

HRISHIKESH MONDAL



Contact: hrishirick@gmail.com

Qualification: M.Sc.

Designation: Assistant Professor of Physics (WBES)

Teaching Experience (in years): UG: 11 Years

Research Experience (in years): 5 Years

Date of Joining Present Institution: 11.12.2013

Institutions/Companies Previously Served:

Name of Institution/Company	Designation	Tenure	
		From (DD-MM-YYYY)	To (DD-MM-YYYY)
Madanpur Mahesh Vidyamandir	Assistant teacher	03.12.2003	25.06.2009
ABN Seal College, Coochbehar	Assistant Professor	26.06.2009	20.08.2010
APC Roy Govt. College, Siliguri	Assistant Professor	21.08.2010	10.12.2013
Durgapur Govt. College, Durgapur	Assistant Professor	11.12.2013	Till date

Examinations cleared: NET-UGC, June-2000

Specialization/Research Interest: Nuclear Physics, Ring Oscillator and its application, Chaos

Courses taught

	B.Sc Honours	B.Sc. Program
Semester-I	Mathematical Methods of Physics-I (CC-1)	-
Semester-II	Electricity and Magnetism (CC-4)	Electricity and Magnetism(CC2)
Semester-III	Thermal Physics- I (CC-6)	Thermal Physics and Statistical Mechanics(CC-3)
Semester-IV	Waves and Optics (CC-9)	Waves and Optics (CC)
Semester-V	Nuclear and particle Physics (DSE-1)	Modern Physics(DSE)
Semester-VI	Applied Optics (DSE-3)	-

Online Mode of Teaching : Taken online classes through Google Meet and Zoom using power point presentation. Lecture notes uploaded in Google classroom for the access of the concerned students.

Publications

Journals:

1. **H. Mondal** and M. K. Mandal, "Wide Range Frequency Synthesizer using Variable Length Ring Oscillator", *Elixir Elec. Engg.* 70 (2014) 23799-23802. ISSN 2229-712x
2. **H. Mondal** and M. K. Mandal, "PLL based Clock Recovery Circuit using Ring Oscillator", *International Journal of Electronics Letters* Vol 4, pp. 421-426, July 2015. DOI: 10.1080/21681724.2015.1067841

Book Chapters:

1. **Mondal H.**, Karmakar J., Nandi D., Mandal M.K. (2020) Image Encryption Scheme Using Chaotic Ring Oscillator. In: Nath V., Mandal J. (eds) Nanoelectronics, Circuits and Communication Systems. NCCS 2018. Lecture Notes in Electrical Engineering, vol 642. Springer, Singapore. DOI: https://doi.org/10.1007/978-981-15-2854-5_23
2. **H Mondal**, A K Das, M K Mandal, "Colour Image Encryption based on combined chaotic map", Recent Developments in Nonlinear Dynamics and its Application, pp. 50-70, Published by: Book Centre, ISBN 978-81-944611-1-1 .

Conference Proceedings:

1. M. K. Mandal and **H. Mondal**, "Design of Variable Length Ring Oscillator for Clock Synthesis", *International conf. itsIP*, Mumbai, pp. 271-275, 18-19 October 2013.

Paper Presentation in seminar/conference/symposium/workshop/discussion meeting

1. Paper Presented on "Chaos in coupled ring oscillator and its application to encryption and decryption of plain image" (**Hrishikesh Mondal**) in the International Conference on "Recent Developments in Nonlinear Dynamics and its Application" held on Nov 28-30, 2018 organized by Physics Department, Durgapur Government College, Durgapur.

Participation in faculty development programmes

1. Refresher Course on "Information Technology" from 12/11/2019 to 25/11/2019 (**Hrishikesh Mondal**) organized by UGC-HRDC, The University of Ranchi

Organization of events (Durgapur Government College)

1. National Conference on "Nonlinear Dynamics and its Application" held on Feb. 7-9, 2017 organized by Physics Department, Durgapur Government College, Durgapur. (**Hrishikesh Mondal**, *Co-organizing Secretary, Department of Physics*)
2. International Seminar on "Recent Developments in Nonlinear Dynamics and its Application" held on Nov 28-30, 2018 organized by Physics Department, Durgapur Government College, Durgapur. (**Hrishikesh Mondal**, *Co-organizing Secretary, Department of Physics*)

Participation in committees of Durgapur Government College since 2017

1. Admission Committee (Jt. Convener-2016-17, 2017-18)
2. Odd Semester Examination Committee (Member-2019-20)
3. IV Semester Examination Committee (Jt. Convener-2019)
4. V semester Examination Committee (Member-2019)
5. Anti-ragging Committee (Jt. Convener-2018)