

Faculty Profile

Name Dr. Soma Banik

Designation Assistant Professor

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Date of Joining in Service:- 27.07.2005

Subject: Physics

Specialization:- Electronics

Year of Experience :- 16 years (+)

Publication Details:

Seminar Proceedings/ Articles in Edited Books and Journals (with ISBN/ISSN)

Titles	Publisher	Month and Year
Adsorption kinetics of a fluorescent dye in a long chain fatty acid matrix	Elsevier Spectrochimica Acta Part A 79 (2011) 1642– 1647 ISSN NO. 1386-1425	2011
Study of Hysteresis during pH and Temperature Changes of Acriflavine: A Gateway to Optrode.	Inverties Journal of Science and Technology, Vol 7, No. 2, 2014, PP 1-8. ISSN NO. 0973-8940	2014
Clay induced aggregation of a tetra-cationic metalloporphyrin in Layer by Layer self assembled film.	Elsevier Journal of Physics and Chemistry of Solids, 87 (2015) 128–135 ISSN NO. 0022-3697	2015
A study on the interactions of cationic porphyrin with nano clay platelets in Layer-by-Layer (LbL) self assembled films.	Elsevier Journal of Chemical Physics Letter, 633 (2015) 82-88. ISSN NO. 0009-2614	2015
Adsorption behaviour of a cationic dye onto nano clay platelets in layer by layer self assembled film	Proceedings of NCRTRP-2015, “Status of Research in Physics in North-East India” ISBN 978-93-81631-38-6 (2015) 152-159.	2015
An effect of pH on the interaction of DPPC with RhB	Proceedings of the UGC sponsored National Seminar on Recent Trend of Research in Chemistry – A New Horizon of Hopes, ISBN 978-93-81631-36-2 (2015) 111-120.	2015
Adsorption of protein at air-water interface in the presence of two Xanthene dyes	Proceedings of NCRTRP-2015, “Status of Research in Physics in North-	2015

	East India" ISBN 978-93-81631-38-6 (2015) 113-120.	
pH induced interaction of DPPC with a fluorescent dye in Langmuir and Langmuir Blodgett (LB) films.	Taylor and Francis Molecular Crystals And Liquid Crystals, 643 (2017) 255-265. ISSN NO. 1542-1406	2017
Modified aggregation pattern of cresyl violet acetate adsorbed on nano clay mineral layers in Langmuir Blodgett film.	Elsevier Journal of Photo Chemistry Photo Biology A: Chemistry, 353 (2018) 570-580. ISSN NO. 1010-6030	2018
Effect of nano clay platelets on the hybrid monolayer of a cationic oxazine dye: In-situ Brewster Angle Microscopic (BAM) study	Elsevier Materials Today: Proceedings, 5 (2018) 2352-2358. ISSN NO. 2214-7853	2018
Study of aggregation behavior of water insoluble metalloporphyrin (Zn) in LB film	Elsevier Materials Today: Proceedings, 5 (2018) 2246-2253. ISSN NO. 2214-7853	2018

Papers Presented at National/ International Seminars / Conferences:

	Title/Subject of paper presented	Subject of Conference / Seminar / Symposium / Workshop	Organizing Institution/ and Name of City/ Country	Duration
1.	Effect of solar flares on VLF radio wave propagation	Fourth conference on Physics research in North East	G. C. College, Silchar,	November 5-6, 2004
2.	Effect on leonid meteor shower on the propagation of sferics	Current Trends of Research in Science and Technology	Guahati University, Assam	January 28-29, 2005
3.	Investigation of a two dimensional phase separation between RhB and NK by fluorescence imaging microscopy	Seminar on Contemporary Areas in Physical & Life Sciences.	IAQC, Karimganj College, Karimganj	November 26-27, 2009
4.	Adsorption kinetics of a fluorescent dye in a long chain fatty acid matrix	7 th National Conference in Physics, PANE-2010	Dept. of Physics, Manipur University	October 5-6, 2010
5.	Reaction kinetics of a water soluble laser dye with a	International Conference on Emerging areas of Chemistry,	Dept. of Chemistry, Tripura	January

	preformed monolayer at air water interface.	ICEAC-2011	University	12-14, 2011
6.	Adsorption behavior of Rhodamine B in clay laponite in ultra thin films by LbL method	National Conference on Recent Trends of Research in Physics - 2012	Dept. of Physics, Tripura University	February 3-4, 2012
7.	Study of Hysteresis during pH and temperature changes of Acriflavine: A gateway to optrode	International Conference on Material Science, ICMS-2013	Dept. of Physics, Tripura University	February 21-23, 2013
8.	Adsorption behavior of a cationic dye onto nano clay platelets in Layer by Layer self assembled film	National Conference on Recent Trends of Research in Physics- 2015	Dept. of Physics, Women's College, Agartala, Tripura	July 23-24, 2015
9.	Effect of pH on the interaction of DPPC with RhB	UGC sponsored National Seminar on Recent Trend of Research in Chemistry –A New Horizon of Hope	Dept. of Chemistry, Women's College, Agartala, Tripura	August 8-9, 2015
10.	Adsorption of a water soluble dye onto a phospholipid monolayer at the air-water interface	National Seminar on Recent Advances in Natural Products Chemistry for Drug Discovery	Dept. of Chemistry, Netaji Subhas Mahavidyalaya, Udaipur, Tripura	November 28-29, 2015
11.	A study of complex and hybrid films of cresyl violet acetate (CVA) at the air-water interface and in LB film	Second International conference on Material Science	Dept. of Physics, Tripura University, Tripura	February 16-18, 2017

Delivered Invited Lectures at Symposiums/ Workshops/ Training Programmes:

- Acted as a resource person in Training Program of School Teachers under Rastriya Avishkar Abhiyan (10th to 14th July, 2017) held at Tripura University.
- As a **Programme Coordinator**, conducted a **7 days online workshop on “Online Teaching Tools and Development of e-content”** through **Youtube** video tutorials among the faculty members of Women's College, 15-21 September 2020 and also acted as a **Resource Person** in the programme.

Chaired at Seminars/ Conferences/ Workshops: NIL

Attended Faculty Development Programmes:

Sl. NO.	Name of the Course/Summer School	Place	Duration	Sponsoring agency
1.	Staff Development Programme on Advanced Operating System using Linux	NIT, Agartala	14th-23rd December, 2009	AICTE
2.	Refresher Course on Thin Films and Nanoscience	Tripura University Suryamaninagar	4th - 18th May, 2015	Indian Academy of Sciences
3.	Refresher Course on Statistical Physics and its applications	Tripura University Suryamaninagar	2nd - 17th May, 2017	Indian Academy of Sciences
4.	Workshop on Thin Films & Nanomaterials: Principles and Applications	Department of Physics, Tripura University	March 26-28, 2018.	Indian Academy of Sciences
5.	Training Programme of 100 hours duration titled "Information Technology and Digital services (including digital payments and GST)"	Women's College, Agartala	August 20 – September 7, 2018.	NIELIT in partnership with MDoNER, Govt, of India,
6.	2-Week FDP on "MANAGING ONLINE CLASSES AND CO-CREATING MOOCS 3.0"	Teaching Learning Centre, Ramanujan College, University of Delhi	July 25 – August 10, 2020	MHRD, PMMMNMTT, Govt. of India
7.	5 Days National e-workshop on "Linux Fundamentals	Dept of IT, Women's college, Agartala	December 3-8, 2020	-----
8.	5 days online FDP on "Web Apps & E-Content Development for Digital Learning"	Institute of Advanced Studies in Education, Agartala in association with Dept. of Educational Technology, Bharathidasan University, Tamilnadu	25 -29 May, 2021	-----

Membership/Positions in National/ International Academic Bodies/ Organisations: NIL

Research Achievements:

Minor Research Project : 01 (Completed)

Sl. No.	Title	Agency	Period	Grant amount mobilized (Rs. in lakhs)
1.	A reaction kinetics study of the adsorption behavior of fluorescent dye at air water interface and also in ultra thin films using LB and LBL technique	UGC- NERO	18 months (Completed)	1.2 lakhs