



# Md Tusher Mollah

*Curriculum Vitae*

## Career Objective

I am looking for a research position in the field of **Computational Fluid Dynamics, Material Extrusion Additive Manufacturing**, where I have the scope to utilize my skills, potentiality and adaptability to do something innovative and from where I will be able to share my knowledge for the amelioration of the future world.

## Experiences

- Jul-19 to **PhD Fellow**, DTU Mechanical Engineering Institute, Process and Production Technology Section, Technical University of Denmark, 2800 Kgs. Lyngby, Denmark.
- Jan-19 to **Lecturer**, Department of Mathematics at European University of Bangladesh, Jun-19 2/4 Gabtoli, Mirpur, Dhaka-1216, Bangladesh.
- Nov-18 to **Adjunct Lecturer in Mathematics**, Department of Computer Science and Jun-19 Engineering at Central University of Science and Technology, Plot-A/5, Block-A, Mirpur-14, Dhaka, Bangladesh.
- Jun-18 to **Research Assistant** at Khulna University, Khulna-9208, Bangladesh; under Dec-18 **Prof. Dr. Md. Mahmud Alam**, Mathematics Discipline, Khulna University, Khulna-9208, Bangladesh.
- Jul-17 to **Research Fellow** at National Science and Technology (NST) under the Ministry of Science and Technology, Government of People's Republic of Bangladesh Jun-18 with **Prof. Dr. Md. Mahmud Alam**, Mathematics Discipline, Khulna University, Khulna-9208, Bangladesh.

## Professional Profiles

ResearchGate: [https://www.researchgate.net/profile/Md\\_Tusher\\_Mollah3](https://www.researchgate.net/profile/Md_Tusher_Mollah3)  
Linkedin: <https://www.linkedin.com/in/md-tusher-mollah-bsmrstu/>

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## Research Interest

1. Material Extrusion Additive Manufacturing
2. Computational Fluid Dynamics (CFD)
3. Fluid Mechanics and Heat Transfer
4. Numerical Simulation

## Research Projects

1. The Ph.D. project entitled "3D print of plastics: From Macromolecules to the Computational fluid dynamics" is supported and funded by Danmarks Frie Forskningsfond, Denmark.
2. The M.Sc. project entitled "Unsteady MHD Bingham Fluid Flow through a Parallel Plate with Ion slip and Hall Current" is supported and funded by National Science and Technology under the Ministry of Science and Technology, Government of the People's Republic of Bangladesh.

## Conference Presentation

1. **Md. Tusher Mollah**, Muhammad Minarul Islam, Mohammad Ferdows and Md. Mahmud Alam, "Bingham Fluid Flow through Oscillatory Porous Plate with Ion-Slip and Hall Current", *8th BSME International Conference on Thermal Engineering 2018*, BUET, Dhaka, Bangladesh.

## M.Sc. Thesis

"Unsteady MHD Bingham Fluid Flow through a Parallel Plate with Ion-Slip and Hall Current"

## B.Sc. Project Thesis

"Numerical Analysis on Unsteady Heat Transfer of Viscous Compressible Boundary Layer Fluid Flow through a Porous Plate with Induced Magnetic Field for an Irrotational System"

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## Publications

1. **Md. Tusher Mollah** (2019), "EMHD Laminar Flow of Bingham Fluid between two Parallel Riga Plates", *International Journal of Heat and Technology, IJETA*, Vol. **37**, Issue 2, P 641-648. <https://doi.org/10.18280/ijht.370236>.
2. **Md. Tusher Mollah**, Muhammad Minarul Islam, Sheela Khatun and Md. Mahmud Alam(2019), "MHD generalized Couette flow and heat transfer on Bingham fluid through porous parallel plates", *Mathematical Modelling of Engineering Problems, IJETA*, Vol. **6**, No. 4, pp. 483-490. <https://doi.org/10.18280/mmep.060402>.
3. **Md. Tusher Mollah**, Muhammad Minarul Islam, Mohammad Ferdows and Md. Mahmud Alam (2019), "Bingham Fluid Flow through Oscillatory Porous Plate with Ion-Slip and Hall Current", *AIP Conference Proceedings, AIP Publishing*, Vol. **2121**, No. 1, P 050011-1 - 050011-6. <https://doi.org/10.1063/1.5115898>.
4. Muhammad Minarul Islam, **Md. Tusher Mollah**, Sheela Khatun, Mohammad Ferdows and Md. Mahmud Alam (2019), "Unsteady Viscous Incompressible Bingham Fluid Flow through a Parallel Plate", *Inventions*, Vol. **4**, Issue 3, P 51. <https://doi.org/10.3390/inventions4030051>.
5. Sheela Khatun, **Md. Tusher Mollah**, Sonia Akter, Muhammad Minarul Islam, and Md. Mahmud Alam (2019), "EMHD Couette Flow of Bingham Fluid Through a Porous Parallel Riga Plates with Thermal Radiation", *Modelling, Measurement and Control B*, Vol. **88**, Issue 2-4, P 64-71, [https://doi.org/10.18280/mmc\\_b.882-409](https://doi.org/10.18280/mmc_b.882-409).
6. Muhammad Minarul Islam, Sheela Khatun, **Md. Tusher Mollah**, and Md. Mahmud Alam (2019), "Fluid Flow along the Riga Plate with the Influence of Magnetic Force in a Rotating System", *AIP Conference Proceedings, AIP Publishing*, Vol. **2121**, Issue 1, P 050002. <https://doi.org/10.1063/1.5115889>.
7. Sonia Akter, Mohammad Rafiqul Islam, **Md. Tusher Mollah**, and Md. Mahmud Alam (2019), "Hall Effects on Casson Fluid Flow along a Vertical Plate" *AIP Conference Proceedings, AIP Publishing*, Vol. **2121**, No. 1, p. 040004, <https://doi.org/10.1063/1.5115875>.
8. **Md. Tusher Mollah**, Muhammad Minarul Islam and Md. Mahmud Alam (2018), "Hall and Ion-slip Effects on Unsteady MHD Bingham Fluid Flow with Suction", *Modelling, Measurement and Control B*, Vol. **87**, Issue 4, P 221-229. [https://doi.org/10.18280/mmc\\_b.870402](https://doi.org/10.18280/mmc_b.870402).
9. Muhammad Minarul Islam, **Md. Tusher Mollah**, Mohammad Sanjeeb Hasan and Md. Mahmud Alam (2017), "Numerical Solution of Unsteady Viscous Compressible Fluid Flow along a Porous Plate with Induced Magnetic Field", *Modelling, Measurement and Control B*, Vol. **86**, Issue 4, P 850-863. [https://doi.org/10.18280/mmc\\_b.860403](https://doi.org/10.18280/mmc_b.860403).

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## — Publications-(Continue)

10. **Md. Tusher Mollah**, Muhammad Minarul Islam and Md. Mahmud Alam (2018), "Couette Flow of Bingham Fluid with Ion-Slip and Hall Current", *LAMBERT Academic Publishing (LAP)*, ISBN:978-613-9-92592-6, number of pages: 128. (M.Sc. Dissertation)
11. **Md. Tusher Mollah**, Muhammad Minarul Islam (2018), "Numerical Study for Compressible Fluid with Induced Magnetic Field", *LAMBERT Academic Publishing (LAP)*, ISBN:978-613-9-93063-0, number of pages: 116. (B.Sc. Dissertation)

## — Submitted Papers

1. **Md. Tusher Mollah**, Muhammad Minarul Islam, Md. Kamruzzaman, Lyazid Djenidi and Md. Mahmud Alam, "Unsteady MHD Bingham Fluid Flow through a Parallel Plate with Ion-Slip and Hall Current", *Proceedings of the Institution of Mechanical Engineers, Part E: Journal of Process Mechanical Engineering*, SAGA Publications, number of pages: 13.
2. **Md. Tusher Mollah**, Muhammad Minarul Islam, Mehetaj Parvine and Md. Mahmud Alam, "Ion-Slip Effects on Bingham Fluid Flowing through Oscillatory Porous Plate with Suction", *Physical Review Fluids*, APS, number of pages: 7.
3. **Md. Tusher Mollah**, Saykat Poddar, Sheela Khatun, Muhammad Minarul Islam, and Md. Mahmud Alam, "EMHD Flow of Bingham Fluid between two Parallel Riga Plates with Suction and Thermal Radiation", number of pages: 6.

## — Preparing for Submission

1. "CFD in Material Extrusion Additive Manufacturing"

## — Education

Passing Year: **Ph.D. in Mechanical Engineering**, Technical University of Denmark, 2800 onwards Kgs. Lyngby, Denmark.

2018 **M.Sc. in Applied Mathematics**, Bangabandhu Sheikh Mujibur Rahman Science and Technology University, Gopalganj-8100,  
Result: CGPA 3.88 (on scale 4.00) with **Distinction**.  
Position: **2nd**.

Medium of instruction: **English**.

Danish weighted average: **11.2** in Courses and **12.0** in M.Sc. Thesis.

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- 2016 **B.Sc. in Mathematics**, *Bangabandhu Sheikh Mujibur Rahman Science and Technology University*, Gopalganj-8100,  
 Result: CGPA 3.88 (on scale 4.00) with **Distinction**.  
 Position: **2nd**.  
 Medium of instruction: **English**  
 Danish weighted average: **11.4** in Courses and **12.0** in B.Sc. Thesis.
- 2012 **Higher Secondary Certificate**, *Government Haraganga College*, Munshiganj,  
 Result: GPA 5.00 (on scale 5.00).  
 Group: Science.
- 2010 **Secondary School Certificate**, *K.K. Government Institution*, Munshiganj,  
 Result: GPA 4.63 (on scale 5.00).  
 Group: Science.

## Major Course Completed

### Master of Science

Analytical Dynamics, Theoretical Astrophysics, Fluid Dynamics, Industrial Mathematics, Operation Research, Boundary Layer Theory and Heat Transfer, Magneto-Hydrodynamics, and Thermodynamics and Statistical Mechanics.

### Bachelor of Science

Basic Algebra and Trigonometry, Calculus-I, Geometry in Two Dimensions, Geometry in Three Dimensions, Calculus-II, Linear Algebra, Ordinary Differential Equations, Vector and Tensor Analysis, Real Analysis-I, Partial Differential Equations, Discrete Mathematics, Programming with FORTRAN, Abstract Algebra, Real Analysis-II, Complex Analysis, Mechanics, Mathematical Methods, General Topology, Classical Mechanics, Theory of Numbers, Numerical Analysis, Linear Programming, Hydrostatics and Hydrodynamics, Integral Equations, Differential Geometry, Lattice Theory, Astronomy, Mathematical Modeling in Biology, Rings and Modules, Quantum Mechanics, Wavelet Analysis, and Real Function Theory.

## Award and Fellowship

- Award** 6th Undergraduate National Mathematics Olympiad in Khulna Division, Khulna University on November 2014.  
 Awarded for superior performance.

- Research Fellowship** National Science and Technology (NST) Fellowship (2017-2018), Ministry of Science and Technology, Government of People's Republic of Bangladesh.

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## **Technical Skills**

Programing Language	C/C++, MATLAB, FORTRAN.
Commercial Simulation Tools	Flow3D, ANSYS Fluent, COMSOL Multiphysics.
Scripting Languages	PHP, CSS, CSS3, HTML, HTML5.
Database	MySQL, MySQLi.
Computing	Proficient on Microsoft Word, Excel, Power Point, Adobe Photoshop.
Development Tools	MATLAB R2010a, R2015a and R2018a, Studio Developer FORTRAN 4.0 and 6.6a, Code Blocks 12.11, XAMPP - 5.6.23.0.

## **Language Skills**

1. Bengali: Native or Bilingual Proficiency
2. English: Professional Working Proficiency

## **Personal Information**

Name	Md Tusher Mollah
Father's Name	Md Nurul Huque Mollah
Mother's Name	Morgina Begum
Spouse's Name	Kaniz Fatema
Present Address	Tobaksvejen 2C, st. Door 26, 2860 Soborg, Denmark
Permanent Address	Mollah Bari, Champatala, Munshiganj Sadar, Munshiganj-1500, Bangladesh.
Date of Birth	October 25, 1993
Nationality	Bangladeshi by birth
Gender	Male
Religion	Islam
Martial Status	Married

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## References

### Prof. Md. Mahmud Alam

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March, 2020

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