

CURRICULUM VITAE OF TARIKUL ISLAM



CURRENT POSITION

Assistant Professor

Department of Mathematics

Faculty of Science

Bangabandhu Sheikh Mujibur Rahman Science and
Technology University, Gopalganj-8100, Bangladesh.

Cell Phone No.: +351-920496411, +88-01778186718

Email: tarikulamath@gmail.com, ti.math@bsmrstu.edu.bd

Orcid ID: <https://orcid.org/0000-0003-0220-6996>

CAREER OBJECTIVE

To utilize my passion for applied mathematics, and educate students in the field of applied mathematics. I aim to foster a lifelong love for learning, and promote critical thinking skills, and inspire and empower students to become proficient mathematicians. I also aim to apply my knowledge and expertise to make meaningful contributions to research, thereby aiding in the growth and innovation of industries such as technology, engineering, and scientific research. Through my dedication and commitment to excellence in teaching, I aspire to make a positive impact on the educational journey and future success of my students.

RESEARCH INTEREST

- Computational Fluid Dynamics (CFD)
- Magneto-hydrodynamics (MHD)
- Heat and Mass Transfer
- Non-Newtonian Fluids
- Numerical Analysis
- Data Assimilation
- Machine Learning
- Multiphase Flow
- Optimization

ACADEMIC QUALIFICATIONS

Master of Philosophy (MPhil) in Mathematics

University : Bangladesh University of Engineering & Technology, Dhaka, Bangladesh.
Department : Mathematics
Faculty : Engineering
Result : 3.31 (Out of 4.0)

Passing Year : 2021 (Date of publication of results 05 July 2021)
Thesis Title : **Unsteady natural convection heat transfer of nanofluids inside a semi-circular cavity under the influence of periodic magnetic field**
Supervisor : Professor Dr. Nazma Parveen
Major Studied Courses : Fluid Dynamics, Computational Fluid Dynamics & Heat Transfer, Partial Differential Equations, Advanced Numerical Methods, Numerical Heat Transfer & Fluid Flow, Perturbation & Approximation Theory, and Finite Element Analysis of Heat & Mass Transfer.
Medium of Instruction : English

Master of Science (M.Sc.) in Mathematics

University : Jagannath University, Dhaka, Bangladesh.
Department : Mathematics
Faculty : Science
Result : 3.90 (Out of 4.0)
Passing Year : 2011 (Date of publication of results 22 January 2015)
(Examination held in 2014, due to session jam)
Thesis Title : Unsteady MHD forced convection flow of a micropolar fluid along a permeable wedge with convective surface boundary condition
Supervisor : Professor Dr. Md. Shariful Alam
Major Studied Courses : Dynamical Systems, Fluid Dynamics, Differential & Integral Equations, Advanced Numerical Analysis, Aerodynamics, Quantum Mechanics.
Medium of Instruction : English

Bachelor of Science (B.Sc.) in Mathematics

University : Jagannath University, Dhaka, Bangladesh.
Department : Mathematics
Faculty : Science
Result : 3.79 (Out of 4.0)
Passing Year : 2010 (Date of publication of results 06 May 2013)
(Examination held in 2013, due to session jam)
Major Studied Courses : Fundamental of Mathematics, Calculus, Analytic & Vector Geometry, Physics, Computer Techniques, Statistics, Linear Algebra, Statistics, Fortran Programming, Theory of Probability & Methods of Statistics, Electricity, Magnetism & Optics, Mathematica, Abstract Algebra, Real Analysis, Complex Analysis, Numerical Analysis, Mechanics, Complex Analysis, Ordinary Differential Equation, Partial Differential Equation, Matlab, Theory of Numbers, Topology & Functional Analysis, Linear Programming, Methods of Applied Mathematics, Differential Geometry, Hydrodynamics, Discrete Mathematics, Mathematical Methods in Biology, Tensor Analysis.
Medium of Instruction : English

Higher Secondary Certificate Examination (H.S.C)

College : Savar Model College, Savar, Dhaka, Bangladesh.
Group : Science
Result : 4.30 (Out of 5.0)
Passing Year : 2005 (Date of publication of results 26 September 2005)
Major Studied Courses : Bangla, English, Mathematics, Physics, Chemistry, Biology.
Education Board : Dhaka Board
Medium of Instruction : Bangla (Mother tongue)

Secondary School Certificate Examination (S.S.C)

College : Nessaruddin Talukder High School and College, Gopalganj, Bangladesh.
Group : Science
Result : 4.56 (Without 4th subject & out of 5.00)
Passing Year : 2003 (Date of publication of results 15 July 2003)
Major Studied Courses : Bangla, English, Mathematics, Physics, Chemistry, Biology, Social Science, Religion (Islam), Higher Mathematics.
Education Board : Dhaka Board
Medium of Instruction : Bangla (Mother tongue)

TEACHING EXPERIENCE

I am teaching the following courses at undergraduate and graduate levels: Differential Calculus, Integral Calculus, Matrix Algebra, Vector Analysis, Tensor Analysis, Ordinary Differential Equation, Partial Differential Equation, Linear Algebra, Co-ordinate Geometry, Laplace Transform, Fourier Analysis, Numerical Methods, Complex Analysis, Fluid Dynamics, Hydrodynamics & Hydro-statistics, Business Mathematics, Linear Programming, Optimization, MATLAB, Numerical Methods for Boundary Value Problem, Boundary Layer Theory and Heat Transfer, etc.

COMPUTER LITERACY

- Microsoft Office Package : MS Word, MS Excel, Power Point etc.
- Programming Language : Comsol Multiphysics, Python, Matlab, FORTRAN, Mathematica, Tecplot, etc.

LANGUAGE LITERACY

- Bangla : Mother tongue
- English : Read, write, and speak fluently.

WORKING EXPERIENCES

- Assistant Professor, Department of Mathematics, Faculty of Science, Bangabandhu Sheikh Mujibur Rahman Science and Technology University (BSMRSTU), Gopalganj-8100, Bangladesh, from 12 November 2021 to till date.

- Lecturer, Department of Mathematics, Faculty of Science, Bangabandhu Sheikh Mujibur Rahman Science and Technology University (BSMRSTU), Gopalganj-8100, Bangladesh, from 11 February 2019 to 11 November 2021.
- Lecturer in Mathematics, Department of Mathematics and Statistics, Bangladesh University of Business and Technology (BUBT), Mirpur-2, Dhaka, Bangladesh, from 01 February 2015 to 31 May 2018.

PROFESSIONAL MEMBERSHIP

- Life Member of Bangladesh Mathematical Society, Member No. Aa-905

PERSONAL INFORMATION

Father's Name : Md. Sahidul Islam
 Mother's Name : Mamataj Begum
 Date of Birth : 31 December 1988
 Nationality : Bangladeshi by Birth
 Religion : Islam
 Sex : Male
 Marital Status : Married
 Blood Group : O (positive)
 Permanent Address : Vill: Botbari, Post Office: Shitaikundu-8103, Union: Radhaganj,
 Upazila: Kotalipara, District: Gopalganj, Bangladesh.
 Present Address : Department of Mathematics, Academic Building, Room No. 311,
 Bangabandhu Sheikh Mujibur Rahman Science and Technology
 University (BSMRSTU), Gopalganj-8100, Bangladesh.
 National ID No. : 6438036771
 Passport Number : A01940566
 Contact : 8801778186718, 8801707648514, 010-7495-1231

RESEARCH-BASED AUTHOR'S WEB ID

Orcid ID : <https://orcid.org/0000-0003-0220-6996>
 Research Gate : https://www.researchgate.net/profile/T_Islam
 Google Scholar : <https://scholar.google.com/citations?hl=en&user=Y4pJz70AAAAJ>
 Scopus link : <https://www.scopus.com/authid/detail.uri?authorId=57213772455>
 Profile link : <https://www.bsmrstu.edu.bd/dev/dept/profile.php?dept=math&id=1>

LIST OF PUBLICATIONS

1. Tinni Saha, **Tarikul Islam**, Yeasmin S., Parveen N., (2023): Thermal Influence of Heated Fin on MHD Natural Convection Flow of Nanofluids inside a Wavy Square Cavity. International Journal of Thermofluids, 2023, 100338. <https://doi.org/10.1016/j.ijft.2023.100338>.

2. S. Islam, T. Bairagi, **Tarikul Islam**, B.M.J. Rana, S.K. Reza-E-Rabbi, M.M. Rahman (2022): Heatline visualization in hydromagnetic natural convection flow inside a prismatic heat exchanger using nanofluid, *Int. J. of Thermofluids*, 16, 2022, 100248. <https://doi.org/10.1016/j.ijft.2022.100248>.
3. Tinni Saha, Nazma Parveen, **Tarikul Islam** (2022): Analysis of Reciprocal Thermal Conductivity on Free Convection Flow along a Wavy Vertical Surface, *Advances in Mathematical Physics*, 2022, Article ID: 6389275. <https://doi.org/10.1155/2022/6389275>.
4. **Tarikul Islam**, Rehena Nasrin (2022): Thermal operation by nanofluids with various aspects: a comprehensive numerical appraisal, *Waves in Random and Complex Media*, 2022. <https://doi.org/10.1080/17455030.2022.2117430>.
5. Mst. Asiya Khatun, **Tarikul Islam** (2022): Influence of Magnetic field and Heat Generation/Absorption on Unsteady MHD Convective Flow along a Permeable Stretching/Shrinking Wedge with Thermophoresis and Variable Fluid Properties, *International Journal of Thermofluids*, 16, 2022, 100204. <https://doi.org/10.1016/j.ijft.2022.100204>.
6. **Tarikul Islam**, N. Parveen, R. Nasrin (2022): Mathematical Modeling of Unsteady Flow with Uniform/Non-uniform Temperature and Magnetic Intensity in a Half-moon Shaped Domain. *Heliyon*, 8(3), e09015. <https://doi.org/10.1016/j.heliyon.2022.e09015>.
7. **Tarikul Islam**, Mehmet Yavuz, Nazma Parveen, Md. Fayz Al-Asad (2022): Impact of Non-Uniform Periodic Magnetic Field on Unsteady Natural Convection Flow of Nanofluids in Square Enclosure. *Fractal and Fractional*, 6(2), 101. <https://doi.org/10.3390/fractalfract6020101>.
8. **Tarikul Islam**, M.N. Alam, M.I. Asjad, N. Parveen, Y.M. Chu (2021): Heatline Visualization of MHD Natural Convection Heat Transfer of Nanofluid in a Prismatic Enclosure, *Scientific Reports*, 11, Article number: 10972. <https://doi.org/10.1038/s41598-021-89814-z>.
9. **Tarikul Islam**, N. Parveen, M.F.A. Asad (2020): Hydromagnetic Natural Convection Heat Transfer of Copper-Water Nanofluid within a Right-Angled Triangular Cavity. *International Journal of Thermofluid Science and Technology*, 7(3), Paper No. 070304. <https://doi.org/10.36963/IJTST.2020070304>.
10. **Tarikul Islam**, N. Akter, N. Jahan (2020): MHD Free Convective Heat Transfer in a Triangular Enclosure Filled with Copper-Water Nanofluid. *International Journal of Material and Mathematical Sciences*, 2(2), 29-38. <https://doi.org/10.34104/ijmms.020.029038>.
11. **Tarikul Islam**, M.F.A. Asad, N. Akter (2020): Numerical study of magneto- hydrodynamic natural convection heat transfer and fluid flow of nanofluid in a skewed cavity. *Journal of Engineering Mathematics and Statistics*, 4(1), 14-36. DOI: <http://doi.org/10.6084/m9.figshare.12383642>.
12. **Tarikul Islam**, M.M. Islam (2020): MHD mixed convective heat transfer of a micropolar fluid over an unsteady stretching porous wedge with viscous dissipation and Joule heating. *Journal of Applied Mathematics and Statistical Analysis*, 1(1), 1-12. DOI: <http://doi.org/10.5281/zenodo.3859468>.
13. M.S. Alam, **Tarikul Islam**, M.J. Uddin (2016): Mathematical modeling for heat transfer of a micropolar fluid along a permeable stretching/shrinking wedge with heat generation/absorption. *Mathematical Modeling of Engineering Problems*, 3, 1-9. DOI: [10.18280/mmep.030101](https://doi.org/10.18280/mmep.030101).

14. M.S. Alam, **Tarikul Islam**, M.M. Rahman (2015): Unsteady hydromagnetic forced convective heat transfer flow of a micropolar fluid along a porous wedge with convective surface boundary condition. International Journal of Heat and Technology, 33(2), 115-122. DOI: <http://dx.doi.org/10.18280/ijht.330219>.

CONFERENCE/SEMINAR PAPER

1. **Tarikul Islam**, M.S. Alam (2015): Convective heat transfer Flow of a Micropolar Fluid along a Porous Wedge with Convective Surface Boundary Condition. (Paper presented), Bangladesh Mathematical Society, Mathematics Conference, 10th August 2015, Jagannath University, 9-10, Chittaranjan Avenue, Dhaka-1100, Bangladesh.

REFERENCES

1. **Dr. Md. Shariful Alam**, Professor, Department of Mathematics, Jagannath University, 9-10, Chittaranjan Avenue, Dhaka-1100, Bangladesh. Cell Phone: +8801316814344, Email: dralamjnu@gmail.com, msalam631@yahoo.com.
2. **Dr. Nazma Parveen**, Professor, Department of Mathematics, Bangladesh University of Engineering and Technology (BUET), Dhaka-1000, Bangladesh. Cell Phone: +8801711265349, Email: nazma@math.buet.ac.bd.
3. **Dr. Dipankar Kumar**, Associate Professor & Chairman, Department of Mathematics, Faculty of Science, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj, Bangladesh. Cell Phone: +8801722285442, Email: dks.bsmrstu@gmail.com.



(**Tarikul Islam**)