

## Nor Alisa Binti Mohd Damanhuri



### Education

#### **Ph. D (Mathematics) University of Manchester, United Kingdom, 2014**

Thesis title: The numerical approximation to solutions for the double-slip and double-spin model for the deformation and flow of granular materials.

Supervisor: Dr. David Harris

#### **M. Sc. (Mathematics) Universiti Sains Malaysia, Malaysia, 2004**

Coursework

Dissertation title: Recursive Subdivision Method for Smoothing Irregular Polyhedron

Software: MATLAB and Mathematica

Supervisor: Dr. Ahmad Abdul Majid

#### **B. Sc. (Hons) (Mathematics) Universiti Sains Malaysia, Malaysia, 2003**

Project title: Fundamental calculus via pictures for high school (CD ROM)

The project was designed to illustrate the ideas of fundamental calculus via pictures

Supervisor: Dr. Adam Baharom

### Current Teaching and Administrative Responsibilities

|                                      |  |
|--------------------------------------|--|
| <b>1 Feb 2019 – 30 July 2019</b>     | Coordinator – Mathematics for Management Section 1 Gambang Campus Sem 2 Session 2018/2019              |
| <b>1 Feb 2019 – 30 July 2019</b>     | Coordinator – Mathematics for Management Section 2 Gambang Campus Sem 2 Session 2018/2019              |
| <b>1 Jan 2019 – 31 Dec 2020</b>      | Head of Mathematics Support Centre   |
| <b>1 Jan 2019 – 31 Dec 2020</b>      | Committee members for International Conference on Applied & Industrial Mathematics and Statistics 2019 |
| <b>1 Jan 2019 – 31 Dec 2019</b>      | Faculty Representative for UMP Library   |
| <b>1 Dec 2018 – 30 June 2019</b>     | Massive Open Online Course (MOOC) Coordinator for Mathematics for Management                           |
| <b>2 May 2018 – 1 May 2020</b>       | Committee members e-Portfolio Technical UMP  |
| <b>18 April 2017 – 17 April 2019</b> | Fellow for Centre of Academic Innovation & Competitiveness   |

### Work Experience

|                                  |   |
|----------------------------------|---|
| <b>12 Dec 2014 – Present</b>     | <b>Senior Lecturer</b><br>Faculty of Industrial Science & Technology, University Malaysia Pahang. |
| <b>2009 – 2014</b>               | <b>Teaching Assistant</b><br>School of Mathematics, University of Manchester, United Kingdom.     |
| <b>2 June 2008 – 11 Jan 2015</b> | <b>Lecturer</b>   |

Faculty of Industrial Science & Technology, University Malaysia  
Pahang.

**3 Jan 2005 – 7 Oct 2006**

**Lecturer**

Faculty of Chemical & Natural Resources Engineering, Kolej Universiti  
Kejuruteraan & Teknologi Malaysia, Pahang.

**July 2006 – Jan 2007**

**Part-time Lecturer**

Kuliyah of Science, International Islamic University, Malaysia.

**Sept 2004 – Dec 2004**

**Lecturer**

Department of General Studies, UniKL, Malaysian Spanish Institute.

**June 2003- May 2004**

**Tutor**

School of Mathematical Sciences, Universiti Sains Malaysia, Malaysia.

**Professional Membership**

**2013-2019** LMS (London Mathematical Society)  
**2005- Lifetime** PERSAMA (Persatuan Sains Matematik Malaysia)  
**2013-2019** IMA (Institute of Mathematics and its application)  
**2009-2017** SIAM (Society for Industrial and Applied Mathematics)

**Previous Teaching Responsibilities**

1. Engineering Mathematics I
2. Engineering Mathematics II
3. Mathematics I
4. Mathematics II
5. Probability & Statistics
6. Computer Application
7. Developing and Protecting Mathematical Ideas
8. Mathematics 1Q1
9. Mathematics OB2
10. Mathematics 1E1
11. Mathematics 1M2
12. Technical Mathematics
13. Ordinary Differential Equations
14. Mathematics for Management
15. Basic Mathematics

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|------------------------------|--|
| 1 Sept 2018 – 30 Jan 2019    | Coordinator – Mathematics for Management Section 1 Gambang<br>Campus Sem 1 Session 2018/2019 |
| 1 Sept 2018 – 30 Jan 2019    | Coordinator – Mathematics for Management Section 2 Gambang<br>Campus Sem 1 Session 2018/2019 |
| 20 April 2018 – 30 July 2018 | Coordinator – Calculus Sem 2 Session 2017/2018   |
| 1 Feb 2018 – 30 July 2018    | Coordinator – Mathematics for Management Section 1 Gambang<br>Campus Sem 2 Session 2017/2018 |
| 1 Feb 2018 – 30 July 2018    | Coordinator – Mathematics for Management Section 2 Gambang<br>Campus Sem 2 Session 2017/2018 |
| 1 Sept 2017 – 30 Jan 2018    | Coordinator – Mathematics for Management Section 1 Gambang<br>Campus Sem 1 Session 2017/2018 |
| 1 Sept 2017 – 30 Jan 2018    | Coordinator – Mathematics for Management Section 2 Gambang<br>Campus Sem 1 Session 2017/2018 |
| Open Courseware (OCW)        | Mathematics for Management   |
| 1 Aug 2017 – 30 Sep 2017     | Basic Mathematics Sem 0 Session 2017/2018  |
| 1 Feb 2017 – 30 July 2017    | Coordinator – Mathematics for Management Section 1 Gambang<br>Campus Sem 2 Session 2016/2017 |
| 1 Feb 2017 – 30 July 2017    | Coordinator – Mathematics for Management Section 2 Gambang<br>Campus Sem 2 Session 2016/2017 |
| 1 Sept 2016 – 30 Jan 2017    | Coordinator – Mathematics for Management Section 1 Gambang<br>Campus Sem 1 Session 2016/2017 |
| 1 Sept 2016 – 30 Jan 2017    | Coordinator – Mathematics for Management Section 2 Gambang<br>Campus Sem 1 Session 2016/2017 |
| 1 Feb 2016 – 30 July 2016    | Coordinator – Mathematics for Management Section 1 Gambang<br>Campus Sem 2 Session 2015/2016 |
| 1 Feb 2016 – 30 July 2016    | Coordinator – Mathematics for Management Section 2 Gambang<br>Campus Sem 2 Session 2015/2016 |
| 1 Sept 2015 – 30 Jan 2016    | Coordinator – Mathematics for Management Section 1 Gambang<br>Campus Sem 1 Session 2015/2016 |

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| 1 Sept 2015 – 30 Jan 2016   | Coordinator – Mathematics for Management Section 2 Gambang Campus Sem 1 Session 2015/2016  |
| 1 Sept 2015 – 30 Jan 2016   | Coordinator – Mathematics for Management Collaboration programme UMP – Muscatt College, Oman Sem 1 Session 2015/2016                               |
| 1 Sept 2015 – 30 Jan 2016   | Coordinator – Mathematics for Management Collaboration programme UMP – International College of Automotive Malaysia (ICAM) Sem 1 Session 2015/2016 |
| 1 Aug 2015 – 30 Sep 2015    | Ordinary Differential Equations Sem 3 Session 2014/2015  |
| 1 Feb 2015 – 30 July 2015   | Ordinary Differential Equations Sem 2 Session 2014/2015  |
| 1 Feb 2015 – 30 July 2015   | Coordinator - Technical Mathematics Sem 2 Session 2014/2015  |
| 1 Jan 2015 – 31 Dec 2016    | Coordinator – Postgraduate mathematics research students Sem 2 Session 2014/2015   |
| 1 Jan 2015 – 31 Dec 2016    | Committee member - Postgraduate Applied Industrial MSc programme   |
| 20 Oct – 2015 – 19 Oct 2016 | Person in charge – FIST QMS procedure  |
| Sem II Session 2012/2013    | Mathematics 1Q1  |
| Sem II Session 2011/2012    | Mathematics OB2  |
| Sem I Session 2011/2012     | Mathematics 1E1  |
| Sem II Session 2010/2011    | Mathematics 1M2  |

### **Previous Administrative Responsibilities**

|                                    |  |
|------------------------------------|--|
| <b>28 Aug 2017 – 27 Aug 2018</b>   | University Taskforce as data analyst for the UMP Strategic Planning No5 – Brand Prominence   |
| <b>2 May 2017 – 1 May 2018</b>     | Committee member for Technical Research on CGPA Comparison of UMP Students Intake and Current Performance                                  |
| <b>1 Jan 2017 – 31 Dec 2018</b>    | Head of Undergraduate Academic Committee (Mathematics)   |
| <b>1 Jan 2017 – 31 Dec 2018</b>    | Committee member New Programme Development (Master of Science, Industrial Applied Mathematics)   |
| <b>1 Jan 2017 – 31 Dec 2018</b>    | Committee member Innovative & Creative Group (KIK), FIST UMP.  |
| <b>25 Jan 2016 – 24 Jan 2018</b>   | Ahli Jawatankuasa <i>Task Force</i> Teknikal iCGPA Peringkat Universiti Malaysia Pahang  |
| <b>1 April 2016 – 1 Nov 2017</b>   | Head of Publicity & Multimedia, 1 <sup>st</sup> International Conference on Applied & Industrial Mathematics and Statistics (ICoAIMS) 2017 |
| <b>9 March 2016</b>                | Coordinator Sudoku Battle 2016   |
| <b>25 Feb 2015 – 24 Feb 2017</b>   | Person in charge - Postgraduate for the Applied & Industrial Mathematics   |
| <b>1 Jan 2015 – 31 Dec 2016</b>    | Coordinator – Postgraduate mathematics research students Sem 2 Session 2014/2015   |
| <b>1 Jan 2015 – 31 Dec 2016</b>    | Ahli Jawatankuasa Gerak Kerja MQA-01 bagi program Sarjana Sains (Matematik Gunaan Industri)  |
| <b>1 Jan 2015 – 31 Dec 2016</b>    | Ahli Jawatankuasa Pembangunan Program Baharu Sarjana Sains (Matematik Gunaan Industri)   |
| <b>20 Oct – 2015 – 19 Oct 2016</b> | Person in charge – FIST QMS procedure  |
| <b>Sem I Session 2008/2009</b>     | Academic Advisor FIST  |
| <b>2006</b>                        | Committee member - FKKSA ICT   |
| <b>March 2006</b>                  | Committee member - New Faculty & Programme Formation   |
| <b>15 Aug 2005 - 15 Aug 2006</b>   | Quality Coordinator and internal committee in Basic Science & Non-engineering Courses FKKSA  |
| <b>2005</b>                        | Committee member - Diploma and Degree recognition FKKSA  |
| <b>2005</b>                        | Committee member - Culture and Arts MINDS session 2005/2006  |
| <b>2005</b>                        | Quality Coordinator  |

### **List of Postgraduate Students**

**Current PhD Student: Syafikah Ayob PSE15002**

### **Grant & Research Experience**

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|------------------------------------|--|
| <b>15 Apr 2017 – 14 April 2019</b> | <b>UMP RESEARCH GRANT</b><br>RDU170355, Leader, RM 22,400<br>Title: Numerical Approximation for The Stress Field of Ideal Soil Under Plane Strain Conditions   |
| <b>30 June 2017 – 29 June 2019</b> | <b>UMP RESEARCH GRANT</b><br>RDU1703275, Leader, RM 24,700<br>Title: Academic Talent Management System (ATMS) Rubric to Identify Multitrack Inclination for Academic Staff in Universiti Malaysia Pahang |

- 1 Jan 2019 – 31 Dec 2020**      **FRGS**  
RDU190135, Member, RM 84,180  
Title: Elucidation of Synergistic Effect between Parameter Affecting Xylanase Production via Conventional and Ultrasonic Assisted Fermentation
- 30 June 2017 – 29 June 2019**      **UMP RESEARCH GRANT**  
RDU1703272, Member, RM 24,999  
Title: A New Integrated Assessment and Reporting Mechanism for Extra Curricular Activities
- 1 July 2015 – 30 Dec 2016**      **UMP RESEARCH GRANT Seed Money**  
RDU151115, Member, RM 5,500  
Title: Mathematical Model for the Deformation and Flow of Granular Materials
- 1 July 2014 – 31 Dec 2017**      **FRGS**  
RDU140108, Member, RM 72,200  
Title: Pressure-Impulse Theory For Wave Impact On Inclined Seawalls
- 1 Oct 2008 -30 June 2010**      **UMP RESEARCH GRANT**  
RDU080301, Member, RM 20,000  
Title: Determination of Biological Activities of Selected Kuantan Mangrove Plant Species
- 4 Jan 2007- 30 March 2009**      **FRGS**  
RDU070302, Member, RM 150,000  
Title: Essential oil production from Patchouli (*Pogostemon* ) Cablin and Waste Recovery
- 1 Nov 2005 – 31 Oct 2006**      **UMP RESEARCH GRANT**  
RDU050119, Member, RM 15,000  
Title: Optimization of Short-patch Distillation of Ginger Extraction Pilot Plant (GEPP) Process using Multivariate Statistical Process Control (MSPC)

#### Conference presentations and invited seminar talks

1. **Mathematical Sciences and Technology 2018 (MathTech 2018)**, 10 – 12 December 2018, Hotel Equatorial Penang, Malaysia, *presenter*.
2. **6<sup>th</sup> Global Higher Education Forum 2018**, 8 – 10 October 2018, Le Meridien Putrajaya Malaysia, *presenter*.
3. **Workshop on Basic Skills Lab (Excel) 2018**, Faculty of Industrial Sciences & Technology, UMP, *trainer*.
4. **3<sup>rd</sup> SIAM National Student Chapter Conference**, Mathematical Institute, Oxford University 2014, *talk and poster*.
5. **Mathematics Research Students Conference (MRSC)**, University of Manchester, 2013, *poster*.
6. **SIAM Student Chapter Conference**, University of Manchester, 2013, *talk*.
7. **Informal Student Seminar**, University of Manchester, 2012, *talk*.

#### Selected Publication

1. RK R. Zakariaa, S Z Satari, **N A Damanhuri**, Descriptive Analysis of Students' CGPA: A Case Study of University Malaysia Pahang, IOP Conference Series, Acheh.
2. **NA Damanhuri**, S Ayob A general numerical approximation of construction of axisymmetric ideal plastic plane deformation of a granular material, Journal of Physics: Conference Series 890 (1), 012059, 8-10 August 2017, Vistana Hotel, Pahang.
3. **M Damanhuri**, N Alisa, The numerical approximation to solutions for the double-slip and double-spin model for the deformation and flow of granular materials, PhD Thesis, The University of Manchester, Manchester, UK 2014.
4. **Damanhuri N.A** & Majid A.A, 2006, Recursive Subdivision Method for Smoothing Irregular Polyhedron, 14<sup>th</sup> National Symposium of Mathematical Sciences, University Malaya, 6-8 June 2006, Kuala Lumpur.
5. **Damanhuri N.A** & Majid A.A, 2006, Subdivision Algorithm for Smoothing down Irregular Shaped Polyhedrons, Proceedings of the Computer Graphics, Imaging and Visualisation, 25-18 July 2006, Sydney Australia.
6. **Damanhuri N.A**, 2006, Subdivision Algorithm Generalizing Uniform B-Spline Surfaces of Arbitrary Degree, International Conference on Mathematical Modelling and Computation, 5- 8 June 2006, Brunei.
7. **Damanhuri N.A** 2006, Interpolating Subdivision for Meshes with Arbitrary Topology, Seminar Kebangsaan Sains Kuantitatif 2006, 19-21 Disember 2006, UUM Langkawi.

8. **Damanhuri N.A**, 2005 Smooth Piecewise Surfaces on Irregular Polyhedron, Proceedings of the USM Workshop on CAGD, 2 December 2005, Pulau Pinang.
9. **Nor Alisa Mohd Damanhuri** (2004), Recursive Subdivision Method for Smoothing Irregular Polyhedron, M. Sc. Dissertation, Universiti Sains Malaysia.

## Award

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### Silver Medal

Creation, innovation, technology & research exposition 2019 (CITREX 2019)  
12-13 Feb 2019  
Universiti Malaysia Pahang

### Silver Medal

Creation, innovation, technology & research exposition 2019 (CITREX 2019)  
12-13 Feb 2019  
Universiti Malaysia Pahang

### Silver Medal

Creation, innovation, technology & research exposition 2018 (CITREX 2018)  
6-8 Feb 2018  
Universiti Malaysia Pahang

### Silver Medal

Creation, innovation, technology & research exposition 2017 (CITREX 2016)  
15-16 March 2017  
Universiti Malaysia Pahang

### Bronze Medal

Creation, innovation, technology & research exposition 2016 (CITREX 2016)  
7-8 March 2016  
Universiti Malaysia Pahang

## Viva/ Pre-Viva Examiner

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1. **Pre-viva Examiner** for Mohd Shahridwan Bin Ramli, Master of Science, 7 December 2018, UMP Gambang, Pahang.
2. **Pre-viva Examiner** for Kho Yap Bing, Master of Science, 2 Aug 2017, UMP Gambang, Pahang.
3. **Pre-viva Examiner** for Hussein Ali Mohammed Al-Sharifi, PhD Mathematics, 18 Aug 2017, UMP Gambang, Pahang.
4. **Viva Examiner** for Sayed Qasim Alavi, Master of Science, 3 September 2015, UMP Gambang, Pahang.

## Others/ Community Service

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1. **Project Leader STEM Program Math Bootcamp 1.0**, 9 November 2018, SK. Seri Melati, Kuantan.
2. **Mentor Kem Saintis Muda**, 2-7 September 2018, UMP Gambang, Pahang.
3. **Ahli Jawatankuasa Program Lawatan STEM SMK Seri Bera ke Makmal FSTI**, 28 Mac 2018, FIST Lab UMP Gambang, Pahang.
4. **Committee Member Young Scientist Camp 2017**, 13-16 August 2017, UMP Gambang, Pahang.
5. **Olimpiad Matematik Kebangsaan**, 12 August 2017, UMP Gambang, Pahang.
6. **Fasilitator Program Pemantapan Pembelajaran Matematik dan matematik tambahan bagi Pelajar Sekolah Menengah Kebangsaan Seri Pekan**, 12 April 2017, UMP Gambang, Pahang.
7. **Fasilitator Program Pemantapan Pembelajaran Matematik dan matematik tambahan bagi Pelajar Sekolah Berasrama Penuh Integrasi Temerloh**, 8 February 2017, UMP Gambang, Pahang.
8. **Program Motivasi & Matematik bersama Sekolah Menengah Kebangsaan Ahmad Pekan**, 6 August 2015, UMP Pekan Pahang.

## Training

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1. **Minitab Workshop**, 12 – 13 February 2019, Fakulti Sains & teknologi Industri Computer Lab, UMP Pahang.
2. **Matlab Workshop**, 30 January 2019, Fakulti Sains & teknologi Industri Computer Lab, UMP Pahang.
3. **Open CourseWare (OCW) Development**, 18 – 20 August 2017, Awana Kijal Golf Resort Terengganu.
4. **Bengkel Pernunian Dokumen MQA-01 Program Sarjana Sains (Komputasi Industri)**, 17 Mei 2017, Fakulti Sains & teknologi Industri, Mathematics Support Centre, UMP Pahang.

5. **Bengkel Penetapan KPI 2017 Fakulti Sains & Teknologi Industri**, 4 April 2017, MS Garden Hotel, Kuantan Pahang.
6. **Bengkel Penulisan dan Penyediaan Geran Penyelidikan Siri 1/2016**, 16-17 December 2016, Suria Bentong Resort, Pahang.
7. **Bengkel Penetapan KPI 2016 Fakulti Sains & Teknologi Industri**, 21 Mei 2016, MS Garden Hotel, Kuantan Pahang.
8. **Information Skill Class: Emerald Online Databse**, 7 October 2015, UMP Library Pahang.
9. **Managing Electronic Thesis submission**, 17 July 2014, Sackville Street building G11, Manchester University.
10. **Seminar Penyelidikan Statistik**, 24 April 2015, Mathematics Support Centre UMP Gambang Pahang.
11. **Program MyUMP Siri 1/2015**, 28 March 2015, Cherengin Hills Convention & Spa Resort, Janda Baik, Bentong Pahang
12. **MQA-01 Workshop**, 13-14 March 2015, Vistana Hotel, Kuantan Pahang.
13. **Optimising research posters**, 9 January 2014, Sackville Street building G13D, Manchester University.
14. **Publishing academic papers**, 18 December 2013, Sackville Street building G13D, Manchester University.
15. **Writing up your Thesis**, 17 February 2013, Sackville Street building G13D, Manchester University.
16. **Wiley Publishing workshop**, 24 June 2013, Roscoe building 1.010, Manchester University.
17. **Programming in MATLAB**, 21 July 2011, Kilburn building G41, Manchester University.
18. **Research computing using MPI**, 25 November 2015, Kilburn building, Manchester University.
19. **An introduction to LaTeX**, Kilburn building Lanscelles Williams, 24-25 November 2009, Manchester University.
20. **Academic writing course**, 10 November 2009, Sackville Street building G13D, Manchester University.
21. **Introduction to research**, Sackville Street building C24, Manchester University.
22. **Graduate Teaching Assistant Training**, 17 June 2009, Sackville Street building H14, Manchester University.

## Referees

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### **Dato' Prof. Dr. Rosli Muhammad Yunus**

Faculty of Chemical and Natural Resources Engineering,  
Universiti Malaysia Pahang,  
26300 Gambang, Pahang, Malaysia  
+6095492012  
rmy@ump.edu.my

### **Dr. David Harris**

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