# CURRICULUM VITAE

## ZUHAILA ISMAIL

**B.Sc (Hons) (UTM, Malaysia), M.Sc (UTM, Malaysia), PhD (Southampton, UK)**
Senior Lecturer of Applied Mathematics (*Fluid & Solid Mechanics*)
Department of  Mathematical Sciences, Faculty of Science. Universiti Teknologi Malaysia,
81310 Johor Bahru, Johor, Malaysia
Tel:   Office: +6075534226    Fax:+6075566162
E-mail: zuhaila@utm.my
https://people.utm.my/zuhaila

## ACADEMIC QUALIFICATIONS

University of Southampton, Southampton, United Kingdom.
**PhD (Mathematics)**                                                                                          **2013**
Thesis Title: The Mathematical Modelling of Flow and Deformation in the Human Eye.

Universiti Teknologi Malaysia (UTM), Johor, Malaysia
**MSc (Mathematics)**                                                                                          **2006**
Dissertation Title: Mathematical Modelling of non-Newtonian Blood Flow through a
Tapered Stenotic Artery.

Universiti Teknologi Malaysia (UTM), Johor, Malaysia
**BSc (Industrial Mathematics)**                                                                        **2004**
Final Year Project Title: Application of Calculus Vector in Fluid Mechanics.

## AWARDS

| | |
|---|---|
| Writing and Publication Award (Faculty Level) | **2018** |
| Active Blended Learning Course Award (University Level) | **2017** |
| Excellent Service Award (Faculty Level) | **2016** |
| Excellent and Dedication Academic Advisor Award (Faculty Level) | **2016** |
| Excellent Service Award (Faculty Level) | **2013** |

## TEACHING EXPERIENCE

Undergraduate

**SSH1013 Intermediate Mathematics**                                             **Semester 1, 20062007**
Section 05 | No. of Students 59 | Credit Hours 3.0
Section 90 | No. of Students 65 | Credit Hours 3.0

**SSE1793 Differential Equations**                                                    **Semester 2, 20062007**
Section 15 | No. of Students 61 | Credit Hours 3.0

**SSE1792 Calculus**                                                                          **Semester 1, 20072008**
Section 36 | No. of Students 58 | Credit Hours 2.0
Section 67 | No. of Students 49 | Credit Hours 2.0
Section 69 | No. of Students 87 | Credit Hours 2.0

**SSCE1693 Engineering Mathematics I** **Semester 1, 20112012**
Section 55 | No. of Students 29 | Credit Hours 3.0
Section 65 | No. of Students 41 | Credit Hours 3.0

**SSE1893 / SSCE1993 Engineering Mathematics / Engineering Mathematics II** **Semester 2, 20112012**
Section 70 | No. of Students 48 | Credit Hours 3.0
**SSH1723 Calculus II**
Section 88 | No. of Students 63 | Credit Hours 3.0

**SSCE1693 Engineering Mathematics I** **Semester 1, 20122013**
Section 70 | No. of Students 70 | Credit Hours 3.0
Section 17 | No. of Students 38 | Credit Hours 3.0
Section 34 | No. of Students 47 | Credit Hours 3.0

**SSCE1793 Differential Equations** **Semester 2, 20122013**
Section 47 | No. of Students 52 | Credit Hours 3.0
Section 50 | No. of Students 52 | Credit Hours 3.0

**SSE1893 / SSCE1993 Engineering Mathematics / Engineering Mathematics II** **Semester 1, 20132014**
Section 35 | No. of Students 53 | Credit Hours 3.0
**SSCE1693 Engineering Mathematics I**
Section 34 | No. of Students 46 | Credit Hours 3.0

**SSCU3623 Research Methodology and Data Retrieval** **Semester 2, 20132014**
Section 02 | No. of Students 32 | Credit Hours 3.0

**SSH1033 / SSCM1033 Mathematical Methods II** **Semester 1, 20142015**
Section 01 | No. of Students 32 | Credit Hours 3.0

**SSCM1033 Mathematical Methods II** **Semester 2, 20142015**
Section 01 | No. of Students 42 | Credit Hours 3.0

**SSCM1033 Mathematical Methods II** **Semester 1, 20152016**
Section 01 | No. of Students 43 | Credit Hours 3.0

**SSCM1033 Mathematical Methods II** **Semester 2, 20152016**
Section 03 | No. of Students 39 | Credit Hours 3.0
Section 01 | No. of Students 43 | Credit Hours 3.0

**SSCE1693 Engineering Mathematics I** **Semester 1, 20162017**
Section 31 | No. of Students 51 | Credit Hours 3.0
Section 48 | No. of Students 38 | Credit Hours 3.0

**SSCE1993 Engineering Mathematics II** **Semester 2, 20162017**
Section 67 | No. of Students 30 | Credit Hours 3.0

**SSCE1693 Engineering Mathematics I** **Semester 1, 20172018**
Section 19 | No. of Students 36 | Credit Hours 3.0

**SSCE1793 Differential Equations** **Semester 2, 20172018**
Section 35 | No. of Students 67 | Credit Hours 3.0

**SSCE1993 Engineering Mathematics II** **Semester 2, 20182019**
Section 46 | No. of Students 54 | Credit Hours 3.0

*Notes:*

| | |
|---|---|
| Semester 2 20172018 – Semester 2 2010201 | **Study Leave** |
| Semester 1 20182019 | **Maternity Leave** |

## PROFESSIONAL EXPERIENCE

UTM Centre for Industrial and Applied Mathematics (UTM-CIAM)
**Research Fellow**                                                 **3/2/2016 – 2/2/2019**
Provide R&D and expertise in applied mathematics with a particular focus in fluid flow and heat transfer, network & linkage, handle operation and staff welfare, organizing Mathematics in Industry Study Group (MISG) Malaysia, conference, seminar & workshop, fund generation & consultation.

MATEMATIKA: Malaysian Journal of Industrial and Applied Mathematics
**Editorial Board Member**                                         **1/1/2017 – 30/12/2019**
Maintain the publication of high quality articles.

MATEMATIKA: Malaysian Journal of Industrial and Applied Mathematics
**Journal Manager**                                                **29/12/2016 – 31/12/2018**
Manage the publishing system, set up the journal website and configure the system options.

Department of Mathematical Sciences, Faculty of Science,
Universiti Teknologi Malaysia (UTM)
**Tutor**                                                          **8/11/2004 – 21/6/2006**
Provide tutorial classes.

Department of Mathematical Sciences, Faculty of Science,
Universiti Teknologi Malaysia (UTM)
**Lecturer**                                                       **22/6/2006 – 22/9/2013**
Provide teaching duties and tutorial classes, provide R&D and expertise in applied mathematics with a particular focus in fluid and solid mechanics, and heat transfer.

Department of Mathematical Sciences, Faculty of Science,
Universiti Teknologi Malaysia (UTM)
**Senior Lecturer**                                                **23/9/2013 – Present**
Provide teaching duties and tutorial classes, provide R&D and expertise in applied mathematics with a particular focus in fluid and solid mechanics, and heat transfer.

## COMPUTING & IT SKILLS

**OS** - Windows, macOS
**Programming** - Visual Basic, C/C++, MFC
**Typography** - LATEX, Adobe Photoshop, Adobe Illustrator
**Microsoft Office** - Word, Excel, PowerPoint, Publisher, Access
**Scientific** – MATLAB & GUI, MAPLE, MATHEMATICA, COMSOL Multiphysics.

## LANGUAGES

**Malay** – native language
**English** – speak fluently and read/write with high proficiency

## PROFESSIONAL MEMBERSHIP

Society for Industrial and Applied Mathematics (SIAM)
**Member**                                                                                          **2007 – 2010**

The Association for Research in Vision and Ophthalmology (ARVO)
**Member**                                                                                          **2010 – 2011**

European Mechanics Society (EUROMECH)
**Member**                                                                                          **2010 – 2011**

Persatuan Sains Matematik Malaysia (PERSAMA)
**Member**                                                                                          **2011 – Present**

American Mathematical Society (AMS)
**Member**                                                                                          **2014 – 2015**

European Mechanics Society (EUROMECH)
**Member**                                                                                          **2016 – 2021**

## RESEARCH INTEREST / SPECIALIZATION

**Field** - Fluid and solid mechanics
**Area of Research** - Non-Newtonian fluid mechanics: Physiological Flows; blood flow in arteries and flow in Human eyes. Boundary layer flow and convective heat transfer. Solid mechanics of the human eye. Fluid structure interaction in blood flow and human eyes.

## PROFESSIONAL DUTIES (LAST 5 YEARS)

International Conference and Workshop on Basic and Applied Sciences (ICOWOBAS)
**Organising Committee**                                                        **June 2018 – July 2019**
Johor, Malaysia

Malaysia Industrial Mathematical Modelling Challenge (MIMMC)
**Organising Committee**                                                        **Dec 2018 – Mac 2019**
UTM Johor Bahru, Malaysia

International Conference on Mathematical Sciences and Technology (MathTech)
**Presenter**                                                                     **10/12/2018 – 12/12/2018**
Penang, Malaysia

International Seminar on Mathematics in Industry & International Conference on
Theoretical and Applied Statistics (ISMI-ICTAS)
**Organising Committee**                                                          **4//9/2018 – 6/9/2018**
UTM Kuala Lumpur, Malaysia

Hands on Finite Different Method via MATLAB Programming Workshop
**Organising Committee**                                                          **3/9/2018**
UTM Kuala Lumpur, Malaysia

International Conference on Mathematics, Engineering & Industrial Applications
(ICoMEIA)
**Organising Committee**                                                          **24/7/2018 – 26/7/2018**
UTM Kuala Lumpur, Malaysia

COMSOL Conference
**Presenter**                                                                     **22/11/2017**
Penang, Malaysia

International Seminar on Mathematics in Industry (ISMI)
**Organising Committee**                                                          **1/8/2017 – 2/8/2017**
Johor, Malaysia

Risk Simulator Software Workshop
**Organising Committee**                                                          **31/7/2017**
UTM Johor Bahru, Malaysia

Malaysian Hub for Industrial Mathematics & Statistics (MyHIMS)
**Pro-Tem Committee**                                                             **20/12/2016 – 19/12/2017**
Malaysia

Finite Element Method and COMSOL Multiphysics Hands on Workshop
**Instructor and Chairman**                                                       **3/4/2017 – 4/4/2017**
UTM Johor Bahru, Malaysia

15th Asian Congress of Fluid Mechanics
**Presenter**                                                                     **21/11/2016 – 23/11/2016**
Sarawak, Malaysia

Hi-Tea with Industry and Invited Guest from Smith Institute for Industrial Mathematics
and System Engineering
**Organising Committee**                                                          **4/11/2016**
UTM Kuala Lumpur, Malaysia

Special Meeting and Round Table Discussion with Academia, Government and
Industry in Action, and Invited Guest from Smith Institute for Industrial Mathematics
and System Engineering
**Organising Committee**                                                          **3/11/2016**
UTM Kuala Lumpur, Malaysia

Young Talent Consultancy Camp (YTC Camp)
**Organising Committee and Participant**                        **1/11/2016 – 2/11/2016**
UTM Johor Bahru, Malaysia

Demand Driven Projects Public Private Research Network (PPRN) Workshop
**Facillitator**                                                          **16/3/2016**
Johor, Malaysia

The International Invention, Innovation & Design Competition (IIID Johor)
**Judge**                                                                **29/10/2015**
Johor, Malaysia

7th International Conference on Research and Education in Mathematics (ICREM7)
**Presenter**                                                         **25/8/2015 – 27/8/2015**
Kuala Lumpur, Malaysia

International Conference on Applied Analysis and Mathematical Modelling (ICAAMM)
**Presenter**                                                         **8/6/2015 – 12/6/2015**
Istanbul, Turkey

Malaysia Mathematical Modelling Camp (MMMC)
**Participant**                                                       **30/3/2015 – 2/4/2015**
UTM Johor Bahru, Malaysia

Simposium Kebangsaan Sains Matematik (SKSM23)
**Organising Committee**                                              **24/11/2015 – 26/11/2015**
Johor, Malaysia

## RESEARCH GRANTS

**AS A PROJECT LEADER**

Research Title: Generalized Power Law Model of Magnetohydrodynamic (MHD) Blood Flow in a Stenosed
Bifurcated Artery
Grant: RUG Tier 1
Researchers: Zuhaila Ismail, Norsarahaida Saidina Amin, Sharidan Shafie, Wan Rukaida Wan Abdullah, Alistair
Fitt.
Value: RM50,000.00
Start: February 2018 – January 2020

Research Title: Computation and Simulation of DMD and RRD by using finite element analysis.
Grant: RUG Tier 1
Researchers: Zuhaila Ismail, Norsarahaida Saidina Amin, Sharidan Shafie, Wan Rukaida Wan Abdullah, Alistair
Fitt.
Value: RM42,300.00
Start: July 2016 – 2018

Research Title: Modelling: Mathematical Innovation Led Economy
Grant: FLAGSHIP
Researchers: Zuhaila Ismail, Ismail Mohamad, Zaitul Marlizawati Zainuddin, Fuaada Mohd Siam, Wan Rohaizad Wan Ibrahim, Hamisan Rahmat, Shazirawati Mohd Puzi.
Value: RM20,000.00
Start: May 2016 – October 2017

Research Title: Mathematical Modelling of Non-Newtonian Biomagnetic Blood Flow with Body Acceleration
Grant: FRGS
Researchers: Zuhaila Ismail, Norsarahaida Saidina Amin, Sharidan Shafie, Norzieha Mustapha, Farhana Johar, Ilyani Abdullah, Yulita Hanum P Iskandar.
Value: RM64,400.00
Start: December 2014 – 2016

Research Title: Numerical Computation and Simulation of Physiological Fluid Flow
Grant: RUG Tier 1
Researchers: Zuhaila Ismail, Norsarahaida Saidina Amin, Sharidan Shafie, Norzieha Mustapha, Farhana Johar, Wan Rukaida Wan Abdullah, Syarifah Zyurina Nordin, Fuaada Mohd Siam.
Value: RM20,000.00
Start: July 2014 – 2015

Research Title: The Mathematical Modelling of Flow and Deformation in the Human Eye
Grant: RUG Tier 2
Researchers: Zuhaila Ismail and Norsarahaida Saidina Amin.
Value: RM28,000.00
Start: May 2012 – 2013

**AS A MEMBER**

Research Title: Program Pengukuhan Matematik Tambahan Tingkatan 4 (Fungsi dan Persamaan Kuadratik).
Grant: Business Entity (BE)
Researchers: Shariffah Suhaila Syed Jamaluddin (Project Leader), Zuhaila Ismail, Wan Rukaida Wan Abdullah, Zaiton Mat Isa, Syarifah Zyurina Nordin, Farhana Johar, Faridah Mustapha, Anati Ali, Zaitul Marlizawati Zainuddin, Normah Maan, Fuaada Mohd Siam, Amidora Idris, Nor Muhainiah Mohd Ali, Hamisan Rahmat, Yeak Su Hoe, Norazlina Ismail, Nur Arina Bazilah Aziz, Shazirawati Mohd Puzi, Wan Rohaizad Wan Ibrahim.
Value: RM4,500.00
Start: March 2017 – December 2017

Research Title: Oscillations and Multiple Equilibria of Blood Flow Networks in Microcirculation.
Grant: Tier 2
Researchers: Wan Rukaida Wan Abdullah (Project Leader), Zuhaila Ismail, Sharidan Shafie, Zaiton Mat Isa, Syarifah Zyurina Nordin.
Value: RM20,000.00
Start: October 2016 – December 2017
Research Title: Hybrid PV/ wind turbine/ battery System towards net zero Energy Building using Genetic Algorithm.
Grant: Tier 2
Researchers: Farhana Johar (Project Leader), Zuhaila Ismail, Fuaada Mohd Siam, Zaitul Marlizawati Zainuddin.
Value: RM20,000.00
Start: October 2016 – December 2017

Research Title: Transport Phenomena in Magnetohydrodynamics Convection Flow of Non-Newtonian Fluids.
Grant: Tier 1
Researchers: Zaiton Mat Isa (Project Leader), Zuhaila Ismail, Sharidan Shafie, Mohd Arif Admon, Nurul Farahain Mohammad, Abdul Rahman Mohd Kassim.
Value: RM40,000.00
Start: November 2016 – 2018

Research Title: Magnetohydodynamics flow of Nanofluid with Different Shapes and Sizes of Particles.
Grant: Tier 1
Researchers: Sharidan Shafie (Project Leader), Zuhaila Ismail, Anati Ali, Wan Rukaida Wan Abdullah, Mohamad Shukor Talib,Mohd Arif Admon, Nurul Farahain Mohammad, Abdul Rahman Mohd Kassim.
Value: RM50,000.00
Start: July 2016 – 2018

Research Title: New Analytical Solutions for Convective Heat Transfer of a Non-Newtonian Casson Fluid
Grant: FRGS
Researchers: Sharidan Shafie (Project Leader), Zuhaila Ismail, Zaiton Mat Isa, Ilyas Khan, Abdul Rahman Mohd Kassim, Basuki Widodo.
Value: RM72,000.00
Start: November 2015 – 2017

Research Title: Multiscale Modelling of Unsteady Blood Flow in Microcirculation Networks.
Grant: Tier 1
Researchers: Wan Rukaida Wan Abdullah (Project Leader), Zuhaila Ismail, Syarifah Zyurina Nordin, Sharidan Shafie, Norzieha Mustapha, Zaiton Mat Isa.
Value: RM20,000.00
Start: July 2014 – 2015

Research Title: Modelling on Ascending, Descending and Arbitrary Order Characteristic of Task Scheduling in Unrelated
Parallel Processor System.
Grant: Tier 1
Researchers: Syarifah Zyurina Nordin (Project Leader), Zuhaila Ismail, Wan Rukaida Wan Abdullah, Farhana Johar, Fuaada Mohd Siam, Nur Arina Bazilah Aziz, Rohanin Ahmad, Rashidah Ahmad.
Value: RM20,000.00
Start: July 2014 – 2015

Research Title: Solving Time Dependent Vehicle Routing Problem with Due Dates using Metaheuristic Algorithms.
Grant: Tier 2 E
Researchers: Farhana Johar (Project Leader), Zuhaila Ismail, Syarifah Zyurina Nordin, Fuaada Mohd Siam, Nur ArinaBazilah Aziz, Rashidah Ahmad.
Value: RM28,040.00
Start: April 2014 – 2015

Research Title: The Applications of Metaheuristics in Inventory Routing Problems.
Grant: PAS
Researchers: Nur Arina Bazilah Aziz (Project Leader), Zuhaila Ismail, Farhana Johar, Syarifah Zyurina Nordin, Zaitul Marlizawati Zainuddin.
Value: RM20,000.00
Start: September 2014 – 2015

Research Title: Mathematical Modelling of Blood Flow in an Arterial Stenosis
Grant: Tier 1
Researchers: Norsarahaida Saidina Amin (Project Leader), Zuhaila Ismail and Norzieha Mustapha.
Value: RM60,000.00
Start: May 2012 – 2014

Research Title: The development of Mathematical Model for Free Convection Flow in Non-Newtonian Brinkman
Type
Fluids
Grant: Tier 1
Researchers: Sharidan Shafie (Project Leader), Norsarahaida Saidina Amin, Anati Ali, Zuhaila Ismail, Norzieha
Mustapha, Abdul Rahman Mohd Kassim, Mohd Ariff Admon.
Value: RM60,000.00
Start: May 2012 – 2014

Research Title: Mathematical Modelling of Non-Newtonian Fluids with Ramped Wall Temperature
Grant: Tier 1
Researchers: Sharidan Shafie (Project Leader), Norsarahaida Saidina Amin, Anati Ali, Zuhaila Ismail, Norzieha
Mustapha, Mukheta Isa, Adrian Syah Halifi, Mohd Ariff Admon.
Value: RM88,200.00
Start: December 2012 – 2014

Research Title: Dynamic of Blood Flow in the Microcirculation
Grant: Tier 2
Researchers: Wan Rukaida Wan Abdullah (Project Leader), Zuhaila Ismail, Norzieha Mustapha and Syarifah
Zyurina
Nordin.
Value: RM32,000.00
Start: Jan 2012 – 2013

## SUPERVISION

**GRADUATED**
**PhD - 3**
**Masters by Research - 0**
**Masters Dissertation - 8**
**Undergraduate Final Year Projects - 7**

**ON-GOING**
**PhD - 3**
**Masters by Research - 4**
**Masters Dissertation - 2**
**Undergraduate Final Year Projects - 1**

**PHD STUDENTS**

The Effects of Gravitational Acceleration on Micropolar Fluid Model of Blood Flow
in a Bifurcated Stenosed Artery
**Tan Yan Bin** **05 April 2017**
(Matrix no. PS113027)

Generalized Power-law Model of Magnetic Hydrodynamic Blood Flow in Inclined
Stenosed Artery with Body Acceleration
**Ahmed Bakheet Saeed**                                          **04 July 2017**
(Matrix no. PS123091)

Numerical Studies of Fluid Flow in Human Eyes of with Descemet Membrane
Detachment and Rhegmatogeneous Retinal Detachment
**Lim Yeou Jiann**                                               **04 July 2017**
(Matrix no. PS133002)

Numerical Studies of Blood Flow in Stenosed Bifurcated Artery under the influence of
Heat and Mass Transfer
**Huda Salmi Ahmad**                                             **On going**
(Matrix no. PSC143015)

Unsteady magnetohydrodynamics Mixed Convective Flow of Nanofluid and Heat
Transfer
**Yahaya Shagaiya Daniel**                                       **On going**
(Matrix no. PSC153050)

Stability Analysis of Shell under Higher Order Shear Deformation Theory
**Karthik A/L Krishnan**                                         **On going**
(Matrix no. PSC173021)

## MASTERS BY RESEARCH

Numerical Computation and Simulation of Biomagnetic Blood Flow in a Stenosed
Bifurcated Artery due to the Effect of Body Acceleration
**Normazni binti Abdullah**                                      **On going**
(Matrix no. MSC153026)

Numerical Studies of Non-Newtonian Blood Flow in a Stenosed Bifurcated Artery
subject to External Magnetic Field
**Norliza Binti Mohd Zain**                                      **On going**
(Matrix no. MSC15333)

Numerical Computation and Simulation of Blood Flow in Stenosed Bifurcated Artery
Concerning the Effect of Heat Transfer
**Muhammad Sabaruddin Bin Ahmad Jamali**                         **On going**
(Matrix no. MSC173011)

Biomagnetic Fluid Dynamic effects on Blood Flow through Different Geometry and
Location in a Stenosed Bifurcated Artery
**Alia Rafiza Binti Che Ayob**                                   **On going**
(Matrix no. MSC183006)

## MASTERS DISSERTATION

Numerical Computation of a two dimensional Navier-Stokes equations using Marker
and Cell (MAC) Method
**Nurul Izyan Binti Mat Daud**                                   **02 January 2014**
(IC no. 901125-03-5118)

A Generalized Power Law Model of Blood Flow through Tapered Arteries with an
Overlapping Stenosis
**Huda Salmi Ahmad**                                                                                      **06 August 2014**
(Matrix no. MS122104)

Analytical Solutions and Simulation using COMSOL Multiphysics of Aqueous Humour
Flow during Descemet Membrane Detachment
**Siti Aishah binti Salleh**                                                                              **13 July 2016**
(Matrix no. MSC142031)

Numerical Study of Boundary Layer Flow past a full 3-dimensional Obstacle
**Zul Hilmi bin Abdullah**                                                                                **On going**
(Matrix no. MSC152020)

Numerical Simulation Aqueous Humour Flow during Descemet Membrane Detachment
with the Effect of Cornea Indentation
**Husniyanti Binti Adnan**                                                                                **On going**
(Matrix no. MSC142057)

Numerical Simulation of Generalized Power Law Model of Blood Flow through Different
Angle of Stenosed Bifurcated Artery
**Azyante Erma Binti Abd Aziz**                                                                          **15 August 2018**
(Matrix no. MS132045)

Numerical Simulation of Generalized Power Law Model of Blood Flow in a Stenosed
Bifurcated Artery.
**Mohd Taufik Bin Pamis**                                                                                 **15 August 2018**
(Matrix no. MSC142058)

Numerical Simulation of Aqueous Humour flows and Deformation of Descemet's
membrane detachment in a 3D Anterior Chamber
**Mohd Razali Bin Baharon**                                                                              **19 September 2018**
(Matrix no. MS132027)

Homotopy Perturbation Method Integral Transform for Blasius Equation
**Nur Asyiqin Binti Mohd Nasarruddin**                                                                   **23 May 2018**
(Matrix no. MSC162023)

Numerical Simulation of Aqueous Humour Flow through Different Geometry of
Descemet membrane detachment
**Ting Wei Teng**                                                                                         **19 September 2018**
(Matrix no. MSC142056)

**UNDERGRADUATE FINAL YEAR PROJECTS**

**Nor Salyana Binti Mohd Salleh**                                                                        **02 July 2014**
(Matrix no. AS100075)

**Normazni Binti Abdullah**                                                                              **12 July 2015**
(Matrix no. A11SC0045)

**Nurul Farahin Binti Zaharuddin**                                          **12 July 2015**
(Matrix no. A11SC0046)

**Khairun Ameerah Binti Zulkifli**                                          **11 July 2016**
(Matrix no. A12SC0243)

**Muhammad Sabaruddin Bin Ahmad Jamali**                       **29 May 2017**
(Matrix no. A13SC0079)

**Mohammad Azim Bin Mohd Azahari**                                **28 June 2017**
(Matrix no. A12SC0243)

**Alia Rafiza Binti Che Ayob**                                              **02 July 2018**
(Matrix no. A14SC0013)

**Woon Woan Jen**                                                               **On going**
(Matrix no. A15SC0301)

## PUBLICATIONS

**CITATION INDICES (Based on Google Scholar since 2008)**
**Citations - 239**
**H-index - 9**
**i10-index - 7**

| ISI / SCOPUS Journal | Cited by |
|---|---|
| **2008** | |
| • **Z. Ismail**, I. Abdullah, N.Mustapha and N. Amin (2008). "A Power-law Model of Blood Flow Through a Tapered Overlapping Stenosed Artery". Applied Mathematics and Computation. 195. 669-680. (**Impact Factor = 1.349, Q1**) | **101** |
| **2013** | |
| • **Z. Ismail**, A.D. Fitt and C.Please (2013). "A Fluid Mechanical Explanation of the Spontaneous Reattachment of a Previously Detached Descemet". Mathematical Medicine and Biology. 30. 339-355. (**Impact Factor = 2.412, Q1**) | **6** |
| **2014** | |
| • **Z. Ismail**, A.D. Fitt and C.Please (2014). "The Deformation of Human Eyeball when Undergoing Scleral Buckling". Applied Mechanics and Materials. 695. 544-547. | **1** |
| **2015** | |
| • L. Y. Jiann, **Z. Ismail**, S. Shafie and A. Fitt (2015). "Numerical computational of fluid flow through a detached retina". AIP Conference Proceeding. 1643. 642-648. | **2** |
| **2016** | |
| • A. Bakheet, E. A. Alnussaiyri, **Z. Ismail**, N. Amin (2016). "Blood Flow through an Inclined Stenosed Artery". Applied Mathematical Sciences. 10. 235-254. | **2** |
| • L. Y. Jiann, **Z. Ismail**, S. Shafie and A. Fitt (2016). "Numerical computational of fluid flow through a sclera buckling". AIP Conference Proceeding. 1750. 030005. | **1** |

- L. Y. Jiann, **Z. Ismail**, S. Shafie and A. Fitt (2016). "Aqueous humour dynamics in anterior chamber with the Descemet's membrane detachment". AIP Conference Proceeding. 1775. 030009.

    0

- **Z. Ismail**, L. Y. Jiann, H. S. Ahmad, S. Shafie and A. Fitt (2016). "Fluid Mechanics of the Descemet Membrane Detachment with Spontaneous Reattachment". Malaysian Journal of Mathematical Sciences. 10. 19-31.

    0

**2017**

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2017). "Effects of thermal radiation, viscous and Joule heating on electrical MHD nanofluid with double stractification". Chinese Journal of Physics. 55. 630-651.
    (**Impact Factor = 0.514, Q4**)

    45

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2017). "Numerical study of entropy analysis for electrical unsteady natural magnetohydrodynamics flow of nanofluid and heat transfer". Chinese Journal of Physics. 55. 1821-1848. (**Impact Factor = 0.514, Q4**)

    13

- A. Bakheet, E. A. Alnussaiyri, **Z. Ismail**, N. Amin (2017). "The effect of body acceleration on the generalized power law model of blood flow in a stenosed artery". AIP Conference Proceedings. 1830. 020030.

    0

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2017). "Entropy analysis in electrical magnetohydrodynamic (MHD) flow of nanofluid with effects of thermal radiation, viscous dissipation, and Chemical reaction". Theoretical and Applied Mechanics Letters. 7. 235-242.

    17

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2017). "Entropy Analysis of Unsteady Magnetohydrodynamic Nanofluid over Stretching sheet with Electric Field". International Journal for Multiscale Computational Engineering. 15. 545-565. (**Impact Factor = 1.103, Q3**)

    1

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2017). "Double stratification effects of unsteady electrical MHD mixed convection flow of nanofluid with viscous dissipation and Joule heating". Journal of Applied Research and Technology. 15. 464-476.

    9

- N. M. Zain and **Z. Ismail.** (2017). "Modelling of Newtonian Blood Flow through a Bifurcated Artery with the presence of an Overlapping Stenosis". Malaysian Journal of Fundamental and Applied Sciences. 13. 304-309.

    0

- **Z. Ismail**, L. Y. Jiann, S. A. Jamali and A. Fitt. (2017). "Simulation of AH Flows and Deformation of DMD in a 3D AC". Malaysian Journal of Fundamental and Applied Sciences. 13. 362-366.

    0

- **Z. Ismail**, L. Y. Jiann, S. Shafie and A. Fitt (2017). "Aqueous Humour Dynamics in Anterior Chamber under Influence of Cornea Indentation". Journal of Physics: Conference Series. 822. 012023.

    0

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2017). "Thermal radiation on unsteady electrical MHD flow of nanofluid over stretching sheet with chemical reaction". Journal of King Saud University-Science. (Article in Press).

    5

**2018**

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2018). "Slip effects on Electrical Unsteady MHD Natural Convection Flow of nanofluid over permeable Shringking Sheet with Thermal Radiation". Engineering Letters. 26. 1-10.

    1

- A. Azahari, **Z. Ismail** and N. Abdullah. (2018). "3D Model of Generalized Power Law Blood Flow in a Stenosed Bifurcated Artery". MATEMATIKA. 34. 87-102.

    0

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2018). "Thermal Stratification Effects on MHD Radiative Flow of Nanofluid Over Nonlinear Stretching Sheet with Variable Thickness". Journal of Computational Design and Engineering. 5. 232-242.

    10

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2018). "Effects of slip and convective conditions on MHD flow of nanofluid over a porous nonlinear stretching/shrinking sheet". Australian Journal of Mechanical Engineering. 16. 213-229.

    12

- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2018). "Impact of thermal radiation on electrical MHD flow of nanofluid over nonlinear stretching sheet with variable thickness". Alexandria Engineering Journal. 57. 2187-2197.                **12**
- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2018). "Impact of thermal radiation on electrical MHD flow of nanofluid over nonlinear stretching sheet with variable thickness". Matematika. 34. 393-417.                **0**
- Y. S. Daniel, Z. A. Aziz, **Z. Ismail** and F. Salah (2018). "Hydromagnetic slip flow of nanofluid with thermal stratification abnd convective heating". Australian Journal of Mechanical Engineering. (Article in Press).                **1**

## Book Chapters

**2015**
- **Z. Ismail**, A.D. Fitt and C.P. Please (2015) "Modelling of Liquefied Vitreous Humour through Detached Retina". UTM Press, Johor. ISBN 978-983-52-1003-7. 51-76.

**2018**
- N.F. Mohamad, L.Y. Jiann, W.R. Wan Abdullah and **Z. Ismail** (2018) "On Velocity and Heat Transfer of MHD Forced Convective Boundary Layer Flow over a Sphere". UTM Press, Johor. ISBN 978-983-52-1571-1. 47-70.

## Conference Papers

**2006**
- I. Abdullah, **Z. Ismail**, N. Saidina Amin. "A Micropolar Fluid Model of Blood Flow through a Constricted Artery ". Simposium Kebangsaan Sains Matematik XIV, 135 - 141, Jun 2006.

**2008**
- **Z. Ismail** and A.D. Fitt. "Mathematical Modelling of Flow in Schlemm's Canal and Its Influence on Primary Open Angle Glaucoma". International Conference on Science and Technology (ICSTIE): Applications in Industry and Education, 1967 – 1973, December 12 -13, 2008.

**2015**
- L.Y. Jiann, **Z. Ismail**, S. Shafie and A.D. Fitt, (2015). "Numerical computational of fluid flow in a Retinal Detachment". The 22nd National Symposium on Mathematical Sciences (SKSM). 1 – 6, November 24 -26, 2014.

## Thesis / Dissertation

- **Z. Ismail** (2006). "Mathematical Modelling of Non-Newtonian Blood flow through a Tapered Stenotic Artery". MSc Dissertation. Universiti Teknologi Malaysia, Johor, Malaysia.
- **Z. Ismail** (2013). "The Mathematical Modelling of Flow and Deformation in the Human Eye". PhD Thesis. University of Southampton, Southampton, United Kingdom.

## REFERENCES

**Professor Alistair David Fitt**
Vice-Chancellor
Vice-Chancellor's Office
Headington Campus
Oxford Brookes University
OX3 0BP, Oxford, United Kingdom
afitt@brookes.ac.uk

**Professor Dr. Norsarahaida Saidina Amin**
Department of Mathematical Sciences
Faculty of Science
Universiti Teknologi Malaysia (UTM)
81310 Johor Bahru, Johor, Malaysia
norsarahaida@utm.my