



UNIVERSITI PUTRA MALAYSIA

***AN INTEGRATED PULSE FIELD DIELECTROPHORETIC FIELD-FLOW
FRACTIONATION SEPARATION AND OPTICAL DETECTION ON-CHIP
FOR IDENTIFICATION OF MICROORGANISMS***

MOHD FIRDAUS BIN KAMURI

FK 2019 61



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By

MOHD FIRDAUS BIN KAMURI

**Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia,
in Fulfillment of the Requirements for the Degree of Doctor of Philosophy**

November 2018

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