RAJAT SUBHRA CHAKRABORTY

M.Sc.Physics (Specialization in Material Science)
Address: 4/262, Gayeshpur, PO-Gayeshpur, PIN-741234
Dist-Nadia, State- West Bengal. (INDIA)
Contact - +918697509595, E-mail- rjtchakraborty365@gmail.com

Education

Master of Science, Physics, Specialization in Material Science. First-class, (2016)
Guru Ghasidas University (A Central University), Bilaspur, India.
Thesis: 'Synthesis and Characterization of Graphene Oxide Bismuth Vanadate composite'
Guide: Dr Goverdhan Reddy Turpu, (Assistant Professor, Department of Pure and Applied Physics, Guru Ghasidas University).

Bachelor of Science, Physics Honours. 2nd Class Honours, (2013)
West Bengal State University, Barasat, India.

Online courses:

Topology in Condensed Matter: Tying Quantum Knots (EDX)

Graphene Science and Technology (EDX)

Skills:

Quantum simulation programming in IBM Quantum Computer
Technical Skill- Powder XRD, Raman spectroscopy, SEM
Programming- FORTRAN, C
Material simulations - Quantum Espresso.
Other- MS OFFICE, MS WORD, EXCEL.
OS- LINUX, WINDOWS.

Research Interests:

2D-Graphene materials for sensors, and application to future electronics for efficient circuits and fast electronic circuits and Nano-technology. Use of Graphene materials for superconductivity applications. Experimental Condensed Matter Physics and Simulations studies. Thin film technology.

Present Research: (2020 - present)

Study of Graphene superconductive states using Quantum simulations for future quantum computing application.

Research Experience:

Master Research, Guru Ghasidas University, Dept. Of Pure and Applied Physics.

(Jan-May 2016)

I, Synthesized Graphene Oxide and Bismuth Vanadate composite by Hummer's method and solid-state reaction method. And Characterized the composite, using Powder XRD and Raman Spectroscopy.

Fellowship:

Selected as **Junior Research Fellow**, to study the "Weak anti-localization and Quantum Oscillation in Topological Insulator using Ion irradiation." (April-2019)

Employments and responsibilities:

Student Life (Subject Matter Expert) **March 2020 to present**

Responsibility: Prepare academic research, write contents for student course materials, analysing problems and problem-solving.

Physics Class: (Teacher, UG) **May 2018- November 2019**

Responsibilities: Teaching Physics to undergraduate students, helping them in solving problems and guiding them in their course study. Evaluating performances of students in the class, Conducting Tests for students.

Physics subject matter expert: (Role: Teaching, making doubt clearing classes) December 2016 - April 2018.

(Under Graduate and high school students)

Presentation: "Synthesis and Characterization of Graphene Oxide and Bismuth Vanadate Composite"

Presented at Department of Pure and Applied Physics, Guru Ghasidas University. (May-2016)

Language: English (Able to communicate proficiently with others and able to present scientific papers), Hindi and Bengali (Native).

References:

Dr. GOVERDHAN REDDY TURPU Assistant Professor Department of Physics and Applied Physics Guru Ghasidas University (Central University) E-mail: dr.tgreddy@gmail.com TEL.NO- +91-8963901321	Dr Pradip Das Assistant Professor Department of Pure and Applied Physics Guru Ghasidas University (Central University) Koni, Bilaspur 495 009, India Email Id: pradipd.iitb@gmail.com Phone: 09407734453