




Faculty Details proforma for DU Web-site

Title	Dr.	First Name	Sumalay	Last Name	Roy	Photograph
Designation		Assistant Professor (UGC)				
Address		Department of Physics and Astrophysics University of Delhi (North Campus) Delhi - 110007				
Phone No Office						
Residence						
Mobile		+919433641100				
Email		sumalay.roy@gmail.com				
Web-Page		https://www.researchgate.net/profile/Sumalay_Roy				
Educational Qualifications						
Degree		Institution			Year	
Ph.D. (Physics)		Indian Association for the Cultivation of Sciences, Kolkata (Jadavpur University)			2012	
Diploma in Advanced Physics (~ M. Phill of Utkal University)		Institute of Physics, Bhubaneswar			2002	
M.Sc.		University of Calcutta			2000	
B.Sc. (Physics Hons.)		S. A. Jaipuria College, Kolkata (University of Calcutta)			1998	
Career Profile						
Max Planck Institute of Microstructure physics, Halle, Germany		Guest Scientist (~ Post Doctoral Researcher)		February, 2012- December 2015		Research
Indian Association for the Cultivation of Science		Research Associate		January, 2016 – March, 2016		Research
University of Delhi		Assistant Professor (UGC)		April, 2016 - Present		Teaching and Research
Administrative Assignments						
Member : Departmental Website Maintenance and Documentation Committee (2017-2019)						
Member: NAAC Documentation committee(2018)						
Areas of Interest / Specialization						
Broad Area : Experimental condensed matter physics						
Specific area : Surface physics and Nano-science						
Topics:						
X-ray scattering in condensed matter						
Multilayer thin films and nanostructures						
Accelerated ion beam induced modifications in materials						
Topological insulators						
Subjects Taught						
Computer Laboratory (Semester III -M.Sc. Previous : 2016, 2017, 2018, 2019)						

Statistical Mechanics (Semester II- M.Sc. Previous: 2017, 2018, 2019) Advanced Solid State Physics Laboratory (Semester IV- M.Sc. Final: 2017, 2018) Laser and Spectroscopy Laboratory (Semester IV-M.Sc. Final: 2019) Physics at Nanoscale Laboratory (Semester III-M.Sc. Final: 2019) Solid State Physics (Semester II-M.Sc. Previous: 2020)			
Research Guidance			
Ph.D. students: 1) Devisharan Gautam (2017 - Continuing) 2) Rimpay (2017 - Continuing) Project: Different structural aspects of topological insulators M.Sc. Dissertation (Sem IV) as Principal Supervisor: 1) Satyam Agarwal (January-April, 2018) Title: Theoretical investigation of electronic band structures in solids 2) Susweta Das (January-April, 2019) Title: X-ray diffraction analysis of Bi ₂ Se ₃ thin films			
Publications Profile			
No. of publications in peer reviewed/ indexed journals = 27 No. of publications in conference proceedings = 5 Please see this web link for the details : Google Scholar (https://scholar.google.de/citations?user=Kdj4foYAAAAJ&hl=en)			
Publications in the Last one year			
Year	Title	Journal, Vol., Page	Other Co-author(s)
2018	X-ray structure analysis of ultra-thin silver films on the (0001) surface of the topological surface of Bi ₂ Se ₃	Physica Status Solidi –Rapid Research Letter (2018) 1800138	A.Polyakov, K. Mohseni, H. L. Meyerheim
2019	Towards x-ray waveguide formation upon ion irradiation of a Co thin film on Si(111)	Materials Research Express 6 (2019) 056419	N. Banu, B. Satpati, Surendra Singh, Anjan Bhukta, P. Chakraborty, S. Basu, B. N. Dev
Conference Organization/ Presentations (in the last three years)			
<ul style="list-style-type: none"> Invited talk at a meeting on “Emerging trends in physics of surfaces, interfaces and nanostructures”, jointly organized by Indian Association for the Cultivation of Science, Kolkata, India and S. N. Bose National Center for Basic Sciences, Kolkata, India, 24-25 November, 2017. 			

- **Invited talk at Visitor's Programme 2017, University of Delhi, Delhi, India, March 27, 2017.**

Research Projects (Major Grants/Research Collaboration)

- **Grant name: UGC Start-up grant for faculties joined under Faculty Recharge Program**
Funding agency : UGC
Role: Principal Investigator
Period/Status: 2018-2020
- **Grant name: Core Research Grant (CRG)**
Funding agency: SERB-DST
Role: Principal Investigator
Period/Status: 2019-2022
- **Grant name: Collaborative Research Scheme (CRS) using synchrotron facilities at Raja Ramanna Center for Advanced Technology (RRCAT), Indore**
Funding agency: UGC-DAE Centre for Scientific Research (CSR), Indore
Role: Principal Investigator
Period/Status: 2020-2023

Awards and Distinctions

Association With Professional Bodies

- **Reviewer: Nature Publishing Group, Elsevier**
- **Member : German Physical Society (Deutschen Physikalischen Gesselschaft); Membership No. 143524 (2013 – 2015).**
American Physical Society (APS); Membership No. 61177415 (2013 – 2014).

Other Activities