Sekitar <i>Faculty of Science and Environmental Studies</i>	22	831,700.00
11	Fakulti Sains Makanan dan Bioteknologi <i>Faculty of Food Science and Biotechnology</i>	3	148,000.00
12	Institut Biosains <i>Institute of Bioscience</i>	5	224,000.00
13	Institut Multimedia dan Perisian <i>Multimedia and Software Institute</i>	2	61,000.00
14	Sekolah Pengajian Siswazah Pengurusan <i>Graduate School of Management</i>	3	107,982.00
15	Institut Gerontologi <i>Institute of Gerontology</i>	2	200,000.00
16	Institut Penyelidikan Matematik <i>Institute for Mathematics Research</i>	8	500,000.00
JUMLAH / TOTAL		104	4,027,624.04

Patent dan Pengkomersialan

Pada tahun 2003, penyertaan UPM dalam pameran dan pertandingan penyelidikan di peringkat antarabangsa dikurangkan. Ia bertujuan untuk memberi tumpuan dan keutamaan kepada usaha untuk mematenkan produk penyelidikan. Sebagai bukti, UPM telah memperuntukkan sebanyak RM 500,000 untuk proses pendaftaran paten. Malah pihak universiti juga telah memutuskan supaya mana-mana produk penyelidikan yang ingin menyertai Pertandingan Reka Cipta dan Penyelidikan khususnya di peringkat antarabangsa perlulah dipatenkan terlebih dahulu atau proses pendaftaran paten dimulakan.

Sementara itu, setakat bulan Disember 2003 jumlah permohonan paten keseluruhannya di UPM adalah sebanyak **92** permohonan. Tiga reka cipta telah berjaya mendapat sijil paten. Dua daripada reka cipta tersebut adalah daripada Fakulti Kejuruteraan iaitu **Putra Block (Prof. Madya Dr. Mohd. Razali Abdul Kadir) dan HO-Meter (Prof. Madya Dr. Husaini Omar)**. Manakala reka cipta daripada Fakulti Sains dan Pengajian Alam Sekitar yang berjaya mendapatkan sijil paten ialah **Latexometer (Prof. Dr. Kaida Khalid)**. Selain daripada 3 reka cipta yang telah mendapat sijil paten, 40 permohonan telah dihantar ke Kementerian Perdagangan Dalam Negeri dan Hal Ehwat Pengguna bagi mendapatkan sijil paten (**patent pending**) dan 49 lagi dalam proses untuk memohon paten (**under process for patenting**).

Selain itu, untuk tahun 2003 sahaja, UPM telah mengkomersilkan sebanyak 18 produk penyelidikan.

Antara produk penyelidikan yang telah dikomersilkan ialah:

Patents and Commercialisation

In 2003, UPM's participation in international level exhibitions and competitions was reduced. This was done to prioritise and focus on patenting research products. In line with this, UPM has allocated RM500,000 for patent registration process. In fact, the University has also decided that any research product that competes in international Design and Research Competitions must have been patented or at least have initiated the patent registration process before participation.

Meanwhile, as at December 2003, the total number of patent applications in UPM stood at 92. Patent certification was successfully secured for three inventions. Two of these were from the Faculty of Engineering, i.e. Putra Block (Associate Professor Dr. Mohd. Razali Abdul Kadir) and HO-Meter (Associate Professor Dr. Husaini Omar). The other invention that secured patent certification was the Latexometer (Professor Dr. Kaida Khalid) from the Faculty of Science and Environmental Studies. Apart from these three patents, 40 applications have been sent to the Ministry of Domestic Trade and Consumer Affairs to obtain patent certificates and 49 others are under process for patenting.

Apart from this, for 2003 alone, UPM successfully commercialised 18 research products. Among these products are:

Bil. / No	Produk / Product	Penyelidik / Researcher
1.	Zappa and Vitta Grow	Prof. Madya Dr. Ahmad Husni Mohd Hanif dan Dr. Syed Omar Syed Rastan
2.	White Spot Syndrome Ditection Kit	Prof. Dr. Mohamed Shariff Mohamed Din
3.	Newcastle Disease and Fowl Pox Vaccines	Prof. Dr. Datin Khatijah Yusof
4.	Generating Financial Report Simulation (GeneRes)	Prof. Madya Dr. Arfah Saleh
5.	Modulation of Signal in Optical System	Prof. Madya Dr. Mohammad Khazani Abdullah

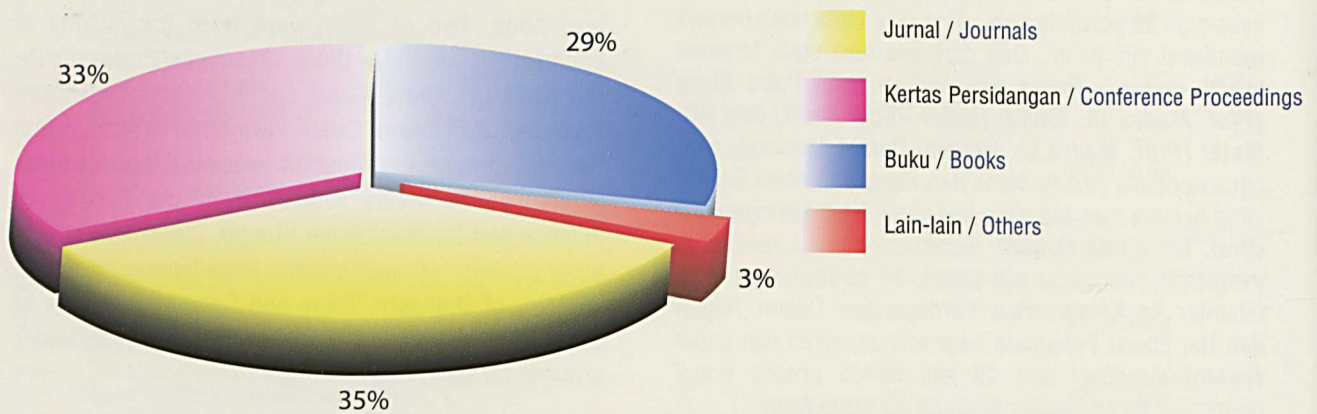
Penerbitan

Jumlah keseluruhan bilangan penerbitan bagi tahun 2003 adalah **2827** iaitu meningkat berbanding dengan penerbitan pada tahun 2002 iaitu sebanyak **2507**. Maklumat lengkap dapat dirujuk pada Rajah III dan Jadual berikut:

Publication

The total number of publications for 2003 was 2,827 which is an improvement over the year 2002 when the number was only 2,507. Detailed information is available in Chart III and the following Schedule:

**Penerbitan UPM bagi tahun 2003 /
UPM publications for the year 2003**



**Rajah iv: Peratusan Bilangan Penerbitan UPM pada tahun 2003
Chart iv: UPM publications for year 2003 by percentage basis**

Jadual: Bilangan Penerbitan untuk Tahun 2003 Schedule: Number of Publications for 2003		
Bil / No	Penerbitan / Publication	Jumlah / Total
1	Journals • Foreign • Malaysian	511 320
2	Conference Proceedings • Foreign • Malaysian	225 778
3	Buku / Books	95
4	Others	898
TOTAL		2,827

Anugerah, Pencapaian dan Kejayaan

UPM telah menempa nama di persada kebangsaan dan antarabangsa apabila banyak produk penyelidikan UPM telah memenangi beberapa anugerah dalam pameran penyelidikan yang disertai. Penyelidik-penyelidik UPM telah banyak merangkul anugerah penyelidikan di mana delegasi UPM telah meraih 10 pingat semasa Pameran ITEX 2003 dan lebih membanggakan apabila penyelidik UPM, Prof. Dr. Ho Yin Wan telah meraih Anugerah Ram Rais Bio-technology.

Selain itu, UPM telah muncul sebagai IPTA yang meraih pingat terbanyak dengan menggondol 30 pingat di Ekspo S&T 2003 serta booth UPM juga telah dinobatkan sebagai booth terbaik. Kesemua kejayaan dan kecemerlangan ini membuktikan bahawa produk penyelidikan UPM diiktiraf oleh pihak luar serta membuktikan bahawa penyelidik UPM tidak ketinggalan dalam meningkatkan keupayaan dan penghasilan penyelidikan yang bermutu sejajar dengan hasrat pengurusan universiti untuk menjadikan UPM universiti bertaraf dunia dalam bidang penyelidikan. Antara pameran yang disertai dan kejayaan yang dicapai sepanjang 2003 ialah:

a) Pameran *Invention, Innovation, Industrial Design Technology (I-TEX) 2003*

Pameran *Invention, Innovation, Industrial Design Technology (I-TEX) 2003* telah berlangsung pada 16-18 Mei 2003 di Sunway Convention Centre, Subang Jaya. Delegasi UPM terdiri daripada 24 orang penyelidik berserta dengan 20 produk telah bersaing dengan beberapa institusi penyelidikan yang lain dalam pameran selama dua hari itu. UPM telah berjaya memperoleh 2 Pingat Emas, 2 Pingat

Awards, Achievements and Success

UPM is renowned at both national and international scene due to the many awards its research products have won in the various research exhibitions it had participated. UPM researchers have received numerous research awards especially at the ITEX 2003 where the UPM delegation won 10 medals. To make the achievement even sweeter for UPM, its researcher Prof. Dr. Ho Yin Wan grabbed the Ram Rais Biotechnology Award.

Apart from this, UPM was the IPTA with the biggest medal haul at the S&T Expo 2003 winning 30 medals in addition to being named the Best Booth at the Expo. These resounding achievements prove that UPM research products have been well received by others and indicates that UPM researchers are competent in their research capabilities, striving to produce high quality research work in line with the University's objective of becoming a world-class research institution. Among the exhibitions participated and successes achieved in 2003 are:

a) *Invention, Innovation, Industrial Design Technology (I-TEX) 2003 Exhibition*

The *Invention, Innovation, Industrial Design Technology (I-TEX) 2003 Exhibition* was held from 16-18 May 2003 at the Sunway Convention Centre, Subang Jaya. The UPM delegation consisted of 24



Perak dan 6 Pingat Gangsa dari 20 penyertaan. UPM juga menerima Anugerah Khas 'Ram Rais Biotechnology Award' melalui Prof. Dr. Ho Yin Wan. Butiran penuh pemenang seperti jadual di bawah.

researchers with 20 products competed with several other research institutions in the two-day event. UPM's 20 entries managed to win 2 Gold, 2 Silver and 6 Bronze medals. UPM also won the special "Ram Rais Biotechnology Award", via Prof. Dr. Ho Yin Wan. The full details of the winners are indicated below:

Senarai Pemenang Pameran Invention, Innovation, Industrial Design Technology (I-TEX) 2003
List of Invention, Innovation, Industrial Design Technology (I-TEX) 2003 Exhibition Winners

Bil No.	Penyelidik Researcher	Tajuk Penyelidikan Research Title	Pingat Medal
1	Prof. Dr. Ho Yin Wan, Ms. Kalavathy Ramasamy, Dr. Jin Lizhi, PM Dr. Norhani Abdullah, Tan Sri Dato Dr. Syed Jalaludin Syed Salim	Probiotic for Poultry	Emas dan Ram Rais Biotechnology Award (RM1,000, plus filing of one Patent, Trademark & Design application each)
2	Prof. Dr. Khatijah Yusoff, Tan Wen Siang, Kho chiew Ling, Amir Rabu Novel	Molecular Carrier	Emas / Gold
3	Dr. Jalaluddin Harun, Dr. Khairul Zaman Hj. Mohd. Dahlan	Fibre Reinforced Plastic Composite (FRPC) for Interior Automotive and Other Application	Perak / Silver
4	PM. Dr. Fauziah Othman, Prof. Dr. Aini Ideris, Dr. Abdul Rahman Omar, Narayani Meyyappan	Newcastle Disease Virus (NDV): A Killer in Chicken but a Potential Life Saver in Human	Perak / Silver
5	Dr. Sabira Katun, Aduwati Sali, Hasniza Hambali, Ng Chee Kyon, Ong Kar Chun	Network Independent Video on Demand (VoD) System	Gangsa / Bronze
6	Farinazleen Mohamed Ghazali, Prof. Dr. Abu Bakar Salleh, Raja Noor Zaliha Abd. Rahman & Prof. Dr. Mahiran Basri	Bioremediation of Petroleum Pollutants by Microbial Consortium	Gangsa / Bronze
7	Prof. Dr. Abdul Halim Shaari, Lim Kean Pah, K. Kabashi, Yu Ong Sing, Huda	GMR & CMR Magnetic Thin Film for Sensor Applications	Gangsa / Bronze
8	Prof. Madya Dr. Iyuke Sunny Esayegbemu, Prof. Madya Dr. Fakhru'l-Razi Ahmadun, Ma'an Fahmi Al- Khatib, Muataz Ali Atieh	Development of Activated Carbon-Tin (IV) Oxide (SnO ₂) for Hydrogen Purification in Pressure Swing Adsorption (PSA) for (PEM) Fuel Cell.	Gangsa / Bronze
9	Prof. Madya Dr. Mariana Nor Shamsudin, V. Neela, Prof. Madya Dr. Raha Abdul Rahim	SASSAR Kit (<i>Staphylococcus aureus</i> Species Specific Antibiotic resistant) Identification Kit.	Gangsa / Bronze
10	Tan Wen Siang, Khatijah Yusoff, Priadarishni Ramanujam-Thurai Raja	Novel Peptide to Distinguish Vaccinated Birds from those Infected with Virulent Newcastle Disease Virus	Gangsa / Bronze

b) Pameran dan Anugerah Reka Cipta & Penyelidikan 2003

UPM telah menganjurkan Pameran dan Anugerah Rekacipta & Penyelidikan bertempat di Pusat Kebudayaan dan Kesenian Sultan Sallahuddin Abdul Aziz Shah, UPM pada 8 – 10 Julai 2003. Pameran ini merupakan acara tahunan bagi UPM. Ia memberi peluang untuk para penyelidik di UPM mempamerkan segala hasil dan usaha dalam penyelidikan. Menerusi pameran ini juga segala hasil dan pencapaian yang diperolehi oleh para penyelidik dapat dikongsi bersama untuk menyemarakkan lagi semangat kerjasama di kalangan penyelidik tanpa ada sempadan fakulti dan institut di mana konsep kluster penyelidikan telah diperkenalkan.

Sebanyak 8 Kluster Penyelidikan iaitu *Agriculture, Food & Forestry, Energy, Material & Environment, Bioscience & Biotechnology, Information Technology & Mathematics, Science & Engineering, Health & Allied Science, Humanities & Social Science dan Economics & Management*. Agenda pameran yang berlangsung selama dua hari ini termasuklah Pameran Rekacipta, Seminar Rekacipta, Ceramah Kerjaya Sains, Kuiz Sains dan di akhiri dengan Majlis Penganugerahan. Sebanyak 470 projek penyelidikan mengambil bahagian dalam pameran ini. Seramai 260 telah berjaya menggondol pingat yang terdiri daripada 37 pingat emas, 81 pingat perak dan 148 pingat gangsa.

Pameran dan Anugerah Rekacipta dan Penyelidikan ini telah dirasmikan oleh Yang Berhormat Dato' Hj. Zainal Dahalan, Timbalan Menteri Sains, Teknologi dan Alam Sekitar Malaysia.

b) Invention and Research Exhibition and Awards 2003

UPM organised the Invention and Research Exhibition and Awards 2003, which was held on 8 July 2003 at UPM's Sultan Salahuddin Abdul Aziz Shah Culture and Arts Centre. An annual event at UPM, it offers UPM researchers the perfect opportunity to exhibit their research work. The exhibition enables researchers to share their achievements and findings to enhance cooperation without any faculty or institutional barriers where cluster concepts have been introduced.

Currently there are 8 Research Clusters namely Agriculture, Food & Forestry, Energy, Material and Environment, Bioscience & Biotechnology, Information Technology & Mathematics, Science & Engineering, Health & Allied Science, Humanities & Social Science and Economics & Management. The agenda of the two-day exhibition included Invention Exhibition, Invention Seminar, Science Career Talk, Science Quiz and concluded with an Award Ceremony. A total of 470 research projects participated in this exhibition with 260 of them winning medals comprising 37 Gold, 81 Silver and 148 Bronze.

The Invention and Research Exhibition and Awards 2003 was officiated by Yang Berhormat Dato' Hj. Zainal Dahalan, Deputy Minister of Science, Technology and Environment, Malaysia.



c) Ekspo Sains dan Teknologi 2003

Ekspo Sains dan Teknologi 2003 telah berlangsung pada 7-9 Ogos 2003 di Pusat Dagangan Dunia Putra (PWTC), Kuala Lumpur. Delegasi UPM seramai 29 orang penyelidik telah membawa pulang sebanyak 30 pingat kesemuanya dengan pecahan pingatnya adalah 10 pingat emas, 13 pingat perak dan 6 pingat gangsa. Ini merupakan kejayaan yang gemilang dan cemerlang buat UPM. Di samping itu booth UPM juga telah berjaya memenangi tempat pertama bagi kategori Rekabentuk Khas Booth.

Kejayaan Penyelidik UPM di *Expo Science & Technology* 2003, 7 – 9 Ogos 2003, PWTC Kuala Lumpur

- a. **Booth UPM** telah berjaya mendapat **tempat pertama** bagi kategori "**Booth Special Design**"
- b. **30 pingat** daripada **29 penyertaan UPM** (iaitu 17% daripada jumlah 181 pingat keseluruhannya). Pecahan pingat adalah seperti berikut :
 - **10 Pingat Emas** (iaitu 29 % daripada keseluruhan 35 pemenang pingat emas)
 - **13 Pingat Perak** (iaitu 16% daripada keseluruhan 81 pemenang pingat perak)
 - **7 Pingat Gangsa** (iaitu 11% daripada keseluruhan 65 pemenang pingat gangsa).

c) Science and Technology Expo 2003

The Science and Technology Expo 2003 was held from 7-9 August 2003 at the Putra World Trade Centre (PWTC), Kuala Lumpur. UPM's 29-man delegation took home a total of 30 medals. They comprised 10 Gold, 13 Silver and 6 Bronze medals. This proved to be a resounding success for UPM. UPM also won the first place in the Special Booth Design category.

The outstanding success of UPM researchers in the Science and Technology Expo 2003, 7-9 August 2003 at PWTC Kuala Lumpur:

- a. **UPM's Booth** won **first place** in the "**Special Booth Design**" category
- b. UPM won **30 medals** from **29 entries** (17% of the total 181 medals offered). The medal breakdown is as follows:
 - **10 Gold Medals** (29% of total 35 Gold Medal Winners)
 - **13 Silver Medals** (16% of total 81 Silver Medal Winners)
 - **7 Bronze Medals** (11% of total 65 Bronze Medal Winners)



**Penyelidik-penyelidik UPM yang telah memenangi pingat:
UPM researchers who have won medals:**

Bil	Penyelidik / Researcher	Tajuk Penyelidikan / Research Title	Pingat / Medal
1	Arfah Salleh	The Generating Financial Reports Simulation (GenerReS) Software	Emas Gold
2	Foo Hooi Ling, Lim Yin Sze, Norihan Mohd Saleh, Raha Abdul Rahim and Gulam Rusul R. A	The Study of Novel Biopreservative Produced by Lactobacillus plantarum I-UL4 isolated from Fermented Tapioca, Manihot Esculanta	Emas Gold
3	Ghizan Bin Saleh, Mandefro Nigussie, Khayamuddin Panjaitan and Iden Ismail	UPM-GS 2002: Improved Sweet Corn (<i>Zea mays</i> L.) Genotype Developed by Introgression of Exotic Germplasm	Emas Gold
4	Jamilah Bakar, Azizah Ahmad, Tan Kah Weng, Yazid Abdul Amnaf, Yaakob Che Man and Mohd. Nazri Zayapor	Gelatin from 3 Cultured Freshwater Fish Skins Obtained by Limiting Process	Emas Gold
5	Khatijah Yusoff, Tan Wen Siang, Kho Chiew Ling and Amir Rabu	BioCarrier TM : A Novel Molecular Carrier from Newcastle Disease Virus	Emas Gold
6	Mohd. Azmi Mohd. Lila and Lai Kit Yee	IMURON TM A Total Solution for Polynucleotide Vaccines	Emas Gold
7	Mohd. Azmi Mohd. Lila, Lai Kit Yee, Sheikh-Omar Abdul Rahman, Sabrina Sukardi, Rosnina Yusof and Hafizi Mohd. Nor	Novel Polynucleotide Vaccine, NUCLEOCEPTIN TM For An Effective Fertility Control In Animals	Emas Gold
8	Mohd. Shahwahid Hj. Othman and Awang Noor Abdul Ghani	Cost Benefit Analysis Simulation for Development Project Evaluation	Emas Gold
9	Robiah Yunus, Fakhru'l-Razi Ahmadun, Ooi Tian Lye and Azni	Environmental Friendly Synthetic Lubricant	Emas Gold
10	Tan Wen Siang, Priadarishni Ramanujam, Sheila Nathan, Lee Thong Chuan and Khatijah Yusoff	NDPath TM : A Simple Solution to Newcastle Disease Virus Pathotyping	Emas Gold
11	Abdul Rahman Ramli and Salah Ramadan Althloothi	Data Hiding Techniques in Digital Images	Perak Silver
12	Borhanuddin Mohd. Ali, Chong Ming Chuan, Wong Cheong Seng, Yeoh Hoe Seng and Ng Chee Kyun	Smart Remote Access Distributed System	Perak Bronze
13	Fakhru'l-Razi Ahmadun, Muataz Ali Atieh, Iyuke S.E., Ma'an Fahmi Alkhatib, Dayang Awang Baik, EL-Sadig Mahdi, Abdul Ghani Liew, Faizah Md. Yasin and Md. Halim Shah Ismail	Carbon Nanotubes and Carbon Nanofibers Synthesis for Nanotechnology Applications	Perak dan Gangsa Silver & Bronze
14	Ho Yin Wan, Kalavathy Ramasamy, Jin Lizhi, Norhani Abdullah and Syed Jalaludin Syed Salim	Sterllac TM : A Multi-strain Probiotic for Poultry	Perak
15	Mahiran Basri, Siti Salhah Othman, Mohd. Zobir Hussein, Halila Jasmani, Mohd. Basyaruddin Abd. Rahman, Abu Bakar Salleh, Raja Noor Zaliha Abd. Rahman	Enhancement of Lipase Enantioselectivity Through Immobilization	Perak Silver

Bil	Penyelidik / <i>Researcher</i>	Tajuk Penyelidikan / <i>Research Title</i>	Pingat / <i>Medal</i>
16	Maziah Mahmood, Sreeraman Subramaniam, Mohd Puad Abdullah and Sariah Meon	Improved Enhanced Protection Against Fusarium Wilt by Constitutive Co-expression of Chitinase and Glucanase Genes in Transgenic Banana	Perak
17	Maznah Ismail, Abdul Salam Abdullah, Azrina Azlan, Wafaa Hailat, Nurzillah Maliki, Anuar Omar and Nurulaini Abd. Rahman	E-ORY™: Antioxidant Rich Nutraceutical Oil from Local Agricultural by-Products	Perak
18	Mohd Ali Hassan, Shahrakbah Yacob, Suraini Abdul Aziz, Yoshihinito Shirai and Mohamed Ismail Abdul Karim	Alternative Methods for the Recovery of Intracellular Bioplastics from Various Waste Resources	Perak Silver
19	Radin Umar Radin Sohadi, Abdel Magid Salem Hamouda, Megat Mohamad Hamdan Megat Ahmad, Wong Shaw Voon and Farag Mohamed Shuaeib	Design of Cost Effective and Comfortable Motorcycle Helmet with Bio-Composite Material for Tropical Climates	2 Perak 2 Silver
20	Shattri Mansor, Abdul Rashid Mohamed Shariff, H.M Ibrahim and Zahra	Oil Spill Contingency Planner	Perak Silver
21	Suraini Abd. Aziz, Mohd. Ali Hassan, Mohamed Ismail Abdul Karim, Noraini Samat and Gan Siew Hung	Growth of Aspergillus Niger in Solid Substrate Fermentation Using Palm Kernel Cake (PKC) as Substrate	Perak Silver
22	Yaakob Che Man and Syahariza Zainul Abidin	Detection of Lard in Chocolates by Fourier Transform Infrared (FTIR) Spectroscopy for Halal Authentication	Perak Silver
23	Aminuddin bin Hussin, Noraidah Malek and Irene Lah	Nutrient Flow Stem Infusion Technique of Fertilizer Application in Oil Palm Seedlings.	Gangsa Silver
24	Mohd. Zobir Hussein, Zulkarnain Zainal, Asmah Hj. Yahaya, Chan Woei Long and Azira Abd. Aziz	Composite Conversion Coating using Organic-Inorganic Nanolayered Hybrid Materials	Gangsa Silver
25	Nor Azowa Ibrahim, Md. Zin Wan Yunus, Mansor Ahmad, Faraj A. Abu-Ilaiwi, Khairul Zaman M. Dahlan and Mohd Zaki Ab. Rahman	Modification of Oil Palm Empty Fruit Bunch Fiber by Graft Copolymerization	Gangsa Silver
26	Wong Shaw Voon, Abdel Magid Salem Hamouda, Megat Mohamad Hamdan Megat Ahmad, Radin Umar Radin Sohaidi and Tan Kean Sheng	Design and Development of Heavy Duty Pendulum Impact Test Rig	2 Gangsa 2 Bronze
27	Zulkarnain Zainal, Lee Chong Yong, Mohd. Zobir Hussein, Anuar Kassim and Nor Azah Yusof	Electrochemical Assisted Photodegradation of Dye Pollutants using TiO ₂ Thin Film Electrodes	Gangsa Silver

d) Pameran Penyelidikan & Pembangunan IPTA 2003

Pameran ini telah berlangsung pada 9 – 12 Oktober 2003 di Pusat Dagangan Dunia Putra (PWTC) Kuala Lumpur. Menteri Pendidikan Y.B.Tan Sri Dato' Seri Musa Mohamad telah menyempurnakan majlis perasmian. Tema pameran adalah '*Investing in Innovation*' atau Pelaburan dalam Inovasi yang bermaksud untuk meningkatkan keyakinan dan kesedaran awam tentang kepakaran yang ada serta sumbangan kepada masyarakat melalui penyelidikan. Pada pameran kali ke-2 ini, ia dianjurkan oleh Kementerian Pendidikan dengan kerjasama seluruh IPTA di Malaysia di mana UPM telah diberi tanggungjawab sebagai penganjur bagi pameran ini.

Dalam pameran ini, sebanyak 17 IPTA mengambil bahagian dan 254 booth dengan 467 produk hasil penyelidikan telah dipamerkan. Selain pameran, terdapat 77 kertas kerja telah dibentangkan dan 397 poster persidangan dipamerkan. Fokus pameran pada tahun ini merangkumi penyelidikan & pembangunan yang dibahagikan kepada tujuh kelompok bidang penyelidikan yang utama iaitu Bidang Pertanian, Makanan dan Perhutanan, Bidang Bahan, Tenaga dan Alam Sekitar, Bidang Biosains dan Bioteknologi, Bidang Teknologi dan Komunikasi, Bidang Sains dan Kejuruteraan, Bidang Kesihatan dan Sains Sekutu serta Bidang Kemanusiaan dan Sains Sosial.

e) Ekspo OIC 2003

Ekspo OIC 2003 telah diadakan pada 14-19 Oktober 2003 di Pusat Konvensyen Putrajaya. Ekspo ini diadakan bersempena dengan Persidangan Pertubuhan Negara-negara Islam (OIC) ke-11. Ia terbahagi kepada gerai pameran dan gerai jualan yang disertai oleh wakil-wakil delegasi Negara-negara

d) IPTA Research & Development Exhibition 2003

This exhibition was held from 9-12 October 2003 at the Putra World Trade Centre (PWTC) Kuala Lumpur. It was officiated by Y.B. Tan Sri Dato' Seri Musa Mohamad, the Minister of Education. The theme of the exhibition was "Investing in Innovation" which was mooted to increase the public confidence and interest in the existing expertise and as a public service through research. Held for the second consecutive time, the exhibition was organised by the Ministry of Education and received full cooperation from all Malaysian IPTAs. UPM was given the responsibility to be the Exhibition's organiser.

17 IPTAs participated in this exhibition, which saw 254 booths displaying 467 research products. Apart from the exhibition, there were 77 working papers presented while 397 posters were showcased. The focus of the exhibition this year encompassed research & development and was divided into seven core research segments namely the disciplines of Agriculture, Food and Forestry, Materials, Energy and Environment, Bioscience and Biotechnology, Technology and Communications, Science and Engineering, Health and Allied Science as well as Human and Social Science.

e) OIC 2003 Expo

The OIC 2003 Expo was held from 14-19 October 2003 at the Putrajaya Convention Centre. This expo was organised in conjunction with the 11th Organisation of Islamic Conference (OIC). It was divided into both display and sales booths with



OIC. Pada ekspso ini, Pusat Pengurusan Penyelidikan (RMC) bersama-sama dengan Bahagian Komunikasi Korporat, Sekolah Pengajian Siswazah Pengurusan dan Sekolah Pengajian Siswazah telah mengambil bahagian.

f) Pameran Penyelidikan Sempena Pesta Konvokesyen UPM

Pameran ini telah berlangsung pada 16-19 Oktober 2003 bertempat di Bukit Expo UPM bersempena dengan Pesta Konvokesyen UPM ke-27.

Peningkatan Kemahiran dan Kecemerlangan

UPM melalui Pusat Pengurusan Penyelidikan (RMC) telah merangka pelbagai program dan aktiviti bagi meningkatkan lagi tahap pengetahuan para penyelidik dalam aspek-aspek tertentu yang boleh memberi sumbangan kepada kecemerlangan penyelidikan. Program yang telah berlangsung sepanjang tahun 2003 sama ada di peringkat universiti/kebangsaan mahupun antarabangsa adalah seperti berikut :-

Bengkel/ Kursus /Seminar

a) Bengkel Kluster Penyelidikan

Pra-Bengkel Kluster Penyelidikan telah dianjurkan pada 13 Februari 2003, bertempat di Dewan Taklimat, Bangunan Pentadbiran UPM. Lanjutan dari bengkel ini, satu lagi Bengkel Kluster Penyelidikan diadakan pada 11 dan 12 Mac 2003 bertempat di Cyberview Lodge Resort, Cyberjaya. Seramai 55 orang peserta terdiri daripada penyelidik-penyelidik di UPM telah menghadiri bengkel ini. Kluster penyelidikan di UPM telah dibahagikan kepada 8 kluster dan setiap kluster diketuai oleh seorang Penyelaras. Jawatankuasa Kluster Penyelidikan di UPM dipengerusikan oleh Prof. Dr. Abu Bakar Salleh, Pengarah Institut Biosains (IBS) dan Pusat Pengurusan Penyelidikan bertindak sebagai sekretariat dan penganjur kepada Bengkel Kluster Penyelidikan ini.

participation from OIC delegates. Research Management Centre (RMC) with its Corporate Communications Department, Graduate School of Management and School of Graduate Studies participated in this expo.

f) UPM Convocation Fest Research Exhibition

This exhibition was held from 16-19 October 2003 at the UPM Expo Hill in conjunction with UPM's 27th Convocation Fest.

Enhancing Competence and Excellence

UPM through Research Management Centre (RMC) has designed various programs and activities to further enhance the researchers' knowledge and expertise in various aspects that could contribute to research excellence. The programs held throughout 2003 in both university/national and international levels are as follows:

Workshop/Course/Seminar

a) Cluster Research Workshop

The Cluster Research Pre-Workshop was organised on 13 February 2003 and held at the Briefing Hall of the UPM Administration Building. In addition to this workshop, another Cluster Research Workshop was held on 11 and 12 March 2003 at the Cyberview Lodge Resort, Cyberjaya. A total of 55 participants comprising UPM researchers attended this workshop. Cluster Research in UPM is divided into 8 clusters with each cluster headed by a Coordinator. Prof. Dr Abu Bakar Salleh, the Director of the Institute of Bioscience (IBS) chairs the UPM Cluster Research Committee. The Research Management Centre is the Secretariat and organiser for this Cluster Research Workshop.



b) Kursus Pengurusan Penyelidikan

Pada 28 – 29 April 2003 pula, RMC menganjurkan Kursus Pengurusan Penyelidikan yang bertempat di Cyberview Lodge Resort, Cyberjaya. Kursus yang melibatkan 132 penyertaan daripada pelbagai fakulti dan institut dalam UPM ini telah dirasmikan oleh Yang Berbahagia Prof. Dr. Muhamad Awang, Timbalan Naib Canselor (Akademik), UPM. Kursus ini bertujuan memberi latihan kepada penyelidik-penyelidik di UPM bagi memantapkan lagi pengurusan penyelidikan masing-masing. Di samping itu, dapat memastikan pengendalian projek-projek penyelidikan di UPM berjalan dengan teratur dan betul.

Kursus ini telah dikelolakan oleh pakar-pakar rujuk daripada pihak swasta dan beberapa Profesor dari UPM. Pakar rujuk daripada pihak swasta adalah terdiri daripada; Y. Bhg. Tan Sri Dato' Dr. Omar Abdul Rahman, Pengerusi Eksekutif, Kumpulan Modal Perdana Sdn. Bhd. dan Y. Bhg. Tan Sri Dato' Khalid Ibrahim, Ketua Eksekutif Kumpulan Guthrie Bhd.

b) Research Management Course

From 28-29 April 2003, RMC organised a Research Management Course at the Cyberview Lodge Resort, Cyberjaya. This course involving 132 participants from various faculties and institutions in UPM was officiated by UPM's Deputy Vice-Chancellor (Academic) Yang Berbahagia Prof. Dr. Muhamad Awang. The objective of this course was to train UPM researchers to further enhance their research management skills. Besides this, it was also an avenue to ensure that research projects in UPM is carried out effectively and efficiently.

An expert panel from the private sector as well as several professors from UPM conducted this course. The expert panel from the private sector comprised Y. Bhg. Tan Sri Dato' Dr. Omar Abdul Rahman, the Executive Director of Kumpulan Modal Perdana Sdn Bhd and Y. Bhg. Tan Sri Dato' Khalid Ibrahim, the Chief Executive Officer of Kumpulan Guthrie Berhad.

c) Seminar Paten

Pada 21 Ogos 2003, Pusat Pengurusan Penyelidikan (RMC) telah menganjurkan Seminar Paten kepada para pensyarah di UPM. Seminar ini telah diadakan selama satu hari, bertempat di Dewan Persidangan IDEAL, Universiti Putra Malaysia. Seramai 87 orang peserta yang terdiri daripada pensyarah meliputi 15 fakulti/institut di UPM telah menghadiri seminar ini. Seminar Paten ini dikendalikan oleh En. P. Kandiah dari Kandiah & Associates Sdn. Bhd. Beliau adalah seorang peguam di agensi paten dan berpengalaman luas dalam bidang paten.

c) Patents Seminar

The Research Management Centre (RMC) organised a Patents Seminar for UPM lecturers on 21 August 2003. This one-day seminar was held at the IDEAL Conference Hall in UPM. A total of 87 participants comprising lecturers from 15 UPM faculties/institutes attended this seminar. Mr P Kandiah from Kandiah & Associates Sdn Bhd conducted the seminar. He is a renowned lawyer at a patents agency with vast experience in the field of patents.



Sustained Recognition of

MS ISO 9001 : 2000

- Faculty of Veterinary Medicine
- Faculty of Engineering
- Faculty of Science and Environment
- Faculty of Human Ecology
- Faculty of Agriculture
- Security Department



Started as School of Agriculture in 1931

Upgraded to College of Agriculture in 1947

Elevated to University of Agriculture in 1971



Renamed **U**NIVERSITI **P**UTRA **M**ALAYSIA in 1997

Pengurusan Berkualiti
Quality Management

Pengurusan Berkualiti Quality Management

MS ISO 9001:2000

Selaras dengan hasrat kerajaan untuk mewajibkan semua agensi awam mendapat persijilan MS ISO 9001:2000, UPM telah mengukuhkan lagi struktur jawatankuasa berkaitan pengurusan kualiti seperti berikut:

- Jawatankuasa Pemandu Kualiti
- Jawatankuasa Jaminan Kualiti
- Jawatankuasa Juruaudit Dalam ISO

Selain daripada jawatankuasa berkenaan, Jawatankuasa Pembangunan Templet Dokumentasi juga ditubuhkan bagi membangunkan templet prosedur bagi pengajaran dan pembelajaran serta penyelidikan. Bahagian Perancangan Korporat (BPK) merupakan bahagian yang bertanggungjawab untuk semua urusan berkaitan persijilan MS ISO termasuk penjaminan kualiti IPTA.

Sepanjang 2003, beberapa Fakulti berjaya mengekalkan persijilan masing-masing di samping beberapa Fakulti/Bahagian yang telah berjaya mendapat persijilan.

MS ISO 9001:2000

In line with the Government's intention to ensure that all public service agencies obtain MS ISO 9001:2000 certification, UPM has further strengthened the structure of its quality management related committee as follows:

- Quality Guidance Committee
- Quality Assurance Committee
- ISO Audit Committee

Apart from these committees, the Template Documentation Development Committee was also formed to develop template procedures for teaching, learning and research. The Corporate Planning Division is the unit responsible for all matters pertaining to MS ISO certification including IPTA quality assurance.

Throughout 2003, several Faculties successfully retained their respective certifications while several other Faculties/ Departments managed to secure their certification.

Bil	Fakulti/Bahagian	Persijilan
1	Fakulti Perubatan Veterinar	semenjak 2000
2	Fakulti Kejuruteraan	semenjak 2001
3	Fakulti Sains dan Pengajian Alam Sekitar	semenjak 2002
4	Fakulti Ekologi Manusia	Persijilan
5	Fakulti Pertanian	Persijilan
6	Bahagian Keselamatan	Persijilan

No	Faculty/Department	Certification/Surveillance
1	Faculty of Veterinary Medicine	Surveillance, since 2000
2	Faculty of Engineering	Surveillance, since 2001
3	Faculty of Science and Environmental Studies	Surveillance, since 2002
4	Faculty of Human Ecology	Certification
5	Faculty of Agriculture	Certification
6	Security Department	Certification



Di samping itu, semua Fakulti juga sedang giat untuk mendapatkan persijilan MS ISO 9001:2000. Pihak UPM telah membangunkan templet dokumentasi SPK bagi pengajaran dan pembelajaran pra siswazah untuk memudahkan fakulti membangun dan melaksanakan SPK di fakulti masing-masing. Adalah dijangkakan pada penghujung tahun 2004, semua fakulti di UPM akan mendapat persijilan MS ISO bagi skop pengajaran dan pembelajaran pra siswazah

Selain daripada itu, pihak UPM juga akan berusaha membangunkan proses *mapping* bagi PTJ yang utama untuk memudahkan setiap urusan difahami oleh semua staf/pelanggan dengan menggunakan aplikasi *UPM Process Guide*. Beberapa siri latihan berterusan sepanjang tahun juga telah dilaksanakan bagi melicinkan pelaksanaan dan pembangunan SPK.

Jaminan Kualiti IPTA

UPM sangat komited dengan penjaminan kualiti bagi program akademik yang ditawarkan dan menyokong sepenuhnya usaha yang dijalankan oleh Bahagian Jaminan Kualiti, Jabatan Pendidikan Tinggi untuk melaksanakan penjaminan kualiti program bachelors yang ditawarkan di UPM.

Beberapa fakulti yang telah terpilih untuk pelaksanaan jaminan kualiti IPTA adalah seperti berikut:

Fakulti Ekonomi dan Pengurusan

- Bachelors Ekonomi
- Bachelors Pentadbiran Perniagaan
- Bachelors Perakaunan
- Bachelors Perakaunan dengan Pendidikan

Besides this, all Faculties are also striving to acquire the MS ISO 9001:2000 certification. UPM has developed the Quality Management System (QMS) template documentation in the teaching of and learning undergraduates tool to facilitate faculty development and carry out QMS in respective faculties. It is envisaged that by the end of 2004, all UPM faculties would have acquired MS ISO certification for the scope of learning and teaching of undergraduates.

Apart from this, UPM will also endeavor to develop mapping process for leading Centres of Responsibility to ensure that every transaction is understood by all staff/clients with the use of the UPM Process Guide application. Several year round training series have been carried out to smoothen the QMS implementation and development.

IPTA Quality Assurance

UPM is highly committed with its quality assurance for all the academic programs it offers and fully supports the efforts of its Higher Education Department to implement the Quality Assurance Bachelor's Program.

The faculties selected for the implementation of IPTA Quality Assurance are as follows:

Faculty of Economics and Management

- Bachelor of Economics
- Bachelor of Business Administration
- Bachelor of Accounting
- Bachelor of Accounting with Education



Fakulti Pengajian Pendidikan

- Bacelor Pendidikan (Pendidikan Jasmani)
- Bacelor Pendidikan (PBMP)
- Bacelor Pendidikan (TESL)
- Bacelor Pendidikan (SRT)
- Bacelor Pendidikan (Bimbingan dan Kaunseling)
- Bacelor Pendidikan (SP)
- Bacelor Pendidikan (Teknologi Maklumat)
- Bacelor Sains (Pembangunan Sumber Manusia)

Fakulti Sains dan Pengajian Alam Sekitar

- Bacelor Sains (Kepujian)
- Bacelor Sains Alam Sekitar

Fakulti Sains Komputer dan Teknologi Maklumat

- Bacelor Sains Komputer

Jawatankuasa Keutuhan Pengurusan Universiti

Jawatankuasa Keutuhan Pengurusan Universiti telah bersidang sebanyak 3 kali sepanjang tahun 2003. Beberapa dasar/program berikut telah dicetuskan daripada mesyuarat Jawatankuasa seperti berikut:

- Program Gerak Sihat
- Piagam Pensyarah
- Hari Pensyarah
- Soal Selidik Staf Akademik
- Soal Selidik Kemudahan UPM
- Bimbingan kaunseling untuk Staf

Faculty of Educational Studies

- Bachelor of Education (Physical Education)
- Bachelor of Education (PBMP)
- Bachelor of Education (TESL)
- Bachelor of Education (SRT)
- Bachelor of Education (Guidance and Counseling)
- Bachelor of Education (SP)
- Bachelor of Education (Information Technology)
- Bachelor of Science (Human Resources Development)

Faculty of Science and Environmental Studies

- Bachelor of Science (Honours)
- Bachelor of Environmental Science

Faculty of Computer Science and Information Technology

- Bachelor of Computer Science

Sound University Management Committee

The Sound University Management Committee convened 3 times throughout 2003. Several policies/programs originated from the Committee Meetings which are indicated below:

- Fitness Program
- Lecturers' Charter
- Lecturers' Day
- Questionnaire of Academic Staff
- Questionnaire of UPM Facilities
- Staff Guidance and Counseling



Anugerah Kualiti

Pada 2003, UPM menerima beberapa pengiktirafan kerana berjaya mengamalkan pengurusan berkualiti dalam pelbagai aspek termasuk pentadbiran, pengajaran dan pembelajaran, penyelidikan dan perkhidmatan profesional. Ini dapat dilihat apabila Fakulti Kejuruteraan berjaya memenangi hadiah utama Anugerah Kualiti Ketua Setiausaha Negara 2003 dalam siri Anugerah Kualiti Perkhidmatan Awam (AKPA) dan tempat kedua bagi Anugerah Kualiti Y.A.B Menteri Besar Selangor 2002. Fakulti Sains dan Pengajian Alam Sekitar turut mencatat kejayaan apabila memenangi tempat ketiga Anugerah Kualiti Yang Berhormat Setiausaha Kerajaan Selangor 2003 (kategori Sektor Awam) sempena bulan Kualiti peringkat Negeri Selangor Tahun 2003.

Quality Awards

In 2003, UPM received several accreditations for successfully practicing quality management in various aspects including administration, teaching and learning, research and professional service. This was evident when the Faculty of Engineering won the top prize for the Ketua Setiausaha Negara Quality Award 2003 in the Public Services Quality Award Series and securing second place in the Y.A.B Menteri Besar Selangor Quality Award 2002. The Faculty of Science and Environmental Studies also secured third place in the Yang Berhormat Setiausaha Kerajaan Selangor Quality Award 2003 (Public Sector Category) in conjunction with the 2003 Selangor State Level Quality Month.



Over 70 years of **active** involvement
in **Agro-bio** education and **R & D ...**

... and more to come



Started as School of Agriculture in 1931

Upgraded to College of Agriculture in 1947

Elevated to University of Agriculture in 1971

Renamed

UNIVERSITI **P**UTRA **M**ALAYSIA in 1997



Pengurusan Sumber Manusia
Human Resources Management

Pengurusan Sumber Manusia Human Resource Management

Pejabat Pendaftar, UPM merupakan bahagian yang bertanggungjawab dalam pengurusan sumber manusia yang melibatkan hal ehwal berkaitan perjawatan dan perkhidmatan kakitangan. Sepanjang tahun 2003, Pejabat Pendaftar telah melaksanakan fungsi yang telah ditetapkan dalam Pelan Strategi UPM iaitu:

- a) Membangunkan sumber manusia dan persekitaran kerja yang cemerlang untuk semua kakitangan UPM
- b) Memantapkan sistem pengurusan berkualiti yang cekap, berkesan, telus dan mesra pelanggan dengan berteraskan nilai-nilai murni.

Pada tahun 2003, Pejabat Pendaftar telah menyusun semula pengurusan di mana penumpuan khusus diberikan kepada :

- 1 Memperolehi Persijilan MS ISO 9001
- 2 Berusaha memastikan pelaksanaan semua urusan mengikut prosedur-prosedur ISO yang ditetapkan
- 3 Memantapkan Unit Latihan untuk meningkatkan lagi kecemerlangan kerjaya staf
- 4 Memfokuskan pengambilan kakitangan berdasarkan ketetapan yang dibuat oleh Pihak Pengurusan Universiti seperti mengikut nisbah tenaga pengajar dan pelajar (bagi kakitangan akademik) dan pengisian mengikut kekosongan jawatan bagi kumpulan bukan akademik.

Walau bagaimanapun perancangan ini agak terjejas pelaksanaannya berikutan penumpuan yang lebih dilakukan ke atas pelaksanaan pertukaran skim daripada Skim Saraan Baru (SSB) kepada Skim Saraan Malaysia

The Registrar's Office at UPM is responsible for the management of human resources involving staff employment and services. Throughout 2003, the Registrar's Office implemented functions that were indicated in the UPM Strategy Plan as follows:

- a) Development of human resources and healthy working environment for all UPM staff.
- b) Implement a quality management system that is efficient, effective, transparent and customer-oriented based on noble values.

In 2003, the Registrar's Office restructured the management with specific focus given to:

- 1 Acquiring MS ISO 9001 certification
- 2 Striving to ensure the implementation of all businesses in accordance to relevant ISO procedures
- 3 Establish the Training Unit to improve staff career competence
- 4 Focus on staff intake as per the University Management's objectives based on lecturer and student strength ratio (for academic staff) and filling available positions according to vacancies for the non-academic group.

However, the implementation of the above plans was affected due to the greater focus on carrying out the changing of the New Remuneration Scheme (NRS) to the Malaysian Remuneration Scheme (MRS). UPM



(SSM). UPM berjaya menarik penyertaan seramai 3,382 orang pegawai untuk menyertai SSM sementara itu terdapat hanya 35 orang pegawai memilih kekal dalam SSB.

Pelantikan dan Kenaikan Pangkat

Pada tahun 2003, seramai 432 orang telah dilantik mengisi pelbagai kekosongan jawatan. Daripada jumlah itu, seramai 307 orang yang dilantik terdiri daripada pegawai akademik, 39 orang pegawai dari Kumpulan Pengurusan Profesional dan 86 orang pegawai Kumpulan Sokongan. UPM juga telah melantik seramai 12 orang tenaga dagang. Sepanjang tahun 2003 juga, seramai 77 orang pegawai UPM telah dinaikkan pangkat terdiri daripada 44 orang pegawai kumpulan Pengurusan Tertinggi, 5 orang pegawai kumpulan Pengurusan dan Profesional dan 28 orang pegawai kumpulan Sokongan.

Persaraan dan Cuti

Pada 2003 juga seramai 109 orang telah bersara yang terdiri daripada 49 orang kumpulan Pengurusan dan Profesional dan 60 orang daripada kumpulan Sokongan. Daripada jumlah tersebut mereka dipecahkan kepada beberapa kategori persaraan iaitu bersara wajib seramai 87 orang, bersara pilihan (14), atas sebab kesihatan (2) dan meninggal dunia (6). Selain itu, terdapat seramai 27 orang pegawai UPM telah mengambil cuti tanpa gaji atas sebab-sebab tertentu. Lihat Jadual di mukasurat 76.

successfully managed to get 3,382 officers to join the MRS while only 35 persons chose to remain in NRS.

Appointments and Promotions

In 2003, 432 persons were recruited to fill available positions. From this total, 307 were Academic Officers, 39 Officers from Professional and Management Group and 86 Officers from Support Group. UPM also appointed 12 contract staff.

Throughout 2003, a total of 77 UPM officers were promoted, comprising 44 persons from the Highest Level Management Group, 5 from the Professional and Management Group and 28 from the Support Group.

Retirement and Leave

In 2003, there was a total of 109 retirements comprising 49 from the Professional and Management Group and 60 from the Support Group. From this total they were divided into various retirement categories i.e. (87 persons) under compulsory retirement, (14) voluntary retirements, (2) health grounds and (6) deceased. There are also 27 UPM officers who have taken leave without pay for specific reasons. Refer to Table on page 76:



Bil.	Sebab Cuti (tanpa gaji)	Bilangan Staf
1.	Urusan peribadi dalam negara	12 orang
2.	Urusan peribadi luar negara	2 orang
3.	Menjaga anak selepas bersalin	4 orang
4.	Mengikut pasangan ke luar negara	4 orang
5.	Tidak hadir bertugas	5 orang
JUMLAH		27 orang

Pada 2003, UPM telah meluluskan cuti belajar kepada 162 orang pegawai. Daripada jumlah tersebut ia terbahagi kepada Biasiswa SLAB seramai 78 orang, Biasiswa MOSTE (23) dan Biasiswa UPM (61). Tahun 2003 juga menyaksikan seramai 54 orang pegawai UPM berjaya menamatkan pengajian dan 68 orang lagi membuat permohonan untuk dilanjutkan tempoh pengajian.

Anugerah Perkhidmatan Cemerlang

Seramai 308 orang yang terdiri daripada 87 orang Kumpulan Pengurusan dan Profesional dan 221 orang Kumpulan Sokongan telah menerima Anugerah Khidmat Cemerlang tahun 2003.

Anugerah Setia Putra dan Jasa Putra

Selain itu, UPM juga memperkenalkan tiga anugerah lain mulai 2003 iaitu Anugerah Setia Putra kepada 186 orang pegawai, Anugerah Jasa Putra kepada 103 orang pegawai dan Anugerah Jasamu Dikenang kepada 11 orang pegawai. Anugerah-anugerah ini diberi sebagai

No.	Reasons for Leave (Without Pay)	No. of Staff
1.	Private Matter (Local)	12 persons
2.	Private Matter (Overseas)	2 persons
3.	Caring for Child after Delivery	4 persons
4.	Following Spouse Overseas	4 persons
5.	Absent from Duty	5 persons
TOTAL		27 persons

In 2003, UPM approved study leave for 162 officers. This total was divided into SLAB Scholarship (78 persons), MOSTE Scholarship (23) and UPM Scholarship (61). A total of 54 officers completed their education while another 68 applied for extension of study period in 2003.

Excellent Service Award

A total of 308 persons comprising 87 from the Professional and Management Group and 221 from the Support Group received the Excellent Service Award in 2003.

Setia Putra and Jasa Putra Award

UPM also introduced three other awards in 2003. These included the Setia Putra Award (186 officers), Jasa Putra Award (103 officers) and Jasamu Dikenang Award (11 officers). These awards were given in recognition of the services of UPM officers who have served faithfully for over 20 years, died on duty and retired staff.



menghargai jasa para pegawai UPM yang telah berkhidmat lebih dari 20 tahun, meninggal dunia semasa bertugas dan yang telah bersara.

Anugerah Fellowship Naib Canselor

Selain itu, 7 orang pegawai telah dianugerahkan Anugerah Fellowship Naib Canselor. Anugerah ini diberikan kepada kakitangan yang berjaya menunjukkan pencapaian cemerlang mewakili kategori masing-masing. Anugerah diberikan dalam bentuk geran bernilai RM10,000 dan boleh digunakan oleh penerima untuk tujuan menghadiri kursus, seminar dan aktiviti yang boleh menyumbang kepada kecemerlangan diri serta organisasi.

Pemenang anugerah pada 2003 adalah seperti berikut:

Bil.	Nama pemenang	Kategori
1.	Prof. Madya Dr. Salihan Saias	Pengajaran
2.	Profesor Dr. Azmi Mohd Lila	Penyelidikan
3.	Prof. Madya Dr. Husaini Omar	Penyelidikan
4.	Abdul Karim Shah Noh Shah	Perkhidmatan Profesional
5.	Rosmi bin Othman	Perkhidmatan Profesional
6.	Tajuddin Abdul Manaf	Perkhidmatan Sokongan
7.	Siti Aminah Dato' Sani	Perkhidmatan Sokongan

Vice-Chancellor's Fellowship Award

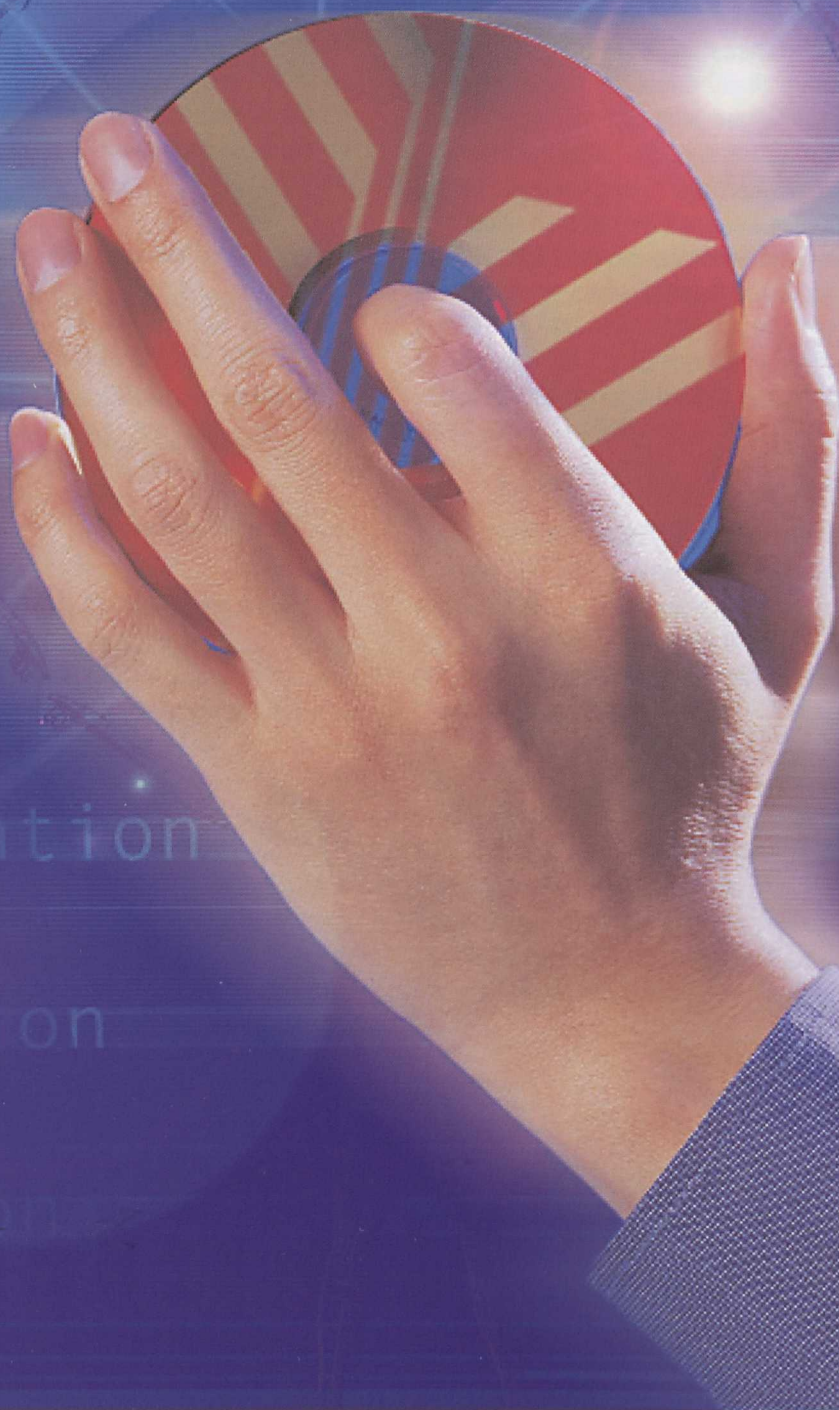
Seven officers were bestowed the Vice-Chancellor's Fellowship Award. This Award is given to staff who have shown excellent achievements in their respective categories. The Award is given in the form of grants worth RM10,000 which can be used to attend courses, seminars and activities that will contribute to self and organizational development. The winners of this award for 2003 are as follows:

No.	Winners	Category
1.	Associate Professor Dr. Salihan Saias	Teaching
2.	Professor Dr. Azmi Mohd Lila	Research
3.	Associate Professor Dr. Husaini Omar	Research
4.	Abdul Karim Shah Noh Shah	Professional Services
5.	Rosmi bin Othman	Professional Services
6.	Tajuddin Abdul Manaf	Support Services
7.	Siti Aminah Dato' Sani	Support Services



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Communication

Destination

Connection



Started as School of Agriculture in 1931

Upgraded to College of Agriculture in 1947

Elevated to University of Agriculture in 1971

Renamed **U**NIVERSITI **P**UTRA **M**ALAYSIA in 1997

Teknologi Maklumat &
Komunikasi
*Information & Communication
Technology (ICT)*

Teknologi Maklumat dan Komunikasi (ICT) Information and Communication Technology (ICT)

Universiti Putra Malaysia (UPM) menggariskan Matlamat Ke-6 Pelan Strategi UPM untuk membudayakan teknologi maklumat dan komunikasi (ICT) melalui e-Universiti. Untuk itu, UPM sentiasa melagang usaha untuk meningkatkan kecekapan penggunaan dan kemudahan ICT dalam kampus. Usaha ini memperlihatkan hasil yang ketara bila majalah *Management Information System* keluaran Oktober 2003 telah meletakkan UPM sebagai pengguna IT terbesar di Malaysia dan ke-22 terbesar di Asia keseluruhannya. Dari sudut sektor pendidikan pula tinjauan tersebut juga mendapati UPM merupakan pengguna IT ke-6 terbesar di Asia.

Dasar ICT

Pada Januari 2003, UPM telah melancarkan Dasar ICT ke arah membudayakan e-Universiti dalam setiap aspek perjalanan fungsi universiti termasuk pengajaran, pembelajaran dan penyelidikan di samping khidmat profesional. Dasar ICT ini merupakan asas dan panduan bagi pengurusan UPM sebagai langkah permulaan ke arah pendekatan bersepadu dan berstruktur bagi pembangunan, penyerahgunaan dan pengurusan perkhidmatan ICT. Dasar ini telah digubal oleh Jawatankuasa Penggubalan Dasar ICT UPM. Terdapat 7 perkara yang ditekankan di dalam dasar ini iaitu:

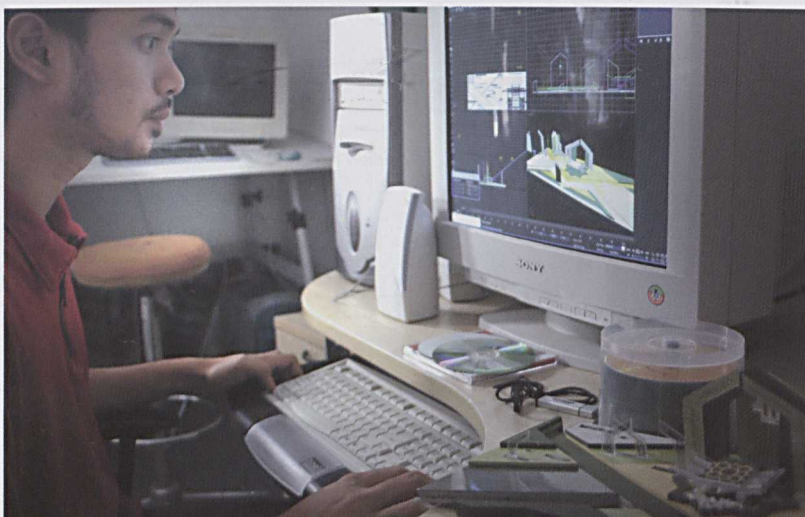
- Dasar Pengurusan ICT
- Dasar e-pembelajaran
- Dasar Pengurusan Ilmu
- Dasar Pembangunan Kemahiran Pengguna Akhir
- Dasar Sistem Maklumat
- Dasar Automasi Pejabat (OA)
- Dasar Infrastruktur

Universiti Putra Malaysia (UPM) has outlined the objectives of the 6th Strategy Plan to cultivate an information and communication technology (ICT) culture through e-University. UPM consistently strives to increase in-campus user competence and ICT facilitation. This effort has seen distinct results as the October 2003 issue of the *Management Information System* magazine ranked UPM as Malaysia's largest IT user and ranked 22nd in Asia. For, the educational sector, UPM is the 6th largest IT user in Asia.

ICT Policy

In January 2003, UPM launched the ICT Policy towards inculcating e-University culture in every aspect of the university's functions including teaching, learning and research besides professional service. The ICT Policy is the basis and guide for UPM's management as the first step towards a united and structured approach for the development, deployment and management of ICT services. The UPM ICT Policy Amendment Committee has amended this policy. This Policy stresses 7 issues namely:

- ICT Management Policy
- e-Learning Policy
- Knowledge Management Policy
- End-User Expertise Development Policy
- Information Systems Policy
- Office Automation (OA) Policy
- Infrastructure Policy



Pelbagai strategi digunakan untuk memenuhi hasrat ini yang merangkumi peningkatan kompetensi pelajar dan staf, peningkatan capaian ICT, integrasi ICT dalam kurikulum, pengiktirafan inovasi ICT dalam pembelajaran, keupayaan laluan internet yang setanding dengan penanda aras semasa dan keselamatan sistem ICT.

Dasar yang dilancarkan ini turut menggariskan perkhidmatan ICT yang relevan kepada universiti, tindakan yang diperlukan untuk melaksanakan perkhidmatan tersebut, menyenaraikan prinsip infrastruktur ICT universiti dan ciri utama persekitaran pengurusan ICT untuk memastikan ketahanan, kecekapan, ramah pengguna, keselamatan operasi dan penyerahgunaan (*deployment*) semua perkhidmatan ICT.

Sistem-sistem IT yang terdapat di UPM

- SAGA/SASL
- E-KLINIK & FAMS
- Sistem Maklumat Pelajar (SMP)
- Putra Student Portal
- iGIMS (Sistem Maklumat Pengurusan Siswazah)
- Sistem Automasi Pejabat-Putranet

Sistem SAGA

Pada bulan Januari 2003, UPM mula mengaplikasikan satu sistem bagi kemudahan semua pihak dalam pengaplikasian pengurusan kewangan. Standard Accounting for Government Agencies atau lebih dikenali sebagai SAGA merupakan satu sistem yang dibangunkan oleh Century Software Sdn. Bhd dengan kerjasama Bahagian Teknologi Maklumat. Ia menjadi hak milik Pejabat Bendahari UPM. Pengguna sasaran untuk sistem ini ialah Pejabat Bendahari, Pusat Tanggungjawab, zon kewangan PTJ dan zon kewangan

Various strategies are utilised to achieve this desire which encompasses increase in the student and staff competence, increase in ICT achievement, ICT integration in curriculum, recognition of ICT innovation in learning, capacity of internet line which is at par with the latest trends and security of ICT system.

This Policy also outlines ICT services that are relevant to the University, the necessary steps required to implement these services, listing the University's ICT infrastructure principles and the salient features of the ICT management environment to ensure fortitude, competence, user-friendliness, operational safety and deployment of ICT services.

IT Systems in UPM

- SAGA/SASL
- E-KLINIK & FAMS
- Students' Information System (SMP)
- Putra Student Portal
- iGIMS (Graduate Information Management Systems)
- Putranet- Office Automation System

SAGA System

In January 2003, UPM began the application of a financial management system for the convenience of its users. Century Software Sdn. Bhd developed the Standard Accounting for Government Agencies or better known as SAGA, in collaboration with the Information Technology Department. It is the property of the UPM Bursar's Office. The target users of this system include the Bursar's Office, Responsibility Centres, PTJ Financial Zones and the Bursar's Office Financial Zones. UPM Serdang's SAGA Module comprises the following core elements:



pejabat Bendahari. Modul SAGA UPM Serdang terdiri daripada beberapa elemen utama seperti:

- Lejer Am
- Buku Tunai
- Pembelian
- Akaun Pembayaran
- Aset Tetap
- Project Costing
- Pinjaman Kakitangan
- Account Receivables
- Budget Control
- Stationary
- Bil-bil
- Tuntutan & Pendahuluan
- Resit
- EIS

SAGA membenarkan pemprosesan maklumat kewangan pada peringkat operasi dan peringkat pengurusan dengan cekap. Ini bagi memastikan akaun sentiasa kemas kini dan laporan-laporan kewangan dapat disediakan pada bila-bila masa yang diperlukan.

Objektif pakej SAGA adalah:

- Menyediakan kemudahan penyelenggaraan satu set akaun yang lengkap dan terkini.
- Membolehkan akaun ditutup setiap hari (proses semua urusan bagi hari yang berkenaan dan mengemas kini Lejar Am serta menghasilkan kunci kira-kira yang kemaskini)
- Menyediakan kemudahan perakaunan Pengurusan Kewangan yang lebih baik
- Menyediakan Laporan-laporan Kewangan Pra-Audit tepat pada masa yang dikehendaki.

- General Ledger
- Cash Book
- Purchasing
- Account Payable
- Fixed Assets
- Project Costing
- Staff Loan
- Account Receivables
- Budget Control
- Stationary
- Billing
- Claim & Advance
- Receipting
- EIS

SAGA allows effective financial information processing at operational and management levels. This ensures that accounts are always up to date and enables financial reports to be printed at any time when required.

The objectives of the SAGA package are:

- Facilitate the maintenance of complete and up-to-date accounts
- Enable daily closing of accounts (Process daily transactions and update the General Ledger and produce a current Balance Sheet)
- Facilitate convenient and better Financial Accounting Management
- Prepare Pre-Audit Financial Reports exactly when needed

Putra Student Portal

In November 2003, UPM launched another new system for student convenience known as the Putra Student



Putra Student Portal

Pada bulan November 2003, UPM melancarkan satu lagi sistem baru untuk kemudahan pelajar. Sistem ini dikenali sebagai Putra Student Portal. Objektif utama pelaksanaan sistem portal ini ialah adalah untuk memberi laluan kepada mahasiswa memperoleh segala maklumat dalam satu tempat (portal). Sistem ini berfungsi dalam menyediakan beberapa maklumat utama yang diperlukan seperti:

- Profil pelajar
- Maklumat Akademik Pelajar
- Maklumat Kewangan Pelajar
- Aplikasi lain seperti e-mel, buletin dan forum

Dalam masa yang sama sistem ini dapat memudahkan pelajar dalam urusan pembayaran yuran melalui penggunaan internet yang boleh diakses terus daripada mana-mana komputer. Ia dianggap penghubung antara pelajar dengan Pejabat Bendahari, UPM dan sebagai landasan untuk kedua-dua belah pihak berinteraksi serta dapat menyelesaikan segala masalah yang timbul berkaitan kewangan dengan secepat mungkin.

Selain itu, Pejabat Bendahari juga telah menjalinkan satu rangkaian antara SAGA dengan Sistem Perakaunan Pelajar (SAS) bagi memberi kemudahan kepada mana-mana pelajar yang ingin melihat dan menyemak lejar. Jika terdapat sebarang kemusykilan atau masalah berhubung perakaunan, pelajar terbabit perlu membawa lejar untuk semakan Pejabat Bendahari.

E-Klinik

Sistem e-Klinik telah dilancarkan penggunaannya bermula pada 16 Jun 2003. Terdapat 9 modul utama yang telah dibangunkan oleh pihak XYBASE Sdn Bhd

Portal. This portal was set up to provide undergraduates with access to vast information within a single portal. The system functions by providing vital information such as:

- Student Profile
- Student Academic Information
- Student Financial Information
- Other applications such as e-mail, bulletin and forums

At the same time, this system makes it easier for students to pay their fees through the internet which can be accessed via any computer. It is considered the link between students and the UPM Bursar's and as a platform for both parties to interact and resolve any financial related issues that arise.

Apart from this, the Bursar's Office also forged a network between SAGA and the Students' Accounting System (SAS) to facilitate students who intend to see or refer to the ledger. If any doubts or problems arise pertaining to the accounts, the students are required to take the ledger to the Bursar's Office for checking.

E-Clinic

The e-Clinic system was fully launched on 16 June 2003. IT comprises 9 modules that were developed by XYBASE Sdn Bhd in collaboration with the Information Technology Department and the Undergraduate Health Centre (PKM). Currently the system is still under maintenance (warranty) for the period of one year by XYBASE. Eventually this e-Clinic system will be



dengan kerjasama Bahagian Teknologi Maklumat dan Pusat Kesehatan Mahasiswa (PKM). Kini, sistem ini masih dalam proses penyelenggaraan (jaminan) untuk tempoh setahun oleh pihak XYBASE. Seterusnya sistem e-Klinik akan diambil alih sepenuhnya oleh UPM. Sistem e-Klinik yang kini menggunakan platform web dan digunakan secara menyeluruh untuk perkhidmatan rawatan kepada pesakit dan pengguna klinik.

Antara objektif e-klinik ialah:

- Memudah cara pesakit menerima rawatan
- Memudah doktor dan paramedik memberi rawatan
- Memudah cara kemasukan, penyimpanan dan penggunaan data pesakit
- Memudah cara pembacaan dan arahan preskripsi, rawatan, kajian, makmal dan X-ray
- Memudah doctor mencapai maklumat rawatan dan mendapat nasihat pakar
- Memudah dan mempercepatkan perolehan statistik rawatan dan pesakit mengikut harian, bulanan dan tahunan
- Memudah kawalan dan pemantauan kesihatan pelajar memudah proses perolehan dan inventori
- Memudah proses bayaran dan tuntutan.

Sistem ini telah diintegrasikan dengan beberapa subsistem UPM yang lain iaitu Sistem Maklumat Pelajar (SMP) dan IHRAMS (Maklumat Kakitangan). Kini, sistem e-Klinik dalam proses untuk diintegrasikan dengan SAGA dan iGIMS (Sistem Maklumat Pengurusan Siswazah).

Perancangan tahun 2004 lebih menjurus kepada memantapkan lagi penggunaan sistem e-Klinik dari segi server dan pelaksanaan itu sendiri.

completely taken over by UPM. The system uses the web platform and is used in the complete management of PKM Administration and Patient Management.

The e-Clinic System utilises the web platform and is used totally in the treatment of patients and users of the Clinic.

Among the objectives of the e-Clinic are:

- Facilitate in the delivery of treatment given to patients
- Facilitate in the delivery of treatment given by doctors and paramedics
- Facilitate the method for the input, storage and use of patient's data
- Facilitate in the reading of prescription instructions, treatment, investigation, laboratory and x-ray information
- Facilitate the doctor's access to information and specialist's advice
- Facilitate and expedite the retrieval of statistics of the treatment and patient according to date, month and year
- Facilitate in the control and follow-up of student's health
- Facilitate the payment and demand procedure

This system has been integrated with several other UPM subsystems namely the Student Information System (SMP) and IHRAMS (Staff Information). Currently, the e-Clinic System is in the midst of integration with SAGA and iGIMS (Graduate Information Management System).



Kemudahan dan Infrastruktur ICT

Di samping itu untuk memantapkan kemudahan yang disediakan sebelum ini, Fakulti Sains Komputer dan Teknologi Maklumat telah menambah peralatan dan perisian kegunaan pembelajaran dan penyelidikan. Fakulti ini telah menyediakan kemudahan rangkaian komputer protocol Internet Versi 6 (IPV6). Fakulti juga telah menyediakan peralatan untuk pembelajaran rangkaian komputer seperti berikut:

- Networking Cabling Toolset
- Fluke Waverunner Wireless Network Tester
- Fluke One Touch 11 Network Tester
- Fluke Optiview console ver.6 (upgradable to ver.7)
- Membaharui lesen perisian opnet MTS

Pada tahun 2003 juga Universiti Putra Malaysia Kampus Bintulu (UPMKB) mula dilengkapi dengan sistem *wireless* dan *wired* untuk kemudahan rangkaian komputer dan internet. Sistem ini juga digunakan untuk memudahkan perhubungan dua hala antara kampus Serdang dan Kampus Bintulu. Sistem Televisyen Litar Tertutup (CCTV) telah dipasang di Fakulti Perubatan Veterinar.

Wakaf Siber dan Kafe Siber

Kemudahan wakaf siber dan akses internet tanpa wayar yang disediakan di dalam kampus memudahkan lagi para pelajar memahirkan lagi mereka menggunakan komputer dan mencari maklumat yang berguna dari hujung jari. Kafe Sifer di kolej-kolej kediaman dan pemasangan nod-nod internet di sebahagian kolej kediaman merupakan salah satu strategi jangka pendek dan jangka panjang agar keseluruhan kampus UPM dapat di rangkai menerusi teknologi internet.

The 2004 Planning is aimed at further perfecting the e-Clinic System in terms of the Server and the implementation itself.

ICT Infrastructure and Facilities

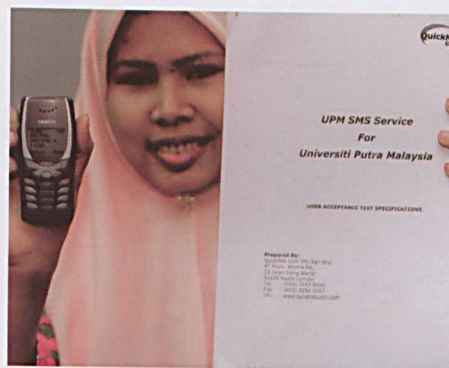
To further enhance the existing facilities, the Faculty of Computer Science and Information Technology has increased the equipment and software for study and research. This faculty has set up Version 6 Internet Computer Protocol Network (IPV6). The faculty has also prepared equipment for computer network studies such as:

- Networking Cabling Toolset
- Fluke Waverunner Wireless Network Tester
- Fluke One Touch 11 Network Tester
- Fluke Optiview console ver.6 (Upgradeable to ver.7)
- Renewal of the Opnet MTS Software License

In 2003, the Universiti Putra Malaysia Bintulu Campus (UPMKB) was equipped with wireless and wired systems for computer network and internet convenience. This system is also used to improve two-way communications between Serdang and Bintulu Campuses. Closed Circuit TV (CCTV) has been installed in the Faculty of Veterinary Medicine.

Cyber Port and Cyber Café

The Cyber Port and wireless internet access is provided within the campus to further help students hone their computer utilisation and information acquisition skills.



Internet

Penggunaan teknologi maklumat di Universiti Putra Malaysia dikendalikan oleh Bahagian Teknologi Maklumat yang beroperasi selama 24 jam sehari. Lebih dari 10,000 buah komputer dan stesen kerja, serta server di UPM dirangkai menerusi sistem UPMNet melalui fiber-optik dengan kelajuan 10-50 Mbs (mega bait per saat).

Kemudahan komputer bagi pelajar UPM disediakan melalui makmal-makmal komputer di Fakulti-fakulti, Institut dan juga di Bahagian Teknologi Maklumat. Pelajar-pelajar boleh menggunakan komputer yang disediakan bagi mengakses maklumat bagi memantapkan lagi proses pembelajaran kursus-kursus yang diambil. Pelajar-pelajar digalakkan berkomunikasi menerusi e-mel bagi menghubungi keluarga dan rakan-rakan serta pensyarah bagi tujuan menghantar tugas.

Sistem e-Pembelajaran (e-SPRINT)

Penggunaan internet dalam bidang pendidikan telah berubah menjadi satu media penyampaian maklumat yang amat penting. Sehubungan dengan ini, UPM juga menyediakan sistem e-Pembelajaran yang berasaskan web iaitu Kelas Maya dan sistem e-SPRINT (Sistem Pengurusan Rangkaian Integrasi Nota kuliah dalam Talian). UPM percaya dengan latihan penggunaan komputer dan teknologi maklumat dalam bidang pengajaran akan menjadikan para graduannya mahir dalam ICT. Bahan-bahan kuliah yang disediakan oleh pensyarah dapat diakses oleh pelajar dalam kampus dan pelajar program jarak jauh menerusi teknologi internet.

Cyber-Cafés in residential colleges and the installation of internet nodes at parts of the residential colleges is one of the long and short term strategies to link the entire UPM campus through internet technology.

Internet

The usage of information technology at Universiti Putra Malaysia is managed by the Information Technology Department, which operates 24 hours daily. It has more than 10,000 computers, workstations and servers in UPM that are networked via the UPMNet system by 10-50 Mbps (Megabytes per second) fibre optic cables.

Computer labs in UPM faculties, institutes and the Information Technology Department provide computer facilities for UPM students. Students can use existing computers to access information to enhance the learning process in their respective courses. Students are encouraged to communicate via e-mail with their families and friends as well as lecturers for the purpose of submitting their assignments.

e-Learning System (e-SPRINT)

Internet usage in the field of education has evolved into a vital source of data transmission. In line with this, UPM has also prepared the web-based e-Learning System i.e. Maya Class and e-Sprint System (Network Management System – Online Integrated Lecture Notes). UPM believes that computer usage and information technology training in the field of teaching will make its graduates competent in ICT. Lecture notes prepared by UPM lecturers are accessible by on-campus and distance learning program students through internet technology.

Diari Peristiwa
Diary of Events

Lawatan
Antarabangsa
2003
*International
Visits 2003*

DATE	VISITORS / LIST OF DELEGATION TO UPM
21 Jan 03	UMIST, UK Prof. Garside, Vice Chancellor & Principal
22 Jan 03	SOKA GAKKAI, MALAYSIA
27 Jan 03	ISLAMIC UNIVERSITY OF NORTH SUMATRA (UISU)
06 Feb 03	FRENCH AMBASSADOR H. E. Mr. Jacques Lapouge,
08 ~ 15 Feb 03	UNIVERSITY OF DUNDEES Higher Education Links (HEL), British Council Program
20 Feb 03	SOKA UNIVERSITY, JAPAN SouthEastAsia Study Club
28 Feb 03	REPUBLIC OF IRAN H. E. DR. MOSTAFA MOIN, Minister of Science, Research & Technology
25 Mar 03	KASETSART UNIVERSITY, THAILAND
12 Apr 03	AL-FATEH UNIVERSITY TRIPOLI Great Socialist People's Libyan Arab Jamahiriya
20 May 03	UNIVERSITY PADJADJARAN, INDONESIA Faculty of Economics
23 May 03	SHRIMP HATCHERY OPERATION AND MANAGEMENT COURSE, MALAYSIAN TECHNICAL COOPERATION PROGRAMME 2003
24 Jun 03	LEMBAGA PENDIDIKAN DAN PENGEMBANGAN PROFESI, INDONESIA (LP31) INDONESIA
25 Jun 03	KING FAHD UNIVERSITY OF PETROLEUM & MINERALS, SAUDI ARABIA
04 Jul 03	AN INTRODUCTORY COURSE ON BRACKISHWATER AQUACULTURE, MALAYSIAN TECHNICAL COOPERATION PROGRAMME 2003
15 Jul 03	EAST WEST CENTER Dr. Elizabeth Buck, Director of Education EWC Dr. Terance W. Bigalke, Dean of Academic Programs EWC
24 Jul 03	NEWCASTLE UNIVERSITY Terry McCarthy, Director of International Office Mr. David Forman, Director, Asian Regional Office

Lawatan
Antarabangsa
2003
International
Visits 2003

DATE	VISITORS / LIST OF DELEGATION TO UPM
01 Aug 03	GEORGE MASON UNIVERSITY, USA Dr. Peter Mandaville
04 Aug 03	KING KHALID UNIVERSITY Prof. Dr. Salem bin Ali Al-Wahhabi, Deputy Rector
26 Aug 03	MAHIDOL UNIVERSITY, THAILAND
27 Aug 03	THAMAR UNIVERSITY, YEMEN Prof. Dr. Abdullah Al Mujahed, President
11 Sep 03	UNIVERSITAS HASANUDDIN, INDONESIA
22 Sep 03	CORNELL UNIVERSITY ITHACA, NEW YORK, USA
23 Sep 03	UNIVERSITY PADJADJARAN, INDONESIA
01 Oct 03	IBB UNIVERSITY, YEMEN Prof. Mohammad Hawat, Vice President
07 Oct 03	GAJAH MADA UNIVERSITY, INDONESIA
13 Oct 03	HIGHER EDUCATION COMMISSION, PAKISTAN
15 Oct 03	UNIVERSITY OF PORTSMOUTH, UK Dr. Mike Bateman, Pro-Vice Chancellor
31 Oct 03	UNIVERSITY OF CALIFORNIA, DAVIS, USA Prof. Dr. William B. Lacy, Vice Provost Dr. Robert A. Kerr, Director, International Alumni & Visit Programs
18 Nov 03	PESURUHJAYA TINGGI NIGERIA Dr. R. O. Akeju, Minister
09 Dec 03	KING SAUD UNIVERSITY, SAUDI ARABIA Dr. Abdulmohsen Alshaikh, Director, International Cooperation Administration
12 Dec 03	KOREAN SCIENTISTS
16 Dec 03	SEOUL UNIVERSITY, KOREA
17 Dec 03	COMMISSION ON HIGHER EDUCATION, REP. OF PHILIPPINES

Lawatan Sekolah / Agensi Dalam Negeri *School / State Agencies Visits*

17 JANUARI 2003
Sekolah Menengah Teknik
Pengkalan Chepa, Kota Bahru
*Pengkalan Chepa Technical Secondary
School, Kota Bahru*

26 MAC 2003
Sekolah Kebangsaan Parit Enam
Sungai Besar, Selangor
*Parit Enam Secondary School
Sungai Besar, Selangor*

12 APRIL 2003
Sekolah Menengah Kebangsaan USJ 8
Subang Jaya, Selangor
*USJ 8 Secondary School
Subang Jaya, Selangor*

5 MAC 2003
Sekolah Sri Garden Sdn. Bhd
Taman Maluri, Kuala Lumpur
*Sri Garden School Sdn. Bhd
Taman Maluri, Kuala Lumpur*

27 MAC 2003
Sekolah Menengah Teknik Terengganu
Kuala Terengganu, Terengganu
*Terengganu Technical Secondary School
Kuala Terengganu, Terengganu*

15 APRIL 2003
Kolej Informasi Teknologi Cosmospect
Taiping, Perak
*Cosmospect Information Technology
College Taiping, Perak*

6 MAC 2003
Sekolah Sri Garden Sdn. Bhd.
Taman Maluri, Kuala Lumpur
*Sri Garden School Sdn. Bhd.
Taman Maluri, Kuala Lumpur*

27 MAC 2003
Sekolah Menengah Teknik Wakaf Tembusu
Kuala Terengganu, Terengganu
*Wakaf Tembusu Technical Secondary
School, Kuala Terengganu, Terengganu*

23 APRIL 2003
Lembaga Kemajuan Wilayah, P. Pinang
Kementerian Pembangunan Luar Bandar
Bukit Panchor, Seberang Prai
*Penang District Development Body,
Ministry of Rural Development,
Bukit Panchor, Seberang Prai*

7 MAC 2003
Institut Teknologi A.N.S.
Alor Setar, Kedah
*A.N.S. Technology Institute
Alor Star, Kedah*

28 MAC 2003
Sekolah Menengah Sains Machang,
Kelantan
*Machang Science Secondary School,
Kelantan*

24 APRIL 2003
Sekolah Menengah Kebangsaan Raja
Muda Musa, Batang Berjuntai, Selangor
*Raja Muda Musa Secondary School,
Batang Berjuntai, Selangor*

8 MAC 2003
Asrama Semai Bakti Felda
Kuala Lumpur
*Semai Bakti Felda Boarding School
Kuala Lumpur*

29 MAC 2003
Sekolah Menengah Kebangsaan Rapat Setia
Jalan Tenaga, Rapat Setia, Perak
*Rapat Setia Secondary School,
Jalan Tenaga, Rapat Setia, Perak*

25 APRIL 2003
Sekolah Menengah Kebangsaan
Tun Haji Abdul Malek, Melaka
*Tun Haji Abdul Malek
Secondary School, Malacca*

11 Mac 2003
Lawatan (KUSTEM, Terengganu)
Visit (KUSTEM, Terengganu)

7 APRIL 2003
Sekolah Menengah Kebangsaan
Tunku Ampuan Durah, Jalan Sikamat
Seremban, Negeri Sembilan
*Tunku Ampuan Durah Secondary School,
Jalan Sikamat, Seremban, Negeri Sembilan*

2 MEI 2003
Sekolah Menengah Kebangsaan
Nasiruddin Shah, Besut, Terengganu
*Nasiruddin Shah Secondary School,
Besut, Terengganu*

22 MAC 2003
Sekolah Menengah Kebangsaan
Jalan Kolam Air, Batu Pahat Johor
*Jalan Kolam Air Secondary School
Batu Pahat, Johor*

12 APRIL 2003
Asrama Semai Bakti Felda Kuala Lumpur
Taman Sri Keramat, Kuala Lumpur
*Semai Bakti Felda Boarding School,
Taman Sri Keramat, Kuala Lumpur*

5 MEI 2003
Pejabat Pendidikan Daerah
Kuala Terengganu
*District Education Office,
Kuala Terengganu, Terengganu*

<p>10 MEI 2003 Sekolah Menengah Kebangsaan Bukit Baru, Melaka <i>Bukit Baru Secondary School, Malacca</i></p>	<p>3 JUN 2003 Sekolah Kebangsaan (LKTP) Triang 3 Triang, Pahang <i>Triang 3 (LKTP) National School, Triang, Pahang</i></p>	<p>11 JUN 2003 Sekolah Menengah Kebangsaan Tun Perak Km 4, Jalan Salleh Muar, Johor <i>Tun Perak Secondary School, KM 4, Jalan Salleh Muar, Johore</i></p>
<p>22 MEI 2003 Kementerian Perpaduan Negara dan Pembangunan Masyarakat Kuala Lumpur <i>National Unity and Social Development Ministry, Kuala Lumpur</i></p>	<p>4 JUN 2003 Sekolah Menengah Kebangsaan Meranti Pasir Mas, Kelantan <i>Meranti Secondary School, Pasir Mas, Kelantan</i></p>	<p>11 JUN 2003 Sekolah Menengah Kebangsaan Engku Husain, Semenyih Selangor <i>Engku Husain Secondary School, Semenyih Selangor</i></p>
<p>23 MEI 2003 Sekolah Menengah Kebangsaan Jalan Reko, Kajang, Selangor <i>Jalan Reko Secondary School, Kajang, Selangor</i></p>	<p>4 JUN 2003 Sekolah Kebangsaan Telkong Kuala Krai, Kelantan <i>Telkong Secondary School, Kuala Krai, Kelantan</i></p>	<p>12 JUN 2003 Sekolah Menengah Kebangsaan Raja Muda Musa, Batang Berjuntai, Selangor <i>Raja Muda Musa Secondary School, Batang Berjuntai, Selangor</i></p>
<p>29 MEI 2003 Sekolah Menengah Kebangsaan Dato Hj. Hussein, Perak <i>Dato Hj. Hussein Secondary School, Perak</i></p>	<p>4 JUN 2003 Sekolah Menengah Kebangsaan Paduka Tuan, Jalan Genuang, Segamat, Johor <i>Paduka Tuan Secondary School, Jalan Genuang, Segamat, Johore</i></p>	<p>12 JUN 2003 Lembaga Tembakau Negara Malaysia Kubang Kerian, Kota Bharu, Kelantan <i>National Tobacco Body, Malaysia Kubang Kerian, Kota Bahru, Kelantan</i></p>
<p>30 MEI 2003 Sekolah Menengah Kebangsaan Seri Semantan, Mentakab, Pahang <i>Seri Semantan Secondary School, Mentakab, Pahang</i></p>	<p>5 JUN 2003 Sekolah Menengah Kebangsaan Penanti Kubang Semang, Seberang Perai Tengah <i>Penanti Secondary School, Kubang Semang, Seberang Perai Tengah</i></p>	<p>12 JUN 2003 Sekolah Menengah Kebangsaan Convent Jalan Daud Muar, Johor <i>Convent Secondary School, Jalan Daud Muar, Johore</i></p>
<p>2 JUN 2003 Sekolah Menengah Kebangsaan (Perempuan) Temenggong Ibrahim Batu Pahat, Johor <i>Temenggong Ibrahim (Girls) Secondary School, Batu Pahat, Johore</i></p>	<p>5 JUN 2003 Pihak Berkuasa Tempatan Pasir Gudang, Johor <i>Local Authority Pasir Gudang, Johore</i></p>	<p>18 JUN 2003 Kolej Teknologi Timur Sepang, Selangor <i>East Sepang Technology College, Selangor</i></p>
<p>3 JUN 2003 Sekolah Menengah Jenis Kebangsaan Yok Jalan Air Leleh, Melaka. <i>Yok National Type Secondary School, Jalan Air Leleh, Malacca</i></p>	<p>11 JUN 2003 Sekolah Menengah Kebangsaan Badrul Alam Shah, Kemasek, Kemaman Terengganu, Kemaman <i>Badrul Alam Shah Secondary School, Kemasek, Kemaman, Terengganu</i></p>	<p>20 JUN 2003 Jabatan Penerangan Malaysia Pejabat Perkhidmatan Penerangan, Terengganu <i>Information Ministry Malaysia, Information Services Office, Terengganu</i></p>

Lawatan Sekolah / Agensi Dalam Negeri *School / State Agencies Visit*

<p style="text-align: center;">27 JUN 2003 Sekolah Menengah Kebangsaan Pasir Gudang (1), Jalan Bandar Pasir Gudang, Johor <i>Pasir Gudang (1) Secondary School, Jalan Bandar Pasir Gudang, Johore</i></p>	<p style="text-align: center;">12 JULAI 2003 Daerah Padang Terap Pendang D/a Sekolah Menengah Kebangsaan Kuala Nerang, Kuala Nerang, Kedah <i>Padang Terap Pendang District d/a Kuala Nerang Secondary School, Kedah</i></p>	<p style="text-align: center;">26 JULAI 2003 Sekolah Menengah Kebangsaan Tuanku Abdul Rahman Gemas Negeri Sembilan <i>Tuanku Abdul Rahman Secondary School, Gemas, Negeri Sembilan</i></p>
<p style="text-align: center;">27 JUN 2003 Sekolah Menengah Kebangsaan Pulau Nyior, Jitra, Kedah <i>Pulau Nyior Secondary School, Jitra, Kedah</i></p>	<p style="text-align: center;">12 JULAI 2003 Sekolah Menengah Kebangsaan Tanjung Lumpur, Kempadang, Kuantan, Pahang <i>Tanjung Lumpur Secondary School, Kempadang, Kuantan, Pahang</i></p>	<p style="text-align: center;">26 Julai 2003 Sekolah Menengah Kebangsaan Bandar Mas, Bandar Penawar Kota Tinggi, Johor <i>Bandar Mas Secondary School, Bandar Penawar Kota Tinggi, Johore</i></p>
<p style="text-align: center;">1 JULAI 2003 Sekolah Menengah Kebangsaan Kuala Jengal Dungun, Terengganu <i>Kuala Jengal Secondary School, Dungun, Terengganu</i></p>	<p style="text-align: center;">12 JULAI 2003 Sekolah Menengah Kebangsaan Dato' Penggawa Barat, Pontian, Johor <i>Dato' Penggawa Barat Secondary School, Pontian, Johore</i></p>	<p style="text-align: center;">31 JULAI 2003 Sekolah Menengah Teknik Wakaf Tembusu Kuala Terengganu, Terengganu <i>Wakaf Tembusu Technical Secondary School, Kuala Terengganu, Terengganu</i></p>
<p style="text-align: center;">1 JULAI 2003 Sekolah Menengah Kebangsaan Agama Kuala Abang, Dungun, Terengganu <i>Kuala Abang Religious Secondary School, Dungun, Terengganu</i></p>	<p style="text-align: center;">16 JULAI 2003 Sekolah Menengah Kebangsaan Seksyen 11 Shah Alam, Selangor <i>Section 11, Secondary School, Shah Alam, Selangor</i></p>	<p style="text-align: center;">1 OGOS 2003 Sekolah Menengah Kebangsaan Raja Muda Musa <i>Raja Muda Musa Secondary School</i></p>
<p style="text-align: center;">8 JULAI 2003 Sekolah Menengah Kebangsaan Hang Kasturi, Masjid Tanah, Melaka <i>Hang Kasturi Secondary School, Masjid Tanah, Malacca</i></p>	<p style="text-align: center;">17 JULAI 2003 Sekolah Menengah Teknik Wakaf Tembusu Kuala Terengganu, Terengganu <i>Wakaf Tembusu Technical Secondary School, Kuala Terengganu, Terengganu</i></p>	<p style="text-align: center;">5 OGOS 2003 Sekolah Menengah Kebangsaan Raja Muda Musa, Batang Berjuntai, Selangor <i>Raja Muda Musa Secondary School, Batang Berjuntai, Selangor</i></p>
<p style="text-align: center;">10 JULAI 2003 Sekolah Menengah Teknik Pasir Mas, Kelantan <i>Pasir Mas Technical Secondary School, Kelantan</i></p>	<p style="text-align: center;">17 Julai 2003 Sekolah Menengah Kebangsaan Mersing Km 3, Jalan Endau, Mersing, Johor <i>Mersing Secondary School, KM 3, Jalan Endau, Mersing, Johore</i></p>	<p style="text-align: center;">6 Ogos 2003 Tadika Jasmini, Taman Jasmin Kajang, Selangor <i>Jasmini Nursery, Taman Jasmin Kajang, Selangor</i></p>
<p style="text-align: center;">11 JULAI 2003 Sekolah Berasrama Penuh Integrasi Sabak Bernam, Sungai Air Tawar Selangor <i>Sabak Bernam Integrated Residential School, Sungai Air Tawar, Selangor</i></p>	<p style="text-align: center;">22 JULAI 2003 Pejabat Pendidikan Daerah Klang Jalan Meru Klang, Selangor <i>District Education Office – Klang Jalan Meru, Klang, Selangor</i></p>	<p style="text-align: center;">7 Ogos 2003 Sekolah Menengah Teknik Kemaman Kemaman, Terengganu <i>Kemaman Technical Secondary School, Kemaman, Terengganu</i></p>

<p>8 OGOS 2003 Sekolah Menengah Kebangsaan Sungai Ruan, Sungai Ruan, Raub, Pahang <i>Sungai Ruan Secondary School, Sungai Ruan, Raub, Pahang</i></p>	<p>28 OGOS 2003 Taska Children's World Taman Sri Endah, Seri Petaling Kuala Lumpur <i>Taska Children's World Taman Sri Endah, Seri Petaling Kuala Lumpur</i></p>	<p>10 SEPTEMBER 2003 Sekolah Menengah Kebangsaan Bandar Baru UDA, Johor <i>Bandar Baru UDA Secondary School, Johor</i></p>
<p>8 OGOS 2003 Universiti Malaysia Sabah Kampus Antarabangsa Labuan Wilayah Persekutuan Labuan <i>Universiti Malaya Sabah Labuan International Campus, Federal Territory of Labuan</i></p>	<p>29 OGOS 2003 Sekolah Menengah Kebangsaan St. Anthony, Teluk Intan, Perak <i>St. Anthony Secondary School, Teluk Intan, Perak</i></p>	<p>11 SEPTEMBER 2003 Sekolah Menengah Kebangsaan Pahi 18000 Kuala Krai, Kelantan <i>Pahi Secondary School, 18000 Kuala Krai Kelantan</i></p>
<p>9 Ogos 2003 Sekolah Menengah Kebangsaan Parit Bunga, Parit Bunga, Muar, Johor <i>Parit Bunga Secondary School, Parit Bunga, Muar, Johore</i></p>	<p>29 OGOS 2003 Sekolah Menengah Jenis Kebangsaan Pei Yuan, Kampar, Perak <i>Pei Yuan Secondary School, Kampar, Perak</i></p>	<p>11 SEPTEMBER 2003 Sekolah Agama Ibu Hamidah, Panchor Muar, Johor <i>Ibu Hamidah Religious School, Panchor, Muar, Johore</i></p>
<p>9 OGOS 2003 Sekolah Menengah Kebangsaan Padang Tengku, Kuala Lipis, Pahang <i>Padang Tengku Secondary School, Kuala Lipis, Pahang</i></p>	<p>8 SEPTEMBER 2003 Ketua Penaja Cawangan Taman Perumahan Desa Petaling, Petaling, Selangor <i>Chief Sponsor Desa Petaling Housing Estate Branch, Petaling, Selangor</i></p>	<p>12 SEPTEMBER 2003 Maktab Perguruan Tuanku Bainun Bukit Mertajam, Pulau Pinang <i>Tuanku Bainun Teacher's Training College, Bukit Mertajam, Penang</i></p>
<p>11 OGOS 2003 Ketua, Sektor Pengurusan Perkhidmatan Pendidikan, Jabatan Pendidikan Wilayah Persekutuan, Kuala Lumpur <i>Chief, Educational Services Management Sector, Federal Territory Education Department, Kuala Lumpur</i></p>	<p>8 SEPTEMBER 2003 Sekolah Menengah Kebangsaan Bukit Pasir Jalan Jorak, Bukit Pasir, Muar, Johor <i>Bukit Pasir Secondary School, Jalan Jorak, Bukit Pasir, 84300 Muar, Johore</i></p>	<p>13 SEPTEMBER 2003 Sekolah Menengah Kebangsaan Seri Ampangan, Jalan Kuala Pilah Seremban, Negeri Sembilan <i>Seri Ampangan Secondary School, Jalan Kuala Pilah, Seremban Negeri Sembilan</i></p>
<p>22 OGOS 2003 Sekolah Menengah Teknik Kemaman Kemaman, Terengganu <i>Kemaman Technical Secondary School, Kemaman, Terengganu</i></p>	<p>9 SEPTEMBER 2003 Kolej Cosmopoint, Muar, Johor <i>Cosmopoint College, Muar, Johore</i></p>	<p>27 SEPTEMBER 2003 Sekolah Kebangsaan Felda Inas, Kulai, Johor <i>Felda Inas National School, Kulai, Johore</i></p>
<p>23 OGOS 2003 Sekolah Menengah Kebangsaan Simpang Beluru, Enggor, Perak <i>Simpang Beluru Secondary School, Enggor, Perak</i></p>	<p>9 SEPTEMBER 2003 Sekolah Menengah Kebangsaan Paya Keladi, Kepala Batas Pulau Pinang <i>Paya Keladi Secondary School, Kepala Batas, Penang</i></p>	<p>27 SEPTEMBER 2003 Persatuan Bahasa Cina Sekolah Menengah Kebangsaan Batu Anam, Segamat, Johor <i>Chinese Language Society Batu Anam Secondary School, Segamat, Johor</i></p>

Lawatan Sekolah / Agensi Dalam Negeri *School / State Agencies Visit*

30 SEPTEMBER 2003
Sekolah Kebangsaan Sungai Dua
Gemencheh, Negeri Sembilan
*Sungai Dua National School,
Gemencheh, Negeri Sembilan*

15 OKTOBER 2003
Sekolah Menengah Kebangsaan
Pandan Jaya, Ampang, Selangor
*Pandan Jaya Secondary School,
Ampang, Selangor*

23 OKTOBER 2003
Sekolah Menengah Kebangsaan
Senggarang Batu Pahat, Johor
*Senggarang Secondary School,
Batu Pahat, Johor*

30 SEPTEMBER 2003
Pusat Latihan Perindustrian dan
Pemulihan Bangi, Kajang, Selangor
*Industrial Training and Rehabilitation Centre
Bangi, Kajang, Selangor*

15 OKTOBER 2003
Sekolah Menengah Kebangsaan
Wangsa Melawati, Jalan Genting Klang,
Kuala Lumpur
*Wangsa Melawati Secondary School,
Jalan Genting Klang, Kuala Lumpur*

23 OKTOBER 2003
Borneo Exploration Tours & Travel
Sdn. Bhd., Kuching, Sarawak
*Borneo Exploration Tours & Travel
Sdn. Bhd., Kuching, Sarawak*

11 OKTOBER 2003
Sekolah Menengah Kebangsaan
Dato' Idris, Pantai Remis, Perak
*Dato' Idris Secondary School,
Pantai Remis, Perak*

16 OKTOBER 2003
Sekolah Menengah Jenis Kebangsaan Pei
Hwa, Sungai Mati, Muar, Johor
*Pei Hwa National Type Secondary School,
Sungai Mati, Muar, Johor*

25 OKTOBER 2003
Sekolah Menengah Kebangsaan Tengku
Suleiman, Tunjong, 02400 Beseri, Perlis
*Tengku Suleiman Secondary School,
Tunjong, 02400 Beseri, Perlis*

11 OKTOBER 2003
Sekolah Kebangsaan
Datuk Ismail Saadon
Kota Tinggi, Johor
*Datuk Ismail Saadon National School,
Kota Tinggi, Johor*

16 OKTOBER 2003
Focus Learning Consulting Sdn. Bhd.
Petaling Jaya, Selangor

6 NOVEMBER 2003
Sekolah Menengah Jenis Kebangsaan
Chio Min, Kedah
*Sekolah Menengah Jenis Kebangsaan
Chio Min, Kedah*

11 OKTOBER 2003
Sekolah Menengah Sains
Tengku Abdullah
Jalan Lipis, Raub, Pahang
*Tengku Abdullah Science Secondary School,
Jalan Lipis, Raub, Pahang*

20 OKTOBER 2003
Sekolah Menengah Kebangsaan Sanglang
Kampung Rama, Sanglang, Perlis
*Sanglang Secondary School,
Kampung Rama, Sanglang, Perlis*

11 NOVEMBER 2003
Sekolah Menengah Jenis Kebangsaan
Keat Hwa, Kedah
*Chio Min National Type
Secondary School, Kedah*

11 OKTOBER 2003
Focus Learning Consulting Sdn. Bhd.
Kelana Jaya Petaling Jaya, Selangor

21 OKTOBER 2003
Sekolah Menengah Kebangsaan
Segamat, Johor
*Segamat National Secondary School
Johore*

2 DISEMBER 2003
Kolej Komuniti Bukit Beruang, Melaka
*Bukit Beruang Community College,
Malacca*

13 OKTOBER 2003
Sekolah Menengah Kebangsaan Taman
Sri Muda, Shah Alam, Selangor
*Taman Sri Muda Secondary School,
Shah Alam, Selangor*

21 OKTOBER 2003
Maktab Tentera Diraja, Sungai Besi, KL
*Royal Military College,
Sungai Besi, Kuala Lumpur*

10 DISEMBER 2003
Sekolah Menengah Kebangsaan
Chepir, Kedah
*Chepir National Secondary School,
Kedah*

15 OKTOBER 2003
Sekolah Menengah Kebangsaan
Tun Saban, Pengkalan Hulu, Perak
*Tun Saban Secondary School,
Pengkalan Hulu, Perak*

22 OKTOBER 2003
Sekolah Menengah Kebangsaan
Sultan Ahmad Tajuddin, Kedah
*Sultan Ahmad Tajuddin Secondary School,
Kedah*

15 DISEMBER 2003
Gabungan Pelajar Melayu Semenanjung
Negeri Terengganu Darul Iman
Kuala Terengganu
*Peninsular Malay Students' Alliance
Terengganu Darul Iman State
Kuala Terengganu*

Pameran dan Ceramah

Exhibition and Talks

11 - 12 JANUARI 2003

Pameran 'The Star Education Fair 2003' di PWTC

26 - 30 JANUARI 2003

Pameran 'Pameran Pendidikan, Multimedia & Kerjaya', Kompleks Kuantan Parade, Kuantan, Pahang

20 - 23 FEBRUARI 2003

Pameran 'Ekspo Pendidikan, Latihan dan Kerjaya 2003 (EDU-CARE 2003)' Di Pusat Dagangan Terengganu (TTC), Kuala Terengganu

21 - 23 FEBRUARI 2003

Pameran 'The Star Education Fair 2003' Di Penang International Sport Arena (PISA)

24 - 28 MAC 2003

Pameran Bagi Program Minggu Kerjaya Sekolah Menengah Kebangsaan Sultan Abdul Aziz Shah Tahun 2003 Di Dewan Sekolah Menengah Kebangsaan Sultan Abdul Aziz Shah, Kajang, Selangor

7 APRIL 2003

Pameran dan Ceramah Sempena Bulan Kerjaya, Di Dewan Sekolah Menengah Kebangsaan Meru, Klang, Selangor

9 APRIL 2003

Pameran Program Hari Kerjaya Sekolah Menengah Kebangsaan Wangsa Melawati Di Dewan Terbuka, Sekolah Menengah Kebangsaan Wangsa Melawati, Jalan Genting, Kuala Lumpur

10 - 15 JUN 2003

Pameran 'Mega Perpaduan' di Bukit Ekspo, UPM, Serdang, Selangor

11-12 JANUARY 2003

"The Star Education Fair 2003" at PWTC

26-30 JANUARY 2003

Education, Multimedia & Career Exhibition" at Kuantan Parade Complex, Kuantan, Pahang

20-23 FEBRUARY 2003

"Education, Training & Career Expo 2003" (EDUCARE 2003) at Terengganu Trade Centre (TTC), Kuala Terengganu

21-23 FEBRUARY 2003

"The Star Education Fair 2003" at Penang International Sport Arena (PISA)

24-28 MARCH 2003

Sultan Abdul Aziz Shah National Secondary School "Career Week Exhibition 2003" Program at Sekolah Menengah Kebangsaan Sultan Abdul Aziz Shah, Kajang, Selangor

7 APRIL 2003

"Career Month Exhibition and Talk" At Meru National Secondary School Hall, Klang, Selangor

9 APRIL 2003

Wangsa Melawati National Secondary School Career Week Exhibition Program at the Wangsa Melawati Secondary School Hall, Jalan Genting, Kuala Lumpur

10-15 JUNE 2003

"Mega Unity Expo" at Expo Hill, UPM, Serdang, Selangor

Pameran dan Ceramah

Exhibition and Talks

20 - 21 JUN 2003

Pameran Bagi Program Minggu Kerjaya Sekolah Menengah Kebangsaan Jalan Reko, Kajang Tahun 2003, Dewan Sekolah Menengah Kebangsaan Jalan Reko, Kajang, Selangor

1 - 4 JULAI 2003

Pameran Peluang Pendidikan Tinggi Di Malaysia Sempena 25th APEC Human Resources Development Working Group Meeting (25th HRD WG) Kuala Lumpur, Malaysia

Anjuran Unit Perancang Ekonomi Jabatan Perdana Menteri
Di Hotel Renaissance
Jalan Ampang, Kuala Lumpur

17 JULAI 2003

Pameran 'Expo Pendidikan Kerjaya "Kenali Diri Cintai Kerjaya" Di Sekolah Menengah Kebangsaan Jalan Kolam Air Peti Surat 32 83007 Batu Pahat, Johor

18 - 19 JULAI 2003

Pameran 'Sempena Sambutan Ulang Tahun Pertama dan Hari Anugerah Kecemerlangan Akademik Kolej Matrikulasi Johor' Di Kolej Matrikulasi Johor, Kementerian Pendidikan Malaysia 84900 Tangkak, Johor

26 JULAI 2003

Pameran Sempena Hari Ko Kurikulum dan Mesyuarat Agong PIBG Sekolah Menengah Teknik Tengku Ampuan Afzan, Bentong, Pahang Di Sekolah Menengah Teknik Tengku Ampuan Afzan Bentong, Pahang

29 JULAI 2003

Pameran Hari Eksplorasi Pendidikan dan Kerjaya 2003 Di Maktab Rendah Sains MARA, Pulau Pinang

20-21 JUNE 2003

Jalan Reko Secondary School, Kajang 2003 "Career Week Exhibition" Program at the Jalan Reko School Hall, Kajang, Selangor

1-4 JULY 2003

"Malaysian Higher Education Opportunities Exhibition" in conjunction with the 25th APEC Human Resources Development Working Group Meeting (25th HRD WG), Kuala Lumpur, Malaysia

Organised by the Economic Planning Unit of the Prime Minister's Department at Hotel Renaissance, Jalan Ampang, Kuala Lumpur

17 JULY 2003

"Career Education Expo – Know Yourself, Love Your Career" at the Jalan Kolam Air Secondary School, PO Box 32, 83007 Batu Pahat, Johore.

18-19 JULY 2003

Exhibition in conjunction with the Johore Matriculation College's "First Anniversary and Academic Excellence Awards Day" at the Johore Matriculation College, Ministry of Education Malaysia, 84900 Tangkak, Johore

26 JULY 2003

Exhibition in conjunction with Cocurriculum and Tengku Ampuan Afzan Technical School PTA Annual General Meeting at the Tengku Ampuan Afzan Technical School Bentong, Pahang.

29 JULY 2003

"Education and Career Exploration Day" Exhibition at the MARA Lower Science College, Penang

12 - 14 OGOS 2003

Pameran 'Karnival Pendidikan Kerjaya Sains dan Teknologi Peringkat Negeri Wilayah Persekutuan Kuala Lumpur 2003' Di Sekolah Menengah Kebangsaan Wangsa Melawati, Kuala Lumpur

16 OGOS 2003

Program Lawatan Sambil Belajar Kelab Kebajikan, Sukan dan Sosial Canseleri (K'SERI) Institut Haiwan Kluang, Johor Pusat Jualan Pasu Hiasan Air Hitam, Kluang

23 - 24 OGOS 2003

Pameran Kerjaya dan IPT Kolej MARA Kulim Di Kolej MARA Kulim, Jalan Junjong, 09000 Kulim, Kedah

26 SEPTEMBER 2003

Pameran Landskap Johor 2003

9 HINGGA - 12 OKTOBER 2003

Pameran Penyelidikan dan Pembangunan IPTA 2003 di PWTC

16 - 20 OKTOBER 2003

Pameran 'Pesta Konvokesyen Ke 27 Sidang III UPM' Di Bukit Ekspo, UPM, Serdang, Selangor

12-14 AUGUST 2003

2003 Federal Territory, Kuala Lumpur Science & Technology Education Career Carnival Exhibition at Sekolah Menengah Kebangsaan Wangsa Melawati, Kuala Lumpur

16 AUGUST 2003

Welfare, Sports and Social Chancellery" (K'SERI) Educational Visitation Program to the Animal Institute Kluang, Johore and Decorative Vase Centre Air Hitam, Kluang

23-24 AUGUST 2003

Kulim MARA College "Career & IPT Exhibition" at the Kulim MARA College, Jalan Junjong, 09000 Kulim, Kedah

26 SEPTEMBER 2003

Johor Landscapes Exhibition 2003

9- 12 OKTOBER 2003

Research and Development IPTA 2003 at PWTC

16-20 OKTOBER 2003

"27th UPM Convocation Fest Third Sitting Exhibition" at the UPM Expo Hill, Serdang, Selangor

Memorandum Persefahaman

Memorandum of Understanding

DALAM NEGERI

7 Februari 2003

Airod Sdn Bhd

10 April 2003

Kementerian Pembangunan Usahawan

14 April 2003

Dewan Bandaraya Kuala Lumpur dan
Institut Penyelidikan Perhutanan
Malaysia (FRIM)

20 April 2003

Institut Penyelidikan Perhutanan
Malaysia (FRIM)

9 Jun 2003

Pusat Zakat Selangor

22 September 2003

The National Cancer Society
of Malaysia

22 September 2003

Persatuan Penterjemah Malaysia

LUAR NEGERI

31 Januari 2003

University of Joensuu, Finland

13 Jun 2003

University of Massachusetts, Amherst,
USA

10 Julai 2003

South Dakota State University, USA

27 Ogos 2003

Thamar University, Yemen

22 September 2003

Cornell University Ithaca, New York, USA

9 Disember 2003

King Saud University, Arab Saudi

2003

Institut Penyelidikan Perhutanan
Malaysia (FRIM), Universiti Putra
Malaysia (UPM) dan The National
Institute for Environmental Studies
(NIES), Japan

NATIONAL

7 February 2003

Airod Sdn Bhd

10 April 2003

Entrepreneurial Development Ministry

14 April 2003

Kuala Lumpur City Hall (DBKL) and Forest
Research Institute Malaysia (FRIM)

20 April 2003

Forest Research Institute Malaysia
(FRIM)

9 June 2003

Pusat Zakat Selangor

22 September 2003

The National Cancer Society of Malaysia

22 September 2003

Translators Association of Malaysia

OVERSEAS

31 January 2003

University of Joensuu, Finland

13 June 2003

University of Massachusetts, Amherst,
USA

10 July 2003

South Dakota State University, USA

27 August 2003

Thamar University, Yemen

22 September 2003

Cornell University Ithaca, New York, USA

9 December 2003

King Saud University, Saudi Arabia

2003

Forest Research Institute Malaysia (FRIM),
Universiti Putra Malaysia (UPM) and The
National Institute for Environmental Studies
(NIES), Japan

Aktiviti Sepanjang 2003

Activities in 2003

JANUARI

17 – 19 Januari

Festival Kebudayaan & Kesenian UPMKB

2 Januari

Majlis Perutusan Tahun Baru 2003

2 Januari

Pelancaran Dasar ICT

24 Januari

Program Malam Budaya Wayang Kulit. Anjuran: PKKSSAAS

25 Januari

Bengkel Penulisan & Kewartawanan
Anjuran: Bahagian Komunikasi Korporat

31 Januari

Majlis MoU dengan University Joensuu, Finland

FEBRUARI

7 Februari

Memorandum Persefahaman antara UPM dan Airod Sdn Bhd
Anjuran : Bahagian Komunikasi Korporat

7 – 21 Februari

Pameran Kartun "Aie-Aku dan Sesuatu"
Anjuran : Pusat Kebudayaan KSSAAS



JANUARY

17 – 19 January

UPMKB Culture & Arts Festival

2 January

New Year Address

2 January

ICT Policy Launch

24 January

Wayang Kulit Culture Night Program. Organised by: PKKSSAAS

25 January

Writing & Journalism Workshop
Organised by: Corporate Communications Department

31 January

MoU signing ceremony with University of Joensuu, Finland

FEBRUARY

7 February

Memorandum of Understanding between UPM
and Airod Sdn Bhd
Organised by: Corporate Communications Department

7 – 21 February

"Aie-Aku dan Sesuatu" Cartoon Exhibition
Organised by: KSSAAS Culture Centre



Aktiviti Sepanjang 2003

Activities in 2003

8 Februari

Malam Sejambak Budi dan Malam Bakti Dikenang
Anjuran : KOSASS

10 Februari

Seminar Komunikasi dan Penerapan Nilai-nilai Islam Dalam
Tadbir Urus Koperasi
Anjuran : Pelajar PJJ UPM Bac. Komunikasi Sem 8, Koperasi
Usaha Bersama Bhd dan Maktab Kerjasama Malaysia

16 Februari

Fiesta Ponggal 2003. Anjuran : Kolej Tun Dr. Ismail (KTDI)

15 Februari

Malam Tokoh dan Hasrat Negara. Anjuran : Kolej Tun Perak

21 Februari

Syarahan Inaugural oleh Prof. Dr. Ir. Radin Umar bin Radin Sohadi

22 Februari

Wacana Intelktual bertajuk 'Keluarga Harmoni: Isu-isu
Poligami'
Anjuran : Institut Pengajian Komuniti dan Keamanan (PEKKA)

22 Februari

Majlis Makan Malam Mega Matrik's 2003

8 February

Malam Sejambak Budi and Malam Bakti Dikenang
Organised by : KOSASS

10 February

Communication and Application of Islamic Values in Corporate
Management Seminar. Organised by : PJJ UPM Bac.
Communications Sem 8 Students, Koperasi Usaha Bersama Bhd
and Malaysia Cooperative College

16 February

2003 Ponggal Fiesta. Organised by: Tun Dr. Ismail College (KTDI)

15 February

Malam Tokoh and Hasrat Negara. Organised by : Tun Perak College

21 February

Inaugural Lecture by Prof. Dr. Ir. Radin Umar bin Radin Sohadi

22 February

Intellectual Discourse entitled: "Harmonious Family: Polygamy
Issues" Organised by : Peace and Community Studies Institute
(PEKKA)

22 February

2003 Mega Matrix Dinner



MAC

11 Mac

Majlis Pelancaran Kempen Jujur kepada Ilmu
Anjuran : Bahagian Hal Ehwal Mahasiswa

12 Mac

Majlis Malam Tautan Kenyalang, Persatuan Kebajikan Anak Negeri Sarawak (PERKASA)

14 Mac

Majlis Anugerah Naib Canselor Sesi 2002/2003
Anjuran : Bahagian Hal Ehwal Mahasiswa

27 – 28 Mac

Seminar Kebangsaan Pembangunan Komuniti : Keperluan dan Hala Tuju di Alaf Baru

29 Mac – 2 April

Program Menabur Budi Menyemai Kasih (Bakti Siswa) Kolej Kesebelas. Anjuran : MTM Kolej Kesebelas

5 Mac

Majlis Anugerah Sukan UPM

APRIL

26 April

Syarah Inaugural oleh Prof. Dr. Shamser Mohamed Ramadili bertajuk "The New Issues Market: Regulatory Invention, Forecast Errors and Challenges

19 – 21 April

Majlis Konvokesyen ke-27 (Sidang I)

10 – 12 April

Kongres Mahasiswa 2003

14 April

Majlis menandatangani Perjanjian Persefahaman dengan DBKL dan FRIM

8 April

National Seed Symposium

9 April

Majlis Penyampaian Sijil MS ISO 9001:2000 Fakulti Sains & Pengajian Alam Sekitar

10 April

Majlis Menandatangani Perjanjian Persefahaman dengan Kementerian Pembangunan Usahawan

MEI

17 Mei

Majlis Makan Malam Rejimental

24 – 25 Mei

Majlis Konvokesyen ke-27 (Sidang II)

23 Mei

Majlis Pelancaran Putra Perkasa & Buku Panduan Mahasiswa

27 Mei

Majlis Pelancaran Buku Panduan Pengurusan Persatuan Mahasiswa

31 Mei

Syarah Inaugural oleh Profesor Dr. Han Chun Kwong bertajuk "Blueprint for Transformation or Business as Usual: A Structural Perspective of The Knowledge-Based Economy in Malaysia.

JUN

1 Jun

Pendaftaran Pelajar Baru Sesi 2003 / 2004

2 Jun

Majlis Ikrar dan Aku janji Pelajar Baru Sesi 2003 / 2004

MARCH

11 March

Honesty to Knowledge Campaign Launch Ceremony
Organised by : Undergraduate Affairs Department

12 March

Tautan Kenyalang Dinner, Persatuan Kebajikan Anak Negeri Sarawak (PERKASA)

14 March

Vice-Chancellor Award Ceremony - 2002/2003 Session
Organised by : Undergraduate Affairs Department

27 – 28 March

National Community Development Seminar :
Need and Direction in the New Millennium

29 March – 2 April

Eleventh College's "Menabur Budi Menyemai Kasih (Bakti Siswa)" Program Organised by : Eleventh College MTM

5 March

UPM Sports Awards Ceremony

APRIL

26 April

Inaugural Lecture by Prof. Dr. Shamser Mohamed Ramadili entitled "The New Issues Market: Regulatory Invention, Forecast Errors and Challenges

19 – 21 April

27th Convocation Ceremony (1st Sitting)

10 – 12 April

2003 Undergraduates' Congress

14 April

Signing of Memorandum of Understanding with DBKL and FRIM

8 April

National Seed Symposium

9 April

MS ISO 9001:2000 Certification Awards Ceremony to Faculty of Science and Environmental Studies

10 April

Signing of Memorandum of Understanding with Ministry of Entrepreneurial Development

MAY

17 May

Regimental Dinner

24 – 25 May

27th Convocation Ceremony (2nd Sitting)

23 May

Putra Perkasa & Student Guide Book Launch Ceremony

27 May

Student Council Management Guide Book Launch Ceremony

31 May

Inaugural Lecture by Profesor Dr. Han Chun Kwong entitled "Blueprint for Transformation or Business as Usual: A Structural Perspective of The Knowledge-Based Economy in Malaysia."

JUNE

1 June

2003 / 2004 Session New Student Intake

2 June

2003/2004 Session New Student Pledge Ceremony

Aktiviti Sepanjang 2003

Activities in 2003

10 Jun

Pelancaran E-Bika

13 Jun

Majlis MoU dengan University of Massachusetts, USA

16 – 18 Jun

Seminar Penerbitan Ilmiah

Anjuran : Penerbit UPM di Langkawi, Kedah

10 June

E-Bika Launch

13 June

MoU signing with University of Massachusetts, USA

16 – 18 June

Academic Publication Seminar

Organised by: UPM Publications in Langkawi, Kedah

JULAI

1 Julai

Seminar Kerangka Kelayakan Kebangsaan

Anjuran : Bahagian Perancangan Korporat

3 Julai

Majlis Anugerah Perkhidmatan Cemerlang Tahun 2003

Anjuran : Pejabat Pendaftar

4 Julai

Syarahan Awam Alumni

Anjuran : Pusat Alumni UPM

5 Julai

Kejohanan Merentas Kampus UPM Sesi 2003/2004

Anjuran : Pusat Sukan

6 Julai

Aktiviti Dogathon 2003. Anjuran : Fakulti Perubatan Veterinar

JULY

1 July

National Qualification Framework Seminar

Organised by : Corporate Planning Department

3 July

Service Excellence Awards Ceremony

Organised by : Registrar's Office

4 July

Public Alumni Lecture

Organised by : UPM Alumni Centre

5 July

2003/2004 Session UPM Cross-Campus Championship

Organised by : Sports Centre

6 July

2003 Dogathon Activity

Organised by : Faculty of Veterinary Medicine



8 Julai

Majlis Anugerah Pelajar Cemerlang dan Persaraan Ahli KEPERTAMA

8 – 10 Julai

Pameran Reka Cipta dan Penyelidikan 2003
Anjuran : Pusat Pengurusan Penyelidikan (RMC)

10 Julai

Majlis MoU dengan South Dakota State University, USA

12 Julai

Seminar Memperkasa Komuniti Tani
Anjuran : Institut Pengajian Komuniti dan Keamanan

19 Julai

Perasmian Sukan Kolej dan Pelancaran Gerak Sukan Sesi 2003 UPM

26 Julai

Syarahan Inaugural oleh Profesor Dr. Mawardi Rahmani bertajuk Chemical Diversity of Malaysian Flora: Potential Source of Rich Therapeutic Chemicals

31 Julai

Bengkel "Get That Job" Persiapan Ke Alam Kerjaya
Anjuran : Pusat Alumni UPM

OGOS

5 Ogos

Sambutan Hari Patriotik 2003

8 Ogos

Majlis Anugerah Sijil Kepujian Dekan Fakulti Sains Komputer dan Teknologi Maklumat (FSKTM). Anjuran : FSKTM

9 Ogos

Syarahan Inaugural oleh Prof. Dr. Fatimah Md. Yusoff, bertajuk "An Ecological Approach: A Viable Option For Aquaculture Industry In Malaysia"

9 Ogos

Program Wacana Ilmu: Forum Nilai Murni, Etika dan Moral
Anjuran : Pusat Islam dan Bahagian Hal Ehwal Mahasiswa UPM

9 Ogos Forum Ketidakeimbangan Nisbah dan Pencapaian Akademik Mahasiswa

8 July

Student Excellence Awards and KEPERTAMA Member Retirement

8 – 10 July

2003 Invention and Research Exhibition
Organised by : Research Management Centre (RMC)

10 July

Signing of MoU with South Dakota State University, USA

12 July

Agricultural Community Empowerment Seminar
Organised by : Community and Peace Studies Institute

19 July

UPM 2003 Session College Sports Officiation and Sports Movement Launch

26 July

Inaugural Lecture by Profesor Dr. Mawardi Rahmani entitled Chemical Diversity of Malaysian Flora: Potential Source of Rich Therapeutic Chemicals

31 July

"Get That Job" Career Preparation Seminar
Organised by : UPM Alumni Centre

AUGUST

5 August

2003 Patriotic Day Celebration

8 August

Faculty of Computer Science and Information Technology (FSKTM) Dean's Excellence Awards Ceremony. Organised by : FSKTM

9 August

Inaugural Lecture by Prof. Dr. Fatimah Md. Yusoff, entitled "An Ecological Approach: A Viable Option For Aquaculture Industry In Malaysia"

9 August

Knowledge Discourse Program: Values, Ethics and Morals Forum. Organised by : Islamic Centre and UPM Undergraduate Affairs Department

9 August

Disproportionate Ratio and Student's Academic Performance Forum



Aktiviti Sepanjang 2003

Activities in 2003

11-12 Ogos

Konferensi Komunikasi Peringkat Kebangsaan
Anjuran : Pelajar Program Eksekutif FBMK.

16 Ogos

Hari Bersama Mahasiswa Luar Kampus 2003 Anjuran : Kolej Sultan Allaeddin Suleiman Shah (KOSASS)

16-17 Ogos

Hari Gerak Perpaduan, Anjuran : Unit Kebudayaan dan Rakan Muda IPTA, B'HEM

23-24 Ogos

Seminar Kerjaya Pra Graduan dan Graduan bertemakan: Pengkredibilitian Graduan Dijamin Ketelusan Hadapan
Anjuran : Persatuan Mahasiswa FEP (FEMSA)

27 Ogos

Majlis MoU dengan Thamar University, Yemen

11-12 August

National Level Communications Conference. Organised by :
FBMK Executive Program Students

16 August

2003 Day with Off-Campus Undergraduates. Organised by:
Sultan Allaeddin Suleiman Shah College (KOSASS)

16-17 August

Solidarity Movement Day
Organised by: IPTA, B'HEM Culture and "Rakan Muda" Unit

23-24 August

Undergraduate and Graduate Career Seminar themed:
"Forward Transparency Guarantees Graduate Credibility"
Organised by : FEP Undergraduates Association FEP (FEMSA)

27 August

Signing of MoU with Thamar University, Yemen

SEPTEMBER

11 September

Syarahen Umum Prof. Ramez A. Elmasri, University of Texas,
bertajuk "Bio Informatic Applications". Anjuran : FSKTM

12 September

Majlis 'Pecah Tanah' Fakulti Perubatan dan Sains Kesihatan, UPM

12 September

Sidang Akhbar Pameran Pendidikan dan Reka cipta IPTA 2003
di PWTC

13 September

Majlis Diskusi Kumpulan 'Aku Hanya Mahu Ke Seberang'
Persidangan IDEAL. Anjuran : GAPURA, FBMK

13 September

Larian Kemerdekaan 2003 UPMKB

13 September

Syarahen Inaugural "Psychotherapy For Rural Malays –
Does It Work ? oleh Prof. Dr. Azhar Md. Zain

15 September

Majlis Mengangkat Sumpah Ahli MPPUPM

22 September

Majlis Pelancaran Bahan Pendidikan Kanser dan MoU dengan
Cornell University, USA

27 September

Seminar Kebangsaan MACFEA Ke-8 "Empowering Consumer:
Strengthening Values Any Ethics"

27 September

Syarahen Inaugural oleh Profesor Dr. Mohd Zamri Saad
bertajuk "Respiratory Tract Infection: Establishment and
Control"

SEPTEMBER

11 September

Public Lecture by Prof. Ramez A. Elmasri, University of Texas,
entitled "Bio Informatic Applications" Organised by : FSKTM

12 September

UPM Faculty of Medicine and Health Sciences
"Groundbreaking Ceremony"

12 September

IPTA 2003 Education & Invention Press Conference at PWTC

13 September

Group Discussion 'Aku Hanya Mahu Ke Seberang' IDEAL
Conference
Organised by : GAPURA, FBMK

13 September

2003 UPMKB Merdeka Run

13 September

Inaugural Lecture "Psychotherapy For Rural Malays – Does It
Work? By Prof. Dr. Azhar Md. Zain

15 September

MPPUPM Members Swearing-in Ceremony

22 September

Cancer Education Material Launch Ceremony & MoU with
Cornell University, USA

27 September

8th MACFEA National Seminar "Empowering Consumer:
Strengthening Values Any Ethics"

27 September

Inaugural Lecture by Professor Dr. Mohd Zamri Saad entitled
"Respiratory Tract Infection: Establishment and Control"

OKTOBER

30 September - 2 Oktober

Persidangan Bahasa, Sastera dan Budaya (MICOLLAC) 2003
Anjuran : Fakulti Bahasa Moden dan Komunikasi.

9 - 12 Oktober

Pameran Penyelidikan dan Pembangunan IPTA di PWTC

11 - 12 Oktober

Kursus Membuat biskut sempena Aidilfitri Anjuran :
Unit Bakeri, Fakulti Sains Makanan dan Bioteknologi.

12 Oktober

Pertandingan Kuda Lasak
Anjuran : Taman Pertanian Universiti.

14 - 16 Oktober

Eksplorasi Kewartawanan anjuran Kolej Tun Dr Ismail
Bertempat di RTM, Melaka

14 Oktober

Majlis Jasa Putra dan Setia Putra

14 - 18 Oktober

Kursus Kepimpinan Mahasiswa Kolej Tun Dr. Ismail 2003

16 Oktober

Pelancaran Pusat Kecemerlangan Keluarga, Remaja dan
Kanak-kanak

16 Oktober

Majlis Santapan Malam Bersama Tuanku Canselor sempena
Konvokesyen ke-27 (Sidang Ketiga)

16 - 20 Oktober

Karnival Konvokesyen bersama TV3

17 Oktober

Majlis Pemasyhuran Bunga Orkid Dendrobium Tengku Anis

18 - 19 Oktober

Majlis Konvokesyen Ke- 27 (Sidang Ketiga)

20 Oktober

Majlis Konvokesyen Program Kerjasama UPM-IPTS

NOVEMBER

1 November - 28 Disember

Pertandingan Seni Khat Peringkat UPM 2003 Anjuran : B'HEM

10 - 20 November

Bulan Aspirasi Ramadhan Al-Mubarak 1424 Hijrah (BARA 24)
Bertempat di Dewan Serbaguna dan Surau Kolej Dua Belas dan
Kolej Empat Belas

10 - 20 November

Ihya' Ramadhan Al-Mubarak 1424 Hijrah
Bertempat di sekitar Kolej 12

15 November

Bengkel Kepimpinan Kepanduan
Anjuran : Kelab Pandu Puteri

29 November

Bengkel Latihan Kebangsaan 2003
(National Training Workshop) Anjuran : Kelab AIESEC

DISEMBER

5 - 7 Disember

Program Berhari Raya di Kampung Angkat, Kg. Air Limau,
Masjid Tanah, Melaka. Anjuran : Kolej Mohamad Rashid

6 Disember

Sesi Penerangan MBA & MM Untuk Pengambilan Januari 2004.
Anjuran : Sekolah Pengajian Siswazah Pengurusan.

OCTOBER

30 September - 2 Oktober

Language, Literature & Culture Conference (MICOLLAC) 2003
Organised by : Faculty of Modern Languages and
Communication

9 - 12 October

IPTA Research & Development Exhibition at PWTC

11 - 12 October

Aidil Fitri Biscuit Making Course
Organised by: Bakery Unit, Faculty of Food Science &
Biotechnology

12 October

Horse Endurance Competition
Organised by : University Agricultural Park

14 - 16 October

Journalism Exploration organised by Tun Dr Ismail College at
RTM, Melaka

14 October

Jasa Putra and Setia Putra Ceremony

14 - 18 October

2003 Student Leadership Course - Tun Dr Ismail College

16 October

Launch of Centre for Family, Teenagers & Children Excellence

16 October

Dinner with Tuanku Chancellor in conjunction with the 27th
Convocation Ceremony (Third Sitting)

16 - 20 October

Convocation Carnival with TV3

17 October

Dendrobium Tengku Anis Orchid Naming Ceremony

18 - 19 October

27th Convocation Ceremony (Third Sitting)

20 October

UPM-IPTS Collaborative Convocation Ceremony

NOVEMBER

1 November - 28 December

UPM Level Khat Craft Competition. Organised by : B'HEM

10 - 20 November

Ramadhan Al-Mubarak 1424 Hijrah (BARA 24) Aspiration
Month held at Multi-purpose Hall and 12 & 14 College Surau

10 - 20 November

Ihya' Ramadhan Al-Mubarak 1424 Hijrah held at Kolej 12

15 November

Leadership Guidance Workshop, Organised by : Girl Guides
Club

29 November

National Training Workshop. Organised by : AIESEC Club

DECEMBER

5 - 7 December

Hari Raya Program at Kampung Angkat, Kg. Air Limau, Masjid
Tanah, Melaka. Organised by: Mohamad Rashid College

6 December

MBA & MM Briefing Session for January 2004 Intake
Organised by: School of Graduate Management Studies

Aktiviti Sepanjang 2003

Activities in 2003

9 Disember

Lawatan Dr. Abdulmohsen Alshaik Director of International Cooperation Administration King Saud University of Riyadh Saudi Arabia dan Majlis menandatangani MoU

11 Disember

Taklimat Prosedur Pengajaran dan Penyelidikan
Anjuran : Bahagian Perancangan Korporat.

12 Disember

Lawatan Saintis Korea daripada Rural Development Administration & International Plant Genetic Resource Institute, Serdang

16 Disember

Lawatan Student Welfare, Seoul National University, Korea Selatan

17 Disember

Lawatan Suruhanjaya Tinggi Pendidikan, Filipina

17 Disember

Bengkel Susulan bagi membangunkan Sistem Balanced Scorecard untuk fakulti di Shangri-La Hotel, Putra Jaya.

18 Disember

Seminar on Nanotechnology and Its Application in Biotechnology and Life Sciences oleh Prof. Ahmed A. Busnaina, William Linclon Smith Professor and Director Northeastern University, Massachusetts, USA.

18 Disember

Konferen 'Women & Peace: Issues, Challenges & Strategies'.
Anjuran : PEKKA dan Unit Pengajian Wanita, Fakulti Pengajian Pendidikan.

20 Disember

Student-get-student Program and Eid al Fitri Celebration oleh OICnetwork

20 Disember

Malam Sirih Pulang Ke Gagang 'Homecoming 2' di Pusat Kebudayaan dan Kesenian Sultan Abdul Aziz Shah. Anjuran Pusat Perkhidmatan Kerjaya dan Alumni.

25 – 28 Disember

Festival Seni Tari MAKUM 2003 di Panggung Percubaan UPM. Anjuran : Unit Kebudayaan B'HEM.

29-30 Disember

Bengkel Bagi Membangunkan Sistem Balanced Scorecard Untuk Entiti Pentadbiran di Marriott Hotel, Putrajaya. Anjuran: Bahagian Perancangan Korporat.

9 December

Visit by Dr. Abdulmohsen Alshaik, Director of International Cooperation Administration, King Saud University of Riyadh Saudi Arabia and MoU signing ceremony

11 December

Research and Teaching Procedure Briefing
Organised by : Corporate Planning Department

12 December

Visit by Korean Scientists from Rural Development Administration & International Plant Genetic Resource Institute, Serdang

16 December

Visit by Student Welfare, Seoul National University, South Korea

17 December

Visit by Higher Education Commission, Philippines

17 December

Follow-Up Workshop to develop a Balanced Scorecard System for Faculty in Shangri-La Hotel, Putra Jaya.

18 December

Seminar on Nanotechnology and Its Application in Biotechnology and Life Sciences by Prof. Ahmed A. Busnaina, William Linclon Smith Professor and Director Northeastern University, Massachusetts, USA.

18 December

"Women & Peace: Issues, Challenges & Strategies" Conference
Organised by : PEKKA and Women Studies Unit, Faculty of Educational Studies.

20 December

Student-get-student Program and Eid al Fitri Celebration by OIC Network

20 December

Malam Sirih Pulang Ke Gagang 'Homecoming 2' at Sultan Abdul Aziz Shah Culture and Arts Centre. Organised by Career and Alumni Services Centre.

25 – 28 December

MAKUM 2003 Dance Arts Festival at UPM Trial Theatre
Organised by: B'HEM Cultural Unit

29-30 December

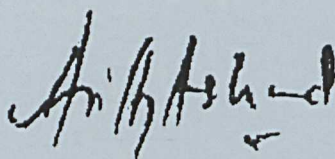
Workshop to develop Balanced Scorecard System for Administration Entity at Marriot Hotel, Putrajaya.
Organised by: Corporate Planning Department.

Laporan Kewangan *Financial Report*

SIJIL KETUA AUDIT NEGARA MENGENAI PENYATA KEWANGAN UNIVERSITI PUTRA MALAYSIA BAGI TAHUN BERAKHIR 31 DISEMBER 2003

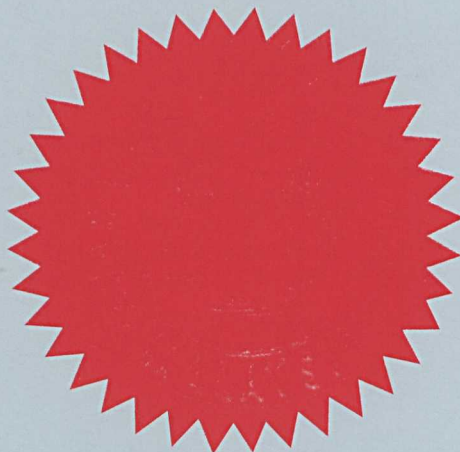
Penyata kewangan Universiti Putra Malaysia bagi tahun berakhir 31 Disember 2003 telah diaudit oleh wakil saya. Pihak pengurusan bertanggungjawab terhadap penyata kewangan ini. Tanggungjawab saya adalah mengaudit dan memberi pendapat terhadap penyata tersebut.

2. Pengauditan telah dilaksanakan mengikut Akta Audit 1957 dan berpandukan piawaian pengauditan yang diluluskan. Piawaian tersebut menghendaki pengauditan dirancang dan dilaksanakan untuk mendapat kepastian yang munasabah sama ada penyata kewangan adalah bebas daripada kesilapan atau ketinggalan yang ketara. Pengauditan itu termasuk memeriksa rekod secara semak uji, menyemak bukti yang menyokong angka dan memastikan pendedahan yang mencukupi dalam penyata kewangan. Penilaian juga dibuat terhadap prinsip perakaunan yang digunakan dan penyampaian penyata kewangan secara keseluruhan.
3. Pada pendapat saya, penyata kewangan ini memberi gambaran yang benar dan saksama terhadap kewangan Universiti Putra Malaysia pada 31 Disember 2003, hasil operasi dan aliran tunai untuk tahun tersebut berdasarkan piawaian perakaunan yang diluluskan.



(DATO' AZIZAH BT. HJ. ARSHAD)
b.p. KETUA AUDIT NEGARA
MALAYSIA

PUTRAJAYA
30 OGOS 2004



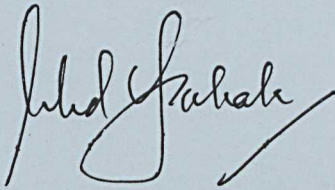
PENYATA LEMBAGA PENGARAH

BOARD OF DIRECTORS STATEMENT

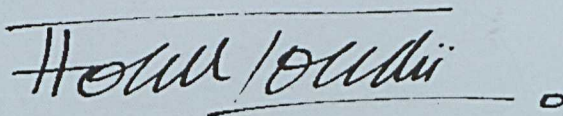
Kami, DATUK HAJI MD. ISAHAK BIN MD. YUSUF dan PROFESOR DATO' DR. IR MUHAMAD ZOHADIE BIN BARDAIE yang merupakan Ahli Lembaga Pengarah UNIVERSITI PUTRA MALAYSIA, dengan ini menyatakan bahawa Penyata Kewangan dari mukasurat 111 hingga 136 adalah disediakan untuk menunjukkan pandangan yang benar dan saksama berkenaan kedudukan kewangan UNIVERSITI PUTRA MALAYSIA pada 31 Disember 2003 dan hasil kendaliannya serta aliran tunai bagi tahun berakhir pada tarikh tersebut.

We, DATUK HAJI MD. ISAHAK BIN MD. YUSUF and PROFESOR DATO' DR. IR MUHAMAD ZOHADIE BIN BARDAIE as members of the Board of Directors of UNIVERSITI PUTRA MALAYSIA do hereby state that the Financial Statement set out on pages 111 - 136 have been drawn up to give a true and fair view of the financial position of UNIVERSITI PUTRA MALAYSIA as at 31 December 2003 and its results including changes in cash flows for the year ending on the date stated.

Bagi pihak Lembaga Pengarah,
On behalf of the Board of Directors,



(DATUK HAJI MD. ISAHAK BIN MD. YUSOF)
(Ahli/Member)



(PROF. DATO' DR. IR. MUHAMAD ZOHADIE BARDAIE, Ph.D., P.Eng.)
Ahli/Naib Canselor
Member/Vice-Chancellor

UPM Serdang
Tarikh/Date: 11 Jun 2004

AKUAN BERKANUN STATUTORY DECLARATION

Saya, **ZULKIFLEE BIN OTHMAN**, pegawai utama yang bertanggungjawab ke atas pengurusan kewangan **UNIVERSITI PUTRA MALAYSIA**, dengan ikhlasnya mengakui bahawa Penyata Kewangan ini dari mukasurat 111 hingga 136, mengikut sebaik-baik pengetahuan dan kepercayaan saya bahawa ianya itu adalah benar dan atas kehendak-kehendak Akta Akuan Berkanun, 1960.

I, **ZULKIFLEE BIN OTHMAN**, the principal officer responsible for the financial management of **UNIVERSITI PUTRA MALAYSIA**, sincerely declare that the Financial Statement set out on pages 111 to 136 to the best of my knowledge and belief, are accurate and I make this solemn declaration in the belief that it is true and in accordance with the requirements of the Statutory Declarations Act 1960.

Sebenar dan sesungguhnya)
Diakui oleh penama di atas) **ZULKIFLEE BIN OTHMAN**
Di Bangi pada 11 Jun 2004) **Pemangku Bendahari / Acting Bursar**

Truly and solemnly)
Declared by the abovenamed) **Dihadapan saya: /**
at Bangi on 11 June 2004) **Before me:**



[Signature]
Pesuruhjaya Sumpah
(Commissioner For Oath)
Mahkamah Sesyen & Majistret
Bandar Baru Bangi

Lembaran Imbangan Pada 31 Disember 2003

Balance Sheet as at 31 December 2003

	Nota / Note	2003 RM	2002 RM
ASET TETAP / FIXED ASSETS			
PEMBINAAN DALAM KEMAJUAN / WORK IN PROGRESS	2	517,877,084	464,754,574
PELABURAN / INVESTMENTS	3	135,027,827	57,283,004
	4	12,708,226	12,443,079
ASET SEMASA / CURRENT ASSETS			
Penghutang pelbagai / Sundry Debtors	5	97,888,088	61,488,246
Simpanan tetap / Fixed Deposits	6	350,000,000	427,000,000
Wang di tangan dan di bank / Cash in hand and bank	7	50,779,381	63,994,622
		498,667,469	552,482,868
LIABILITI SEMASA / CURRENT LIABILITIES			
Pemiutang pelbagai / Sundry Creditors	8	40,776,327	51,282,650
		40,776,327	51,282,650
ASET SEMASA BERSIH / NET CURRENT ASSETS			
		457,891,142	501,200,218
		1,123,504,279	1,035,680,875
Dibiayai oleh: / Financed by:			
Kumpulanwang Mengurus / Operating Fund	9	248,468,249	229,974,684
Kumpulanwang Kolej Kediaman / Residential College Fund	10	11,521,000	18,747,899
Kumpulanwang Pembangunan / Development Fund	11	173,644,173	160,392,850
Kumpulanwang Tabung Penyelidikan / Research Fund	12	124,330,923	115,757,300
Kumpulanwang Tabung Pusingan dan Amanah Lain Revolving Fund & Other Trusts Fund	13	115,816,766	82,392,210
Kumpulanwang Penginapan dan Rekreasi / Accommodation & Recreation Fund	14	5,224,360	5,161,572
Kumpulanwang Pelaburan / Investment Fund	15	51,352,967	67,102,347
Kumpulanwang Kursus, Seminar, Konferensi & Lawatan Sambil Belajar / Course Seminar Conference and Study Visit Fund	16	85,104,499	79,730,982
Kumpulanwang Pinjaman Kenderaan dan Komputer / Vehicle and Computer Loan Fund	17	25,000,000	25,000,000
		840,462,937	784,259,844
Pemberian Modal / Capital Grants	18	283,041,342	251,421,031
		1,123,504,279	1,035,680,875

Sila lihat nota-nota yang mengiringi penyata kewangan ini /
Please refer to the notes accompanying this Financial Statement

Penyata Pendapatan Bagi Tahun Berakhir 31 Disember 2003

Income Statement for the year ended 31 December 2003

	Nota / Note	2003 RM	2002 RM
PENDAPATAN / INCOME			
Pemberian kerajaan / Government Grants	19	383,987,769	455,219,748
Pelbagai yuran / Miscellaneous fees	20	110,877,437	109,262,937
Sumbangan luar / External contributions		9,758,485	10,135,211
Pemberian modal direalisasi / Realisation of Capital Grants	18.1	31,944,689	29,693,270
Faedah dan dividen / Interest and dividends		13,958,025	16,697,355
Untung/(Rugi) atas jualan saham / Profit/(Loss) on sale of shares		552,245	(1,025,500)
Jualan aset tetap / Sales of fixed assets		127,568	44,901
Hasil ladang / Plantation revenue		433,331	410,454
Pengurangan peruntukan rosotnilai saham / Less provision for diminution of shares	4.1	288,763	831,986
Pelbagai sewa / Sundry rentals		934,774	479,299
Pendapatan lain / Other income	21	38,255,610	38,543,511
		591,118,696	660,293,172
Tolak: PERBELANJAAN / Less: EXPENDITURE			
Emolumen / Emoluments		188,597,477	174,054,499
Bekalan dan bahan-bahan / Supplies & materials		93,479,776	92,590,089
Penyelenggaraan dan pembaikan / Maintenance & repairs		34,178,959	44,988,170
Perkhidmatan iktisas dan hospitaliti / Professional & hospitality services		126,336,455	115,945,832
Susutnilai / Depreciation	2	76,214,018	65,237,948
Pelunasan tanah / Land amortisation	2	74,401	74,401
Pelupusan / Disposal		20,997	22,610,935
Hutang ragu / Doubtful debts	5.3	16,944,539	6,049,507
		535,846,622	521,551,381
		55,272,074	138,741,791
LEBIHAN PENDAPATAN / SURPLUS INCOME			
KUMPULANWANG TERKUMPUL DIBAWA KE HADAPAN / ACCUMULATED FUNDS BROUGHT FORWARD			
- Seperti yang dinyatakan terdahulu / As previously stated		784,259,844	666,772,031
- Pelarasan tahun lalu / Prior year adjustment	22	931,019	1,324,790
- Pindahan ke Kolej Universiti Sains dan Teknologi Malaysia / Transfer to Kolej Universiti Sains dan Teknologi Malaysia		-	(22,578,768)
- Seperti yang dinyatakan semula / As restated		785,190,863	645,518,053
		840,462,937	784,259,844
KUMPULANWANG TERKUMPUL DIHANTAR KE HADAPAN / ACCUMULATED FUNDS CARRIED FORWARD			

Penyata Perubahan Ekuiti Bagi Tahun Berakhir 31 Disember 2003 Statement of Changes in Equity for the year ended 31 December 2003

KUMPULANWANG-KUMPULANWANG / FUNDS

	MENGURUS / OPERATING	KOLEJ KEDIAMAN/ RESIDENTIAL COLLEGE	PEMBANGUNAN / DEVELOPMENT	PENYELIDIKAN / RESEARCH	T.PUSINGAN & AMANAH LAIN REVOLVING & OTHER TRUSTS FUND	PENGINAPAN & REKREASI ACCOMMODATION & RECREATION	PELABURAN INVESTMENT	KURSUS, SEMINAR, LSB COURSE, SEMINAR STUDY TRIP	PINJAMAN KENDERAAN & KOMPUTER VEHICLE & COMPUTER LOAN	JUMLAH TOTAL
	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM
2003										
Pada 1 Januari / As at 1 January	229,974,684	18,747,899	160,392,850	115,757,300	82,392,210	5,161,572	67,102,347	79,730,982	25,000,000	784,259,844
Pelarasan tahun lalu / Prior year adjustment	-	-	735,058	-	195,961	-	-	-	-	931,019
Pengelasan semula kumpulanwang Reclassification of funds	-	(3,052,691)	-	-	-	-	-	3,052,691	-	-
- Seperti yang dinyatakan semula / As restated	229,974,684	15,695,208	161,127,908	115,757,300	82,588,171	5,161,572	67,102,347	82,783,673	25,000,000	785,190,863
Lebihan/(kurangan) pendapatan / Surplus / (deficit) income	18,493,565	1,825,792	(283,735)	9,730,646	11,197,572	62,788	14,250,620	(5,174)	-	55,272,074
Pindahan (dari / ke; / Transfer (from) / to: Kolej Kediaman ke Pembangunan / Residential College to Development	248,468,249	17,521,000	160,844,173	125,487,946	93,785,743	5,224,360	81,352,967	82,778,499	25,000,000	840,462,937
Penyelidikan ke T.Pusingan & Amanah Lain Research to Revolving and Other Trusts Fund	-	(6,000,000)	6,000,000	-	-	-	-	-	-	-
T.Pusingan dan Amanah Lain ke Pembangunan Revolving and Other Trusts Fund	-	-	5,600,000	(1,157,023)	1,157,023	-	-	-	-	-
Kursus, Seminar, Konferensi & Lawatan Sambil Belajar ke Pembangunan Course, Seminar, Conference and Study Trip to Development	-	-	1,200,000	-	-	-	-	(1,200,000)	-	-
T.Pusingan & Amanah Lain ke Kursus, Seminar, Konferensi & Lawatan Sambil Belajar Revolving and Other Trusts Fund to Course, Seminar, Conference and Study Visit	-	-	-	-	(3,526,000)	-	-	3,526,000	-	-
Pelaburan ke Amanah Lain Investment to Other Trusts	-	-	-	-	30,000,000	-	(30,000,000)	-	-	-
	248,468,249	11,521,000	173,644,173	124,330,923	115,816,766	5,224,360	51,352,967	85,104,499	25,000,000	840,462,937

Penyata Perubahan Ekuiti Bagi Tahun Berakhir 31 Disember 2002 Statement of Changes in Equity for the year ended 31 December 2002

	KUMPULANWANG-KUMPULANWANG										JUMLAH TOTAL	
	MENGURUS / OPERATING	KOLEJ KEDIAJAMAN/ OPERATING COLLEGE	PEMBANGUNAN / DEVELOPMENT	PENYELIDIKAN / RESEARCH	T. PUSINGAN & AMANAH LAIN REVOLVING & OTHER TRUST FUNDS	PENGINAPAN & REKREASI ACCOMMODATION & RECREATION	PELABURAN INVESTMENT	KURSUS, SEMINAR, LSB COURSE, SEMINAR STUDY TRIP	PINJAMAN KENDERAAN & KOMPUTER & COMPUTER & VEHICLE LOANS	RM		RM
2002												
Pada 1 Januari / As at 1 January	222,375,339	18,987,739	119,417,621	48,668,043	98,799,464	5,411,256	73,074,203	64,338,366	15,700,000		666,772,031	
Pelarasan tahun lalu / Prior year adjustment	1,558,949	-	(88,659)	-	(66,714)	(12,046)	-	78,760	(145,500)		1,324,790	
Pindahan ke Kolej Universiti Sains & Teknologi Malaysia Transfer to Kolej Universiti Sains & Teknologi Malaysia	(16,539,711)	(551,687)	-	(2,291,196)	(2,015,611)	(247,305)	(34,043)	(344,715)	(554,500)		(22,578,768)	
- Seperti yang dinyatakan semula As restated	207,394,577	18,436,052	119,328,962	46,376,847	96,717,139	5,151,905	73,040,160	64,072,411	15,000,000		645,519,053	
Lebihan/(kurangan) pendapatan Surplus / deficit income	50,113,107	311,847	(20,107,051)	69,433,453	8,447,571	9,667	13,927,626	16,605,571	-		138,741,791	
Pindahan (dari): Transfer (from) Mengurus ke Pembangunan Operating to Development	257,507,684	18,747,899	99,221,911	115,810,300	105,164,710	5,161,572	86,967,786	80,677,982	15,000,000		784,259,844	
Pelaburan ke Mengurus Investment to Operating	(17,933,000)	-	17,933,000	-	-	-	-	-	-		-	
Amanah lain ke Pembangunan Other Trusts to Development	400,000	-	-	-	-	-	(400,000)	-	-		-	
Pelaburan ke Pembangunan Investment to Development	-	-	22,772,500	-	(22,772,500)	-	-	-	-		-	
Kursus, Konferensi & Lawatan ke Pembangunan Course, Conference & trip to Development	-	-	19,465,439	-	-	-	(19,465,439)	-	-		-	
Penyelidikan ke Kursus, Seminar Konferensi & Lawatan Research to course, seminar, conference study	-	-	1,000,000	-	-	-	-	(1,000,000)	-		-	
Mengurus ke Pinjaman Kenderaan Operating to Vehicle Loan	(10,000,000)	-	-	(53,000)	-	-	-	53,000	-		-	
	229,974,684	18,747,899	160,392,850	115,757,300	82,392,210	5,161,572	67,102,347	79,730,982	25,000,000		784,259,844	

Penyata Aliran Tunai Bagi Tahun Berakhir 31 Disember 2003

Cash Flow Statement for the year ended 31 December 2003

	Nota / Note	2003 RM	2002 RM
TUNAI DARI AKTIVITI OPERASI / CASH GENERATED FROM OPERATING ACTIVITIES			
Lebihan pendapatan / Surplus income	m/s 4	55,272,074	138,741,791
Pelarasan ke atas: / Adjustment to:			
Susutnilai / Depreciation	2	76,214,018	65,237,948
Pelunasan tanah / Land amortisation	2	74,401	74,401
Pindahan tunai/simpanan tetap ke Kolej Universiti Sains dan Teknologi Malaysia / Transfer of cash / fixed deposit to Kolej Universiti Sains dan Teknologi Malaysia		-	(13,845,930)
(Untung)/Rugi atas jualan aset tetap / (Profit) / Loss from sales of fixed assets		(106,571)	22,566,034
Pemberian modal yang dilunaskan / Realisation of Capital Grants	18	(24,028,938)	(24,857,489)
(Untung)/Rugi atas jualan saham / (Profit) / Loss incurred from sales of shares		(552,245)	1,028,273
Peruntukan rosotnilai saham / Provision of diminution of shares	4.1	(288,763)	(831,986)
Pelarasan tahun lalu / Prior year adjustment	22	931,019	1,324,790
Pemberian modal / Capital Grants	18	55,649,249	38,875,181
Lebihan pendapatan sebelum perubahan modal kerja / Operating profits prior to working capital adjustments		163,164,244	228,313,013
Penambahan penghutang / Increase in debtors		(36,399,842)	(9,659,989)
Pengurangan pemiutang / Decrease in creditors		(10,506,323)	(22,919,034)
Tunai bersih dihasilkan dari aktiviti operasi / Net cash generated from operating activities		116,258,079	195,733,990
TUNAI DARI AKTIVITI PELABURAN / CASH GENERATED FROM INVESTMENT ACTIVITIES			
Pembelian aset tetap / Purchase of fixed assets	2	(129,431,926)	(137,504,868)
Pembinaan dalam kemajuan / Works in progress		(77,744,823)	(17,255,002)
Jualan aset tetap / Sales of fixed assets		127,568	44,901
Jualan saham / Sales of shares		8,245,221	3,077,893
Pembelian saham / Purchase of shares		(6,961,201)	(4,220,930)
Simpanan dengan pengurus portfolio / Deposits with portfolio manager	4	(708,159)	846,073
Tunai bersih dihasilkan dari aktiviti pelaburan / Net cash generated from investment activities		(206,473,320)	(155,011,933)
(Pengurangan)/Penambahan bersih dalam jumlah tunai dan kesetaraan tunai / (Decrease) / Increase in cash and cash equivalents		(90,215,241)	40,722,057
Jumlah tunai dan kesetaraan pada awal tahun / Cash and cash equivalents at beginning of the year		490,994,622	450,272,565
Jumlah tunai dan kesetaraan pada akhir tahun / Cash and cash equivalents at end of the year		400,779,381	490,994,622
Tunai dan kesetaraan tunai diwakili oleh: Cash and cash equivalents represented by:			
Simpanan tetap / Fixed deposits	6	350,000,000	427,000,000
Wang di tangan dan di bank / Cash in hand and bank	7	50,779,381	63,994,622
		400,779,381	490,994,622

Nota-Nota Kepada Penyata Kewangan

Notes to the Financial Statement

1. DASAR PERAKAUNAN UTAMA / IMPORTANT ACCOUNTING POLICIES

(a) Kenyataan Umum / General Statement

Universiti Putra Malaysia (UPM) adalah sebuah Universiti yang ditubuhkan di bawah Akta Universiti dan Kolej Universiti 1971. UPM beroperasi di dua lokasi. Kampus induknya terletak di Serdang, Selangor manakala kampus cawangannya terletak di Bintulu, Sarawak.

Aktiviti utama UPM ialah menjalankan program-program pengajaran dan penyelidikan.

Untuk tahun kewangan 2003, jumlah enrolmen pelajar sepenuh masa ialah seramai 30,489 orang (2002:32,075) – 6,409 pelajar ijazah lanjutan, 20,987 pelajar ijazah pertama dan 3,093 pelajar diploma.

Universiti Putra Malaysia (UPM) is a University established under the University and University College Act 1971. UPM operates from two locations. The main campus is located at Serdang, Selangor whereas its branch campus is at Bintulu, Sarawak.

The main activity of University Putra Malaysia are to carry out teaching and research programmes.

For the financial year 2003, the total full time enrolment was 30,489 (2002:32,075) – 6,409 Post Graduate students, 20,987 First Degree students and 3093 Diploma students.

(b) Asas Perakaunan / Basis of Accounting

Penyata Kewangan ini telah disediakan mengikut konvensyen kos sejarah dan mengikut piawaian perakaunan yang diluluskan.

This Financial Statement have been prepared according to the historical cost convention and approved accounting standards.

(c) Pengiktirafan Pendapatan / Recognition of Income

(i) Pemberian Kerajaan bagi Belanja Mengurus diakaunkan berdasarkan asas tunai dan dinyatakan dalam Penyata pendapatan dan perbelanjaan.

Government grants for operating expenditure has been accounted on cash basis and stated under the income and expenditure statement

(ii) Pemberian untuk projek-projek penyelidikan IRPA (Intensification Of Research In Priority Areas) diakaunkan di dalam Kumpulanwang Tabung Penyelidikan.

Grants for IRPA (Intensification Of Research In Priority Areas) research projects has been accounted under Research Fund.

(iii) Pemberian Kerajaan bagi Belanja Pembangunan yang diterima untuk membiayai kos projek modal pembangunan diakaunkan ke akaun pemberian modal.

Government Grants for Development Expenditure received for financing capital projects development has been accounted under Capital Grant Account

(iv) Pendapatan yuran pengajian adalah berasaskan akruan dan diiktiraf apabila pelajar mendaftar dalam tahun berkenaan.

Income from fees is based on an accrual basis and recognized when a student registers in a particular year.

(v) Faedah dan keuntungan dari pinjaman kenderaan dan komputer diakaunkan mengikut konsep akruan.

Interest and profit from vehicle and computer loan has been accounted according to the accrual concept.

(vi) Pendapatan untuk sewa diakrukan mengikut perjanjian yang telah dipersetujui di antara Universiti dan penyewa.

Income from rental has been accrued according to contract which has been agreed between the University and the tenant.

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

- (vii) Pendapatan faedah ke atas simpanan tetap dari institusi kewangan berlesen diakaunkan mengikut konsep akrual kecuali keuntungan atas simpanan tetap melalui skim Mudharabah diiktiraf berdasarkan asas tunai mengikut tarikh matang.

Interest on fixed deposits from licensed financial institutions has been accounted according to accrual basis but profit on fixed deposits through the Mudharabah scheme has been recognized based on cash basis according to the maturity date.

- (viii) Sumbangan diiktiraf berdasarkan asas tunai.

Contributions has been recognized according to cash basis

(d) Liabiliti Cukai Pendapatan / Income Tax Liability

Universiti Putra Malaysia adalah dikecualikan dari cukai pendapatan atas pendapatannya di bawah perenggan 13 Jadual 6, Akta Cukai Pendapatan 1967 kecuali bagi pendapatan dividen.

Universiti Putra Malaysia is exempted from income tax on its income under paragraph 13, 6th schedule, Income Tax Act 1967 except on dividend income.

(e) Peruntukan Hutang Raghu / Doubtful Debts Provision

Peruntukan dibuat bagi hutang raghu berdasarkan kepada penyemakan akhir tahun ke atas hutang yang belum dapat dipungut. Polisi Universiti dalam mengakaunkan peruntukan hutang raghu adalah seperti berikut :-

Provision is made for doubtful debts based on a year-end appraisal of debts that have not been recovered. The University's policy in accounting for doubtful debts provision is as follows:

- (i) Hutang yang berusia diantara 6 - 12 bulan, peruntukan hutang raghu dibuat pada kadar 50%, dan
For doubtful debts aged between 6-12 months, doubtful debt provision is made at the rate of 50%, and
- (ii) Hutang yang berusia melebihi 12 bulan, peruntukan hutang raghu dibuat pada kadar 100%
For doubtful debts aged more than 12 months, doubtful debts provision is made at the rate of 100%

(f) Susutnilai Aset Tetap / Fixed Asset Depreciation

Aset Tetap dinyatakan pada kos setelah ditolak susutnilai dan didefinisikan sebagai barang-barang tak luak yang mempunyai tempoh penggunaan ekonomik yang lebih daripada 12 bulan yang bernilai RM3,000 atau lebih setiap satu, kecuali bagi pembelian langsir, kapet, bidai dan pengadang, pinggan mangkuk, buku, ternakan dan tumbuhan tanpa mengambilkira kos dikelaskan sebagai perbelanjaan bukan harta tetap.

Fixed assets are quoted at cost less depreciation and are defined as tangible assets that have an economic usage of more than 12 months and are valued at more than RM3,000.00 each with the exception of purchase of curtain, carpet, blinds and screens, crockery, books, livestock and plants which are classified as non fixed asset expenses without taking into consideration their costs.

Tanah dipermodalkan mulai tahun 1993 dan tanah milik bebas tidak dilunaskan manakala tanah pajakan dilunaskan samarata mengikut tempoh pajakan.

Land has been capitalized from the year 1993 and freehold land is not amortised whereas leasehold land is amortised equally over the leasehold period.

Mulai tahun kewangan 2001, semua bangunan yang dibina sebelum tahun 1984 telah dipermodalkan.

As from the financial year of 2001, all buildings built before 1984 have been capitalized.

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

Susutnilai dikira berasaskan kaedah garis lurus ke atas anggaran hayat kegunaan aset berkenaan. Kadar susutnilai tahunan yang digunakan adalah seperti berikut :-

Depreciation is calculated based on a straight-line method over their estimated useful lives. Annual depreciation rates applied are as follows:-

	%
Bangunan / Buildings	2
Infrastruktur dan kemudahan / Infrastructure and facilities	5
Kenderaan dan jentera / Vehicles and machinery	20
Perabot dan kelengkapan / Furniture and fittings	20
Mesin dan komputer / Machines and computers	20

(g) Pembinaan Dalam Kemajuan / Work in Progress

Pembinaan dalam kemajuan adalah kerja-kerja yang masih belum disempurnakan pada akhir tahun kewangan. Jumlah yang diambilkira adalah semua perbelanjaan yang terlibat dengan projek berkaitan. Kos pembinaan akan dipindahkan ke aset tetap yang berkenaan apabila Sijil Perakuan Siap Kerja dikeluarkan. Works in progress are works that have not been completed at the end of financial year. Amount considered are all expenditures related to the concerned projects. Construction costs will be transferred to the concerned fixed assets when Certificate of Practical Completion of Work is issued.

(h) Pelaburan / Investment

Pelaburan dinyatakan pada kos ditolak rosotan nilai pelaburan berkenaan. Investments are stated at cost less depreciation value of investment concerned.

(i) Tunai dan Kesetaraan Tunai / Cash and Cash Equivalents

Tunai dan kesetaraan tunai terdiri daripada tunai di tangan, baki di bank, simpanan tetap dan pasaran wang di dalam institusi kewangan.

Cash and cash equivalents comprise of cash in hand, bank balances, fixed deposits and money market in financial institutions.

(j) Pemberian Kerajaan Bagi Projek Pembangunan / Government Grants for Development Projects

Mulai tahun 2001, Universiti telah mengubah polisi perakaunan berkenaan dengan Pemberian Kerajaan bagi projek pembangunan bersesuaian dengan kehendak IAS 20 – Accounting for Government Grants and Disclosure of Government Assistance. Pemberian Kerajaan untuk projek pembangunan diiktiraf sebagai Pemberian Modal dan akan dilunaskan mengikut susutnilai projek yang telah siap dan aset yang dibeli serta belanja operasi yang tidak dimodalkan.

As from 2001, the University has changed its policy concerning Government Grants for Development projects that meets the IAS 20 – Accounting for Government Grants and Disclosure of Government Assistance. Government Grants for development projects is recognized as Capital Grant and will be settled according to the depreciation values of completed projects and assets purchased as well as non-capitalised operating expenditures.

(k) Pertukaran Matawang Asing / Foreign Currency Conversion

Urusniaga dalam matawang asing sepanjang tahun ditukar kepada Ringgit Malaysia pada kadar pertukaran yang berkuatkuasa pada tarikh urusniaga tersebut.

Keuntungan atau kerugian pertukaran yang timbul daripada penjelasan urusniaga matawang asing diiktiraf sebagai item biasa di dalam penyata pendapatan dan perbelanjaan.

Transactions in foreign currencies throughout the year have been converted to Ringgit Malaysia at rates of exchange ruling at the transaction dates. All exchange losses and gains arising from settlement of foreign exchange are recognised as ordinary items

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

2. ASET TETAP / FIXED ASSETS

	KOS / COST						SUSUTNILAI / DEPRECIATION				Nilai Buku Bersih / Net Book Value 2002 RM	
	2003		2002		2001		2000		2000			
	1 Januari 1 January	Tambahan Addition	Pelupusan Disposals	31 Disember 2003 31 December 2003	1 Januari 1 January	Tambahan Addition	Pelupusan Disposals	31 Disember 2002/ 31 December 2002	1 Januari 1 January	Tambahan Addition		Pelupusan Disposals
(a) Kumpulanwang Mengurus / Operating Fund												
Tanah pajakan / Leasehold land	6,802,736	-	-	6,802,736	2,104,606	74,401	-	2,179,007	4,623,729			4,688,130
Tanah milik kekal / Freehold land	8,962,151	-	-	8,962,151	-	-	-	-	8,962,151			8,962,151
Bangunan / Buildings	39,766,780	2,174,991	-	41,941,771	5,316,623	2,993,072	-	8,309,695	33,632,076			34,450,157
Infrastruktur & kemudahan / Infrastructure & facilities	15,363,155	10,742,772	-	26,105,927	1,472,766	1,152,392	-	2,625,158	23,480,769			13,890,389
Kenderaan dan jentera / Vehicle and machinery	16,074,756	3,365,152	(281,323)	19,158,585	7,378,860	2,275,794	(281,311)	9,373,343	9,785,242			8,695,896
Perabot dan kelengkapan / Furniture & fittings	10,836,160	2,201,581	(134,240)	12,903,501	6,258,933	1,765,110	(134,225)	7,889,818	5,013,683			4,577,227
Mesin dan komputer Machinery & computers	165,065,949	46,314,042	(1,119,470)	210,260,521	90,436,314	33,816,317	(1,117,178)	123,135,453	87,125,068			74,629,635
	262,871,687	64,798,538	(1,535,033)	326,135,192	112,968,102	42,077,086	(1,532,714)	153,512,474	172,622,718			149,903,585
(b) Kumpulanwang Pembangunan / Development Fund												
Bangunan / Buildings	234,990,473	15,468,471	-	250,458,944	24,802,716	5,868,813	-	30,671,529	219,787,415			210,187,757
Infrastruktur & kemudahan Infrastructure & facilities	49,768,171	23,095,524	-	72,863,695	9,512,169	3,661,831	-	13,174,000	59,689,695			40,256,002
Kenderaan dan jentera Vehicles and machinery	1,891,018	259,656	-	2,150,674	1,632,696	80,812	-	1,713,508	437,166			258,322
Perabot dan kelengkapan Furniture & fittings	1,776,185	7,400	-	1,783,585	1,471,513	91,417	-	1,562,930	220,655			304,672
Mesin dan komputer Machinery & computers	132,870,310	9,699,737	(722,979)	141,847,068	92,248,326	15,177,726	(708,817)	106,717,235	35,129,833			40,621,984
	421,296,157	48,530,788	(722,979)	469,103,966	129,667,420	24,880,599	(708,817)	153,839,202	315,264,764			291,628,737
(c) Kumpulanwang Penyelidikan / Research Fund												
Bangunan / Buildings	626,994	19,370	-	646,364	190,407	14,525	-	204,932	441,432			436,587
Infrastruktur & kemudahan Infrastructure & facilities	1,624,895	-	-	1,624,895	1,622,689	245	-	1,622,934	1,961			2,206
Kenderaan dan jentera Vehicles and machinery	390,227	-	-	390,227	197,834	57,317	-	255,151	135,076			192,393
Perabot & kelengkapan Furniture & fittings	464,210	28,080	-	492,290	392,386	38,047	-	430,433	61,857			71,824
Mesin dan komputer Machinery & computers	52,203,222	8,491,236	(379,980)	60,314,478	43,471,723	5,424,450	(379,917)	48,516,256	11,798,222			8,731,499
	55,309,548	8,538,686	(379,980)	63,468,254	45,875,039	5,534,584	(379,917)	51,029,706	12,438,548			9,434,509

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

2003	KOS / COST				SUSUTNILAI / DEPRECIATION				Nilai Buku Bersih Net Book Value	
	1 Januari 1 January	Tambahan Addition	Pelupusan Disposals	31 Disember 2003 31 December 2003	1 Januari 1 January	Tambahan Addition	Pelupusan Disposals	31 Disember 2003 31 December 2003	2003 RM	2003 RM
	RM	RM	RM	RM	RM	RM	RM	RM	RM	RM
(d) Kumpulanwang Amanah Lain / Other Trusts Fund										
Bangunan / Buildings	4,180,237	-	-	4,180,237	366,259	101,658	-	467,917	3,712,320	3,813,978
Infrastruktur & kemudahan Infrastructure & facilities	4,213,087	-	-	4,213,087	824,958	226,154	-	1,051,112	3,161,975	3,388,129
Kenderaan dan jentera Vehicles and machinery	2,336,715	3,887,900	-	6,224,615	1,440,848	955,417	-	2,396,265	3,828,350	895,867
Perabot & kelengkapan Furniture & fittings	898,899	249,918	(30,340)	1,118,477	620,599	152,862	(30,337)	743,124	375,353	278,300
Mesin dan komputer Machines & computers	9,166,464	3,093,852	(183,161)	12,077,155	5,891,507	1,898,128	(178,717)	7,610,918	4,466,237	3,274,957
	20,795,402	7,231,670	(213,501)	27,813,571	9,144,171	3,334,219	(209,054)	12,269,336	15,544,235	11,651,231
(e) Kumpulanwang Kolej Kediaman / Residential College Fund										
Bangunan / Buildings	1,796,735	-	-	1,796,735	471,697	120,489	-	592,186	1,204,549	1,325,038
Infrastruktur & kemudahan Infrastructure & facilities	276,772	45,540	-	322,312	156,327	12,003	-	168,330	153,982	120,445
Kenderaan dan jentera Vehicles and machinery	137,736	-	-	137,736	131,541	1,177	-	132,718	5,018	6,195
Perabot & kelengkapan Furniture & fittings	751,854	14,480	(14,219)	752,115	566,302	82,944	(14,216)	635,030	117,085	185,552
Mesin dan komputer Machines & computers	1,782,389	272,224	(12,950)	2,041,663	1,283,107	245,318	(12,947)	1,515,478	526,185	499,282
	4,745,486	332,244	(27,169)	5,050,561	2,608,974	461,931	(27,163)	3,043,742	2,006,819	2,136,512
Jumlah / Total	765,018,280	129,431,926	(2,878,662)	891,571,544	300,263,706	76,288,419	(2,857,665)	373,694,460	517,877,084	464,754,574

Termasuk di dalam tambahan aset tetap adalah sejumlah RM44,624,872 (2002 : RM54,365,250) pindahan dari pembinaan dalam kemajuan yang telah siap dalam tahun semasa.
Included in fixed assets addition is a total of RM44,624,872 (2002 : RM54,365,250), which has been transferred from work in progress completed in the current year.

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

3. PEMBINAAN DALAM KEMAJUAN / WORKS IN PROGRESS

	Pada awal tahun / Beginning of the year	Tambahan / Increase	Pindahan ke penyelenggaraan / Transfers to maintenance	Pindahan ke Aset Tetap / Transfer to fixed asset	Pada akhir tahun/ Year end
	RM	RM	RM	RM	RM
2003					
Bangunan / Buildings	28,273,511	81,615,670	5,214,932	14,188,831	90,485,418
Kemudahan Riadah / Recreational Facilities	27,415,196	39,805,437	58,856	30,436,041	36,725,736
Perabot dan Kelengkapan lain / Other furniture & fittings	1,594,297	6,222,376	-	-	7,816,673
	57,283,004	127,643,483	5,273,788	44,624,872	135,027,827
2002					
Bangunan / Buildings	15,484,688	28,773,110	-	15,984,287	28,273,511
Kemudahan Riadah / Recreational Facilities	18,506,412	38,899,161	-	29,990,377	27,415,196
Perabot dan Kelengkapan Lain Other furniture & fittings	6,036,902	3,947,981	-	8,390,586	1,594,297
	40,028,002	71,620,252	-	54,365,250	57,283,004

Pada tahun semasa, pembinaan dalam kemajuan sebanyak RM44,624,872 (2002 : RM54,365,250) telah dipindahkan ke aset tetap dan RM5,273,788 dipindahkan ke penyelenggaraan.

During the current year, work in progress totalling RM44,624,872 (2002 : RM54,365,250) has been transferred to fixed assets and the sum of RM5,273,788 has been transferred to maintenance.

4. PELABURAN / INVESTMENT

	2003 RM	2002 RM
Pelaburan tersiarharga - di Malaysia, pada kos Quoted price of investment – in Malaysia, at cost	12,070,869	12,802,644
Tolak: Peruntukan rosotnilai pelaburan / Less: Provision for diminution of investments	(1,460,520)	(1,749,283)
Nilai pasaran pelaburan tersiarharga - di Malaysia / Market value of quoted price of investment – in Malaysia	10,610,349	11,053,361
Campur: Pelaburan tidak tersiarharga - di Malaysia / Plus: Non-quoted price of investment in Malaysia	500,000	500,000
Simpanan dengan Pengurus Portfolio / Deposits with Portfolio Manager	1,597,877	889,718
	12,708,226	12,443,079

4.1 Peruntukan Rosotnilai Pelaburan / Provision for Diminution of Investment

	2003 RM	2002 RM
Baki awal tahun / Balance beginning of year	1,749,283	2,581,269
Tolak: / Less:		
Kurangan dalam tahun / Decrease in the year	(288,763)	(831,986)
	1,460,520	1,749,283

Nota-Nota Kepada Penyata Kewangan (samb.) Notes to the Financial Statement (cont'd.)

5. PENGHUTANG PELBAGAI / SUNDRY DEBTORS

KUMPULANWANG-KUMPULANWANG

PERKARA / ITEM	MENGURUS / OPERATING (RM)	KOLEJ / KEDIAMAN / RESIDENTIAL COLLEGE (RM)	PEMBANGUNAN / DEVELOPMENT (RM)	PENYELIDIKAN / RESEARCH (RM)	T. PUSINGAN & AMANAH LAIN / REVOLVING FUNDS & OTHER TRUSTS (RM)	PENGINAPAN DAN REKREASI / ACCOM. RECREATION (RM)	PELABURAN / INVESTMENT (RM)	KURSUS, SEMINAR, KONFERENSI & LAWATAN / COURSE / SEMINAR, CONFERENCE & STUDY VISIT (RM)	KENDERAAN & KOMPUTER / VEHICLES & COMPUTERS (RM)	JUMLAH TOTAL 2003 (RM)	JUMLAH TOTAL 2002 (RM)
Siberhutang (5.1) / Debtors	16,927,729	86,363	-	-	650,056	-	-	-	14,301,664	31,965,812	37,088,811
Yuran Tertunggak (5.2) / Fees in Arrears	38,052,314	-	-	-	7,740,718	-	-	32,656,831	-	78,449,863	41,956,102
Faedah Simpanan/Tetap Terakru / Interest on Fixed Deposits Accrued	2,831,439	-	-	-	-	-	9,043	-	-	2,840,482	4,716,408
Pel.Pendapatan Terakru / Misc. Accrued Income	1,750	1,200	-	11,241,488	-	-	-	-	-	11,244,438	1,816,658
Bantuan Pendahuluan Projek (Pembangunan) / Advances for Project (Development)	-	-	10,000,000	-	-	-	-	-	-	10,000,000	-
Pengurus Portfolio / Portfolio Manager	-	-	-	-	-	-	761,119	-	-	761,119	(98,310)
Pendahuluan Pegawai & Pelajar UPM / Advances to UPM Officers & students	487,694	1,333	-	411,380	390,165	62,815	-	216,256	-	1,569,643	2,369,022
Cagaran / Deposits	408,567	104,900	20,000	(720)	19,050	-	-	-	-	551,797	543,899
Pelbagai / Miscellaneous	200	-	-	4,225	-	-	-	-	-	4,425	152,138
Jumlah / Total	58,709,693	193,796	10,020,000	11,656,373	8,799,989	62,815	770,162	32,873,087	14,301,664	137,387,579	88,544,728
Tolak: / Less:											
Peruntukan Hutang Ragu / Provision for Doubtful Debts	12,600,187	-	-	-	2,400,218	-	-	24,499,086	-	39,499,491	27,056,482
	46,109,506	193,796	10,020,000	11,656,373	6,399,771	62,815	770,162	8,374,001	14,301,664	97,888,088	61,488,246

Angka-angka penghutang pelbagai adalah nilai bersih setelah diselaraskan dalam proses penyatuan item-item kontra antara akaun-akaun penghutang dan pemutang. /
Figures for sundry debtors represent net values adjusted after reconciliation in the contra items between creditor and debtor accounts.

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

5. PELBAGAI PENGHUTANG (samb.) / SUNDRY DEBTORS (cont'd)

5.1 PECAH KONTRAK / BREACH OF CONTRACT

Jumlah berikut telah diakaunkan sebagai hutang:
Following amounts has been accounted as debts:

Kumpulanwang Mengurus - Staf / Operating Fund / Staff
Kumpulanwang Tabung Pusingan & Amanah Lain- Pelajar Pasca Siswazah /
Revolving & Other Trusts Fund - Postgraduate students

2003 RM	2002 RM
2,183,297	1,720,369
650,056	328,915
2,183,297	1,720,360

5.2 MULTIMEDIA TECHNOLOGY ENHANCEMENT OPERATION SDN. BHD. (METEOR) /

Jumlah berikut telah diakaunkan sebagai yuran tertunggak :
The following amounts have been accounted as fees in arrears:

Kumpulanwang Kursus, Seminar, Konferensi & Lawatan Sambil Belajar
Course, Seminar, Conference & Study Visit Fund

2003 RM	2002 RM
6,417,991	6,417,991

5.3 PERUNTUKAN HUTANG RAGU / PROVISION FOR DOUBTFUL DEBTS

Tambahan dalam tahun / Addition in year
Pengurangan dalam tahun / Decrease in year
Peruntukan dalam tahun / Provision in year
Baki awal tahun / Balance at beginning of year

2003 RM	2002 RM
16,944,540	6,049,507
(4,501,531)	(6,829,284)
12,443,009	(779,777)
27,056,482	27,836,259
39,499,491	27,056,482

Jumlah tahun ini / Total for this year

Pengurangan peruntukan hutang ragu sebanyak RM4,501,531
telah diambilkira sebagai pendapatan. /
A decrease in the provision for doubtful debts totalling RM4,501,531
has been considered as income

6. SIMPANAN TETAP / FIXED DEPOSITS

Simpanan dengan institusi kewangan berlesen: /
Deposits with licensed financial institutions:
Bank / Banks
Syarikat Kewangan / Financial Institutions

2003 RM	2002 RM
274,000,000	323,500,000
76,000,000	103,500,000
350,000,000	427,000,000

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

7. WANG DI TANGAN, DI BANK DAN DALAM PERJALANAN / CASH IN HAND, BANK & TRANSIT

Wang di tangan / Cash in hand

Kampus Serdang / Serdang Campus
Kampus Bintulu / Bintulu Campus

2003
RM

64,881
4,520

2002
RM

90,532
7,500

69,401

98,032

Wang di bank / Cash in bank

Kampus Serdang / Serdang Campus
Kampus Bintulu / Bintulu Campus

50,295,740
414,240

62,217,354
742,745

50,709,980

62,960,099

Wang dalam perjalanan / Cash in transit

Kampus Serdang / Serdang Campus

-

936,491

-

936,491

Jumlah wang di tangan dan di bank / Cash in hand and bank

50,779,381

63,994,622

8. PEMIUTANG PELBAGAI / SUNDRY CREDITORS

Pemiutang Pembekal / Staf / Supplier / Staff Creditors
Akaun Penaja / Pelajar / Sponsor account / student
Cagaran Pelbagai / Miscellaneous deposits
Lain-lain / Others

2003
RM

10,994,878
16,700,696
4,227,363
8,853,390

2002
RM

21,525,720
24,234,963
3,160,443
2,361,524

40,776,327

51,282,650

Angka-angka pelbagai pemiutang adalah nilai bersih setelah diselaraskan dalam proses penyatuan item-item kontra antara akaun-akaun penghutang dan pemiutang
The amount in sundry creditors represents the net values less adjusted after reconciliation in contra items of the debtors and creditors accounts.

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

9. KUMPULANWANG MENGURUS / OPERATING FUND

	2003 RM	2002 RM
PENDAPATAN / INCOME		
Pemberian kerajaan / Government Grants	326,130,561	346,554,700
Pemberian modal direalisasi / Realised capital grants	623,808	572,736
Pelbagai yuran / Miscellaneous fees	50,524,115	54,679,206
Pelbagai sewa / Sundry rentals	287,741	282,967
Jualan aset tetap / Sales of fixed assets	127,568	44,901
Hasil ladang / Income from farm	433,331	410,454
Pendapatan lain / Other income	6,883,909	4,523,804
	385,011,033	407,068,768
Tolak: PERBELANJAAN / Less: EXPENDITURE		
Emolumen / Emoluments	188,597,477	174,054,499
Bekalan dan bahan-bahan / Supplies & materials	64,831,944	67,044,603
Penyelenggaraan dan pembaikan / Maintenance & repairs	22,748,727	33,568,492
Perkhidmatan iktisas dan perbelanjaan lain / Professional services & other expenses	47,624,374	42,221,800
Susutnilai / Depreciation	42,002,685	32,822,693
Pelunasan tanah / Land Amortisation	74,401	74,401
Pelupusan / Disposals	2,319	1,335,035
Hutang ragu / Doubtful debts	635,541	5,834,138
	366,517,468	356,955,661
	18,493,565	50,113,107
LEBIHAN PENDAPATAN / SURPLUS INCOME		
BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUND BALANCE BROUGHT FORWARD		
- Seperti yang dinyatakan terdahulu / As previously stated	229,974,684	205,835,628
- Pelarasan tahun lalu / Prior year adjustment	-	1,558,949
	229,974,684	207,394,577
- Seperti yang dinyatakan semula / As restated		
Pindahan dari/(ke): / Transfers from / ((to):		
Kumpulanwang Pembangunan / Development Fund	-	(17,933,000)
Kumpulanwang Pelaburan / Investment Fund	-	400,000
Kumpulanwang Pinjaman Kenderaan & Komputer / Vehicles & Computers Loan Fund	-	(10,000,000)
	248,468,249	229,974,684
BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD		

Sila lihat nota-nota yang mengiringi penyata kewangan ini /
Please refer to the notes accompanying this Financial Statement

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

10. KUMPULANWANG KOLEJ KEDIAMAN / RESIDENTIAL COLLEGE FUND

	2003 RM	2002 RM
PENDAPATAN / INCOME		
Yuran Kolej Kediaman / Residential college fees	9,601,434	13,262,082
Yuran-yuran lain / Other fees	104,477	711,319
Faedah simpanan tetap / Fixed deposit interest	-	376,929
Pelbagai sewa / Sundry rentals	33,690	49,743
Pendapatan lain / Other income	262,764	2,410,668
	10,002,365	16,810,741
Tolak: PERBELANJAAN		
Bekalan dan bahan-bahan / Supplies & materials	3,209,745	6,020,356
Penyelenggaraan dan pembaikan / Maintenance & repairs	2,210,691	5,715,025
Perkhidmatan iktisas dan perbelanjaan lain / Professional services and other expenses	2,294,200	4,148,860
Susutnilai / Depreciation	461,931	571,064
Pelupusan / Disposals	6	17
Hutang ragu / Doubtful debts	-	43,572
	8,176,573	16,498,894
	1,825,792	311,847
LEBIHAN PENDAPATAN / SURPLUS INCOME		
BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUND BALANCE BROUGHT FORWARD		
- Seperti yang dinyatakan terdahulu / As previously stated	18,747,899	18,436,052
- Pindahan Kumpulanwang Kursus, Seminar, Konferensi dan Lawatan Sambil Belajar / Transfer of Course, Seminar, Conference and Study Visit Fund	(3,052,691)	-
- Seperti yang dinyatakan semula / As restated	15,695,208	18,436,052
Pindahan (ke) : / Transfer (to) : Kumpulanwang Pembangunan / Development Fund	(6,000,000)	-
BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD		
	11,521,000	18,747,899

11. KUMPULANWANG PEMBANGUNAN / DEVELOPMENT FUND

	2003 RM	2002 RM
PENDAPATAN / INCOME		
Pemberian modal direalisasi / Realised capital grants	31,320,881	29,120,534
Pendapatan lain / Other income	1,205,896	801,207
	32,526,777	29,921,741
Tolak: PERBELANJAAN / Less: EXPENDITURE		
Bekalan dan bahan-bahan / Supplies & materials	1,209,568	1,629,701
Penyelenggaraan dan pembaikan / Maintenance & repairs	6,489,206	3,066,593
Perkhidmatan iktisas dan perbelanjaan lain / Professional services & other expenses	216,977	139,487
Susutnilai / Depreciation	24,880,599	25,079,036
Pelupusan / Disposals	14,162	20,113,975
	32,810,512	50,028,792
LEBIHAN / (KURANGAN) PENDAPATAN / SURPLUS (DEFICIT) INCOME	(283,735)	(20,107,051)
BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUND BALANCE BROUGHT FORWARD		
- Seperti yang dinyatakan terdahulu / As previously stated	160,392,850	119,417,621
- Pelarasan tahun lalu / Prior year adjustment	735,058	(88,659)
	161,127,908	119,328,962
Pindahan dari/(ke): / Transfers from / (to):		
Kumpulanwang Tabung Pusingan & Amanah Lain / Revolving and Other Trusts Fund	5,600,000	22,772,500
Kumpulanwang Mengurus / Operating Fund	-	17,933,000
Kumpulanwang Kursus, Seminar, Konferensi dan Lawatan Sambil Belajar / Course, Seminar, Conference & Study Visit Fund	1,200,000	1,000,000
Kumpulanwang Pelaburan / Investment Fund	-	19,465,439
Kumpulanwang Kolej Kediaman / Residential College Fund	6,000,000	-
BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD	173,644,173	160,392,850

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

12. KUMPULANWANG TABUNG PENYELIDIKAN / RESEARCH FUND

PENDAPATAN / INCOME

Pemberian kerajaan / Government Grants	41,168,791	96,911,948
Pelbagai yuran / Miscellaneous fees	220,069	181,419
Sumbangan / Contribution	6,600,303	7,666,787
Faedah simpanan tetap / Interest from fixed deposits	5,127	4,775
Pelbagai sewa / Sundry rentals	343,704	41,655
Pendapatan lain / Other income	5,979,041	6,022,386

54,317,035 110,828,970

Tolak: PERBELANJAAN / Less: EXPENDITURE

Bekalan dan bahan-bahan / Supplies & materials	14,642,946	10,272,075
Penyelenggaraan dan pembaikan / Maintenance & repairs	679,789	540,269
Perkhidmatan iktisas dan perbelanjaan lain / Professional services and other expenditures	23,729,007	25,823,431
Susutnilai / Depreciation	5,534,584	4,751,097
Pelupusan / Disposals	63	8,645

44,586,389 41,395,517

LEBIHAN PENDAPATAN / SURPLUS INCOME

9,730,646 69,433,453

BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUNDS BALANCE BROUGHT FORWARD

115,757,300 46,376,847

125,487,946 115,810,300

Pindahan dari/ (ke): / Transfers from / (to):

Kumpulanwang Tabung Pusingan & Amanah Lain /
Revolving & Other Trusts Fund

(1,157,023) -

Kumpulanwang Kursus, Seminar, Konferensi dan Lawatan Sambil Belajar
Course, Seminar, Conference & Study Visit Funds

- (53,000)

BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD

124,330,923 115,757,300

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

13. KUMPULANWANG TABUNG PUSINGAN DAN AMANAH LAIN / REVOLVING FUND AND OTHER TRUSTS FUND

	2003 RM	2002 RM
PENDAPATAN / INCOME		
Pemberian kerajaan / Government Grants	16,688,417	11,753,100
Pelbagai yuran / Miscellaneous fees	15,222,380	18,118,494
Sumbangan / Contributions	2,704,304	1,606,372
Faedah simpanan tetap / Interest from fixed deposits	411,699	747,764
Pelbagai sewa / Sundry rentals	97,590	82,634
Pendapatan lain / Other income	14,999,776	11,657,493
	50,124,166	43,965,857
Tolak: PERBELANJAAN / Less: EXPENDITURE		
Bekalan dan bahan-bahan / Supplies & materials	4,977,925	4,317,638
Penyelenggaraan dan pembaikan / Maintenance & repairs	1,476,220	1,015,981
Perkhidmatan iktisas dan perbelanjaan lain / Professional services and other expenditures	29,520,943	28,898,810
Susutnilai / Depreciation	1,539,625	1,114,060
Pelupusan / Disposals	32	-
Hutang ragu / Doubtful debts	1,411,849	171,797
	38,926,594	35,518,286
	11,197,572	8,447,571
LEBIHAN PENDAPATAN / SURPLUS INCOME		
BAKI KUMPULANWANG DIBAWA KE HADAPAN / BALANCE FUND BROUGHT FORWARD		
- Seperti yang dinyatakan terdahulu / As previously stated	82,392,210	96,783,853
- Pelarasan tahun lalu / Prior year adjustment	195,961	(66,714)
- Seperti yang dinyatakan semula / As restated	82,588,171	96,717,139
Pindahan dari / (ke) : Transfers from/(to):		
Kumpulanwang Pembangunan / Development Fund	(5,600,000)	(22,772,500)
Kumpulanwang Penyelidikan / Research Fund	1,157,023	-
Kumpulanwang Pelaburan / Investment Fund	30,000,000	-
Kumpulanwang Kursus, Seminar, Konferensi dan Lawatan Sambil Belajar / Course, Seminar, Conference & Study Visit Fund	(3,526,000)	-
	115,816,766	82,392,210
BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD		

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

14. KUMPULANWANG PENGINAPAN DAN REKREASI / ACCOMMODATION & RECREATION FUND

PENDAPATAN / INCOME

Sumbangan / Contributions

Pelbagai sewa / Sundry rentals

Pendapatan lain / Other income

Tolak: PERBELANJAAN / Less: EXPENDITURE

Bekalan dan bahan-bahan / Supplies & materials

Penyelenggaraan dan pembaikan / Maintenance & repairs

Perkhidmatan iktisas dan hospitaliti / Professional & hospitality services

Susutnilai / Depreciation

Pelupusan / Disposals

LEBIHAN PENDAPATAN / SURPLUS INCOME

BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUND BALANCE BROUGHT FORWARD

- Seperti yang dinyatakan terdahulu / As previously stated

- Pelarasan tahun lalu / Prior year adjustment

- Seperti yang dinyatakan semula / As restated

BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD

	2003 RM	2002 RM
PENDAPATAN / INCOME		
Sumbangan / Contributions	17,425	9,885
Pelbagai sewa / Sundry rentals	167,761	-
Pendapatan lain / Other income	759,922	1,326,281
	945,108	1,336,166
Tolak: PERBELANJAAN / Less: EXPENDITURE		
Bekalan dan bahan-bahan / Supplies & materials	338,157	530,979
Penyelenggaraan dan pembaikan / Maintenance & repairs	138,839	433,199
Perkhidmatan iktisas dan hospitaliti / Professional & hospitality services	169,454	129,129
Susutnilai / Depreciation	235,870	233,191
Pelupusan / Disposals	-	1
	882,320	1,326,499
LEBIHAN PENDAPATAN / SURPLUS INCOME	62,788	9,667
BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUND BALANCE BROUGHT FORWARD		
- Seperti yang dinyatakan terdahulu / As previously stated	5,161,572	5,163,951
- Pelarasan tahun lalu / Prior year adjustment	-	(12,046)
- Seperti yang dinyatakan semula / As restated	5,161,572	5,151,905
BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD	5,224,360	5,161,572

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

15. KUMPULANWANG PELABURAN / INVESTMENT FUND

	2003 RM	2002 RM
PENDAPATAN / INCOME		
Faedah dan dividen / Interests and dividends	13,223,199	15,302,387
Untung/(Rugi) atas jualan saham / Profit (Loss) from sales of shares	552,245	(1,025,500)
Pengurangan peruntukan rosotnilai saham / Less provision for diminution in share value	288,763	831,986
Pendapatan lain / Other income	237,720	-
	14,301,927	15,108,873
Tolak: PERBELANJAAN / Less: EXPENDITURE		
Perkhidmatan iktisas dan perbelanjaan lain / Professional services and other expenditures	51,307	27,987
Pelupusan / Disposals	-	1,153,260
	51,307	1,181,247
LEBIHAN PENDAPATAN / SURPLUS INCOME	14,250,620	13,927,626
BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUND BALANCE BROUGHT FORWARD	67,102,347	73,040,160
	81,352,967	86,967,786
Pindahan (ke): Transfer (from) /to :		
Kumpulanwang Mengurus / Operating Fund	-	(400,000)
Kumpulanwang Pembangunan / Development Fund	-	(19,465,439)
Kumpulanwang Tabung Pusingan & Amanah Lain / Revolving & Other Trust Fund	(30,000,000)	-
BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD	51,352,967	67,102,347

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

16. KUMPULANWANG KURSUS, SEMINAR, KONFERENSI DAN LAWATAN SAMBIL BELAJAR / COURSE, SEMINAR, CONFERENCE & STUDY VISIT FUND

PENDAPATAN / INCOME

Pelbagai yuran / Miscellaneous fees	35,204,962	22,310,417
Sumbangan Luar / External contributions	436,453	852,167
Faedah simpanan tetap / Interest from fixed deposits	318,000	265,500
Pelbagai sewa / Sundry rentals	4,288	22,300
Pendapatan lain / Other income	7,926,582	11,801,672

2003	2002
RM	RM

35,204,962	22,310,417
436,453	852,167
318,000	265,500
4,288	22,300
7,926,582	11,801,672

43,890,285	35,252,056
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Tolak: PERBELANJAAN / Less: EXPENDITURE

Bekalan dan bahan-bahan / Supplies & materials	4,269,491	2,774,737
Penyelenggaraan dan pembaikan / Maintenance & repairs	435,487	648,611
Perkhidmatan iktisas dan hospitaliti / Professional & hospitality services	22,730,193	14,556,328
Susutnilai / Depreciation	1,558,724	666,807
Pelupusan / Disposals	4,415	2
Hutang ragu / Doubtful debts	14,897,149	-

43,895,459	18,646,485
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LEBIHAN / (KURANGAN) PENDAPATAN / SURPLUS / (DEFICIT) INCOME BAKI KUMPULANWANG DIBAWA KE HADAPAN / FUND BALANCE BROUGHT FORWARD

- Seperti yang dinyatakan terdahulu / As previously stated	79,730,982	63,993,651
- Pelarasan tahun lalu / Prior year adjustment	-	78,760
- Pindahan dari K/w.Kolej Kediaman /Transfer from Residential College Fund	3,052,691	-
- Seperti yang dinyatakan semula / As restated	82,783,673	64,072,411

Pindahan dari/(ke): Transfers from/(to):

Kumpulanwang Tabung Penyelidikan / Research Fund	-	53,000
Kumpulanwang Pembangunan / Development Fund	(1,200,000)	(1,000,000)
Kumpulanwang Tabung Pusingan & Amanah Lain / Revolving and Other Trust Funds	3,526,000	-

BAKI KUMPULANWANG DIHANTAR KE HADAPAN / FUND BALANCE CARRIED FORWARD

85,104,499	79,730,982
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Nota-Nota Kepada Penyata Kewangan (samb.)
Notes to the Financial Statement (cont'd.)

**17. KUMPULANWANG PINJAMAN KENDERAAN DAN KOMPUTER /
VEHICLE & COMPUTER LOAN FUND**

Kumpulanwang Pinjaman Kenderaan / Vehicle Loan Fund

Baki awal tahun / Balance at beginning of the year

Campur: Tambahan dalam tahun / **Add:** Increase in the year

Tolak: Pindahan ke Kolej Universiti Sains & Teknologi Malaysia /

Less: Transfer to Kolej Universiti Sains & Teknologi Malaysia

Baki akhir tahun / Balance at year end

Kumpulanwang Pinjaman Komputer / Computer Loan Fund

**BAKI KUMPULANWANG DIBAWA DAN DIHANTAR KE HADAPAN /
FUND BALANCE BROUGHT AND CARRIED FORWARD**

**JUMLAH BAKI KUMPULANWANG PINJAMAN KENDERAAN DAN
KOMPUTER DIHANTAR KE HADAPAN**

TOTAL VEHICLE AND COMPUTER FUND BALANCE CARRIED FORWARD

	2003 RM	2002 RM
Baki awal tahun / Balance at beginning of the year	23,000,000	13,700,000
Campur: Tambahan dalam tahun / Add: Increase in the year	-	10,000,000
Tolak: Pindahan ke Kolej Universiti Sains & Teknologi Malaysia / Less: Transfer to Kolej Universiti Sains & Teknologi Malaysia	-	(700,000)
Baki akhir tahun / Balance at year end	23,000,000	23,000,000
Kumpulanwang Pinjaman Komputer / Computer Loan Fund		
BAKI KUMPULANWANG DIBAWA DAN DIHANTAR KE HADAPAN / FUND BALANCE BROUGHT AND CARRIED FORWARD	2,000,000	2,000,000
JUMLAH BAKI KUMPULANWANG PINJAMAN KENDERAAN DAN KOMPUTER DIHANTAR KE HADAPAN		
TOTAL VEHICLE AND COMPUTER FUND BALANCE CARRIED FORWARD	25,000,000	25,000,000
18. PEMBERIAN MODAL / CAPITAL GRANT		
	2003 RM	2002 RM
Terimaan pemberian dari kerajaan tahun semasa untuk projek Pembangunan / Receipt of government grant in current year for Development projects	63,565,000	43,536,990
Tolak: Belanja operasi projek yang tidak dimodalkan / Less: Non-capitalized project operational expenditure	(7,915,751)	(4,835,781)
	55,649,249	38,701,209
Campur: / Add: - Majlis Sukan Negara / National Sports Council	-	173,972
Baki awal tahun / Balance at beginning of the year	55,649,249 251,421,031	38,875,181 237,403,339
Tolak: pemberian modal yang dilunaskan / Less: Capital grant amortised - Susutnilai ke atas aset tetap / Depreciation of fixed assets	307,070,280 (24,028,938)	276,278,520 (24,857,489)
Baki akhir tahun / Balance year end	283,041,342	251,421,031
18.1 PEMBERIAN MODAL DIREALISASI / CAPITAL GRANT REALISED		
	2003 RM	2002 RM
Belanja operasi projek yang tidak dimodalkan / Non-capitalized project operational expenditure	7,915,751	4,835,781
Pemberian modal yang dilunaskan / Capital grant amortised	24,028,938	24,857,489
	31,944,689	29,693,270

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

19. PEMBERIAN KERAJAAN / GOVERNMENT GRANTS

Pemberian adalah untuk belanja berikut :-

Grants were for the following expenditure:-

Mengurus - Dasar Sedia Ada / Operating - Existing policy

Mengurus - Dasar Baru / Operating - New Policy

Mengurus - Dasar *One-off* - Operating - *One-off* policy

Skim Latihan Akademik dan Biasiswa / Academic Training & Scholarship Scheme

Skim Pasca Siswazah / Postgraduate Scheme

Pembangunan makmal interim dan penyelidikan -

Development of interim laboratories and research

Makmal Farmaseutikal / Pharmaceutical laboratory

IRPA/Penyelidikan / IRPA Research

Pembangunan Sumber Manusia (HRD) / Human Resource Development (HRD)

Biasiswa National Science Fellowship / National Science Fellowship Scholarship

	2003 RM	2002 RM
Mengurus - Dasar Sedia Ada / Operating - Existing policy	255,573,835	232,916,700
Mengurus - Dasar Baru / Operating - New Policy	37,460,161	28,138,000
Mengurus - Dasar <i>One-off</i> - Operating - <i>One-off</i> policy	33,096,565	85,500,000
Skim Latihan Akademik dan Biasiswa / Academic Training & Scholarship Scheme	5,606,417	-
Skim Pasca Siswazah / Postgraduate Scheme	2,000,000	800,000
Pembangunan makmal interim dan penyelidikan - Development of interim laboratories and research		
Makmal Farmaseutikal / Pharmaceutical laboratory	2,500,000	4,500,000
IRPA/Penyelidikan / IRPA Research	41,168,791	96,911,948
Pembangunan Sumber Manusia (HRD) / Human Resource Development (HRD)	6,582,000	5,640,000
Biasiswa National Science Fellowship / National Science Fellowship Scholarship	-	813,100
	383,987,769	455,219,748

20. PELBAGAI YURAN / MISCELLANEOUS FEES

Yuran Pengajian / Studies fees

Yuran Kolej Kediaman / Residential College Fees

Yuran Kursus dan Seminar/Pendidikan Jarak Jauh dan Program Eksekutif

Course and Seminar / Distance Learning and Executive Program Fees

Yuran Lain / Other fees

	2003 RM	2002 RM
Yuran Pengajian / Studies fees	40,559,543	47,540,615
Yuran Kolej Kediaman / Residential College Fees	9,601,434	13,180,024
Yuran Kursus dan Seminar/Pendidikan Jarak Jauh dan Program Eksekutif Course and Seminar / Distance Learning and Executive Program Fees	48,038,003	39,728,637
Yuran Lain / Other fees	12,678,457	8,813,661
	110,877,437	109,262,937

21. PENDAPATAN LAIN / OTHER INCOME

Pendapatan mengikut klasifikasi kumpulanwang: /

Income by classification of fund

(i) Mengurus / Operating

(ii) Kolej Kediaman / Residential College

(iii) Pembangunan / Development

(iv) Tabung Penyelidikan / Research Fund

(v) Tabung Pusingan dan Amanah Lain / Revolving and Other Trusts Fund

(vi) Penginapan dan Rekreasi / Accommodation & Recreation

(vii) Pelaburan / Investment

(viii) Kursus, Seminar, Konferensi & Lawatan Sambil Belajar /

Course, Seminar, Conference & Study Visit Fund

	2003 RM	2002 RM
(i) Mengurus / Operating	6,883,909	4,523,804
(ii) Kolej Kediaman / Residential College	262,764	2,410,668
(iii) Pembangunan / Development	1,205,896	801,207
(iv) Tabung Penyelidikan / Research Fund	5,979,041	6,022,386
(v) Tabung Pusingan dan Amanah Lain / Revolving and Other Trusts Fund	14,999,776	11,657,493
(vi) Penginapan dan Rekreasi / Accommodation & Recreation	759,922	1,326,281
(vii) Pelaburan / Investment	237,720	-
(viii) Kursus, Seminar, Konferensi & Lawatan Sambil Belajar / Course, Seminar, Conference & Study Visit Fund	7,926,582	11,801,672
	38,255,610	38,543,511

22. PELARASAN TAHUN LALU / PRIOR YEAR ADJUSTMENT

- (i) Kontra perbelanjaan pembangunan telah didahulukan oleh Kolej Universiti Sains dan Teknologi Malaysia /
Contra development expenditure advanced by Kolej Universiti Sains dan Teknologi Malaysia
- (ii) Selaras baki kredit/defisit pelbagai akaun amanah /
Adjustment of credit / deficit balances of various trusts fund
- (iii) Pindahan baki kumpulan wang kenderaan dan komputer /
Transfer of balance vehicle and computer fund
- (iv) Pindahan baki Tabung Pusat Islam yang diakaunkan sebagai Akaun Amanah /
Transfer of Pusat Islam balance fund which has been accounted as Trust Account
- (v) Melaraskan pendapatan agihan sewa daripada Canary Inforport Sdn. Bhd. bagi melunaskan sebahagian daripada kos pembinaan 4 buah dewan kuliah.
Adjustment of distribution of rental income from Canary Inforport Sdn. Bhd. for amortising portion of building cost of 4 lecture halls.

	2003 RM	2002 RM
	-	1,738,279
	-	(284,189)
	-	(129,300)
	195,961	-
	735,058	-
	931,019	1,324,790

**23. PENGLIBATAN MODAL DAN BUKAN MODAL /
CAPITAL AND NON CAPITAL INVOLVEMENT**

Perbelanjaan modal dan bukan modal yang diluluskan tetapi tidak diperuntukkan di dalam akaun : /

Capital and non capital expenditure approved but not provided in accounts

- Baki nilai kerja pembinaan dalam kemajuan / Balance value of work in progress
- Belum dikontrakkan (projek Rancangan Malaysia) /
Yet to be contracted (Malaysia Plan Projects)
- Jumlah pesanan belian yang ditanggung / Total purchase orders committed

	2003 RM	2002 RM
	237,667,337	55,491,582
	-	612,968,085
	35,304,471	-
	272,971,808	668,459,667

Bagi tahun 2003 jumlah nilai kerja yang belum dikontrakkan tidak diambilkira sebagai sebahagian daripada penglibatan modal.

For the year 2003, total value of work yet to be contracted has not been considered as part of the capital involvement.

Nota-Nota Kepada Penyata Kewangan (samb.)

Notes to the Financial Statement (cont'd.)

24. LIABILITI KONTINGENSI / CONTINGENCY LIABILITIES

	2003 RM	2002 RM
(i) Bayaran terakhir Projek Pembinaan Lubang Kedua Padang Golf, UPM tertangguh sehingga mendapat keputusan mahkamah tinggi. Final payment for Projek Pembinaan Lubang Kedua Padang Golf, UPM construction project deferred pending receipt High Court decision	901,710	631,679
(ii) Mercury Network Sdn Bhd telah mengemukakan tuntutan saman berkaitan Projek Pembinaan Dewan Kuliah Fakulti Pendidikan Mercury Network Sdn Bhd have served a summon pertaining to the Faculty of Education's Lecture Theatre Construction Project	212,194	220,000
(iii) Tindakan undang-undang oleh Canary Inforport Sdn Bhd terhadap UPM berkaitan dengan konsesi penggunaan tanah UPM. Legal action by Canary Inforport Sdn Bhd against UPM in respect of use of UPM land	100,000,000	-
(iv) Tuntutan saman oleh Acctrack 21 Sdn Bhd terhadap UPM bagi kes hakcipta perisian komputer. Court proceedings by Acctrack 21 Sdn Bhd against UPM in respect of computer software copyright	250,000	-
(v) Tuntutan saman oleh staf terhadap UPM bagi kes pemberhentian kerja. Court proceedings by staff against UPM in respect of termination of employment	200,000	-
(vi) Tuntutan saman oleh staf terhadap staf UPM yang lain di mana UPM mengakukan bertindak dan menguruskan bagi pihak defenden. Court proceedings by staff against other UPM staff wherein UPM undertook to act and defend on behalf of the defendent	5,000,000	-
(vii) Tuntutan saman oleh pekerja kontraktor terhadap UPM berkaitan dengan pembinaan bangunan. Court proceedings by contractor against UPM in respect of building construction	50,000	-
	106,613,904	851,679

25. ANGKA-ANGKA PERBANDINGAN / COMPARATIVE FIGURES

Sebahagian dari angka-angka bandingan tahun lalu telah dipinda untuk disesuaikan dengan persembahan tahun ini /
Part of last year's figures have been amended so as to confers this year's presentation

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