

Indra Bate, M.Sc.

✉ indrabmath@gmail.com/indrab@iomaorissa.ac.in

☎ +919090383725

🌐 <https://sites.google.com/view/indrab>



Employment History

- 14 May 2018 – 📌 **Assistant Professor**, Institute of Mathematics and Applications, Bhubaneswar.
- 10 Mar 2017 – 31 Dec 2017 📌 **Lecturer (on contract)**, Central University of Odisha, Koraput.

Education








- 2023 – Present 📌 **Ph.D. in Mathematics**, Department of Mathematical and Computational Sciences, National Institute of Technology Karnataka, Surathkal, Mangaluru.
- 2014 – 2016 📌 **M.Sc. in Mathematics**, Indian Institute of Technology Kanpur, Uttar Pradesh.
- 2011 – 2014 📌 **B.Sc. (Hons.) in Mathematics and Computing**, Institute of Mathematics and Applications, Bhubaneswar, Odisha.
- 2009 – 2011 📌 **Class 12th**, Rajadhani College, Bhubaneswar, Odisha.
- 2008 – 2009 📌 **Class 10th**, Govt SSD High School, Govindapally, Malkangiri, Odisha.

Research Publications



Journal Articles

- 1 I. Bate, K. Senapati, S. George, I. K. Argyros, and M. I. Argyros, “Convergence analysis of jarratt-like methods for solving nonlinear equations for thrice-differentiable operators,” *AppliedMath*, vol. 5, no. 2, 2025, ISSN: 2673-9909. 📄 DOI: 10.3390/appliedmath5020038.
- 2 I. Bate, K. Senapati, S. George, M. M, and C. G, “Jarratt-type methods and their convergence analysis without using Taylor expansion,” *Appl. Math. Comput.*, vol. 487, Paper No. 129112, 28, 2025, ISSN: 0096-3003,1873-5649. 📄 DOI: 10.1016/j.amc.2024.129112.
- 3 M. Murugan, C. Godavarma, S. George, I. Bate, and K. Senapati, “Convergence analysis of a class of iterative methods: A unified approach,” *Mathematical Modelling and Analysis*, vol. 30, no. 4, pp. 645–663, Nov. 2025, ISSN: 1392-6292/ eISSN: 1648-3510. 📄 DOI: 10.3846/mma.2025.21979.
- 4 I. Bate, M. Murugan, S. George, K. Senapati, I. K. Argyros, and S. Regmi, “On extending the applicability of iterative methods for solving systems of nonlinear equations,” *Axioms*, vol. 13, no. 9, 2024, ISSN: 2075-1680. 📄 DOI: 10.3390/axioms13090601.
- 5 S. George, I. Bate, M. M., C. G., and K. Senapati, “Enhancing the applicability of Chebyshev-like method,” *J. Complexity*, vol. 83, Paper No. 101854, 20, 2024, ISSN: 0885-064X,1090-2708. 📄 DOI: 10.1016/j.jco.2024.101854.
- 6 M. M., C. G., S. George, I. Bate, and K. Senapati, “On obtaining convergence order of a fourth and sixth order method of Hueso et al. without using Taylor series expansion,” *J. Comput. Appl. Math.*, vol. 452, Paper No. 116136, 23, 2024, ISSN: 0377-0427,1879-1778. 📄 DOI: 10.1016/j.cam.2024.116136.

Workshop and Conferences





- 30 Nov 2020 – 29 Dec 2020  Faculty Induction Programme, UGC-HRDC, CUH Hyderabad.
- 16 Nov 2020 – 21 Nov 2020  Wavelet via Matrices and its Applications in signals and image processing, QIP- IIT Indore.
- 06 Nov 2020 – 10 Nov 2020  FDP on Recent Developments in Mathematical Sciences, CUJ Jharkhand.
- 11 Dec 2018 – 05 Jan 2019  Advanced Instructional School on Harmonic Analysis, NISER Bhubaneswar (sponsored by NCM-IITB-TIFR).
- 19 Jun 2018 – 25 Jun 2018  Real Complex & Functional Analysis, IMA Bhubaneswar (sponsored by NCM-IITB-TIFR).
- 30 Nov 2015 – 26 Dec 2015  Anual Foundation School-I, JECRC University, Jaipur (sponsored by NCM-IITB-TIFR).
- 10 Jun 2015 – 09 Jul 2015  Summer Fellowship Programme, Indian Institute of Science, Bangalore.
- 16 Jun 2014 – 5 Jul 2014  Summer Programme in Mathematics (SPIM), Harish Chandra Research Institute, Prayagraj, India.
- 23 Dec 2013 – 27 Dec 2013  Interactive Mathematics Training Camp, Institute of Mathematics and Applications, Bhubaneswar.
- 07 May 2012 – 26 May 2012  National Programme on Differential Equations (NPDE), Institute of Mathematics and Applications, Bhubaneswar (sposeder by IITB).

Skills


- Languages  Strong reading, writing and speaking competencies for English, Hindi, Odia.
- Coding  Matlab, \LaTeX , ...

Miscellaneous Experience


Awards and Achievements


- 2023, 2020  **Qualified**, Graduate Aptitude Test in Engineering (GATE).
- 2023,2020,2017,2016  **Qualified**, CSIR-UGC-JRF.
- 2017  **Selected for National Overseas Scholarship for PhD in Mathematics (for abroad)**, Ministry of Tribal Affairs, Government of India (not avail).
- 2011–2014  **Recipient of Undergraduate Scholarship**, National Board of Higher Mathematics (NBHM), India.

Invited Talk

- 30 Oct 2021  Invited Talk on Career on mathematics and its applications, Govt College, Koraput.

Referees

Prof. Santhosh George
Professor in Mathematics,
Department of MACS, NITK
 sgeorge@nitk.edu.in

Dr. Kedarnath Senapati
Associate Professor in Mathematics,
Department of MACS, NITK
 kedar@nitk.edu.in