

PERSONAL INFORMATION Antik Ghosh



EDUCATION AND TRAINING

31 Aug 2017–15 May 2019 Master of Science in Nanotechnology (CGPA-9.22/10.00)

Central University of Gujarat, Gandhinagar (India)

University Ranking- 3rd

Relevant Coursework-

- Carbon Nanoscience and its applications
- Synthesis and Characterization of Nanomaterials
- Nanotoxicology and biosafety (Cytotoxicity assays)
- Nanofabrication
- Nanomaterials in energy technology
- Industrial applications of Nanoscience
- Semiconductor Materials and applications
- Physics and Chemistry of Nanomaterials

Dissertation Topic- "*Investigation of Nanozymetic Activity of Cerium Incorporated MoSe₂ Nanostructures: An Approach for Colorimetric Sensing*" with emphasis on the synthesis, characterization and sensing application.

Term Paper- "*Artificially Mimetic N₂ Photo-fixation: A review*"

Technical Skills-

- UV-vis spectrophotometer(hands-on),
- FTIR (hands-on), NMR(theory)
- DLS (hands-on)
- DRS (hands-on)
- DSC (hands-on), TGA(hands-on)
- Solar simulator(hands-on)
- Real-time UV-vis(hands-on)
- TEM (theory), SEM (theory), STM (theory)
- AFM (theory), XRD and XRPD, XPS and XFS (theory).
- Four Probe(hands-on)
- Synthesis – CVD, PVD, Hydrothermal, Microwave assisted, Reflux, Laser Ablation, Sol-Gel, and Microemulsion.

7 Jul 2014–8 May 2017

Bachelor of Science (Honors) in Chemistry (Percentage-60.25/100, Div.-I)

Bidhannagar College affiliated to West Bengal State University (Kolkata), Kolkata (India)

WORK EXPERIENCE

17 May 2018–9Jul 2018 Summer Research Fellow
 Dr. Ujjal K Gautam, Mohali (India)
 Indian Institute of Science Education and Research Mohali, (India)
 Summer Project-
 -Rietveld refinement using Fullprof
 -Low concentration Ammonia detection produced from photocatalytic reduction of Nitrogen
 -Research experience on Heterogeneous Catalysis and its application in Photocatalysis (photocatalytic dye degradation using Sillen-Aurivillius perovskite materials).

PERSONAL SKILLS

Mother tongue(s) Bengali

Foreign language(s)

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
Hindi	C2	C2	C2	C2	B2
English	C2	C1	C1	C2	C2

Levels: A1 and A2: Basic user - B1 and B2: Independent user - C1 and C2: Proficient user
Common European Framework of Reference for Languages

Communication skills Very good communication skills adapted by attending various conferences, seminars and Workshops as a student participant and Volunteer.

Organizational / managerial skills -good leadership qualities
 -good organizational and managerial skills in hosting conferences and Symposia
 -good team-leading skills gained as Team Captain in University level Football Championships and hosting seminars.

Digital skills

SELF-ASSESSMENT				
Information processing	Communication	Content creation	Safety	Problem-solving
Proficient user	Proficient user	Independent user	Basic user	Independent user

Digital skills - Self-assessment grid

-good command on office suite
 -Basic Python, MATLAB, C, Java
 -Origin, Mercury, Match! 3, Gatan Digital Micrograph, Fullprof, ChemDraw, Crystal Explorer

Others skills -Actively take part in blood donation camps through the National Social Service Scheme (NSS)
 -Road Trips, experienced biker and Driver, TT player, Footballer (College captain).

ADDITIONAL INFORMATION

- Conferences**
- Student participation and Volunteer (Host committee member)-Indian Nanoelectronics User Program (INUP) familiarization workshop on "Nanofabrication Technologies"**
25th to 26th Oct. 2018
 - Participated-** National conference on applied material science
6th to 7th Apr. 2018
 - Volunteered-** 24th Congress and General Assembly of the International Union of Crystallography (selected among the 27 students across India for a sponsored invite)
20th to 28th Aug. 2017
 - Participated-** International Symposium on Facets of Chemistry in Biology
12th Jan. 2017
 - Participated-** Seminar by Dr Gautam R Desiraju on "Crystallography for all"
Nov. 2016
 - Student Participation and Volunteer-** National Seminar on "Enthralling Facets of Molecular Manifestations in Chemical Sciences"
15th to 16th Sept. 2016

- Manuscripts Under Process**
- Nature Identical Photoinduced Water Splitting- a Review, under the supervision of Dr Manu Sharma.*
 - Investigation of Nanozymetic Activity of Cerium Incorporated MoSe₂ Nanostructures: An Approach for Colorimetric Sensing, under the supervision of Dr Manu Sharma*

References - **Dr Ujjal K Gautam**

Assistant Professor, Department of Chemical Sciences
Indian Institute of Science Education and Research (IISER)
Mohali, India
Tel- +91-7087649663
Email- ujjalgautam@iisermohali.ac.in

- **Dr Manu Sharma**

Assistant Professor, School of Nanosciences
Central University of Gujarat
Gandhinagar, India
Tel- +91-9737671518
Email- manu.atray@gmail.com

- **Prof Chilla Malla Reddy**

Department of Chemical Sciences
Indian Institute of Science Education and Research (IISER)
Kolkata, India
Tel- +91-33-25873119
Email- cmreddy@iiserkol.ac.in

(Signature)

