




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- Present)						
Member: NAAC Documentation committee(2018)						
Areas of Interest / Specialization						
Broad Area : Experimental condensed matter physics						
Specific area : Surface physics and Nanoscience						
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)						
Statistical Mechanics (Semester II- M.Sc. Previous: 2017, 2018)						

Advanced Solid State Physics Laboratory (Semester IV- M.Sc. Final: 2017, 2018)
Laser and Spectroscopy Laboratory (Semester IV-M.Sc. Final: 2019)

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 Bi₂Se₃ 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)

(<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)

- 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.
- Invited talk at EMN (Energy Materials and Nanotechnology) Meeting of the “Surface and interface analysis” section, Hong Kong, China, December 9 – 12, 2015.

Research Projects (Major Grants/Research Collaboration)	
Title: UGC Start-up grant for faculties joined under Faculty Recharge Program	
Funding agency : University Grants Commission (UGC)	Amount funded : Rs. 600000.00
Role: Principal Investigator	Period/Status: 2018-2019
Awards and Distinctions	
<ul style="list-style-type: none"> • L.K. Panda award for securing first position in the one year Diploma course in Advanced Physics at Institute of Physics, Bhubaneswar, 2002 • National Eligibility Test (NET) for Lectureship , 2001; Graduate Aptitude Test in Engineering (GATE), 2001; Joint Entrance Screening Test (JEST), 2001 	
Association With Professional Bodies	
<ul style="list-style-type: none"> • 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	