

Dinabandhu Mahavidyalaya, Bongaon

Teacher's Profile

Name: Dr. Sudeshna Lahiri (Halder)

Address: DC 106/1, Narayantala West, Baguiati, P.O Deshbandhu Nagar, Kolkata-700059

Contact No.: 9433115569/9674497871

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Designation: Associate Professor

Department: Physics

Specialization: Radio Physics and Electronics

Educational Qualifications: M.Sc. Ph.D

Academic career:

Sl. No.	Examination	Name of Board/University	Year of passing	% of marks obtained	Divn/Class/Grade obtained	Subjects taken
1.	Secondary level	Board of Secondary education	1983	81.4	1 st division (Letter in Physical Sc., Life Sc, Maths and National Scholarship holder)	Bengali, English, Maths, Ph. Sc, Life Sc, Histoty, Geography, Work edu, Additional Maths
2.	H.S. level	Council of Higher Secondary education	1985	73,6	1 st division (Letter in Physics)	Physics, Chemistry, Mathematics, Biology, English, Bengali
3.	Bachelor level	The University of Burdwan	1988	65.8	1 st class	Physics (Honours)

					1 st class 1 st (Obtained University gold medal)	Mathematics and Electronics (general)
4.	Master's level	The University of Burdwan	1990	66.3	1 st Class (1 st class 5 th Position)	Physics (Elective: Laser Physics Special paper: Radio Physics and Electronics)
5.	Post M.Sc	Saha Institute of Nuclear Physics	1992	73.1	1st Class (5 th Position)	Physics (Plasma Physics in advanced course)

Research Degree/s

Sl. No.	Degree/s	Title	Date	University
	Ph.D	Investigations of Low q_a Discharges in the SINP tokamak	Thesis submitted in March 31, 1999. Awarded on 26 th April, 2000	Jadavpur University (The thesis work involved both experiment and numerical simulation) Ph.D work was carried out in Plasma Physics Division of Saha Institute of Nuclear Physics, Kolkata)

A. Post-Doctoral Research Work

Sl. No.	Position Held	Institution	Date		Remarks
			From	To	
1	Research Associate	Saha Institute of Nuclear Physics	27.4.2000	31.8.2000	From 1 st April, 1999 after submission of thesis I started post doctoral work in Plasma Physics Division of Saha Institute of Nuclear Physics as Senior Research Fellow

Date of Joining: 28/03/2005

Teaching Experience:

Sl No.	Designation	Institution	Date		Remarks
			From	To	
1.	Lecturer (Physics) 8000/-275-13500/-	Techno India	1.09.2001	27.03.2005	Private Engineering College
2.	Lecturer (Physics) 8000/-275-13500	DinabandhuMahavidyalaya, Bongaon	28.03.2005	31.12.2005	Govt. Aided College
3.	Asst. Professor (Grade 1, AGP: 6000/-) vide DPI memo: 646-UGC dt 23.03.2010 15600/- — 39100/-	DinabandhuMahavidyalaya, Bongaon	01.01.06	27.03.2009	Govt. Aided College
4.	Asst. Professor (Grade 2: AGP: 7000/-) 15600/- — 39100/-	DinabandhuMahavidyalaya, Bongaon	28.03.2009	27.03.2014	Govt. Aided College
5.	Asst. Professor (Grade 3: AGP: 8000/-	DinabandhuMahavidyalaya, Bongaon	28.03.2014	27.03.2017	Govt. Aided College

	15600/- — 39100/-				
6.	Assoc. Professor (Grade 4: AGP: 9000/- 37400/- 67000/-	DinabandhuMahavidyalaya, Bongaon	28.3.2017	Till date	Govt. Aided College

Subject/course taught: Under Graduate Physics Course (General and Honours)
Both 3 year degree course (old) and CBCS system(new)

Research Interests:

- Experimental and Numerical Plasma Physics
- Non-Linear Dynamics
- Fluid Mechanics
- Data Analysis

Project Undertaken:

S l. N o	Title of the project with Referenc e No.	Grant(s)/ Amou nt sancti oned in Rs. (Lakhs)	Agency (Funding, Commissi oning and/or Collabora ting	Period	Grant(s)/ Amount mobilized inRs. (Lakhs)	Principal Investigator/ Coinvestigator	Output/ Impact, i.e. book/paper/ film/technology /Web-facility/ Program/Process etc.
1	Precise and Efficient Computati on of three dimension al electric field in Electrosta tic Precipitat ors	UGC approv ed Rs. 80000/-	UGC	Two years April 2006- March 2008	Only Rs. 78000/ was received as first installment	Principal Investigator	Paper presented in conference and achieved PSSI best poster presentation award
2	Studies of Nonlinear Phenomen a and Chaos on Signals	UGC approv ed Rs. 430000 /- for two	UGC	Two years April 2014- March 2016Rs.	Only Rs. 370000 was received as first installment	Principal Investigator	

obtained from small devices	years					
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Awards and Scholarships:

Sl. No.	Award /Fellowship: International/ National /State/Regional	Name of Award / Fellowship received	Year	Name of the organization/Agency from where the award is received
1.	State	National Scholar	1983	West Bengal Board of Secodary Education
2.	Regional	P.N. Sinha Gold Medal	1988	The University of Burdwan
3	National	Young Scientist's Award	1999	86 th Indian Science Congress held at Madras University, Chennai, January 3 – 7, 1999.
4	National	PSSI Best Poster presentation Award	2006	21 st National Symposium on Plasma Science and Technoligy at Malaviya National Institute of Technology, Jaipur, Rajasthan, December 19 – 22, 2006

Membership:

- Life Member of Plasma Science Society of India
- Life Member of Indian Science Congress Association
- Life Member of SINP Alumni Association

List of Publications (Journals and Books):

Sl. No.	Title with author name(s) in order as published	Journal Name, Vol. with page number, Year	Publisher & ISSN, DOI (if any)	Whether peer reviewed and/or UGC	No. of Co - author(s)	Whether you are the main author/
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				listed, Impact Factor (if any), Citation(s) (if any)		Corresponding author/ Co-author
1	"Accessibility of very low q_a (VLQ) and ultra low q_a (ULQ) discharges in the SINP tokamak" by S. Lahiri, A.N.SekarIyengar, S. Mukhopadhyay, R. Pal	Nuclear Fusion, Vol. 36, No. 2 (pp 254-257), 1996	IOP Science, ISSN 17414326, 00295515.	Peer Reviewed and UGC listed, Impact Factor: 3.179 Cite score: 6.8	Three	Main author
2.	"A condition for setting up ultra low q_a discharges in the SINP tokamak" by S. Lahiri, S. Mukhopadhyay, A.N.SekarIyengar, R. Pal	IEEE transactions on Plasma Science, Vol. 25, No.3 (pp 509-512), 1997	IEEE Nuclear and Plasma Science Society, ISSN 0093-3813	Peer Reviewed and UGC listed, Impact Factor: 1.325	Three	Main author
3.	"Runaway electron studies in the start up phase of very low edge safety factor (q_a) (VLQ) discharges in the SINP tokamak" by A.N.S. SekarIyengar, R. Pal, S. Lahiri, S. Mukhopadhyay	Nuclear Fusion, Vol. 38, No. 8 (pp 1177-1181), 1998	IOP Science, ISSN 17414326, 00295515.	Peer Reviewed and UGC listed, Impact Factor: 3.179 Cite score: 6.8	Three	Co-author
4.	"Stability transport modelling of the SINP tokamak" by S. Lahiri, S. Mukhopadhyay, A.N.SekarIyengar and R. Pal	Pramana-journal of Physics, Vol. 56, No. 5(pp 615-624), 2001	Indian Academy of Sciences ISSN : 03044289, 09737111.	Peer Reviewed and UGC listed, Impact factot: 2.219	Three	Main author
5	"Investigation of low q_a discharges in the SINP	Pramana-journal of Physics, Vol. 58, No.	Indian Academy of Sciences	Peer Reviewed and UGC listed	Three	Main author

	tokamak" by S. Lahiri, A.N.Sekarlyengar, S. Mukhopadhyay and R. Pal	1(pp 79-89), 2002	ISSN : 03044289, 09737111.	Impact factot: 2.219		
6.	"GottwaldMelborune (0-1) test for chaos in a plasma" by D.R.Chowdhury, A.N.S. Iyengar, S. Lahiri,	Nonlinear processes in Geophysics , Vol. 19, (pp 53-56), 2012	Copernicus publications on behalf of the European Geosciences Union & the American Geophysical Union ISSN number: 10235809 doi: 10.5194/npg-19-53-2012	Peer Reviewed Impact factor: 1.74	Two	Co-author
7.	"Long range temporal correlation in the chaotic oscillations of a dc glow discharge plasma" by S. Lahiri, D. Roychowdhury and A.N.S Iyengar	Physics of Plasmas, Vol. 19, 082313(1-4), 2012	Americal Institute of Physics ISSN: 1070-664X (print) 1089-7674 (web) doi: 10.1063/1.4747533	Peer Reviewed Impact factor: 2.023	Two	Main author
8.	"Long range correlations in chemical oscillations" by Dola Roy Chowdhury, SudeshnaLahiri, A. N.S. Iyengar and M.S. Janaki	Journal of Control Science and Engineering Vol. 4, (pp 95-101), 2016	David publishing ISSN: 16875249, 16875257 Doi: 10.17265/2328-2231/2016.02.006	Peer Reviewed Impact factor: 1.000	Three	Corresponding Author
9.	"Study of the floating potential in a glow discharge plasma using Langmuir probe" by SudeshnaLahiri, Rena Majumder, Dola Roy Chowdhury, Ranjan Kr, Saha, M.S.	International Journal of Research on Social and natural Sciences, Vol. II, Issue 2, (pp 1-10), 2017	Katwa College, Burdwan, West Bengal, India, 713130 ISSN (Online): 2455-5916	Peer Reviewed	Five	Main author

	Janaki, A.N.S. Iyengar					
10.	"Temperature Dependence of long range correlation in chemical oscillations" by Sudeshna Lahiri, Dola Roy Chowdhury, A.N.S. Iyengar, M.S. Janaki	International Journal of Research on Social and natural Sciences, Vol. III, Issue 1, (pp 1-10), 2017	Katwa College, Burdwan, West Bengal, India, 713130 ISSN (Online): 2455-5916	Peer Reviewed	Three	Main author

Publication of Chapter in Edited Book:

Sl. No.	Chapter Title with total page numbers	Book Title, Editor & Publisher, National/International, Year	ISBN/ISSN	Whether peer reviewed	No. of co-author(s)	Whether you are the main author
1	"Chaotic to Quasi periodic Transition in a DC Glow Discharge Plasma" 4 Pages (57-60)	Plasma 2012 27 th PSSI National Symposium on Plasma Science & Technology on Challenges of Power Generation & Lighting 21 st Century 10-13 December, 2012 Editor: Suraj Kumar Sinha Excel India Publishers New Delhi National, 2012	ISBN: 978-93-82062-82-0	Peer Reviewed	Two	Yes
2	"Collection Efficiency of An Idealized ESP-A Numerical Study" by S. Lahiri et.al, pp 50-53	'Collage of Thoughts', published by BOOKS SPACE, 8, Shyamcharan Dey St., Kolkata – 700073 Year:2016	ISBN No. 978-93-82251-38-5	No	Two	Yes

Conference Presentations:

Sl. No.	Title of Lecture delivered / Paper presented / Paper published in conference proceedings	Title of Conference / Seminar etc., Date	Organized by	International (abroad/within Country)/ National/ State/ University level
1	Paper Presented	International Summer School and Workshop in Academia Sinica",	Academia Sinica, Hefei, China	International

		Hefei, China, October 4-17, 1993.		
2	“Anomalous ion temperature in very low q_a discharge of the SINP-tokamak”, full paper published in conference proceedings TCM - RUST	Technical committee meeting on research using small tokamaks, Serra Negra, SP, Brazil, 25-26 October, 1993	International Atomic Energy Agency	International
3	Paper Presented	2 nd Workshop on Fusion related Physics and Engineering in small devices", Trieste, Italy, October, 1999.	Abdus Salam International Center for Theoretical Physics, Trieste, Italy	International
4	Paper Presented	Autumn College in Plasma Physics", Trieste, Italy, October-November, 1999	Abdus Salam International Center for Theoretical Physics, Trieste, Italy	International
5	Title of the paper Presented, “Investigation of low q_a discharges in the SINP tokamak”	14 th National Symposium on Plasma Science and Technology in December 21-24, 1999	Department of Physics, Gurunanak Dev University, Amritsar	National
6	“A numerical code for solving plasma equilibrium with flows”, full paper published in conference proceedings	International Congress on Plasma Physics (ICPP-2000), October 23-27, 2000, Quebec City, Canada	International Congress on Plasma Physics	International
7	Title of the paper: “ <i>Effect of Equilibrium Flow on Plasma Parameters</i> ”, full paper published in conference proceedings	International Congress on Plasma Physics (ICPP) Sydney, Australia, 2002	International Congress on Plasma Physics	International
8	Title of the paper presented “ <i>Transport and Stability Analysis of Low q_a Discharges</i> ”,	International Congress on Plasma Physics (ICPP) Sydney, Australia, 2002	ICPP Conference	International
9	Paper Presented in oral Session on December 9, 2004	19 th National Symposium on Plasma Science and Technology in December 7-10, 2004	Bundelkhand University, Jhansi	National
10	“ Numerical Modeling of Ultrasonic Wave Propagation ”, full paper published in conference proceedings	31 st National conference on Fluid Mechanics and Fluid Power in December 16-18, 2004	Department of Power Engineering and Department of Mechanical Engineering, Jadavpur University, Kolkata, India	National
	Title of the paper presented: “ <i>Numerical Analysis of Collection Efficiency in Electrostatic Precipitators</i> ”	14 th West Bengal State level Science and Technology Congress, February 28-March 1, 2007	W.B State Science and Technology Department and Jadavpur University	State Level
11	Paper Presented	Indo-Russian Workshop, Complex Network: Dynamics and Synchronization December 1-2, 2009.	Indian Institute of Chemical Biology, Kolkata, India,	International

12	Title of the Paper Presented, <i>“Quasiperiodic to Chaotic Transition in Glow Discharge Plasma”</i> .	International Symposium on Complex Dynamical Systems and Applications”December 4 – 6, 2009.	Digha Science Center, Digha, West Bengal, India	International
13	Paper Presented	National Conference on Nonlinear Systems and Dynamics (NCNSD-2009), March 5-7, 2009	Saha Institute Of Nuclear Physics	National
14	Title of the paper Presented: <i>“Gottwald-Melbourne test for chaos of nonlinear fluctuations in complex laboratory plasmas”</i>	Condensed Matter Days 2010, August 25- 27, 2010	Department of Physics, University of Kalyani, Kalyani,	National
15	Paper Presented	National Seminar on Interdisciplinary Problems in Nonlinear Dynamics: Computational and Other Techniques February 24-25, 2010	Department of Applied Mathematics, University of Calcutta	National
16	Invited Speaker Title of the paper : <i>“Some investigation on nonlinear fluctuation in Glow discharge Plasma”</i>	Brain storming session on nonlinear phenomena, January, 7, 2010	Saha Institute of Nuclear Physics	State level
17	Title of the paper Presented, <i>“Quasiperiodic to Chaotic Transition in a DC Plasma”</i> .	19 th IEEE Workshop on Nonlinear Dynamics of Electronic Systems, March 8-11, 2011	Indian Institute of Chemical Biology, Kolkata, India and Saha Institute of Nuclear Physics, Kolkata, India	International
18	Title of the paper presented, <i>“Studies of Chaotic Oscillations in a DC Plasma”</i>	Sixth International Conference on unsolved problems on noise and fluctuations in Physics, Biology & high technology, February 20-24, 2012	Saha Institute of Nuclear Physics, Kolkata	International
19	Title of the paper Presented, <i>“Long Range Correlation in Chaotic Oscillations”</i>	2 nd International Symposium on Complex Dynamical System and Applications (CDSA-2012), January 9-11, 2012	Presidency University, Kolkata	International
20	Title of the Paper Presented: <i>“Effect of Concentration in a Closed Unstirred Belousov-Zhabotinsky System”</i> .	3 rd International Symposium on Complex Dynamical Systems and Applications (CDSA-2014), March 10-12, 2014	Indian Statistical Institute, Kolkata	International
21	Title of the paper presented: <i>“A new method of determining chaos in a plasma and in non-plasma system”</i>	30 th National Symposium on Plasma Science and Technology held at Saha Institute of Nuclear Physics, December 1-4, 2015	Plasma Science Society of India and Saha Institute of Nuclear Physics, Kolkata	National

22	Title of the paper presented <i>“Study of Nonlinearity in Chemical Oscillations”</i>	4 th International Conference on Complex Dynamical Systems and Applications (CDSA-2016), February 15-17, 2016	National Institute of Technology, Durgapur	International
23	Title of the paper presented : <i>“Effect of Temperature on Long Range Correlation”</i>	10 th Conference on Nonlinear Systems and Dynamics, December 16-18, 2016	IISER, Kolkata	National
24	Title of the paper presented: <i>“Investigations of nonlinearity in a magnetised plasma”</i> ,–full paper published in conference proceedings	UGC sponsored State level Seminar in September 27-28, 2016	Gobardanga Hindu College, Gobardanga, North 24 Parganas	State level
25	Title of the paper presented: <i>“Fusion Research – Present Scenario”</i>	Two days National Conference on Advances in Interdisciplinary Sciences – 2017 27-28 January, 2017	Science Forum, BhairabGanguly College, Kolkata in association with West Bengal State University (WBSU)	National