

CURRICULUM VITAE

PERSONAL INFORMATION

Name: **PRAJWAL CHETTRI**
Date of Birth: 5th March 1989
Gender: Male
Place of Birth: P.O-Kurseong, Darjeeling, West Bengal
Nationality: Indian
Marital status: Single
Permanent and mailing address: St. Mary's Hill, P.O. Kurseong, PIN-734203
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EDUCATIONAL

Qualifying Degree	Board/ University	Institution	Year	Percentage
Ph.D. (Physics)	Sikkim University	Sikkim University	2020	70% (Course Work)
M.Sc. (Gold medal) (Physics)	Sikkim University	Sikkim University	2013	67.2%
B.Sc. (Hons.) (Physics)	North Bengal University	St. Joseph's College	2010	53.7%
Higher Secondary	Meghalaya Board of Secondary Education	St. Edmund's College	2007	63.8%
Matriculation	West Bengal Board of Secondary Education	St. Alphonsus School	2005	69.6%

SCHOLARSHIPS/AWARDS

1. **Gold-Medal** (First class M.Sc. Physics) – 2013
2. Department of Science and Technology, Government of India – **INSPIRE Fellowship (DST-INSPIRE) 2013-2018**, for pursuing full-time doctoral programme (One of thousand recipients selected from all over India)

3. Science and Engineering Research Board, Government of India – International Travel Grant (SERB-ITS)–2018, (For attending international conference held at Strasbourg, France)

PUBLICATIONS

1. **Chettri, P.**, Vendamani, V. S., Tripathi, A., Pathak, A. P., and Tiwari, A. “*Self assembly of functionalised graphene nanostructures by one step reduction of graphene oxide using aqueous extract of Artemisia vulgaris*”, **Applied Surface Science**, 362 (2016), 221 – 229.
2. **Chettri, P.**, Vendamani, V. S., Tripathi, A., Singh, M. K., Pathak, A. P., and Tiwari, A., “*Green synthesis of silver nanoparticle-reduced graphene oxide using Psidium guajava and its application in SERS for the detection of methylene blue*”, **Applied Surface Science**, 406 (2017), 312 – 318.
3. **Chettri, P.**, and Tiwari, A., “*Tuning photoluminescence quenching efficiency of reduced graphene oxide substrates using silver nanoparticles*”, **Thin Solid Films**, 669 (2019), 208 – 214.
4. **Chettri, P.**, Singh, M. K., Tripathi, A., Pathak, A. P., Mandal, R. K., and Tiwari, A., “*Eriochrome Black T sensing using silver nanoparticle-reduced graphene oxide composite via luminescent “turn-off” mechanism and its biosorption on guava (Psidium guajava) leaf powder*”, **Graphene Technology**, 4 (2019), 41 – 51.
5. Singh, M. K., **Chettri, P.**, Tripathi, A., Tiwari, A., Mukherjee, B., and Mandal, R. K., “*Defect mediated magnetic transitions in Fe and Mn doped MoS₂*”, **Physical Chemistry Chemical Physics**, 20 (2018), 15817 – 15823.
6. Luitel, H., **Chettri, P.**, Tiwari, A., and Sanyal, D., “*Experimental and first principle study of room temperature ferromagnetism in carbon-doped rutile TiO₂*”, **Materials Research Bulletin**, 110 (2019), 13 – 17.
7. Pradhan, A., Sharma, L., Tiwari, A. and **Chettri, P.**, “*Characterization of pectin extracted from Citrus reticulata L. Blanco collected from different altitudes of Sikkim Himalaya*”, **Journal of Applied and Natural Science**, 11 (2019), 168 – 181.
8. Singh, M. K., **Chettri, P.**, Basu, J., Tripathi, A., Mukherjee, B., Tiwari, A., and Mandal, R. K., “*Synthesis of rod-shaped Au-Cu intermetallic nanoparticles and SERS detection*”, **Materials Letters**, 249 (2019), 33 – 36.
9. Singh, M. K., **Chettri, P.**, Basu, J., Tripathi, A., Mukherjee, B., Tiwari, A., and Mandal, R. K., “*Synthesis of anisotropic Au-Cu alloy nanostructures and its application in SERS for the detection of Methylene Blue*”, **Materials Research Express**, 7, (2020), 015052.

10. Luitel, H., Roy, S., Chakrabarti, M., **Chettri, P.**, Tiwari, A., Naik, V., and Sanyal, D., “Room temperature ferromagnetism in boron-doped oxides: A combined first principle and experimental study”, **Philosophical Magazine Letters**, 100, (2020), 141 – 153.

THESIS

Ph.D. Thesis title: “*Graphene oxide and its composite derivatives: A multifunctional application platform*”

CONFERENCE AND WORKSHOP

1. Workshop on “*Radiation Its Applications in Chemical, Physical and Life Sciences*”, October 29-31, 2014; Venue: Mizoram University, Mizoram, India.
2. “*International workshop on Frontiers of Spectroscopy*”, January 8-9, 2015; Venue: Banaras Hindu University, Uttar Pradesh, India.
3. **Poster presentation:** “*International Conference on Frontiers of Spectroscopy*”, January 10-12, 2015; Venue: Banaras Hindu University, Uttar Pradesh, India.
4. **Poster presentation:** “*International Conference on Materials Science and Technology*” March 01-04, 2016; Venue: University of Delhi, Delhi, India.
5. **Oral presentation:** “*International conference on nanotechnology: Ideas, Innovations and Initiatives-2017*”, December 06-08, 2017; Venue: IIT Roorkee, Uttarakhand, India.
6. **Oral presentation:** “*European Materials Research Society (E-MRS) Spring Meeting 2018*”, June 17-22, Venue: Strasbourg Convention Center, Strasbourg, France.
7. **Oral presentation:** “*One day National Seminar on Recent Developments in Physics*” 21st September, 2018; Venue: Nar Bahadur Bhandari Degree College (NBBDC), Sikkim, India.

RESEARCH EXPERIENCE

Keywords: *Materials Science, Nanomaterials, Hybrid materials, Graphene, Sensors*

- Synthesis of high quality graphene oxide, reduced graphene oxide, nanoparticles, silver nanoparticle-reduced graphene oxide composites, surface enhanced Raman scattering and Fluorescence detection techniques and morphological and structural characterization of nanomaterials.
- **Instrument handling:** Raman spectrophotometer, UV-vis spectrophotometer, Fluorescence spectrophotometer, FTIR, X-ray diffractometer, SQUID magnetometer,

Atomic Force Microscope (AFM), Four probe station and Scanning Tunneling Microscope (STM).

- One month industrial training on sample preparation for STM measurements, acquiring STM images and scanning tunnelling spectroscopic data.
- One week AFM training by Nanonics representative.
- Research collaboration with VECC, Kolkata and IIT-BHU.
- 14 months post PhD research experience under DST-SERB funded project.

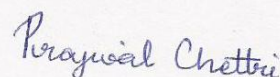
TEACHING EXPERIENCE

- Government organized winter crash course for Class 12 students for 6 months (3+3), Hee Gaon Senior Secondary School, West Sikkim.

Declaration:

I hereby declare that the details stated above are true and correct to the best of my knowledge.

Yours sincerely,



(Prajwal Chettri)

Date: 22/08/2020