



Name : Ahmed Mostafa Abdelhady Ismaeel

Nationality : Egyptian

Birth Date and Place : 10th of March 1986, Sultanate of Oman

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Educational Qualifications

1. Bachelor of Science (Mathematics) with grade of **Distinction with first class honours**, Faculty of Science, Department of Mathematics, University of Assiut, 20/9/2003-22/7/2007.
2. Pre-Master with grade of **very good**, 2009.
3. Master of Science degree (Mathematics- scientific computing), Faculty of Science, Department of Mathematics, University of Assiut, 26/6/2012.
4. Ph. D. In Mathematics (Applied Mathematics) , School of Mathematics and Statistics, University of Glasgow, 13/3/2020

Statement positions

1. Demonstrator, Department of Mathematics, Faculty of Science, University of Assiut, 15/11/2007-10/8/2012.
2. Assistant Lecturer, Department of Mathematics, Faculty of Science, University of Assiut, 11/8/2012- 30/9/2015.
3. Tutor and Lecturer at School of Mathematics and Statistics, University of Glasgow, 1/10/2015-30/12/2020.
4. Lecturer, Department of Mathematics, Faculty of Science, University of Assiut, 28/6/2020-till now

Dissertation

1. Computational of Convective Heat Transfer in Nanofluids.
2. A Mathematical Model for Photothermal Therapy of Spherical Tumours.

Field of Interest

1. Drug delivery and cancer treatment.
2. Calculations and optimization of physical parameters of nanofluids to develop more efficient heat transfer fluids to be used in cooling systems.
3. Studying convective boundary-layer flow of a nanofluid past flat plates numerically for possible boundary conditions, namely those in which both the temperature and the nanoparticle fraction.
4. Solving system of partial differential equations using some numerical methods.
5. Studying transport phenomena in Direct Methanol Fuel Cells.

Publications

1. A.M. Ismaeel, M.A. Mansour, F.S. Ibrahim, F.M. Hady, Numerical Simulation for Nanofluid Extravasation from a Vertical Segment of a Cylindrical Vessel into the Surrounding Tissue at the Microscale, *Applied Mathematics and Computation*, under review.
2. M. Mansour, S. Ahmed, F. Hady, F. Ibrahim, A. Ismaeel, Numerical Simulation for Nanoparticle Extravasation from a Single 2D Vessel, *journal of thermal analysis and calorimetry*, under review.
3. F. M. Hady, F. S. Ibrahim, H. M. El-Hawary and A. M. Abdelhady, Effect of suction/injection on natural convective boundary-layer flow of a nanofluid past a vertical porous plate through a porous medium, *Journal of Modern Methods in Numerical Mathematics*, **3** (2012) 53.
4. F. M. Hady, F. S. Ibrahim, H. M. El-Hawary and A. M. Abdelhady, Numerical study for MHD boundary-layer flow of a nanofluid past a stretching vertical semi-infinite flat plate, *Applied Mathematics*, **3** (2012) 121.
5. F. S. Ibrahim, F. M. Hady, H. M. El-Hawary and A. M. Abdelhady, Free convection flow of nanofluids past power law stretching vertical plate, *The Third Scientific Conference for Young Researchers on Basic Science and Technology, Faculty of Science, Assiut University, Assiut, Egypt, April 5* (2011) 9.

Current Postgraduate Students

Nora Fattah (2020-) Studying The influence of Nanoparticles Drainage Through Lymphatic Vessels.

Research IDs:

ORCID: <https://orcid.org/0000-0003-2798-2131>

Google Scholar:

<https://scholar.google.com/citations?user=66QldsgAAAAJ&hl=en>

Research Gate: https://www.researchgate.net/profile/Ahmed_Ismaeel

Research Grants:

Agency: The Academy of Scientific Research and Technology (ASRT).

Grant Title: Numerical Simulation for Cancer Treatment Using Photothermal Therapy.

Duration: 1/9/2020 - 31/8/2021.

Memberships:

- A member of Math-Mechanics Professional Learning Community (PLC) for Science, technology, engineering, and mathematics (STEM) teaching Diploma.

<https://sites.google.com/21pstem.org/math-mechanics/home>

Presentations and Events:

- Modelling & Experiments in Drug Delivery Systems (MEDDS) workshop, University of Glasgow, 3rd -5th September 2018.
- A 10 mins presentation for PubhD on at Waterstones Sauchiehall Street, 16th April 2019.
- “7 mins of science”, University of Glasgow, 19 January 2019.
- Edinburgh Mathematical Society Postgraduate Meeting for Students, Edinburgh, 2018.
- British Applied Mathematics Colloquium, University St Andrews, 26-29 March 2018.
- SofTMeCh Industry Dialogue, University of Glasgow, 24 Nov 2017.
- Mathematics for Industry PhD Modelling Week, Edinburgh, 31/1/2017.
- ‘The Dialogue on Cancer’ - between clinicians, biologists and modellers, 25/11/2016.
- British Applied Mathematics Colloquium, University of Surrey 10-12 April 2017.
- CMALS Early Career Researcher Symposium, Glasgow, 02/12/2016.
- Conference of young researchers (Oral). Annual Conference for Young Scientists on Basic Sciences and Technology, Faculty of Science, Assiut University, Assiut, Egypt, 2011.

Computer Skills: Programming with Fortran, Mathematica, C++ , LibMesh Library and MATLAB.

Teaching Experience:

1. Demonstrator, Faculty of Science, Department of Mathematics, University of Assiut, 2007-2012.

2. Assistant Lecturer at the Faculty of Science Department of Mathematics, University of Assiut, 2012-2015.
3. Tutor at School of Maths and Stats, University of Glasgow, 2016
4. Participation in teaching, giving regular exercises sessions, preparation and evaluation of mid-term examinations for undergraduate students in Faculties of Engineering, Education and Science.
5. I have successfully completed the Equality and Diversity Essentials course at the University of Glasgow in 2017.
6. I am delivering lectures for Professional Diploma Program to Prepare Teachers for STEM Schools.
7. I am a member of [Math-Mechanics Professional Learning Community](#) (PLC) for Science, Technology, Engineering, and Mathematics (STEM) teaching Diploma.

Contribution to teaching the following courses:

1. Mathematics 1. (At University of Glasgow).
2. 2B Linear Algebra. (At University of Glasgow).
3. Calculus. (At University of Assiut).
4. Advanced Calculus. (At University of Assiut).
5. Mathematical Applications in Mathematics. (At University of Assiut).

Related Professional Experience

Attained and satisfactorily completed the following training programs organized by the FLDC (Faculty and leadership development centre)

1. Code of Ethics (15 hours)
2. International Publishing of Research (15 hours)
3. Strategic planning (15 hours)
4. E-Learning (15 hours)
5. Conference Organization (15 hours)
6. Research Team Management (15 hours)

I hereby declare that the above given information is correct and true to the best of my knowledge.