



## Biography

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### Md. Mamun Miah

Assistant Professor

**Research Area** Mathematical Physics,  
Nonlinear Sciences, Fluid Dynamics

## Education

### Masters of Science (M. Sc.)

University of Rajshahi, Bangladesh (2013) Student Type: Regular, Merit Position: First Class Third,

**Thesis Title:** [Study on boundary layer and the effect of first order chemical reaction in turbulent and MHD turbulent flow.](#)

### Bachelor of Science (B. Sc.)

University of Rajshahi, Bangladesh (2012) Group: Department of Applied Mathematics, Student Type: Regular, Merit Position: First Class First,

### Higher Secondary Certificate (H.S.C)

Lions School and College, Bangladesh (2008) Group: Science, Student Type: Regular, Achievement: A Plus

### Secondary School Certificate (S. S. C)

Kadirabad High School, Bangladesh (2006) Group: Science, Student Type: Regular,

## Service Records

- **Assistant Professor**  
**Department/Section:** Mathematics  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970  
Working Area: Teaching & Research
- **Lecturer**  
**Department/Section:** Mathematics  
**Khulna University of Engineering & Technology** From 01-01-1970 to 01-01-1970  
Working Area: Teaching & Research
- **Lecturer**  
**Department/Section:** Computer Science and Engineering  
**Southeast University** From 01-01-1970 to 01-01-1970

## Research Interest

**Mathematical Physics, Nonlinear Sciences, Fluid Dynamics**

## Publication

### Books

### Journals

33. Borhan, J. R. M., Miah, M. M. and Osman, M. A. I. a. M. S. (2023), "A highly effective analytical .....", **Submitted to the Journal(MMM)**
32. Iqbal, M. A. and Osman, M. M. a. M. (2023), "An investigative program to.....", **Submitted to the Journal(MMM)**
31. Rasid, M. M., Miah, M. M., Ganie, A. and Osman, M. S. (2023), "An alternative approach.....", **Modern Physics letter B**, Submitted to the Journal(MSO)
30. (2023), "New investigation of the analytical behaviors for.....", **Submitted to the Journal(MSO)**
29. Iqbal, M. A., Miah, M. M., Rasid, M. M. and Osman, S. M. E. a. M. S. (2023), "An investigation of the two integro-differential.....", **Arab Journal of Science and Engineering**, Submitted to the Journal(MSO)
28. (2023.), "New Exact Traveling Wave Solutions to the Zakharov-Kuznetsov-Benjamin-Bona-Mahony Equation," **AIP Conference Proceedings (Accepted for Publication)**, International Conference on Advances in Physical Sciences and Materials 2022, KPR Institute of Engg. & Tech., Coimbatore, Tamil Nadu, India
27. Mia, R. and Osman, M. M. a. M. S. (2023.), "A new implementation for finding of analytical solutions in nonlinear PDEs," **Heliyon**, Elsevier, Q1 and IF: 3.776, vol9, no.5, pp.e15690
26. Miah, M. M. and Osman, M. A. I. a. M. S. (2023.), "A Study on stochastic longitudinal wave equation in a magneto-electro-elastic annular bar to find the analytical solutions," **Communications in Theoretical Physics**, IOP Publishing Ltd., Q2, IF: 3.1, vol75, pp.085008
25. Iqbal, M. A., Miah, M. M. and Osman, H. M. S. A. a. M. S. (2023), "An analysis to.....", **Optical and Quantum Electronics**, Submitted to the Journal
24. Iqbal, M. A., Baleanu, D., Miah, M. M., Ali, H. S. and Osman, H. M. A. a. M. S. (2023), "New soliton solutions of the mZK equation and the Gerdjikov-Ivanov equation by employing the double  $(\delta' \otimes \hat{a}^2 \hat{a}, \delta' \otimes 1/\delta' \otimes)$ -expansion method," **Results in Physics**, Q2, Elsevier, ISI IF: 4.564, vol47, pp.106391
23. Chowdhury, M. A., Miah, M. M., Iqbal, M. A., Alshehri, H. M. and Osman, D. B. a. M. S. (2023), "Advanced exact solutions to the nano-ionic

currents equation through MTs and the soliton equation containing the RLC transmission line," **The European Physical Journal Plus** , Springer, vol138, pp.502

22. Borhan,J. R. M. ,Miah,M. M. and Osman,M. A. I. a. M. S. (2023) , " Discovering the innumerable solutions of the -dimensional integro-differential Ito and -dimensional integro-differential Sawda-Kotera equations via an efficient analytical technique," **Applied Mathematics & Information Sciences**, Accepted(Scopus indexed) Q4 in SJR
21. Ali,H. S. , Habib,M. , Miah,M. M. , Miah,M. M. and Akbar,M. A. (2023.) , " Diverse solitary wave solutions of fractional order Hirota-Satsuma coupled KdV system using two expansion methods," **Alexandria Engineering Journal**, Elsevier, Q1 and IF: 6.626, vol66, pp.1001-1014
19. (2022) , " Assorted soliton wave solutions of time-fractional BBM-Burger and Sharma-Tasso-Olver equations in nonlinear analysis," **Journal of Ocean Engineering and Science**, Accepted, Elsevier (Q2 and ISI IF : 3.408)
18. Iqbal,M. A. , Wang,Y. , Miah,M. M. and Osman,M. S. (2022.) , " Study on Dateâ€“Jimboâ€“Kashiwaraâ€“Miwa Equation with Conformable Derivative Dependent on Time Parameter to Find the Exact DynamicWave Solutions," **fractal and fractional (Q1)**, MDPI (ISI IF: 3.577), vol6, no.4
17. Chowdhury,M. A. , Miah,M. M. , Ali,H. S. , Chu,Y. and Osman,M. (2021) , " An investigation to the nonlinear (2 + 1)-dimensional soliton equation for discovering explicit and periodicwave solutions," **Results in Physics**, Q1 and ISI IF: 4.019, Elsevier, vol23, no.104013
16. Ali,H. S. , Habib,M. , Miah,M. and Akbar,M. A. (2020) , " Solitary wave solutions to some nonlinear fractional evolution equations in mathematical physics," **Heliyon** , Q1 and ISI IF:1.650, Elsevier, vol6, no.4, pp.e03727
15. (2020) , " New exact solutions for the Kaup-Kupershmidt equation," **AIMS Mathematics** , Q2 and ISI IF: 1.427, AIMS Press, vol5, no.6, pp.6726â€“673
14. Miah,M. M. , Seadawy,A. R. , Ali,H. S. and Akbar,M. A. (2020) , " Abundant closed form wave solutions to some nonlinear evolution equations in mathematical physics," **Journal of Ocean Engineering and Science**, Q2 and ISI IF :3.408 , Elsevier , vol5, no.3, pp.269-278
13. Billah,M. A. ,Miah,M. M. and Khan,M. N. (2020) , " Reproductive number of coronavirus: A systematic review and meta-analysis based on global level evidence," **PLOS ONE**, Q1 and ISI IF: 3.2, Elsevier, vol15, no.11, pp.1-17
13. Ali,H. M. S. ,Akher,C. M. and Akbar,M. M. M. a. M. A. (2020.) , " Abundant closed form wave solutions to the Burgers equation, Bogoyavlenskii equation and negative Gardner-KP equation," **New Trends in Mathematical Sciences (ISI)**, BSKA, vol8, no.1, pp.26-41
12. Habib,M. A. ,Ali,H. M. S. and Akbar,M. M. M. a. M. A. (2019.) , " The generalized Kudryashov method for new closed form traveling wave solutions to some NLEEs," **AIMS Mathematics** , Q2 and ISI IF: 1.427, AIMS Press, vol4, no.3, pp.896â€“909
9. Rahman,M. M. , Ali,M. S. , Habib,M. A. and Miah,M. M. (2019.) , " The Generalized Kudryashov method: a renewed mechanism for performing exact solitary wave solutions of some NLEEs," **Journal of Mechanics of Continua and Mathematical Sciences(ISI)**, vol14, no.1, pp.323-339
8. Ali,H. M. S. , Habib,M. A. , Miah,M. M. and Akbar,M. A. (2019.) , " A modification of the Generalized Kudryashov method for the system os some nonlinear evolution equations," **Journal of Mechanics of Continua and Mathematical Sciences(ISI)**, vol14, no.1, pp.91-109
6. Ali,H. M. S. and Akbar,M. M. M. a. M. A. (2018.) , " Study of abundant explicit wave solutions of the DSSH equation and the shallow water wave equation," **Propulsion and Power Research**, Q1 and ISI IF 3.738, Elsevier, vol7, no.4, pp.320-328
6. Miah,M. M. and Akbar,H. M. S. A. a. M. A. (2016.) , " An investigation of abundant traveling wave solutions of complex nonlinear evolution equations: The perturbed nonlinear Schrodinger equation and the cubic-quinticGinzburg-Landau equation," **Cogent Mathematics** , Taylor & Francis, vol3, no.1, pp.1277506

#### Conference

3. (18-19 August, 2022) , "New Exact Traveling Wave Solutions to the Zakharov-Kuznetsov-Benjamin-Bona-Mahony Equation," **Third International Conference on Advances in Physical Sciences and Materials 2022** , AIP Conference Proceedings, KPR Institute of Engg. & Tech.