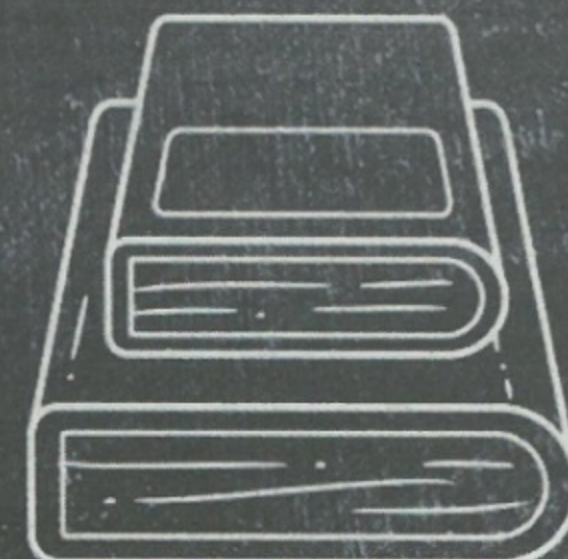
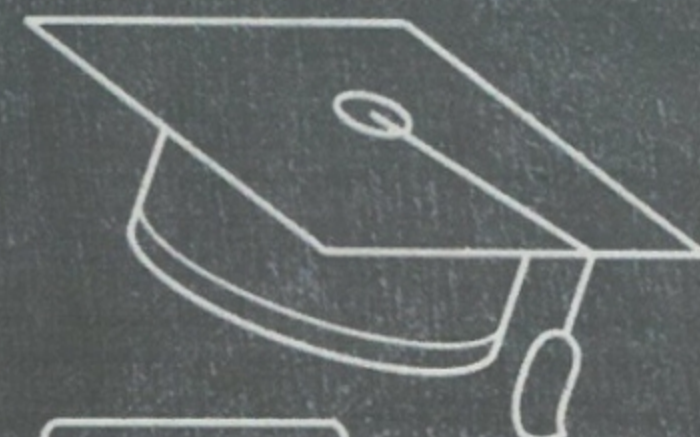
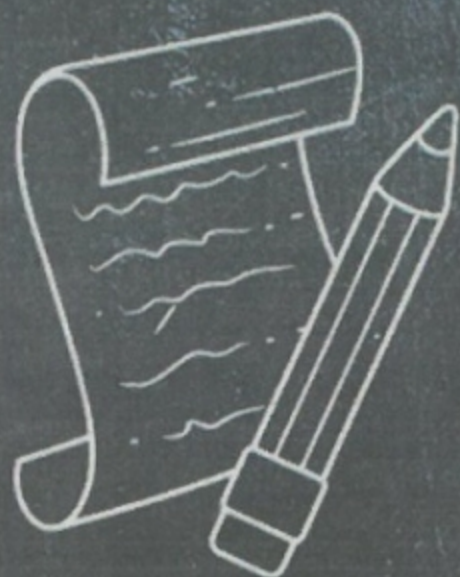


HIGHER ED

The value of a PhD



ROZANA SANI
rsani@nst.com.my

STUDYING for a Doctor of Philosophy (PhD) qualification is not for the faint-hearted.

A rigorous exercise, it involves at least three or more years of independent research on a specific topic under the supervision of expert academics.

Along the way, there are workshops, seminars and competitions at both local and international levels to participate in to gain updates and insights on the research topics, papers for journals to produce, and even undergraduates and master's students to tutor.

"Exhilarating", "exciting", "challenging", "stressful", "a lonely experience"—these are how some PhD candidates and graduates describe the process and yet they take on the challenge.

Some embark on their doctorate studies immediately after their Bachelor's and Master's degree while some may start their pursuit after some years of working experience.

The main appeal of doing a PhD is the opportunity to attain the highest academic degree a student can achieve at university—an honour that belongs to a selected group.

Apart from that it would be in line with the government's target of 60,000 PhDs by 2030, which caters to the need for knowledgeable, innovative and skillful professionals to support the country's aspiration of becoming a high income-status nation.

But with today's fast-moving and fast-changing world, in what way does an investment in a PhD qualification—that requires keen focus and dedication, time and money—add value to a person's professional and personal life?

OPPORTUNITIES

PhD is a training process, highlights Universiti Putra Malaysia's (UPM) deputy vice chancellor (Academic and International) Professor Dr M. Iqbal Saripan.

"PhD candidates are trained to explore the uncertainties in a specific research topic, and provide explanations (with evidence) of what,

where, why, who, when and how questions. This develops an individual to be critical, more mature, confident and resilient," he said.

In Malaysia, PhD holders are normally associated with lecturers at higher education institutions, he remarked. However, in the global scenario in advanced countries, PhD holders are the main drivers in the industries.

Universiti Kebangsaan Malaysia (UKM) Graduate Centre deputy director Associate Professor Dr Ashinida Aladdin said with a PhD degree comes skills that will help holders become job creators through venturing into business.

"Fresh PhD graduates should be ready to take up jobs available overseas if the local market cannot absorb them. There are many postdoctoral positions available for them to apply in Europe, Australia, North America and some Asian countries like Singapore, China and Korea," she said.

Universiti Teknologi Mara (UiTM) Institute of Graduate Studies dean Associate Professor Dr Haslinda Yusoff opines more doors of career development and opportunities would

be widely opened to those with a PhD degree; particularly, for higher-level positions, which can propel them to more comfortable means of living and career sustainability.

"From the context of industries and organisations, having a pool of talents with PhD qualification will stimulate the productivity and impact on economic and social change through industry-relevant research-based solutions and propositions.

"Should owning a PhD not help one get a job, one should strive to boost his/her confidence and showcase personal strengths and expertise. This uniqueness will open more doors to job opportunities as a PhD degree is recognised as a value-added element that signifies a person's level of intellectual thinking and other skills and capabilities," she said.

Jobstreet Malaysia country manager Gan Bock Herm noted that regardless of the qualification, career success will still depend on soft skills that one possesses.

"When it comes to degree types, there are opportunities for people to earn more no

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Dr Ahmad Ilyas Rushdan with his wife Siti Nur Atikah Mahamud and their children after receiving their respective scrolls for PhD and Masters of Chemical Engineering at UPM's 43rd convocation ceremony.

Passion for research work and the academia

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matter what their education level. With the rising digital economy, more new job roles will be created. There will be more opportunities for talent with unique skill sets, or relevant higher qualifications such as PhD holders, to secure a job in the new digital economy.

"It is also important to note that there is no linear path to a higher salary as career success will still depend on a balanced skill set, which includes soft skills. With the rise of digitalisation, talent regardless of qualifications, are encouraged to adopt a continuous learning approach to keep pace with changes to ensure they remain relevant and employable in the market today," he said.

DEMAND

Of the demands for PhD studies in Malaysia, Haslinda said they vary from the Science and Technology, Business and Management as well as Social Sciences and Humanities.

"Evidently, high demands for PhD studies in our university can be categorised based on these key areas. From the Science and Technology are areas pertaining to sustainability-based such as biodiversity, food, energy and water, climate change, AI (artificial intelligence), robotics, cyber security, plantation crops, healthcare and medicine.

"Whilst from the Business and Management are financial criminology, Islamic finance, organisational-based management and ethics, transportation, tourism, and information management.

"In-demand study areas from the Social Sciences and Humanities are music, communication and strategies, fine arts, arts and technology, corporate policies and IT-based law and criminal justice," she said.

PASSION

Passion for research work and the academia is what motivated Dr Abdullah Ameru Indera Luthfi,



From the context of industries and organisations, having a pool of talents with PhD qualification will stimulate the productivity and impact on economic and social change.

**ASSOCIATE PROFESSOR
DR HASLINDA YUSOFF**
UiTM Institute of Graduate Studies dean

29, to pursue a PhD in Chemical and Process Engineering.

The recipient of the Gold Doctorate Award at Universiti Kebangsaan Malaysia's (UKM) 47th Convocation Ceremony last year had always wanted to become a full-time researcher and academician and having a PhD qualification has put him on the right track to his dream of becoming a lecturer and a professor one day.

Despite getting a job in a Germany-based tyre factory in Petaling Jaya a year after obtaining a bachelor's degree in biotechnology engineering from the International Islamic University Malaysia (IIUM), Abdullah soon realised he felt more com-

fortable and energised in an academic environment and enrolled in a Masters programme at UKM.

"After the conversion from Masters to PhD in 2016, I have been actively writing research articles for journal and books, particularly in the field of bioprocess and biorefinery. I completed my PhD with an award of excellence for my thesis at faculty level in 2019," the post-doctoral researcher at the Research centre for Sustainable Process Technology (CESPRO) and UKM-Yayasan Sime Darby Chair for Sustainable Development shared.

His thesis revolved around finding the solution for agricultural waste disposal which led towards understanding complex biochemical reactions and



Dr Abdullah Ameru Indera Luthfi conducting research on the conversion of palm oil residue to high-value bioproducts.

applying the knowledge to "help make our environment better".

"During my PhD, I conducted numerous research on the conversion of palm oil residue to high-value bioproducts. It is a very relevant topic in our world today and I am excited about furthering my knowledge in this field and hope to make a valuable academic contribution. Moreover, it would be of great benefit if we could implement such technology in Malaysia to compete with modern countries like Italy, Spain and Japan," he said.

Sharing similar passion and ambition is Dr Ahmad Ilyas Rushdan, 28, a PhD in Biocomposite Technology and Design holder who received the UPM MVP (Malaysian Vaccines Pharmaceutical) Doctor of Philosophy Gold Medal at last year's convocation ceremony.

Starting from a Diploma in Forestry, then on to a bachelor's degree in chemical engineering, and a conversion from Masters programme to PhD, the post-doctoral fellow at UPM's Faculty of Engineering has research interests in polymer engineering and material engineering.

He has authored, co-authored and edited four books, 30 book chapters as well as 27 conference proceedings, seminars and research bulletin on the topics.

"My PhD topic looked at the replacement of non-biodegradable plastics with bio-based biodegradable plastics that would eliminate what is termed as 'white pollution'," said the father of two.

His PhD work had Ahmad Ilyas networking not only with fellow researchers and academicians but also industrial leaders. "This has opened my eyes to opportunities in commercialising my research and a window to becoming a businessman also," he said.



Dr Soheil Kazemian

REALISING POTENTIAL

Undertaking PhD studies is also a way of demonstrating intellectual capacity and proving one's ability.

For Dr Soheil Kazemian, 34, a lecturer at Edith Cowan University (ECU) in Perth, Australia, it was his family's wish and his own ambition for him to complete his studies at the highest possible tertiary level that motivated him to pursue PhD studies in accountancy at UiTM's Accounting Research Institute (ARI) after completing his Masters in Accounting from the University of Tehran in Iran.

"My PhD was on Influences of Market Orientation on the Sustainability of the Islamic Microfinance Institutions. I chose this particular topic because I wanted to work on something which is very advanced in Malaysia (Islamic Microfinance). Based on what my supervisor recommended, I reviewed many papers to see what issues are currently being encountered globally. I also know that many companies are suffering due to the lack of sustainability. After a comprehensive review, I tried to link these two areas somehow to build the framework of my thesis," he shared.

Soheil was offered a post-doctoral position at ARI right after finishing his PhD.

"I worked there for three years until I was offered a senior lecturer's position at Universiti Sains Malaysia (USM). Then, ECU invited me for an interview for a lecturer's position, which I was successful in, and now, I am working as a lecturer of Commerce at its Department of Accounting," he said.

He remarked that having a PhD opens up many doors. "Not only that, it broadens your horizons in terms of self-growth. Finally, it helps you to find a highly prestigious and fulfilling job."

Being the first to have such a qualification and making his family proud is what motivates Cheng Kai Wah, 28, to pursue a PhD in Consumer Science at UPM.

Currently awaiting his PhD viva voce, Cheng



Senutha P. Ratthinan
all smiles
after passing
her viva
voce.

— who was once employed as a relief teacher at Sekolah Jenis Kebangsaan (Cina) Foon Yew in Pasir Gudang, Johor after obtaining his bachelors and masters degree in consumer science — feels he has finally found his calling and wants to become a lecturer.

"My PhD topic is focused on the acceptance of solid waste segregation-at-source policy among Malaysian citizens. This is not just a local issue but a global one and I realised the importance of raising this issue to protect the planet. It's something I can contribute to society," said the graduate research fellow at UPM Faculty of Human Ecology.

PERSONAL GOALS

After more than 19 years working as a civil servant, Senutha P. Ratthinan, 43, felt it was time for her to explore her ability and skills while attaining knowledge towards personal growth.

Senutha obtained a Bachelor of Communication (Honours) degree in 1999 and a Master of Public Administration in 2011 from from USM and held positions at the Ministry of Culture, Arts & Tourism (MOCAT) and Education Ministry among others before deciding to take a break in 2015 and pursue a PhD in Gender and Tourism.

"I am an ardent traveller (flash packer) and my previous experience of working in the tourism sector influenced my proposal and topic of research. Hence, I chose to explore how technology enhanced travel experiences contribute as a form of empowerment for women travellers. It is obvious that women are travelling and making big changes in the global travel statistics.

"Technology on the other hand has been an integral part of their transformation. Into the bargain, Goal 5 of the Sustainable Development Goals emphasised on looking at technology as a form of liberation for women. That became my strong foundation to choose the topic," she shared.

Senutha recently passed her viva and is due for convocation in October.

"I have returned to work, with hope to put the knowledge, skills and experience I have gained towards improving my service as a civil servant and reflect it in my career progress. In between, I am also working with my supervisor to turn my dissertation into a book and writing journal papers as well as book chapters," she said, adding that she encourages undergraduates to experience the world outside academia before embarking on postgraduate studies.

"It will help increase their confidence and better prepare them to face the challenges of PhD," she said.

MISCONCEPTION

Visually-impaired doctoral candidate Lim Tien



Lim Tien Hong

Hong, 36, decided to pursue a PhD in Economics Development at Universiti Malaya (UM) after failing to gain employment despite attaining a Bachelor's and a Masters degree in the same field of study.

"I have been brought up with the belief that with better qualifications come better jobs but this is not what I have experienced. Though I have worked as a tutor at UM after obtaining my Masters, it was short-lived due to budget cuts. I decided to continue on to PhD studies while looking for employment suitable to my qualification in both industry and academia but sadly have had no luck," he said.

His PhD journey so far has been stressful — having to depend on volunteers and hired assistants to help him with his readings and research analysis. His thesis is focused on the study of a Malaysian food manufacturing company's production efficiency in relation to its capability.

"It has taken me seven years to complete my thesis which I submitted last May and I am still waiting to be called for viva," he said, noting that it is also a challenge to have lecturers and supervisors who are not adept in supervising lesser abled students in the PhD process.

"If I could turn back time, I would not take this decision to do PhD because it has been a frustrating journey. I feel not enough is being done to provide opportunities for qualified disabled citizens in gaining suitable employment and that the government should do something about it," he said.



PhD holders expect better career development opportunities from industry and academia.