



## Biography

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### Dr. Md. Habibur Rahman

Professor

**Research Area** Fluid Mechanics, Nonlinear  
System Analysis with ODEs & PDEs

## Education

### Doctor of Philosophy

Swinburne University of Technology, Melbourne, Australia (2011-2015)

**Thesis Title:** [Analysis of Thermomagnetic Convection in a Vertical Layer of Magnetic Fluid with Arbitrary Orientation of Magnetic Field](#)

### Master of Philosophy

Khulna University of Engineering & Technology, Bangladesh (2007-2009)

**Thesis Title:** [On Some Analytical Approximate Solutions of Fourth Order damped Oscillatory and Near Critically Damped Nonlinear Systems](#)

### Master of Science

University of Rajshahi, Rajshahi, Bangladesh (1995-1996) Achievement: First Class

### Bachelor of Science

University of Rajshahi, Rajshahi, Bangladesh (1992-1995) Achievement: First Class

### Higher Secondary Certificate

Gov. Edward College, Pabna, Bangladesh (1990-1992) Achievement: First Division

### Secondary School Certificate

Bangladesh Railway Chandraprabha Vidyapitha, Paksey, Pabna, Bangladesh (1988-1990) Achievement: First Division

## Service Records

- **Professor**  
**Department/Section:** Mathematics  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970
- **Tutor**  
**Department/Section:** Mathematics  
**Swinburne University of Technology** From 01-01-1970 to 01-01-1970
- **Lecturer (Part time)**  
**Department/Section:** Mathematics  
**University of Khulna** From 01-01-1970 to 01-01-1970
- **Associate Professor**  
**Department/Section:** Mathematics  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970
- **Assistant Professor**  
**Department/Section:** Mathematics  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970
- **Lecturer**  
**Department/Section:** Mathematics  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970
- **Lecturer**  
**Department/Section:** Mathematics  
**Ishurdi Mohila Degree College** From 01-01-1970 to 01-01-1970

## Research Interest

### Fluid Mechanics, Nonlinear System Analysis with ODEs & PDEs

Fluid Mechanics, Nonlinear System Analysis with PDEs

## Publication

### Books

### Journals

18. (2019) , " Thermomagnetic-gravitational convection in a vertical layer of ferrofluid in an applied magnetic field," **International Research Journal of Engineering and Technology**, vol06, no.03, pp.2698-2707
17. Rahman, H. and Suslov, S. A. (2016) , " Magneto-gravitational convection in a vertical layer of ferrofluid in a uniform oblique magnetic

field," **Journal of Fluid Mechanics (JFM)**, Cambridge University Press, vol795, pp.847-875

16. Rahman,H. and Suslov,S. A. (2015) , " Thermomagnetic convection in a layer of ferrofluid placed in a uniform oblique external magnetic field," **Journal of Fluid Mechanics (JFM)**, Cambridge University Press, vol764, pp.316-348

15. Rahman,M. H. and Akbar,B. I. H. a. M. A. (2011) , " An Analytical Approximate Solution of Fourth Order Damped-Oscillatory Nonlinear Systems," **Research Journal of Mathematics and Statistics**, vol03, no.01, pp.12-19

14. Alom,M. A. ,Rahman,M. H. and Akbar,B. M. I. H. a. M. A. , " Perturbation Technique for Analytical of Fourth Order Near Critically Damped Nonlinear Systems," **International Journal of Basic & Applied Sciences IJBAS-IJENS**, vol11, no.01, pp.2011

13. Haque,B. M. I. and Rahman,M. A. a. M. H. (2011) , " olution of Fourth Order Critically Damped Oscillatory Nonlinear Systems," **International Journal of Basic & Applied Sciences IJBAS-IJENS**, vol11, no.03, pp.68-77

12. Rahman,M. H. and Akbar,M. A. K. A. a. M. A. (2010) , " An Asymptotic Method for Certain Fourth Order Damped Oscillatory Nonlinear Systems," **Journal of Engineering Science**, vol01, pp.53-60

11. Haque,B. M. I. ,Rahman,M. H. and Akbar,a. M. A. (2010) , " Asymptotic Solution of Fourth Order Critically Damped Nonlinear Systems Under Some Special Conditions," **Journal of Engineering Science**, vol01, pp.95-104

10. Islam,M. R. ,Rahman,M. H. and Akbar,a. M. A. (2009) , " Asymptotic Solutions of Fourth Order Near Critically Damped Nonlinear Systems," **Indian Journal of Mathematics**, vol51, no.03, pp.611-626

9. Rahman,M. H. and Akbar,B. M. I. H. a. M. A. (2009) , " Asymptotic Solutions of Fourth Order Near Critically Damped Nonlinear Systems," **Journal of Informatics and Mathematical Sciences**, vol01, no.01, pp.61-73

#### Conference

3. Rahman,M. H. and Suslov,S. A. (1â€"5 February 2015) , "Effects of oblique magnetic field on mixed ferrofluid convection," **ANZIAM 2015** , ISBN: 978-0-9942562-0-1

2. Suslov,S. A. and Bozhko,H. R. a. A. A. (23-25 November 2014) , "Oscillatory magnetoconvective instability in a ferrofluid layer placed in an oblique external magnetic field," **The American Physical Society**

1. Suslov,S. A. and Rahman,H. a. A. B. (2-6 February 2014) , "Unexpected waves in ferrofluid convection," **ANZIAM 2014** , ISBN: 978-0-473-27350-7