



Dr Norazaliza Mohd Jamil

Curriculum Vitae (October 2019)

*"Success is an integration or infinite sum of continuous
hardwork on an interval of time."*

Education

- May 2015 **PhD (Applied and Computational Mathematics)**, *University of South Carolina, USA.*
- May 2008 **Masters of Science (Mathematics)**, *Universiti Teknologi Malaysia, Skudai.*
- May 2005 **Bachelor of Science (Mathematics)**, *Universiti Teknologi Malaysia, Skudai.*
First Class Honours

Research Interest

Field Mathematical Modeling and Simulation, Multi-scale Modeling, Renewable energy and Biofuel production.

Experience

- 2015–Present **Senior Lecturer**, UNIVERSITI MALAYSIA PAHANG, Malaysia.
- 2012–2013 **Research Assistant**, UNIVERSITY OF SOUTH CAROLINA, USA.
- 2009–2015 **Lecturer**, UNIVERSITI MALAYSIA PAHANG, Malaysia.
- 2005–2008 **Tutor**, UNIVERSITI MALAYSIA PAHANG, Malaysia.
- 2004–2004 **Research Assistant**, UNIVERSITI TEKNOLOGI MALAYSIA, Malaysia.

Awards

- 2018 Bronze Medal in Creation, Innovation, Technology & Research Exposition 2018 (CITREX), Universiti Malaysia Pahang. Norazaliza Mohd Jamil, Siti Nurashiken Md. Sabudin. "A Mathematical Model For Performance Validation Of A Solar Photovoltaic Module Based On The Integrated Environmental Factor."

- 2017 Bronze Medal in Creation, Innovation, Technology & Research Exposition 2017 (CITREX), 15-16 March 2017, Universiti Malaysia Pahang. Norazaliza Mohd Jamil, Essam Abdellatif Makky Saleh, Abu Yousuf, Sharmin Sultana. "A Mathematical Model for Ethanol Fermentation From Oil Palm Trunk Sap Using *Saccharomyces Cerevisiae*."
- 2017 Hadiah Sanjungan Cendekia Bitara Universiti Malaysia Pahang 2016: Kategori Penerbitan Jurnal. "One-Dimensional Simulation of Diffusion and Advection Effects in Enzymatic Hydrolysis of Cellulose." American Journal of Applied Sciences.
- 2016 Certificate of Award in Creation, Innovation, Technology & Research Exposition 2016 (CITREX), Universiti Malaysia Pahang. Norazaliza Mohd Jamil. "CFD-PBE Modelling and Simulation of Enzymatic Hydrolysis of Cellulose in a Stirred Tank"
- 2016 Anugerah Perkhidmatan Cemerlang (APC) Universiti Malaysia Pahang 2016
- 2016 Hadiah Sanjungan Cendekia Bitara Universiti Malaysia Pahang 2016: "Jamil, N. M. (2014). Mathematical analysis of a kinetic model for enzymatic cellulose hydrolysis. WIT Transactions on Ecology and the Environment, 186, 499-510."
- 2014 PERDANA Scholar Award USA 2014
- 2011 Hadiah Sanjungan - Kategori Penerbitan (Jurnal), Anugerah Cendekia Bitara 2011. "Minimize Network Congestions in Single-Row Networks".
- 2008 Excellent Service Award, Universiti Malaysia Pahang 2008
- 2005 Gold Medal, First Class Honour for Bachelor of Science (Mathematics), Universiti Teknologi Malaysia
- 2005 Pembentang Terbaik dalam Simposium Projek Sarjana Muda Sesi 2004/2005, Fakulti Sains, Universiti Teknologi Malaysia
- 2004 Anugerah Dekan dalam Kursus Sarjana Muda Sains (Matematik) pada Semester I 2002/2003 (CGPA 3.79), Semester II 2002/2003 (CGPA 3.73), Semester I 2003/2004 (CGPA 3.58), Semester II 2003/2004 (CGPA 3.75), Semester I 2004/2005 (CGPA 3.88), Semester II 2004/2005 (CGPA 3.77)
- 2004 The Most Outstanding Academic Performance Award di Secret of Success Seminar II, Universiti Teknologi Malaysia
- 2002 Pelajar Terbaik 9A dalam Peperiksaan Sijil Pelajaran Malaysia 2001, Maktab Rendah Sains Mara Muar

Publications

1. **Norazaliza Mohd Jamil** (2019). Mathematical Modelling of Corrosion for Polymers. *Mathematics and Statistics*, 7(4), pp. 124-128. DOI: 10.13189/ms.2019.070405.
2. Sabudin, S. N. M., & **Jamil, N. M.** (2019, June). Parameter Estimation in Mathematical Modelling for Photovoltaic Panel. In *IOP Conference Series: Materials Science and Engineering*(Vol. 536, No. 1, p. 012001). IOP Publishing.
3. **Jamil, N. M.**, & Wang, Q. A mathematical model for the effects of volume fraction and fiber aspect ratio of biomass mixture during enzymatic hydrolysis. *Journal of Physics Conference Series* 890(1):012016 September 2017
4. Sultana, S., **Jamil, N. M.**, Saleh, E. A. M., Yousuf, A., & Faizal, C. K. M. A mathematical model for ethanol fermentation from oil palm trunk sap using *Saccharomyces cerevisiae*. *Journal*

- of Physics Conference Series, 890(1), September 2017
5. Sabudin, S. N. M., **Jamil, N. M.**, & Rosli, N. A review of parameter estimation used in solar photovoltaic system for a single diode model. *Journal of Physics Conference Series* 890(1):012037, September 2017
 6. **N. M. Jamil** and Q. Wang, "Multi-scale modelling for cellulosic biomass mixture during enzymatic hydrolysis," 2017 4th International Conference on Industrial Engineering and Applications (ICIEA), Nagoya, 2017, pp. 270-274. doi: 10.1109/IEA.2017.7939220
 7. **Jamil, N. M.**, & Wang, Q. CFD-PBE Modelling and Simulation of Enzymatic Hydrolysis of Cellulose in a Stirred Tank. *Journal of Mathematics and Statistics*, 12(4), 225-237, 2016.
 8. **Jamil, N. M.**, and Q. Wang. "One-Dimensional Simulation of Diffusion and Advection Effects in Enzymatic Hydrolysis of Cellulose." *American Journal of Applied Sciences*. Vol. 13(7), 870-876, 2016.
 9. **Jamil, N. M.**, and Q. Wang. "Numerical prediction of kinetic model for enzymatic hydrolysis of cellulose using DAE-QMOM approach." *IOP Conference Series: Earth and Environmental Science*. Vol. 36. No. 1. IOP Publishing, 2016.
 10. **Jamil, N. M.**, & Wang, Q. The Nondimensionalization of Equations Describing Enzymatic Cellulose Hydrolysis. *World Applied Sciences Journal*, 34(2), 158-163,(2016).
 11. **Jamil, N. M.** (2015). Mathematical Analysis of a Kinetic Model for Enzymatic Cellulose Hydrolysis. *WIT Transactions on Ecology and the Environment*, 186. (Q4)
 12. Noraziah, A., Noriyani Mohd Zin, Ahmed N. Abdalla, and **Norazaliza Mohd Jamil**. Minimize network congestions in single-row networks. *Scientific Research and Essays* 6, no. 11: 2372-2378 (2011).
 13. Noraziah, A., Herawan, T., Zin, N. M., **Jamil, N. M.**, Deris, M. M., & Abdullah, Z. Reducing network congestion by separating nets of single-row networks into layers. *Procedia-Social and Behavioral Sciences*, 28, 39-44 (2011).
 14. **Norazaliza Mohd Jamil**, Noraziah Ahmad, Ezrinda Mohd Zaihidee, "The K-means Clustering Algorithm for Separating Nets in Single-row Networks", *ICMSSC: International Conference on Mathematics, Statistics and Scientific Computing*, (2010).
 15. Noraziah Ahmad, Suryanti Awang, Nurshabah Yalah, **Norazaliza Mohd Jamil**, "Implementation of Block Segmentation in Cross Stitch Application", *DCABES Book Series Volume 1*, University of Greenwich AMCE Publishing, EL and SCI indexed, (2009).
 16. **Norazaliza Mohd Jamil**, Shaharuddin Salleh, Noraziah Ahmad, "Layering Nets in Single-row Networks Using Graph Partitioning Technique", *DCABES Book Series Volume 1*, University of Greenwich AMCE Publishing, EL and SCI indexed, (2009).
 17. Fauziah Zainuddin, Roslina Mohd Sidek, Noorlin Mohd Ali, Awanis Romli, Nooryati Talib, **Norazaliza Mohd Jamil**, "Steamer Food in Vending Machine", *International Conference on Enterprise Information Systems (ICCSIT)*, Beijing China, (2009).
 18. **Norazaliza Mohd. Jamil**, Shaharuddin Salleh, Noraziah Ahmad, " Graph Partitioning Technique for Separating Nets in Single-row Networks", *7th International Conference on Distribute Computing and Applications Business Engineering and Science*, China, Vol. 2 (2008), pp. 775-779.
 19. Noraziah Ahmad, Suryanti Awang, Nurshabah Yalah, **Norazaliza Mohd Jamil**, "Block Segmentation in Cross Stitch Application", *th International Conference on Distribute Computing and Applications Business Engineering and Science*, China, Vol. 1 (2008), pp. 254-257.
 20. Mohd Nizam Mohmad Kahar, **Norazaliza Mohd Jamil**, Suryanti Awang, "A Satisfaction Survey on KUKTEM Automated Course Scheduling", *COSTAM* (2004).

Reviewer

1. Biotechnology for Biofuels (Q1 Journal), 13/5/2019. BBIO-D-19-00232, Kinetic Modeling of Countercurrent Saccharification
2. Biotechnology for Biofuels (Q1 Journal), 20/9/2019. BBIO-D-19-00476, A two-phase substrate model for enzymatic hydrolysis: application to batch and continuous reactors
3. Pertanika Journal of Science and Technology, 10/10/2019, (Scopus Q4, SJR:0.13) Title: Instantaneous Speed Ratio of Traffic Flowing the Merging Area at Kilometer 31.6 from Shah Alam to Kuala Lumpur."
4. American Journal of Applied Sciences
5. 1st International Conference on Applied & Industrial Mathematics and Statistics (ICoAIMS 2017)
6. Applications and Applied Mathematics Journal (AAM)
7. International Scientific Committee for International Conference on Mathematics: Pure, Applied and Computational (ICoMPAC 2017)
8. International Conference on Multidisciplinary Method and Model 2016
9. International Conference on Mathematics: Pure, Applied and Computational (ICoMPAC 2016)

Books Publication

1. Mathematical Formulae 3.0. **Norazaliza Mohd Jamil**, Nor Alisa Mohd Damanhuri, Yuhani Yusof, Nor Aida Zuraimi Md Noar, Norhafizah Md Sarif. Penerbit UMP, 2019.
2. Applied Mathematics. Norhayati Rosli, **Norazaliza Mohd Jamil**, Muhammad Azrin Ahmad, Abdul Rahman Mohd Kasim. Penerbit UMP, 2019.
3. Mathematical Formulae 2.0. **Norazaliza Mohd Jamil**, Nor Alisa Mohd Damanhuri, Yuhani Yusof, Nor Aida Zuraimi Md Noar, Norhafizah Md Sarif. Penerbit UMP, 2017.
4. Mathematical Formulae. **Norazaliza Mohd Jamil**, Nor Alisa Mohd Damanhuri, Yuhani Yusof, Nor Aida Zuraimi Md Noar, Norhafizah Md Sarif. Penerbit UMP, 2017.
5. Applied Calculus for Engineering & Science Students, Rahimah Jusoh @ Awang, Dr Abdul Rahman Mohd Kasim, **Dr Norazaliza Mohd Jamil**, Samsudin Abdullah, Nor Izzati Jaini, Ezzatul Farhain Azmi, Penerbit UMP, 2015.
6. Mathematical Analysis Of A Kinetic Model For Enzymatic Cellulose Hydrolysis, Book Title: Energy and Sustainability V, Author(s): **N. Mohd Jamil**, Pages: 12, Published: 2015, Price: Free (open access).
7. **Mohd Jamil, N.** (2015). Mathematical Modeling and Simulation of Biofuel Production from Lignocellulosic Biomass (Doctoral dissertation, UNIVERSITY OF SOUTH CAROLINA).
8. Calculus for Science & Engineering, Siti Zanariah Satari, Mohd Nizam Mohmad Kahar, and **Norazaliza Mohd Jamil**, 2009, Penerbit UMP.
9. **Norazaliza Mohd Jamil**, Shaharuddin Salleh, Noraziah Ahmad, Layering Nets in Single-row Networks Using Graph Partitioning Technique, DCABES Book Series Volume 1, University of Greenwich AMCE Publishing, EL & SCI indexed, (2009).

Research Grants

- 15/3/2019– 14/3/2021 PGRS190356, A Kinetic Study for Ethanol Production Using Fermentation, RM3500
- 01/01/2019– 31/12/2020 GERAN FRGS, RDU190187, Mechanistic Study of Heat Transfer and Mixing in Simultaneous Saccharification and Fermentation Process Through Dual Zone Horizontal Rotating Bioreactor for Higher Ethanol Conversion, RM85,947.00 (Member)

- 1/1/2017– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 170303, A
1/1/2019 Code Profiling Model of Crosscutting Concern for Reliable Test Cases Selection Aspect-Oriented Program, RM21,500.00 (Member)
- 1/8/2016– GERAN FRGS, RDU 160116, Development of Mathematical Model and Sim-
31/7/2019 ulation for Enzymatic Hydrolysis of Cellulose in a Stirred Tank, RM110,300.00 (Leader)
- 15/12/2015– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 150399, Mathe-
14/12/2017 matical modeling and simulation of biofuel production from palm trees, RM21,000.00 (Leader)
- 5/8/2015– GERAN PENYELIDIKAN SEED MONEY, RDU 151109, Kinetic Model for Biofuel
4/8/2016 Production from Palm Trees, RM5,500.00 (Leader)
- 1/12/2013– FRGS, RDU 130122, Stochastic Model of Cancer Growth with the Effect of
30/11/2017 Glycosaminoglycans (GAGs) as Anticancer Therapeutics, RM108,800.00 (Member)
- 1/2/2011– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 110104, A New
30/4/2013 Design of Multiple Dimension Parameterless Data Clustering Technique (MaxD K-Means) Distance of Data Point and Lloyd K-Means Algorithm, RM60,000.00 (Member)
- 1/5/2009– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 090306, Sepa-
31/10/2011 rating Ntes of Single-row Networks into Two Layers Based on Graph Partitioning, RM20,500.00 (Member)
- 1/8/2008– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 080328, Devel-
31/7/2009 opment of Read-One-Write-All Synchronization Transaction Daemon (ROWA-STD) in Distribution System, RM16,000.00 (Member)
- 1/8/2008– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 080327, Devel-
31/7/2009 opment of Pet Shop Management System Veterinary Clinic, RM2,500.00 (Member)
- 1/8/2008– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 080333, Devel-
31/7/2009 opment of Building Submission Check List Information for Operational Submission Centre (OSC), RM9,000.00 (Member)
- 1/8/2008– GERAN PENYELIDIKAN UNIVERSITI MALAYSIA PAHANG, RDU 080329, Enhanc-
31/7/2009 ing Data Transmission In Mobile Invigilator System With Web Service, RM6,000.00 (Member)

Supervision of Research Student

1. Sharmin Sultana, Master of Sciences (Mathematics), Main Supervisor – Completed
2. Siti Nurashiken binti Md Sabudin, PhD, Main Supervisor – In progress
3. Muhammad Bilal, PhD, Co-Supervisor – In progress
4. Ahmad Izul Fakhruddin bin Azimi, PhD, Main Supervisor – In progress

Consultation

1. Konsultansi untuk Program Latihan dan Bimbingan Olimpiad Matematik 2019 (Training), Vendor: MRSM Tun Abdul Razak, Pekan. Kos keseluruhan: RM300, No Vot: UCT1903035, 21/8/2019

Association Membership

1. SIAM (Society for Industrial and Applied Mathematics), USA
2. PERSAMA (Persatuan Sains Matematik Malaysia), Malaysia. Ahli Seumur Hidup PERSAMA sejak 2017. No. ahli: NS2017-12
3. PAKAD (Persatuan Staf Akademik Universiti Malaysia Pahang). Nombor keahlian: PAKAD 252

Teaching Experience

- Postgraduate (Master):
 - Mathematical Modelling, Research Methodology
- Undergraduate (Degree):
 - Discrete Mathematics, Fundamental Discrete Structure, Calculus, Engineering Mathematics III, Mathematics for Management, Applied Calculus, Applied Mathematics, Technical Mathematics.
- Undergraduate (Diploma):
 - Calculus, Fundamental Discrete Structure, Statistics and Probability, Elementary Statistics, Foundation of Mathematics, Technical Mathematics III,
- Preparatory Intensive English for China Students:
 - PIE0001 Mathematics