



## *Nilangshu Acharya*

**Assistant Professor (WBES)  
Mathematics**

**Email:** nilangshu.acharya@prtgc.ac.in

**Specialization:** Applied Mathematics

**Major Interest Areas:** Differential Equations, Integral transforms, Mathematical Physics.

### **Academic Credentials:**

- *Ph.D. (Nov.2011 - July.2016): Jadavpur University, Kolkata, West Bengal.*
- *M.Sc. (2009-2011): Calcutta University, Kolkata.*

### **Teaching Experience**

- *Assistant Professor (June.2015 - Till date): P.R.Thakur Govt. College, Thakurnagar, North 24 Pgs., West Bengal.*
- *Assistant Professor (Feb.2015 – June 2015): Dr. APJ Abdul Kalam Govt. College, New Town, North 24 Pgs., West Bengal.*

### **Courses taken:**

- All theoretical papers of Applied Mathematics at UG level under West Bengal State University.

### **Research Interest:**

- Computational Fluid dynamics
- Magnetohydrodynamics (MHD) flow
- Economic Theory

### **Research Grants Received:**

None

### **Research Experience:**

- Nov, 2011 to July, 2016: PhD. at Jadavpur University, Kolkata, India, Supervisors: Prof. P.K.Kundu & Dr. K.Das, Major Topic of Research: Heat and mass transfer analysis of MHD flow under different geometrical configurations.

## List of Publications:

1. Magneto Chemically Reacting Micropolar Nanofluid Flow in Existence of Heat Source/Sink; K. Das, **N. Acharya**, P.K. Kundu, P. R. Duari, Journal of Nanofluids, 11, 539–547. 2022. ISSN: 2169-432X.
2. Slip flow of hybrid nanofluid in presence of solar radiation; K. Das, **N. Acharya** N, T. Sk , P.R. Duari , T. Chakraborty. International Journal of Modern Physics C. 2022, 33(02): 2250017. ISSN: 02179792.
3. Identification of the Conditions for Increasing Dimensionality of the Income Expansion Path; S. Mitra, **N. Acharya**, S. K. Bhandari, Economics Bulletin, Volume 39, Issue 4, pages 2664-2673. 2019. ISSN: 15452921.
4. Impact of Transverse Magnetic Field Thermal Radiation on Non-Darcy Forced Convection Flow; **N. Acharya**, S. Jana, K. Das; Journal of Siberian Federal University, Mathematics & Physics, 11(1), 1-13, 2018. ISSN: 19971397.
5. Forced convective flow over a porous plate with variable fluid properties and chemical reaction: An application of lie group transformation; K. Das, **N. Acharya**, P. R. Duari; Moldavian Journal of the Physical Sciences, 16 ( N1-2) (2017). ISSN: 1810648.
6. Thin film flow over an unsteady stretching sheet with Thermocapillarity in presence of magnetic field; K. Das, **N. Acharya**, P.K. Kundu; Themal Science, 21(6A), 2363-2372 (2017). ISSN: 23347163.
7. Slip effects on Squeezing flow of nanofluid between two parallel disks; K.Das, S. Jana, **N. Acharya**; International Journal of Applied Mechanics and Engineering, 21(1), 5-20 (2016). ISSN: 17344492.
8. MHD micropolar fluid flow over a moving plate under slip conditions: An application of Lie group analysis; K. Das, **N. Acharya**, P.K. Kundu; U.P.B. Sci. Bull., Series A: Applied Mathematics and Physics, 78(2), 225-234 (2016). ISSN: 12237027.
9. Effect of thermal radiation on MHD boundary layer flow of a perfectly conducting fluid; K.Das, **N. Acharya**, P.K. Kundu; Heat Transfer Research, Begell House Ltd, USA, 47(6), 529–543 (2016). ISSN: 10642285.
10. Investigation of the Effects of Different Models of Nanofluids on their Flow and Heat Transfer Characteristics; K. Das, **N. Acharya**, P.K.Kundu; Journal of the Korean Physical Society (Springer), 67(7),1167-1174 (2015). ISSN: 03744884.
11. Radiative flow of MHD Jeffrey fluid past a stretching sheet with surface slip and melting heat transfer; K. Das, **N. Acharya**, P.K. Kundu ; Alexandria Engineering Journal (Elsevier), 54, 815- 821 (2015). ISSN: 11100168.
- 12 Effect of Magnetic field on Thermosolutal Marangoni boundary layer flow; K. Das, **N. Acharya**, P.K. Kundu; Acta Technica, 60, 237-252 (2015). ISSN: 12215848.
13. Flow features of a conducting fluid near an accelerated vertical plate in a porous medium with ramped wall temperature; P. K. Kundu, K. Das, **N. Acharya**; Journal of Mechanics, Cambridge University Press, 30, 277-288 (2014). ISSN: 17277191.

## List of Books/Book Chapters:

None

**Patents(if any):**

None

**List of Honours/Awards:**

- Received International Travel Support (ITS) from SERB, DST, Government of India to visit Cape Town, South Africa for a research paper presentation during Apr, 2017.
- Qualified National Eligibility Test (NET, Dec 2011) in Mathematical Sciences.
- Qualified all INDIA Graduate Aptitude Test for Engineering (GATE) in Mathematics, 2011.
- Received Swami Vivekananda merit cum means scholarship for pursuing M.Sc. during 2009-2011.

**Membership in scientific bodies:**

- Life time member of Calcutta Mathematical Society, Kolkata, West Bengal, India
- Life time member of Mathematics Teachers' Association (MTA, India) , Mumbai, Maharashtra, India.

**Editor/or Editorial Board Member/Reviewer:**

- Served as reviewer of various international journals of computational fluid mechanics with Scopus and SCI indexing like International Journal of Heat and Mass Transfer, Waves in Random and Complex Media, Thermal Science etc.

**Served as reviewers of Lecture Presentations:**

- 2017 The 6th International Conference on Engineering Mathematics and Physics: 2017 (ICEMP 2017) during April, 2017, Cape Town, South Africa.