

**Name:** Dr. Soumendra Nath Bandyopadhyay

**Designation:** Assistant Professor

**Branch:** Chemistry



**Educational Qualification(s):**

Qualification(s)	University
Ph.D.	IIT Kanpur
M. Sc. (Chemistry)	IIT Kanpur
B. Sc. (Hons.) Chemistry	Presidency College, University of Calcutta

**EXPERIENCE (IN YEARS):**

Academic: 09 Years

**Details:**

Sl. No.	Organization	Position Held	Duration	
			From	To
1.	Saha Institute of Nuclear Physics(SINP)	Summer Project Trainee	March,2010	July, 2010
3.	IIT Kanpur	Project assistant	Aug,2011	Dec,2011
5.	IIT Kanpur	Teaching assistantship (CHM 423)	2014	2014
6.	IIT Kanpur	Teaching assistantship (CSO 202A)	2015	2015
7.	IIT Kanpur	Teaching assistantship (CHM 102A)	Dec,2016	May,2016
8.	ICFAI University Tripura	Assistant Professor	30 <sup>th</sup> July, 2018	Till date

## Other Information:

### (a) Publication details

- 1) Direct Observations of Coherent Oscillations in Solution due to Microheterogeneous Environment. Dipak Kumar Das, Krishnandu Makhal, **Soumendra Nath Bandyopadhyay**, Debabrata Goswami\*. *Scientific reports*, **4**, 6097 (2014). DOI: 10.1038/srep06097
- 2) Resolution enhancement through microscopic spatiotemporal control. Debabrata Goswami\*, Dhiman Das, **Soumendra Nath Bandyopadhyay**, *Faraday Discussions*, **177**, 203-212 (2015). DOI: 10:1039/c4fd00177j
- 3) On the interferometric coherent structures in femtosecond supercontinuum generation. Sirshendu Dinda, **Soumendra Nath Bandyopadhyay**, Debabrata Goswami\*, *Appl. Phys. B*, **122**:148 (2016). DOI:10.1117/12.2253561.
- 4) Structured interferometry features in femtosecond supercontinuum: towards better understanding of supercontinuum for bio applications, Debabrata Goswami\*, Sirshendu Dinda, **Soumendra N. Bandyopadhyay**, *Proc. SPIE*, **10060**, 1006019-1 (2017). DOI: 10.1117/12.2253561.
- 5) On-the-fly Calibrated Measure and Remote Control of Temperature and Viscosity at Nanoscale, Dipankar Mondal, **Soumendra Nath Bandyopadhyay**, Paresh Mathur, Debabrata Goswami\*, *ACS omega*, **14** (10), 2019
- 6) Polarization induced control of optical trap potentials in binary liquids, Dipankar Mondal, Sirshendu Dinda, **Soumendra Nath Bandyopadhyay**, Debabrata Goswami\*, *Scientific Reports*, **9**(700), 1-11 (2019).
- 7) Rapid programmable pulse shaping of femtosecond pulses at the MHz repetition rate, Sirshendu Dinda, **Soumendra Nath Bandyopadhyay**, Debabrata Goswami\*, *OSA Continuum*, **2**(4), 1386-1400 (2019)
- 8) Manifesting the Effects of Thermal Nonlinearity in Optical Trapping for Rayleigh Regime, T, Gaur, **Soumendra Nath Bandyopadhyay**, Debabrata Goswami\*, 2019 URSI AP-RASC, 1-5 (2019)
- 9) Elucidating optical field directed hierarchical self-assembly of homogeneous versus heterogeneous nanoclusters with femtosecond optical tweezers, Dipankar Mondal<sup>1</sup>, **Soumendra Nath Bandyopadhyay**<sup>1</sup>, Debabrata Goswami\*, *PlosOne*, **14**(10), 2019.
- 10) Comparative study of the real-time optical trapping in the Rayleigh regime for continuous and pulsed lasers, **Soumendra Nath Bandyopadhyay**, Tushar Gaur,

Debabrata Goswami, *Opt Laser Technol.* 136 (2021), 106770. DOI: 10.1016/j.optlasertec.2020.106770.

- 11) Experimental Comparison of Conventional and Femtosecond Optical Tweezers, A. Singh, **S. N. Bandyopadhyay**, K. K. Singh, D. Kumar, and D. Goswami, *Conference on Lasers and Electro-Optics*, OSA Technical Digest (Optica Publishing Group, 2021), paper JW1A.153.
- 12) Sensing non-ideal microheterogeneity in binary mixtures of dimethyl sulfoxide and water, **Soumendra Nath Bandyopadhyay**, Ajitesh Singh, Krishna Kant Singh and Debabrata Goswami, 2022 *J. Opt.* (2022) **24**, 054001

**(b) Details of Seminar/Workshop/Conference.**

- 1) IFCPAR (Indo-French Centre for the Promotion of Advanced Research) Workshop on Modern Nonlinear Optics, a Multidisciplinary Approach from Fundamentals to Applications (held at IISc; 12-16 March, 2012. Organized by Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore 560012)
- 2) Asian Research Network Workshop for Characterising Semi-conducting Materials at High Spatial and Temporal Resolution (held at University of Melbourne, Australia; 27-29 January, 2016)
- 3) SDMC 2016 (International meeting on Spectroscopy and Dynamics of Molecules and Clusters) conference (held at Brightland Resort, Mahabaleswar, Pune, 18-21 February, 2016. Organized by IISER Pune)
- 4) Indo-Japan Discussion Meeting on "Frontiers in Molecular Spectroscopy: From Fundamentals to Applications on Material Science and Biology" (held on 13-16 November, 2016. Organized by IIT Kanpur)
- 5) Faculty Development Program, THE ICFAI UNIVERSITY TRIPURA, FACULTY OF SCIENCE AND TECHNOLOGY, (held on 8<sup>th</sup> – 10<sup>th</sup> July, 2019)
- 6) Introductory Workshop on Physical Perspectives of Astronomy. (IWPPA 2019). (Held on 30-31 October, 2019, at ICFAI University Tripura).
- 7) Python Workshop for Teachers and Research scholars on 22 June 2019. (Held on 22<sup>nd</sup> June, 2019 at NIT Agartala, Organiser IIT Bombay, Pandit Madan Mohan Malaviya National Mission on teachers and Teaching, MHRD, GoI).