



BGSRP-2025 Summer Internship - List of Projects

Sr. No.	Name of the Investigator	Department	Title of the Project problem	Area of the project problem
1	Prof. Ramesh Vasan	EEE	Simulation of uncooled infrared photo detectors using alloyed $\text{Ge}_{(1-x)}\text{Sn}_x$ .	Optoelectronics
2	Prof. Nitin Sharma	EEE	Development of Software GNSS Receiver for ISRO	Communication Systems/Signal Processing
3	Prof. Shilpa Gondhali	Mathematics	Computation of quantum invariants of class of links using python	Knot Theory (Topology)
4	Prof Sudipta Chatterjee	Chemistry	The Role of Metal-Pincers in Electrocatalytic Water Splitting	Inorganic Chemistry
5	Prof Kiran Vankayala	Chemistry	Cost-efficient materials for green hydrogen production	Materials Chemistry
6	Prof Amrita Chatterjee	Chemistry	Aggregation-Induced emission based Red emissive carbon dots for detection of toxic analytes	Organic Chemistry
7	Prof Mainak Banerjee	Chemistry	1. Mechanochemical tandem C-H bond activation of heterocycles. 2. Design of functionalized imidazo[1,2-a]pyridine-based drug scaffolds and their synthesis by Green Technologies	Organic Chemistry
8	Prof Rabi Narayan Panda	Chemistry	1.Molybdenum Oxide Based materials for Semiconducting and Optothermal applications 2.Polymer coated Fe(/Co)-Ni nano-alloy formation and characterization	Materials Chemistry
9	Prof Saurav Bhattacharya	Chemistry	Synthesis of polyfunctional organic linkers for the design and development of novel Bismuth-based metal-organic framework (Bi-MOF) catalysts	Inorganic Chemistry

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10	Prof Bhavana P	Chemistry	Electrocatalysis using metalloporphyrin – metal oxide hybrid materials	Inorganic Chemistry
11	Prof. Sanjay Kumar	Chemistry	Targeted drug delivery systems	Drug delivery
12	Prof. Sachin Waigaonkar	Mechanical Engineering	Characterization of Polymeric Materials for Processability and Mechanical Properties	Materials and Manufacturing (Mechanical Engg)
13	Prof. Iniyan Thiruselvam N	Mechanical Engineering	Design, development and characterization of medical- grade polymers for guided surgery	New product development and testing
14	Prof. Ch V V S N V Prasad	Economics and Finance	“Ecotourism”: A roadmap to promote tourism in Goa	Ecotourism
15	Dr. Arfat Ahmad Sofi	Economics and Finance	Green Growth, inequality and Welfare Interface	Economic Growth and Environment
16	Dr. R. L. Manogna	Economics and Finance	Climate change impacts and food security: A study of Asian economies	Food security, climate risk, agricultural innovation.
17	Dr. Aabhaas Vineet Mallik	Physics	Real space theoretical study of two dimensional superconductors with impurities and magnetic fields	Theoretical Condensed Matter Physics
18	Prof. Prasanta Kumar Das	Physics	1. Studying some aspects of Neutrino Oscillation using the Quantum Information	High Energy Physics and Quantum Information
			2. Probing Dark Matter using the Galaxy Rotation Curve data	Astronomy & Astrophysics
19	Prof. Tarun Kumar Jha	Physics	On Aspects of Magnetized Neutron Stars	Nuclear-Astrophysics
20	Prof. Raghunath Ratabole	Physics	Wavelets in Field Theory	Quantum Field Theory
21	Prof. Richa Singhal	Chemical Engineering	Next generation energy storage: Develop advanced carbon nanofiber-based composites for next gen energy storage devices	Materials synthesis and characterization

22	Prof. Sonal Ayakar	Biological Sciences	Development of probiotic fermentative process	Biotechnology
23	Prof. Suman Kundu	Biological Sciences	hemoglobins, blood pressure and blood substitutes.	Biotechnology
24	Prof. Rajesh Kumar	CS&IS	Attack path analysis of an e-commerce application	LLMs and Reinforcement learning
			Innovation vs cybersecurity	LLM and Cyber security