

CURRICULUM VITAE

Dr. Subhabrata Mondal,

M.Sc & PhD

University of Calcutta

Phone No: +91-9832749186

Email Id: subhamath644@gmail.com

Orchid ID: <https://orcid.org/0009-0005-7205-7481>



Current employment details:

- **Assistant Professor (Regular)** at Swami Vivekenanda University, Kolkata, Department of Mathematics (01.09.2021-till date)

Research Interest

- Integral Equations
- Mathematical Modeling
- Fluid Mechanics

Academic Qualifications:

2016-2021: Ph.D.

Department of Applied Mathematics, University of Calcutta.

Thesis Title: “**Numerical and analytical methods for the solution of some integral equations**”

Thesis Supervisor: **Dr. Soumen De,**

Date of Degree Awarded – **09.03.2021**

2012-2014: M.Sc. (Mathematics)

University of Burdwan

Percentage- 80%

2009-2012: B.Sc. (Mathematics(Hon.), Physics, Chemistry)

Bankura Christian College, University of Burdwan, West Bengal, India.

Percentage- 62.13 %

2009: Higher Secondary (12th)

Institution: Kamalpur Netaji High School, Bankura, West Bengal, India. Percentage – 80.75%

2006: Madhyamik (10th)

Institution: Muradi S.R.B.P. High School, Purulia, West Bengal, India. Percentage – 80.50%

Academic Achievements:

- 2016-2021 Junior Research Fellowship funded by **CSIR**, Govt. of India.
- 2015 Qualified State Eligibility Test (SET)

Research Experience:

PhD Research (2016-2021):

Thesis Title: Numerical and analytical methods for the solution of some integral equations

Institute: University of Calcutta

Research Publications:

1. A Note On The Solution Of a Simple Hypersingular Integral Equation, **Mondal, S.** and Mandal, B. N., *Global journal of pure and applied mathematics*, **13**(2017) 1959- 1964.
2. Application of The Fractional Differential Transform Method To The First Kind Abel Integral Equation, **Mondal, S.**, and Mandal, B. N., *Communications in Computer and Information Science* **834**(2018) 257- 267. [DOI: https://doi.org/10.1007/978-981-13-0023-3_24]
3. Solution Of Abel Integral Equation Using Differential Transform Method, **Mondal, S.**, and Mandal, B. N., *Journal of Advances in Mathematics*, **14**(2018) 7521-7532. [DOI: <https://doi.org/10.24297/jam.v14i1.7172>]
4. Solution Of Singular Integral Equations Of The First Kind With Cauchy Kernel, **Mondal, S.**, and Mandal, B.N., *Commu. Adv. Math. Sci*, **2**(2019) 69-74. [DOI: <https://doi.org/10.33434/cams.454740>]
5. Application Of Differential Transform Method For Solving Some Classes Of Singular Integral Equations, **Mondal, S.**, and Mandal, B.N., *Pacific Journal of Applied Mathematics*, **9**(2019) 263-270.
6. Approximate Solution of Hypersingular Integral Equation by Using Differential Transform Method, **Mondal, S.**, and Mandal, B.N., *Advances in Intelligent Systems and Computing*, **1170**(2021) 181-186. [DOI: https://doi.org/10.1007/978-981-15-5411-7_13]

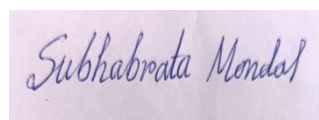
7. Generalized Differential Transform Method: Application to Integral Equations of Fractional Order, **Mondal, S.**, Biswas, A. and Chatterjee, A., *Journal of Mines, Metals and Fuels*, **71**(5): 578-582; 2023.[DOI: <https://doi.org/10.18311/jmmf/2023/34153>]
8. Solution of Lane-Emden Type Differential Equations by Using Differential Transform Method, Biswas, A., **Mondal. S.** and Chatterjee, A., *Journal of Mines, Metals and Fuels*, **71**(5): 698-702; 2023 [DOI: <https://doi.org/10.18311/jmmf/2023/34173>]
9. Investigation of Groundwater Contamination in Physical Systems mathematically Using Differential Transform Method, Biswas, A., **Mondal. S.** and Chatterjee, A., *International Journal of Hydrology Sciences and Technology*, **18**(3):267-284; 2024 [DOI: <https://doi.org/10.1504/IJHST.2024.140920>]
10. An Ideal Technique for Solving Linear and Non-linear Goursat Problems, Biswas, A., **Mondal. S.** and Chatterjee, A., *Recent Advancements in Computational Intelligence and Design Engineering*, Proceedings of the International Conference on Computational Intelligence and Design Engineering (ICCID 2023), September 28-30, 2023, [DOI: <https://doi.org/10.1201/9781003596745>]
11. Application of Differential Transform Method for solving some classes of singular integral equations **Mondal, S.**, Ghorai, S., Pan, S., Sarkar, B. and Das, A., Proceedings of 3rd International Conference on Mathematical Modeling and Computational Science, *Advances in Intelligent Systems and Computing*, vol **1450** ICMMCS-2023. [DOI: https://doi.org/10.1007/978-981-99-3611-3_17]
12. Study of a Fuzzy prey-predator Harvested model: Generalised Hukuhara Derivative Approach, Manna,B., Acharya,A., **Mondal, S.**, Roy,B., Paul,S., Mahata,A., Proceedings of 3rd International Conference on Mathematical Modeling and Computational Science, *Advances in Intelligent Systems and Computing*, vol **1450** ICMMCS-2023. [DOI: https://doi.org/10.1007/978-981-99-3611-3_31]
13. Scattering by Thin Multiple Bottom Standing Vertical Porous Walls in Water of Uniform Finite Depth, Sarkar, B., Sharma, P., Ghorai, S., Das, A., **Mondal, S.**, Pan, S. (2023), Proceedings of 3rd International Conference on Mathematical Modeling and Computational Science. ICMMCS 2023. *Advances in Intelligent Systems and Computing*, vol **1450**. [DOI: https://doi.org/10.1007/978-981-99-3611-3_24]

14. Results and Discussion of the Food Chain Model with Different Fear Effects under Uncertain Environment, Bharati, P., Manna, B., Acharya, A., Paul, S., Mahata, A., **Mandal, S.**, Mukherjee, S. & Roy, B., (2024), *Neutrosophic Optimization and Intelligent Systems*, Vol 4 [DOI: <https://doi.org/10.61356/j.nois.2024.4342>]
15. Results and Discussion of Dengue Model with Temperature Effects in Interval Environment, Manna, B., Bharati, P., Paul, S., Mahata, A., Mondal, S., Mukherjee, S., Dutta, A.K. & Roy, B., (2024), *SciNexuses*, Vol. 1 [DOI: <https://doi.org/10.61356/j.scin.2024.1372>]

References

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| 1. Dr. Soumen De, Associate Professor
Email: soumenisi@gmail.com
Ph. No.- 9231893526 | Department of Applied Mathematics,
University of Calcutta, Kolkata, India. |
| 2. Prof. (Dr.) Sudeshna Banerjea, Professor
Email: bsudeshna@vsnl.net | Department of Mathematics,
Jadavpur University, Kolkata, India. |

Declaration: I hereby declare that all the details furnished above are true to the best of my knowledge and belief.



Subhabrata Mondal