

DR. HAMZEH HUSNI RASHEED ZUREIGAT

Nationality: Jordanian

Place and Date of Birth: Jordan, December 1990.

Marital Status: single

Address: Amman, Jordan

Mobile: +962-776990253

Email: a_zreq@yahoo.com



EDUCATION

2016-2019 **Ph.D.** (Mathematics) Universiti Sains Malaysia (USM), Malaysia, Penang.

Thesis: Finite Difference Method for Solving Fuzzy Time Fractional Diffusion and Advection Diffusion Equations

2014-2015 **M.Sc.** (Applied Mathematics, Very Good) Universiti Sains Malaysia (USM), Malaysia.

Thesis: Numerical solution for solving one dimensional fuzzy heat equation.

2009-2014 **B.Sc.** (Mathematics Science and Statistics, Good) Jordan University of Science and Technology, Irbid, Jordan.

2008-2009. General Secondary Certificate, Jerash, Jordan.

CAREER & RESEARCH INTEREST:

Fuzzy Fractional Partial Differential Equations, fractional diffusion and advection diffusion equations, Applied Mathematics on cancer models, Fractional calculus

WORK ACADIMIC EXPERIENCE

- Assistant Professor, Department of Mathematics, Faculty of Sciences and Information Technology, Jadara University, Jordan, (**Feb. 15, 2020**).

Courses Taught:

1) **Undergraduate:**

Calculus I and II, Ordinary Differential Equation I, Partial Differential Equations, Linear Algebra, Software Packages in Mathematics, Probability and Statistics(1), logic, number theory, mathematical methods.

2) **Postgraduate:**

Numerical analysis, linear algebra

• **Teaching Assistant**

Universiti Sains Malaysia, Penang, Malaysia, **(September 2018 – September 2019).**

Course taught: Teaching Special courses: Tutorial for basic courses.

- **Teacher at Socrates International Secondary School/ Penang, Malaysia (2016-2017).**
Teaching mathematics and science (GCSE Curriculum)

MEMBERSHIPS UNIVERSITY COMMITTEES

- Chairman of the Commission of distance learning for Faculty of Science (April 2020 to date).
- Assistant Dean for Accreditation Assurance Committee for the mathematics department (September 2021 to date).
- Chairman of the Commission of marketing for Faculty of Science (September 2021 to date).
- Chairman of the Commission of eLearning for Mathematics Department (September 2021 to date).
- Chairman of the Commission of the scientific day for Faculty of Science.
- Member of the Social Committee for Mathematics Department (September 2021 to date).
- Member of the Accreditation Assurance Committee (September 2020 to date).
- Member of the Accreditation Board for Engineering and Technology (ABET) for Faculty of Science.
- Member of the committees for scientific research and study plan and graduate studies in the department.

SKILLS

Computer skills:

- Wolfram mathematica software,
- Microsoft Teams
- Math lab software,
- Mabel math software,
- LaTeX,
- Mendeley software,
- International Computer Driving License (ICDL).

Languages: Arabic (mother language), English (fluently).

PUBLICATINS AND PRESENTATIONS

• JOURNALS

1. Zureigat, H., Ismail, A. I., & Sathasivam, S. (2018). Numerical solutions of fuzzy fractional diffusion equations by an implicit finite difference scheme. *Neural Computing and Applications*, 1-10.
2. Zureigat, H., Ismail, A. I., & Sathasivam, S. (2021). Numerical solutions of fuzzy time fractional advection-diffusion equations in double parametric form of fuzzy number. *Mathematical Methods in the Applied Sciences*, 44(10), 7956-7968.
3. Almutairi, M., Zureigat, H., Izani Ismail, A., & Fareed Jameel, A. (2021). Fuzzy numerical solution via finite difference scheme of wave equation in double parametrical fuzzy number form. *Mathematics*, 9(6), 667.
4. Zureigat, H., Ismail, A. I., & Sathasivam, S. (2019). A compact Crank–Nicholson scheme for the numerical solution of fuzzy time fractional diffusion equations. *Neural Computing and Applications*, 1-8.
5. Talafha, M., Alkouri, A. U., Alqaraleh, S., Zureigat, H., & Aljarrah, A. Complex hesitant fuzzy sets and its applications in multiple attributes decision-making problems. *Journal of Intelligent & Fuzzy Systems*, (Preprint), 1-29.
6. Jameel, A. F., Saaban, A., & Zureigat, H. H. (2018). Numerical solution of second-order fuzzy nonlinear two-point boundary value problems using combination of finite difference and Newton's methods. *Neural Computing and Applications*, 30(10), 3167-3175.
7. JAMEEL, A., & ZUREIGAT, H. H. (2015). Solution of Fuzzy Heat Equations By homotopy Perturbation Method (HPM). *Asian Journal of Mathematics and Computer Research*, 7(2), 127-139.
8. Al-khateeb, A., Zureigat, H., Ala'yed, O., & Bawaneh, S. (2021). Ulam–Hyers Stability and Uniqueness for Nonlinear Sequential Fractional Differential Equations Involving Integral Boundary Conditions. *Fractal and Fractional*, 5(4), 235.
9. Heilat, A. S., Zureigat, H., Hatamleh, R. E., & Batiha, B. (2021). New Spline Method for Solving Linear Two-Point Boundary Value Problems. *European Journal of Pure and Applied Mathematics*, 14(4), 1283-1294.

• CONFERENCES

1. Zureigat, H. H., & Ismail, A. I. M. (2016, July). Numerical solution of fuzzy heat equation with two different fuzzifications. In 2016 SAI Computing Conference (SAI), London, United Kingdom (pp. 85-90). IEEE.
2. Zureigat, H., & Ismail, A. I. (2018, June). Numerical solutions of fuzzy fractional diffusion equations by two different finite difference schemes. In AIP Conference Proceedings, Pahang, Malaysia (Vol. 1974, No. 1, p. 020085). AIP Publishing.
3. Zureigat, H., Izani Ismail, A., & Sathasivam, S. (2018). Explicit Solutions of Fuzzy Time Fractional Diffusion Equations in Double Parametric Form of Fuzzy Number. ICFDA – Amman, Jordan, 2018 (pp. 80-87). IEEE.

- **THEASES PUBLICATIONS AND CONFERENCES.**

1. Speaker **in the International Conference on Fractional Differentiation and its Applications** (ICFDA – Amman, Jordan, 2018).
2. Speaker in the International Conference on Mathematical Sciences and Technology (MathTech – pulau Penang, Malaysia 2018)
3. Speaker in **the Simposium Kebangsaan Sains Matematik KE-25** (SKSM 25 – Pahang, Malaysia 2017).
4. Participant in the science and information computing Conference (SAI computing – London, United Kingdom 2016.

COURSES AND CERTIFICATES

- Participant in workshop for Lecture on evaluation and evaluation methods
- Participant in workshop for distance learning using Microsoft Teams.
- Participant in workshop for scientific research.
- Participant in workshop for Accreditation Board for Engineering and Technology (ABET)
- Participant in workshop for data science in Wolfram Mathematica.

- Participant and speaker in the postgraduate colloquium for research mode students.

- Participant in workshop for an introduction to heat and mass transfer.

- Participant in workshop for numerical solutions for fuzzy dynamic systems.

REFERENCES:

1. Prof. Ahmed Izani Ismail, s , Universiti Sains Malaysia (USM), Faculty of Science, Department of Mathematics and Statistics, room number:30, Ext:3657/3284,,Malaysia,

E-mail: ahmad_izani@usm.my .

2. Prof. Saratha Sathasivam, Universiti Sains Malaysia (USM), Faculty of Science, Department of Mathematics and Statistics, phone number:04-6532428,Malaysia,

E-mail: saratha@usm.my .

