### **PUSAT SAINS MATEMATIK**

### **UNIVERSITI MALAYSIA PAHANG**



## **FARAHANIM BINTI MISNI**

Position: Lecturer in Mathematics (DS45)

tel: 09-5492414 email: <a href="mailto:farahanim@ump.edu.my">farahanim@ump.edu.my</a>

## **Academic Qualification:**

- Master of Science (Mathematics)(2008), Universiti Teknologi Malaysia, Skudai
   Dissertation: A Study on Cooling Schedule Effect of Simulated Annealing in Solving Job Shop Scheduling
- 2. Bachelor of Science (Industrial Mathematics)(2007), Universiti Teknologi Malaysia, Skudai

## **Professional Membership:**

1. PERSAMA (Persatuan Sains & Matematik Malaysia)

# **Teaching Contact:**

- 1. BUM2433 (Statistics for Management)
- 2. BUM2413 (Applied Statistics)
- 3. DUM2413 (Statistics & Probability)
- 4. BUM1123 (Mathematics for Management)
- 5. DUM1113 (Basic Mathematics)
- 6. BAM1012 (Engineering Mathematics I)
- 7. BUM2012 (Numerical Method)
- 8. BUM1313 (Mathematics)

### **Administrative Responsibility:**

- 1. Academic Committee, Faculty (Coordinator of Part Time Program) (2011-2013)
- 2. Academic Committee, Faculty (Coordinator of Teaching & Learning) (2012-2015)
- 3. E-learning Committee (Faculty Representative)(2013-2015)

- 4. Librarian Committee (Faculty Representative) (2013-2015)
- 5. Committee of Program (Sciences)(2015)

#### **Committee Member:**

- 1. Jawatankuasa Tetap Sebutharga/Tender Fakulti (2009)
- 2. K-Portal (2009-2010)
- 3. UniK (2009-2010)
- 4. KIK(Kumpulan Inovatif & Kreatif) (2009)
- 5. Karnival Akademik (2009)
- 6. Unit Jaminan Kualiti Fakulti (2010)
- 7. Majlis Anugerah Cendekia Bitara (2010-2011)
- 8. ICONT 2012 (International Conference of Nanotechnology)(2011)
- 9. Karnival Bioteknologi, Herba & ICT Negeri Pahang (2012)
- 10.2<sup>nd</sup> ISM International Statistical Conference (2013)
- 11. National Conference on Industry-Academia Joint Initiatives in Biotechnology (CIA:Biotech)(2013)
- 12. Program Sehari Bersama Penasihat Akademik (2014)

## **Expert Area**:

- 1. Operational Research
- 2. Metaheuristic
- 3. Statistics

#### Research Interest:

- 1. Operational Research (Heuristic)
- 2. Statistics

#### **Conferences:**

- 1. Malaysian Technical Universities International Conference on Engineering & Technology (MUiCET 2011 & 2014), 13 15 Nov 2011, Batu Pahat, Johor & 10 12 Nov 2014, Melaka.
- 2. International Health Conference (ICHI 2011), 7-8 Dec 2011, Kuantan, Pahang.
- 3. International Conference on Food Science & Nutrition, 2012 (ICF SN 2012),2-4 Apr 2012, Kota Kinabalu, Sabah.
- 4. International Conference of Science & Technology, 2012 (ICSTIE 2013)
- 5. An International Innovation, Invention & Design Competition & Conference (ICON 2014)
- 6. Innovative Practices in Higher Education Expo (I-PHEX 2015) 6 Aug 2015, Kuala Lumpur.
- 7. International Conference on Knowledge Transfer (2015) 1 -3 Dec 2015, Putrajaya.
- 8. International Conference on Control, Optimization and Differential Equation (CODE2017), 18-20 January 2017, Putrajaya.
- 9. The 7<sup>th</sup> International Conference on Optimization and Control with Application (OCA2018), 1-4 August 2018, Melaka.
- 10. International Quantitative Research and Applications Conference (IQRAC2018), 5-8 August 2018, Kuching, Sarawak (IQRAC2018)
- 11. 30<sup>th</sup> International Invention, Innovation & Technology Exhibition 2019 (ITEX2019), 2-4 May 2019, Kuala Lumpur, Malaysia.
- 12. 2<sup>nd</sup> International Conference on Applied and Industrial Mathematics and Statistics (ICOAIMS2019),

- 23-25 July 2019, Kuantan, Pahang.
- 13. 11<sup>th</sup> International Fundamental Science Congress (iFSC2019), 30-31 October 2019, Putrajaya, Malaysia.
- 14. International Conference on Recent Advances in Applied Mathematics (ICRAAM2020), 4-6 February 2020, Kuala Lumpur, Malaysia.
- 15. 2<sup>nd</sup> Symposium on Multidisciplinary Sciences 2020, 12 August 2020, UPM, Serdang.

#### **Research Grants:**

- 1. Studies on Heavy Metals Contamination of Water and Sediment from Pahang River, Pahang, Malaysia (RDU090309)(2009-2010)
- 2. Mixed Heuristic Approach for Multidimensional Knapsack Problem (RDU100376)(2010-2012)
- 3. Pahang State Terrestrial Background Radiation Mapping (RDU110365)(2011-2013)
- 4.A Ranking Algorithm for Pareto Optimal Solutions in Fuzzy Multi-Criteria Decision Making (RDU1703199)(2017-2019)

## **Publications (Proceeding/Poster):**

- Determination of Heavy Metals in Water and Sediment from Pahang River, Pahang, Malaysia.
   Malaysian Technical Universities International Conference on Engineering & Technology (MUICET 2011)
- 2. Determination of Vitamin C and Mineral from Spinach (Amaranthus Viridis) Chips for Nutrient Facts. International Health Conference (ICHI 2011)
- 3.The Production of Sugar from Banana Peels (Musa Acuminata and Musa Sapientum) and the Determination of Sucrose by HPLC. International Conference on Food Science & Nutrition, 2012 (ICFSN 2012)
- 4. Mixed Heuristic Method for Multidimensional Knapsack Problem. International Conference of Science & Technology, 2012 (ICSTIE 2013)
- 5.A Study of Kuantan, Pahang Malaysia Terrestrial Background Radiation in Determination of Uranium & Pottasium-40 (MUiCET, 2014)
- 6. Construction of Knowledge Through Mistakes: A Learning Module (ICON, 2014)
- 7. Enhancing Knowledge Transfer Experience Through Computer-Aided Design, Virtual Learning Environment and Community Engagement. International Conference on Knowledge Transfer (2015) & Innovative Practices in Higher Education Expo (I-PHEX 2015)

### **Publications (Journal):**

1. Misni, F and Lee, L.S. (2017). A Review On Strategic, Tactical and Operational Decision Planning in

- Reverse Logistics of Green Supply Chain Network Design, *Journal of Computer and Communications*, 5, 83-104.
- 2. Misni, F and Lee, L.S. (2019). Harmony Search for Multi-depot Vehicle Routing Problem, *Malaysian Journal of Mathematical Sciences*, 13(3), 311-328.
- 3. Misni, F and Lee, L.S. (2019). Harmony Search Algorithm for Location-Routing Problem in Supply Chain Network Design, *ASM Science Journal*, 12(5), 48-56.
- 4. Misni, F., Lee, L. S., & Seow, H. V. (2020). Hybrid Harmony Search-Simulated Annealing Algorithm for Location-Inventory-Routing Problem in Supply Chain Network Design with Defect and Non-Defect Items. *Applied Sciences*, *10*(18), 6625

# **Publications (Module):**

- 1. Applied Statistics Module (ISBN 978-967-2226-02-4)(2018)
- 2. Statistical Tables (ISBN 978-967-0120-85-6)(2018)
- 3. Basic Mathematics (Internal Use)(ISBN 978-967-0120-93-5)(2013)

# **Community Service:**

- 1. Mini MAHA (2011)
- 2. Karnival Ez-Scimat jointly organized with MOSTI (2012)
- 3. Program Matemadesa jointly organized with PERSAMA (2011 2012)
- 4. Olimpiad Matematik Kebangsaan jointly organized with PERSAMA (2010 2015)
- 5. Oh My Math! jointly organized with ECER (2014)
- 6. Program Motivasi & Matematik (SMK Ahmad, Pekan)(2015)