



جامعة العلوم والتقنية في الفجيرة
University of Science and Technology of Fujairah

CURRICULUM VITAE

PERSONAL INFORMATION

Name:	Bilal Ahmed
Nationality:	Pakistan
Job Title:	Visiting Assistant Professor
Marital Status:	Married
College:	Humanites and Sciences
Department:	Mathematics
Date of Birth:	07 th Jan, 1986
Mobile Number:	009715294467
E-mail:	(Personal) bilalmaths7@yahoo.com , (Office) b.ahmed@ustf.ac.ae

EDUCATIONAL BACKGROUND

1. Doctorate

University:	International Islamic University Islamabad,
Country:	Pakistan
Date of Obtaining degree:	22 nd October 2018
Major:	Mathematics
Minor:	Mathematics
Title:	A Numerical Study of Inertia and Streamline Curvature Effects on Peristaltic Flows

2. Master

University:	Riphah International University, Islamabad
Country:	Pakistan
Date of Obtaining degree:	12 th March, 2012
Major:	Mathematics
Minor:	Mathematics
Title:	Mixed Convection Stagnation Point Flow of an Oldroyd-B Fluid

3. Bachelor

University:	University of the Punjab, Lahore
Country:	Pakistan
Date of Obtaining degree:	07 th Jan, 2008

COMPUTER SKILLS

MATLAB	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Mathematica	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
LATEX	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Scientific Workplace	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Word	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Excel	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Power Point	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
MS Outlook	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Internet	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced

LANGUAGE SKILLS

Arabic	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input type="checkbox"/> Advanced
English	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced
Urdu	<input type="checkbox"/> Beginner	<input type="checkbox"/> Intermediate	<input checked="" type="checkbox"/> Advanced

PROFESSIONAL EXPERIENCE

From (year)	To (year)	Position	Employer	Country
2022	To Present	Visiting Assistant Professor	University of Science and Technology of Fujairah formerly known as Ajman University UAE	UAE
2018	2022	Assistant Professor	The University of Lahore	PAK
2017	2018	Research Associate	International Islamic University	PAK
2012	2017	Lecturer	Army Public college	PAK
2007	2012	Lecturer	Pakistan Air Force College (FAZAIA)	PAK

PUBLICATIONS**1. Books**

Study of Inertia & Streamline Curvature Effects on Peristaltic Flows – Finite Element Analysis
LAP LAMBERT Academic Publishing, Germany (2019-08-28)
ISBN-13: 978-620-0-28826-4 ISBN-10: 6200288267 EAN: 9786200288264

2. Journal Articles

2022 Z.T. Wei, **B. Ahmed**, K. Al-Khaled, S.U. Khan, M.I. Khan, S. Ahmad, M. Y. Malik, and W.F. Xia. "Peristaltic Blood Transport in Non-Newtonian Fluid Confined by Porous Soaked Tube: A Numerical Study Through Galerkin Finite Element Technique. (Published in Arabian Journal for Science and Engineering 47(1) (2022), 1019-1031).

B. Ahmed, S.U. Khan, S. Ahmad, S.A. Shehzad and W. Chamman: Galerkin finite element analysis for peristaltic flow of micropolar fluid through porous soaked inclined tube independent of wavelength. Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering, 236(3), (2022) 1067-1075

B. Ahmed, F. Akbar, A. Ghaffari, S.U. Khan, M.I. Khan, & Y.D. Reddy: Soret and Dufour aspects of the third-grade fluid due to the stretching cylinder with the Keller box approach. Waves in Random and Complex Media, (2022) 1-13.

2021 H.G. JiLe, **B. Ahmed**, K. Al-Khaled, M.T. Mehdi, S.U. Khan, M.I. Khan, Y.M. Chu: Peristaltic Activity in an Asymmetric Inclined Channel with Inertial Forces under the Inducement of Magnetic Field: Finite Element Method. (Published in Alexandria Engineering Journal 60 (2021), 4723-4734).

W.M. Qian, **B. Ahmed**, S.U. Khan, M.I. Khan, A.H. Hamid: Novel Scientific Simulations (Finite Element Method) for Peristaltic Blood Flow in an Asymmetric Channel: Applications of Magnetic and Inertial Forces. (Published in Journal of Magnetism 26(1) (2021), 129-140).

T. Javed, A.H. Hamid, **B. Ahmed** and N. Ali: Effect of Heat Transfer on Peristaltic Flow in Presence of Heat Generation against Higher value of Reynolds number using FEM. (Published in Journal of Theoretical and Applied Mechanics 59(2) (2021) 279-292)

A.U. Khan Niazi, J. He, R. Shafiqat, **B. Ahmed**: Existence, uniqueness, and Eq-Ulam type Stability of fuzzy fractional differential equation. (Published in Fractal and Fractional, 5(3) (2021), 66)

Q.H. Shi, **B. Ahmed**, S. Ahmad, S.U. Khan, K. Sultan, M.N. Bashir & J.D. Chung. Dual solution framework for mixed convection flow of Maxwell nanofluid instigated by exponentially shrinking surface with thermal radiation. (Published in Scientific Reports, 11(1) (2021) 1-12.)

2020 D. Nie, A.U.K. Niazi and **B. Ahmed**: On Local Generalized Ulam-Hyers Stability for Nonlinear Fractional Functional Differential Equation. (Published in Mathematical Problems in Engineering 2020, 3276873, 12 pages)

2019 **B. Ahmed** and T. Javed: A Study of Full Navier-Stokes Equations of Peristaltic Flow in a Porous-Saturated Tube under the Inducement of Magnetic Field: Finite Element Analysis. (Published in Chaos, Solitons & Fractals 125 (2019), 79-87).

- 2018** Tariq Javed, **B. Ahmed**, A.H. Hamid and M. Sajid: Numerical analysis of peristaltic transport of Casson fluid for non-zero Reynolds number in presence of magnetic field. (Published in *Nonlinear Engineering – Modelling and Application*, 7(3) (2018), 183–193).
- B. Ahmed**, T. Javed, and N. Ali: Numerical study at moderate Reynolds number of peristaltic flow of micropolar fluid through a porous-saturated channel in magnetic field. (Published in *AIP Advances*, 8, 015319 (2018)).
- T. Javed, **B. Ahmed** and M. Sajid: Numerical study of mixed convective peristaltic flow through vertical tube with heat generation for moderate Reynolds and wave numbers. (Published in *Communications in Theoretical Physics* 69(4) (2018), 449-460).
- B. Ahmed**, T. Javed and M. Sajid: Study of peristaltic flow of blood flow model-Casson fluid in tube engaged in magnetic field for effects of moderate Reynolds number. (Published in *Journal of Quality Measurement and Analysis*, 14(1) (2018), 101-113).
- 2017** T. Javed, **B. Ahmed**, N. Ali and A.H. Hamid: Finite element analysis of the hydromagnetic peristaltic flow in a porous-saturated channel at moderate Reynolds numbers. (Published in *Journal of Porous Media*, 20(9) (2017), 841-857).
- A.H. Hamid, T. Javed, **B. Ahmed**, N. Ali: Numerical study of two-dimensional non-Newtonian peristaltic flow for long wavelength and moderate Reynolds number. (Published in *Journal of the Brazilian Society of Mechanical Sciences and Engineering*, 39(11) (2017), 4421-4430).
- B. Ahmed**, T. Javed, A.H. Hamid and M. Sajid: Numerical analysis of mixed convective peristaltic flow in a vertical channel in presence of heat generation without using lubrication theory. (Published in *Journal of Applied Fluid Mechanics* 10(6) (2017), 1813-1827).
- Tariq Javed, A.H. Hamid, **B. Ahmed** and N. Ali: Effect of high Reynolds number on hydromagnetic peristaltic flow in an inclined channel using finite element method. (Published in *Journal of Korean Physical Society* 71(12) (2017), 950-962).

3. Conferences

- 2021 International HAZAR Scientific Researches Conference - II (IHSRC-II), Khazar University, Baku, Azerbaijan. 10th – 12th April, 2021
- 2018 7th International Conference on “Recent Developments in Fluid Mechanics and Environmental Sciences”, International Islamic University, Islamabad Pakistan. 13th – 15th February 2018.
- 2017 Third National Conference on Mathematical Sciences" (NCMS 2017), International Islamic University, Islamabad, Pakistan, 27th– 28th April 2017,
- 2016 "Second International Conference on Pure & Applied Mathematics" (ICPAM 2016), University of Sargodha, Sargodha, Pakistan. 26th – 27th November 2016,
- 2015 6th International Conference on “Recent Developments in Fluid Mechanics”, National University of Science & Technology (NUST), Pakistan., 17th – 18th March 2015.
- 2013 5th International Conference on “Recent Developments in Fluid Mechanics”, Quaid-e-Azam University, Islamabad Pakistan. 22nd – 24th June 2013
- 2013 "Second Conference on Mathematical Sciences" (SCMS 2013), International Islamic University, Islamabad, Pakistan, 01st – 02nd November 2013.
- 2012 “Two days Conference on Mathematical Sciences" (TCMS 2012), International Islamic University, Islamabad, Pakistan, 19th – 20th October 2012.

PROFESSIONAL AND ACADEMIC ACTIVITIES

Master Theses Supervision

- Study of Entropy Generation in a Flow over a Curved Surface Aman Ullah (W-2022)
- Numerical Study at Moderate Reynolds Numbers of Peristaltic Flow of Micropolar Fluid Through a Porous-Saturated Channel in Presence of Magnetic Field Hifza Ahsan (W-2022)
- Computational Analysis of Heat and Mass Transfer of Non-Newtonian Nanofluid Flow over horizontal Stretching Surface Khansa Nasir (W-2022)
- Influence of Non-Linear Thermal Radiations on The Non-Orthogonal Stagnation Point Flow of Non-Newtonian Fluids Muhammad Umair (W-2022)
- Role of Marangoni Convection and Cross Diffusion in a Flow of Non-Newtonian Fluid with Exponential Space Dependent Heat Source Rida Iqbal (W-2022)
- Study of Non-Newtonian Fluids with Thermal Radiations Over A Shrinking Sheet. Hooria Riaz (W-2022)
- Impact of Chemical Reaction on Non-Newtonian Nanofluid subject to Connective Boundary Condition over a Radioactive Riga Plate. Hafiza Nabgha Kanwal (W-2022)
- Numerical Study of Peristaltic Flow of Non-Newtonian Fluid in Asymmetric Channel for Moderate Reynolds Number. Aamir Mehmood (W-2022)
- Numerical Investigation of Boundary Layer Flow of non-Newtonian Fluids over a Stretching Cylinder. Ambreen Ahmed (W-2021)
- Boundary Layer Flow of non-Newtonian Nano Fluids Instigated by Exponentially Shrinking Flat Sheet. Saima Jabbar (W-2021)
- Numerical Investigation of Heat Transfer Analysis of a Flow over a Riga Plate. Tehseen Kousar (W-2021)
- Study of Inertial and Magnetic Forces in Peristaltic Flow of the Micropolar Fluid in Symmetric and Asymmetric Channels Fizza Anwar (W-2021)
- Entropy Generation for Peristaltic Flow of non-Newtonian Fluids with Magnetohydrodynamics Effects. Hafsa Arshad (W-2021)
- Heat and Mass Transfer of Metachronal Propulsion of a Magnetized Particle-Fluid Suspension in a Ciliated Channel. Kalsoom Fatima (W-2021)
- Numerical Study of Unsteady MHD Convective Rotating Flow Past an Infinite Vertical Surface. Ayisha Shafiq (W-2021)
- Heat and Mass Transfer Analysis of Mixed Convective-Radiative Flow of Non-Newtonian Fluid Through a Vertical Sheet Asifa Rehman (W-2021)
- Numerical Study of Stagnation Point Flow Past Over a Cylinder Muhammad Shahzad Zafar Khan (W-2021)
- Numerical Study of Orthogonal Stagnation Point Flow of Oldroyd-B Nanofluid on a Flat Sheet. Sana Mukhtar, (W-2020)
- Study of Some Physical and Non-Physical Solutions of Flow of Nanofluids on a Flat Surface. Kiran Sultan, (W-2020)
- Heat and Mass Transfer Analysis of a flow on a Curved Surface with Soret and Dufour Effects. Faryal Akbar, (W-2020)
- Study of Peristaltic Flow in Asymmetric Inclined Channel Using Finite Element Method. Muhammad Tanseer ul Mehdi, (F-2020)
- Study of Oblique Stagnation Point Flow of non-Newtonian Fluid . Muhammad Naveed Rafique, (F-2020)
- Heat Transfer Analysis and Inducement of Magnetic field in a Flow of Maxwell Fluid over a Stretching Sheet Farhan Illahi, (W-2019)

AWARDS

- Merit Scholarship: During M. Phil; Riphah International University, Islamabad, Pakistan; Feb 2010.
- Merit Scholarship: During M. Phil; Riphah International University, Islamabad, Pakistan; Sep 2010.
- Distinction: Highest CGPA in M. Phil; Riphah International University, Islamabad, Pakistan; Mar, 2012
- HEC PAK Scholarship: PhD fellowship for 5000 scholars – Phase II under Category A; HEC Pakistan, July 2012 – July 2016.
- HEC PAK Approved Supervisor May, 2019 and April 2025 in the discipline of Physical Sciences,