

Annexure I

List of projects floated by IIT Bhubaneswar and corresponding supervisor(s): Institute is offering **10 (ten)** interns in this academic year. The internship period will be from 19/05/2023 to 19/06/2023. We would appreciate if you follow one student/one supervisor policy based on the choice of the intern (or as per AICTE selection criteria). The details profile of the faculty can be found by clicking the weblink provided (please use mozilla web browser).

Sr. No.	Schools	Name of the faculty (email)	Research Area	Weblink
1	School of Basic Sciences	Dr. Dr. Akhilesh Kumar Singh (aksingh@iitbbs.ac.in , akhileshiitk@gmail.com)	T1 and ParaCEST Based Contrast Agents for MRI Magnetochemistry of 3d and 4f Based Supramolecules Fluorogenic and Chromogenic Chemosensors Ionic Liquids as Electrolyte Additives in Lithium Ion Battery Stabilization of Unusual High Oxidation States of 3d Metal Ions	https://www.iitbbs.ac.in/profile.php/aksingh/
2	-do-	Dr. Soumendra Rana (soumendra@iitbbs.ac.in)	Structure Function Studies on Peptide or Protein binding G-protein Coupled Receptors; Rational Design of Peptides / Proteins as Therapeutics; (Antimicrobial / Antiviral / Anti-inflammatory); Chemical and Cellular Biology; Computational Biology and Bioinformatics; Protein-Protein Interactions Drug Design and Discovery	https://www.iitbbs.ac.in/profile.php/soumendra.rana/
3	-do-	Dr. Tabrez Khan (tabrez@iitbbs.ac.in)	Synthetic Method Development; Natural Product Synthesis; Heterocyclic Chemistry; Organocatalysis; Asymmetric Syntheses using Chiral Pool Approach	https://www.iitbbs.ac.in/profile.php/tabrez/
4	-do-	Dr. Palas Roy (palasroy@iitbbs.ac.in)	Ultrafast Dynamics in Molecules and Materials; Time-resolved Emission and Absorption Spectroscopy; Femtosecond Stimulated Raman Spectroscopy; Photodynamics of Next-generation Energy Materials; Control and Harvest Charge Carriers Efficiently	https://www.iitbbs.ac.in/profile.php/palasroy/
5	-do-	Dr. Tuhin Patra (tuhinpatra@iitbbs.ac.in)	Photocatalysis, Synthetic Organic Electrochemistry, Flow Chemistry	https://www.iitbbs.ac.in/profile.php/tuhin/
6	-do-	Dr. Satchidananda Rath (srath@iitbbs.ac.in , snrath08@gmail.com)	Nanoclusters for molecular electronics Application; □ Two-dimensional nanostructure for Solar Cell, Optoelectronics and sensors; Rheological behavior of soft matter/nanomaterials dispersion; Study of Ultrafast processes; In Nanostructure & soft matter research activities, we have been working on	https://www.iitbbs.ac.in/profile.php/srath/

			research programs consist of (1) Growth of nanostructure materials (metal, semiconductor and oxides) different shape and sizes (e.g. nanoclusters, nanosheets etc.) (2) characterization through light scattering, (3) studies of ultrafast processes using femtosecond Laser and (4) rheological properties of nanomaterial dispersion –nanofluid in different solvents and polymer as a function of the external force field to explore on the challenging application of above materials in energy and optoelectronic devices.	
7	-do-	Dr. Avijit Kumar (avijitkumar@iitbbs.ac.in)	Two-Dimensional Materials: Graphene, 2D TMDs; Metal-Organic Frameworks (MOFs); Energy Materials: Perovskites; Molecular Electronics; Scanning Tunneling Microscopy (STM); non-contact Atomic Force Microscopy (nc-AFM)..	https://www.iitbbs.ac.in/profile.php/avijitkumar/
8	-do-	Dr. Abhishek Chowdhury (achowdhury@iitbbs.ac.in , achowdhurig@gmail.com)	String Theory; Black Holes; QFT; Moonshine	https://www.iitbbs.ac.in/profile.php/abhishek-chowdhury/
9	-do-	Dr. Niharika Mohapatra (niharika@iitbbs.ac.in)	Experimental condensed matter physics (Strongly Correlated electron system, including magnetically driven ferroelectrics, thermoelectric oxides, high temperature superconductors, low dimensional and frustrated magnetic systems and magnetocaloric intermetallics)	https://www.iitbbs.ac.in/profile.php/niharika/
10	-do-	Dr. Aneesh M (aneesh@iitbbs.ac.in , aneeshkolappa@gmail.com)	Operator theory; Functional analysis	https://www.iitbbs.ac.in/profile.php/aneeshm/
11	-do-	Dr. Bankim Chandra Mandal [bmandal(AT)iitbbs(DOT)ac(DOT)in]	Numerical Analysis, Scientific Computing, Partial Differential Equations, Domain Decomposition Methods	https://www.iitbbs.ac.in/profile.php/bmandal/
12	-do-	Dr. Sunil Kumar Prajapati (skprajapati@iitbbs.ac.in)	Algebra	https://www.iitbbs.ac.in/profile.php/skprajapati/
13	-do-	Dr. Vasudeva Rao Allu [avrao@iitbbs.ac.in , alluvasudevarao(AT)gmail(DOT)com]	Complex Analysis; Geometric Function Theory; Harmonic Mappings in the Plane	https://www.iitbbs.ac.in/profile.php/vasura/
14	-do-	Dr. Mahendra Kumar Gupta (mkgupta@iitbbs.ac.in , mahendra14389@gmail.com)	Control Theory, Linear Algebra & Matrix Theory, Observer design, Differential-Algebraic Equations (Descriptor Systems), Design of Input and Output Feedback	https://www.iitbbs.ac.in/profile.php/mahendra-kumar/

15	School of Minerals, Metallurgical and Materials Engineering	Dr. Snigdha Ghosh (snigdha@iitbbs.ac.in)	Mathematical modelling of metallurgical processes; Iron and steel making; surface phenomena	https://www.iitbbs.ac.in/profile.php/snigdha-ghosh/
16	-do-	Dr. Kodanda Ram Mangipudi (kodanda@iitbbs.ac.in)	Computational Mechanics; Mechanical behavior of (nano)composite materials; Mechanics of cellular solids: metal foams, bone, and nanoporous metals; Deformation and fracture at nanoscales; Acoustic and phonon band gap engineering; Surface elasticity; Phase-field modelling of microstructural evolution; D tomography and Quantitative microstructural characterization	https://www.iitbbs.ac.in/profile.php/kodanda/
17	-do-	Dr. Maya K. Kini (mayakini@iitbbs.ac.in)	Thin film mechanics and micromechanics; Mechanical behavior of ceramics; Materials characterization; Thin film deposition; High temperature ceramic processing	https://www.iitbbs.ac.in/profile.php/maya/
18	School of Infrastructure	Prof. Sumanta Halder (sumanta@iitbbs.ac.in , sumanta.halder@gmail.com)	Offshore Geotechnics; Soil-Structure Interaction; Railway Geotechnics; Geotechnical Earthquake Engineering; Dynamics of Soil and Foundation	https://www.iitbbs.ac.in/profile.php/sumanta/
19	-do-	Dr. Jothi Saravanan Thiyagarajan (tjs@iitbbs.ac.in , tjs.saravanan@gmail.com)	Structural Engineering and Dynamics; Structural Health Monitoring; Smart Materials and Structures; System Identification; Vibration Monitoring; Machine Learning; Deep Learning; Computer Vision; Image Processing	https://www.iitbbs.ac.in/profile.php/jothisaravanan/
20	-do-	Dr. Devesh Punera (devesh@iitbbs.ac.in , puneradevesh12@gmail.com)	Structural Mechanics; Composite structures; Continuum theories of beams, plates and shell structures; Smart materials; Bio-mechanics.	https://www.iitbbs.ac.in/profile.php/deveshpunera/
21	School of Electrical Sciences	Dr. Himanshu Pramod Padole (himanshupadole@iitbbs.ac.in)	Digital Signal Processing	https://www.iitbbs.ac.in/profile.php/himanshu/
22	-do-	Dr. Ankit Ravindra Deshmukh (ankitd@iitbbs.ac.in)	Control Systems	https://www.iitbbs.ac.in/profile.php/ankit/
23	-do-	Dr. Abhik Jana (abhikjana@iitbbs.ac.in)	Natural Language Processing and Cognitive Science	https://www.iitbbs.ac.in/profile.php/abhik/