

# AUC 77

Details of approval like Runs/Shifts/Samples/UFR Funds/BTA etc. will be communicated by post.

Sr No	AUC ID	PI	Title	UFR Status
1	77101	Dr. Bommadeni Arun	Estimation and Comparative study on Radiocarbon measurements in the environmental samples using AMS and Liquid Scintillation counter (Benzene Synthesis Method)	
2	77102	Dr. Suresh Das	Glacial Chronology and Climatic Implications during Local Last Glacial Maxima: A Regional Synthesis of the Western and Eastern Himalayas	
3	77103	Dr. Thejasino Suokhrie	Understanding paleo-oxygenation conditions from the Indian Ocean	
4	77105	Prof. A.C. Narayana	AMS C-14 dating of speleothems	
5	77107	Dr. Prajith A	High-Resolution Paleoenvironmental Reconstruction using sediment cores from the off Kerala region, SW India.	
6	77108	Dr. Niraj Rai	Reconstructing the human population history of South Asia using ancient genomics.	
7	77109	Dr. Harsh Raj	Radiocarbon dating of marine shells associated with anchors and potteries from Indian coasts	
8	77110	Dr. M. B. L. Mascarenhas-Pereira	Spatial Variation in Eolian Sedimentation in the Eastern Arabian Sea during the Holocene	
9	77111	Dr. Saleem Shaik	Dating of pigment samples of rock paintings	
10	77112	Dr. Suja S	Late Quaternary Sedimentation in the Southern Continental Margin of India: Inferring the variations in Indian monsoon, provenance, palaeoproductivity and ocean circulation	
11	77113	Dr. Vikas Kumar Singh	Chronology of the site Sakas, District Sasaram (Rohtas), Bihar based on the AMS C-14 dating of bone samples	

12	77114	Prof. Hema Achyuthan	Reconstruction of Holocene paleolimnology in Kashmir Valley and Ladakh Region	
13	77115	Dr. Suresh Kumar Thokchom	In vitro evaluation of carbon ion and gamma radiotherapy in combination with cisplatin in gallbladder carcinoma cell line G-415	
14	77116	Dr. Sourav Ghosh	Radiosensitisation of human cancer cell line with silver nano particle (SNP).	
15	77117	Dr. Damodar Gupta	In-Vitro Modulation of High LET Radiation-Induced DNA Damage and Repair by TLR agonist Mannan Oligosaccharide	
16	77118	Dr. Sujata Saxena	<sup>14</sup> C analysis of purified natural and synthetic indigo dye samples to develop a method for determining synthetic indigo adulteration in commercial natural indigo dyesamples	
17	77120	Dr. Souren Paul	Effect of Carbon Ion Radio Therapy in combination with cGAS-STING agonist on triple negative breast cancer cell	
18	77121	Dr. Saif Ahmad Khan	Investigating the Effects of Convolvulus pluricaulis (Shankhapushpi) Extracts on the Response of MCF-7, MCF-10, and MDA-MB-231 Cell Lines to High Energy Carbon-ion Irradiation	
19	77122	Dr. Akshay Talukdar	Impact of Lithium Ion Beam Irradiation on Phenotypic Variation, Nutritional Composition and Biochemical Parameters in Glycine max (L.) Merr.	
20	77127	Dr. Dipika Patel	Determination of higher order deformations of atomic nuclei by quasi-elastic scattering	
21	77129	Prof. Javed N malik	Holocene organic matter dynamics and environmental shifts from Lakshadweep Island	
22	77130	Dr. Neetu	<sup>26</sup> Al/ <sup>10</sup> Be burial dating of Prehistoric Site of Mehtakheri, Central India	
23	77131	Dr. Tejpal Singh	Palaeoseismic events along the MFT in Morni-Nahan sector, NW Himalaya of India.	
24	77133	Dr. Niteshkumar Khonde	Holocene land-sea interactions and palaeoenvironmental changes in Great Rann of Kachchh basin, western India	
25	77135	Dr. Priyanka Singh Rao	AMS Radiocarbon dating	

26	77136	Dr. Ambuj Tripathi	Formation of Q-silicon and Ion Tracks by Swift Heavy Ion Irradiation	
27	77137	Dr. Sandeep M Eswarappa	Investigating the ability of tardigrades to tolerate lethal ionizing radiations	
28	77201	Ms. Anjali Kumari C/o. Dr.Thejasino Suokhrie	Reconstruction of past water column variability from the south eastern Arabian Sea	
29	77202	Ms. Ovica Manners C/o. Dr. Vikas Dubey	Luminescence studies on rare-earth (Eu, Er, Yb and Tb) doped MRE <sub>2</sub> O <sub>4</sub> [M=Ba, Ca, Sr, Re=Y, Gd, La] phosphor for Display, Safety Applications and Bio-imaging	
30	77203	Mr. Ajith Kumar K C/o. Dr. A. Vidyasakar	Paleoclimate reconstruction of the Nilgiri Valleys during the Holocene: a multi-proxy approach	
31	77204	Ms. Akanksha Srivastava C/o. Prof. Narendra Kumar Pandey	Functionalization & Characterization of Metal Oxide Nanomaterials for Sensing Application	
32	77207 & 77504	Ms. Trishna Verma C/o. Prof. Pawan Kumar Kulriya	Development of high radiation resistance alloys by controlling the chemical composition and structural defects	
33	77208	Ms. Labli Das C/o. Prof. Devesh Walia	Paleoenvironmental Reconstruction Using Quaternary Deposits of East Khasi Hills District, Meghalaya	
34	77209	Ms. Komal C/o. Prof. Bivash Ranjan Behera	Measurement of fusion and transfer cross section for <sup>28</sup> Si+ <sup>64</sup> , <sup>70</sup> Zn system with the HIRA facility	
35	77210	Mr. Rishabh Prajapati C/o. Dr. Akhil Jhingan	Investigating Ternary Fission in around Z > 100 region	
36	77211	Ms. Kiran C/o. Prof. Bivash Ranjan Behera	Measurement of mass gated and average neutron multiplicity in the actinide region with the NAND facility	
37	77212	Mr. Alankar Singh C/o. Dr. Subir Nath	Roles of positive Q-value neutron transfer channels and shell closure on fusion dynamics.	
38	77213	Mr. Amit C/o. Prof. Bivash Ranjan Behera	Measurement of Quasi-elastic Barrier Distribution and Transfer Cross Section for <sup>24</sup> Mg+ <sup>58</sup> , <sup>61</sup> Ni Systems	
39	77214	Mr. Debajyoti De C/o. Prof. Pitambar Pati	Holocene palaeoenvironmental studies from the Chilika Lagoon based on sedimentary archives	

40	77217	Mr. Somasundharam Magalingam C/o. Prof. Selvakumar Radhakrishnan	Paleoflood History of Cauvery River and the Defunct of Ancient Port City-Poompuhar	
41	77218	Ms. Niketan Jakhar C/o. Prof. Manish Kumar	Wakefield Characterization of Charged particles in beam-foil system	
42	77219	Ms. Manjusha Rohidas Madkaikar C/o. Dr. Pratima Kessarkar	Changes in sediment provenance in the Laxmi basin, eastern Arabian Sea.	
43	77220	Ms. Khushi C/o Dr. Tarkeshwar Trivedi	Exploring Chirality and Octupole Correlations in the A $\approx$ 70 region	
44	77221	Mr. Roni Paul C/o. Dr. Utpal Ghosh	A Comparative Analysis of High LET Carbon Ion vs. Low LET Gamma Radiation-Induced Bystander Effects in Human NSCLC A549 Cells with PARP-1 Inhibitors	
45	77222	Ms. Rima Das C/o. Dr. Utpal Ghosh	Exploring the impact of poly-ADP ribosylation on telomere maintenance in human lung cancer cells	
46	77223	Ms. Dhana Sai Shree C/o. Prof. Sunita Rattan	Stimulus Responsive Shape Memory Polymers and their applications	
47	77224	Ms. Ashna C/o. Dr. E. Prasad	Fission fragment angular distribution measurements in $^{28}\text{Si} + ^{182}\text{W}$ and $^{30}\text{Si} + ^{182,184,186}\text{W}$ reactions	
48	77226 & 77515	Mr. Pritam Patra	Effect of ion irradiation on microstructure and mechanical properties of additively manufactured materials for next-generation nuclear reactor application	
49	77227	Mr. Gokul Ram V B C/o. Prof. Ramkumar M	Geodynamics and environmental status of coastal sedimentary landforms of Cauvery River Delta, Tamil Nadu, Southern India	
50	77228	Mr. Amritpal Singh C/o. Dr. Varinderjit Singh	Investigation of fusion enhancement and shell effects on fusion for neutron-rich systems near the fusion barrier	
51	77229	Mr. Nayan Kirpashankar Sharma C/o. Prof. Javed N Malik	Chronological Reconstruction of Landscape Evolution and Seismic Events in the Great Rann of Kachchh Using AMS Radiocarbon Dating	
52	77231	Mr. Rahul Khichi C/o. Dr. Suhas S. Shetye	Study of the Siliceous Microfossil in the marine sediments: Reconstructing Holocene oceanographic and Climatic changes in the Arabian Sea and Bay of Bengal	
53	77232	Ms. Zofa Shireen C/o. Prof. Sanjit Dey	Modulation of cancer cell death by Anthocyanins: Mechanism based experimental approach	

54	77305	Dr. Mudasir Ashraf Shah	In-Vitro Study on Radiation Sensitization of Nanoparticles in Photon and heavy ion Irradiation of Cancer Cells	UFR not Approved
55	77308	Dr. Vikas Dubey	Synthesis & Characterization of rare earth doped Aluminate based Phosphors (Y/Gd)AlO <sub>3</sub> , (Y/Gd) <sub>4</sub> Al <sub>2</sub> O <sub>9</sub> , (Y/Gd) <sub>3</sub> Al <sub>5</sub> O <sub>12</sub> ) for luminescence Dosimetry and opto-electronics applications	UFR not Approved
56	77310	Dr. Manasi Debnath	Quantify the Holocene climate dynamics in select glacial valleys in North Sikkim Eastern Himalaya	UFR Approved
57	77312	Dr. Manju Bala	Development of Ion Beam Engineered BiCuSeO Nanostructured thin films for thermoelectric Device fabrication.	UFR Approved
58	77313 & 77505	Dr. Chongtham Jiten	Study of Effect of Ion Implantation and Gamma Irradiation on the Properties of Piezoelectric Ceramics	UFR Approved
59	77315	Dr. L. Kungumadevi	Impact of SHI Irradiation on Transition Metal oxides/rGO composites for Supercapacitor Applications	UFR Approved
60	77316 & 77508	Dr. Harpreet Singh	Creation of Silicon Vacancies in Silicon Carbide for Quantum Sensing Applications	UFR Approved
61	77318	Dr. P. Raji	Swift Heavy ion irradiated Ni-doped Co <sub>3</sub> O <sub>4</sub> / Reduced Graphene Oxide Nanocomposites for Supercapacitor Applications	UFR not Approved
62	77319 & 77512	Prof. V. S. Vasantha	Modifying the Properties of 2D Composite Materials Using Energetic Ion Beams for Electrochemical Sensor for Neurodegenerative Disorders	UFR Approved
63	77321	Dr. P. Udayaganesan	Holocene climate variability and oceanographic shifts in the Southwestern Bay of Bengal: a multi-proxy approach	UFR Approved
64	77322 & 77518	Dr. Tanuj Kumar	Development of Engineered Ripple-Patterned Surfaces for Enhanced SERS Detection of Water-Soluble Dyes	UFR Approved
65	77324	Dr. Nutan Sharma	Study the Effect of SHI Induced surface modification and structural changes on electrochemical performance of MXene nanosheet and their Hybrid composites	UFR not Approved
66	77326	Dr. Netram Kaurav	Effect of Ion Beam Irradiation on Structural, Electrical and Magnetic Phase Transitions in Pyrochlore Thin Films	UFR not Approved
67	77503	Dr. Poulami Chakraborty	Irradiation behavior of RAFM steel	

68	77506	Dr. Narendra Kumar Pandey	Preparation and Characterization of Junction-Engineered Metal OxideBased Sensor for Gas Sensing Applications	
69	77507	Mrs. Deeksha Khandelwal	Development of ion implanted standards for quantitative secondary ion mass spectrometry measurements in semiconductors	
70	77510	Dr. Himani Sharma	Direct Z Scheme based WS <sub>2</sub> /TiO <sub>2</sub> and gC <sub>3</sub> N <sub>4</sub> /WS <sub>2</sub> heterostructures for Hydrogen evolution reaction (HER) investigation	
71	77511	Dr. Diksha Garg	Fragmentation and dissociative ionization of ammonium chloride salt present in the cometary nuclei	
72	77514	Dr. Santosh Kumar	Ion Implantation for Enhancing Surface Charge Density of Triboactive materials: Towards Sustainable Energy Harvesting	
73	77516	Dr. Mamta Shandilya	Surface Modification and In-Depth Analysis of Perovskite Cathode Materials for Enhanced Solid Oxide Fuel Cell (SOFC) Performance by Low-Energy Ion Beam.	
74	77520	Mr. Chandan Thakur	Effect of gas mixing on the plasma instabilities in ECR ion source	