

**Details of approval like Shifts/Samples/UFR Funds/BTA etc. will be communicated by post. User can also refer to their dashboard for details.**

**AUC-72 APPROVED PROPOSALS FOR AMS**

<b>AUC ID</b>	<b>PI NAME</b>	<b>TITLE</b>	<b>UFR STATUS</b>
72124	Dr. Anil Kumar Gupta	Multi-proxy analysis of lake sediments(West Bengal Lakes).	-
72125	DR. ANIL KUMAR GHUPTA	Tracing Possible Climate induced methane emissions from hydrate bearing sediments off the continental margin of Chile: Benthic Foraminifera proxies.	-
72126	Prof. Anil Kumar Gupta	Reconstruction of paleoclimatic variability of the Lower Ganga Plain: A multi-proxy study using lake sediments.	-
72127	Dibishada B Garnayak	14C of Hastinapur Archaeological Site, Meerut, Uttar Pradesh.	-
72128	DR. ANIL KUMAR GUPTA	Variations in the oceanographic conditions associated with the Indian monsoon along the coast of Eastern Arabian Sea.	-
72129	Dr. Anil Kumar Gupta	Radiocarbon (14C) analysis of terrestrial sediments from fresh water lake archives.	-
72130	Dr. Anil Kumar Gupta	Multiproxy analysis of lake sediments, Chilika lake.	-
72132	Y. Raghmani Singh	Reconstruction of past climate of the Late Quaternary Period from a sediment core of Imphal Valley, Manipur.	-
72133	Dr. Anil Kumar Gupta	Lake records from Northern and Eastern India and model runs to understand monsoon variability during the last millennium.	-
72134	PEW BASU	Analysis of C-14 in soil samples using AMS.	-
72135	K. Amarnath Ramakrishna	AMS dating of Keeladi Charcoal Samples.	-
72138	Dr. Shubha Majumder	Dating of excavated materials.	-
72140	Saju Varghese	Genesis and evolution of ferromanganese crusts from the Laccadive Ridge, Indian Ocean.	-
72141	Dr. Sushant Suresh Naik	C-14 dating of sediment cores from the Eastern Arabian Sea.	-

72143	Dr. Vinay Kumar Gupta	AMS / C14 dating of the samples from archaeological excavation at Barnauli Ki Dhai Mathura.	-
72144	Dr. Vinay Kumar Gupta	AMS / C14 dating of the samples from archaeological excavation at Rakhigarhi Hisar Haryana.	-
72145	Dr. Anil Kumar Gupta	AMS 14C dating of Lake Sediments.	-
72146	Komal Verma	Paleoclimatic and palaeoceanographic variability in Bay of Bengal.	-
72149	Mahadev	Plaeochannels of the Ghaghra River in the Himalayan foreland basin: Evolution, paleoclimate and palaeodenudation aspects.	-
72151	Sharada Channarayapatna	Depth verses age from bioarchaeological record at World Heritage site of Dholavira.	-
72152	Mrs. Maria Hilda D.M. Joao	Chronology of sediment cores based on AMS C-14 dating of foraminifera.	-
72154	Rajveer Sharma	Quantification of fossil fuel CO2 and methane using radiocarbon measurements in atmospheric air in Megacity Delhi.	-
72155	Rajveer Sharma	Radiocarbon based source apportionment study of particulate and dissolved organic carbon in rainwater in Megacity Delhi.	-
72156	Dr. Om Kumar	Reconstruction of holocene monsoon circulation and glacier varibility from the lake sediments, Himalayas.	-
72158	Dr. Arunraj T	AMS dating of Charcoal, husk of paddy and bones of Adichanallur Site, Thoothukudi District, Tamil Nadu.	-
72162	Dr. Niteshkumar N. Khonde	Land-marine interaction changes and palaeoenviroment reconstruction form the Great Rann of Kachchh basin, Western India.	-
72163	Dr. Raghupratim Rakshit	Tectono-sedimentary evolution of Champhai block of Mizoram Northeast India and its implications on the closure of the paleolake.	-
72164	Madhav Krishna Murari	Exploration of meteoric and in-situ cosmogenic radionuclide (CRN) dating Application: Middle and Early Pleistocene contexts in India.	-

72166	Farha Zaman	Implications of geochronologic analysis on the uplift rate of the foothills of Naga-Schuppen Belt of Northeast, India.	-
72168	Dr. Oinam Kingson Singh	Origin of ophi-carbonate in the Naga-Hill and Andaman ophiolites: Implication for atmospheric CO <sub>2</sub> sequestration and deep carbon cycle.	-
72169	Dr. Niteshkumar N. Khonde	Provenance and paleoclimatic study of eastern part of Great Rann of Kachchh.	-
72202	Pramodkumar Shivajirao Hire	Evolution of the Mahi River Basin: Insights from the Tectonic Geomorphology.	-
72209	VEENA G VISWAM	A high resolution study on the Indian monsoonal system of the Western Bay of Bengal, a multiproxy approach.	-
72210	Pratima M. Kessarkar	Changes in sediment depositional environment at the Carlsberg ridge valley: Inferences on hydrothermal activity.	-
72223	Sambuddha Misra	Reconstruction of atmospheric pCO <sub>2</sub> across the Mid-Pleistocene Transition and establishing $\delta^{18}O$ of epi- and in-faunal benthic foraminifera as bottom water pH proxy.	-
72224	Dr. Binita Phartiyal	Landscape evolution, Sediment characterization & Climatic variability during Quaternary in the Karewa sequence of Kashmir Valley, India.	-
72226	Dr Binita Phartiyal	Human-climate relationship in the Central Ganga Plain during Late Quaternary: A multi-proxy approach.	-
72227	Dr Sandeep K	Multi proxy approach of Indian Summer Monsoon variability during the Holocene in southern India: Evidence from lacustrine sediments.	-
72230	KOMAL SAHADEV SHINDE	High resolution Holocene monsoon record from the Bay of Bengal.	-
72232	Deepthi N	Radiocarbon dating of sediment cores from Cauvery Delta: A study to understand climate and Land Use.	-
72233	AL Fathima	Landscape evolution and basin dynamics of the Cauvery Basin, South India: implications on climate and tectonics.	-

72239	Dr Vikrant Jain	Tectonic and climatic control on the evolution and sediment transfer in the Sutlej Valley of the Northwestern Himalayas.	-
72243	Dr. Som Nath	Reconstruction of Holocene Palaeoclimate record from core samples of Mansar and Surinsar Lakes of Jammu: Using Multiproxy Approach.	-

**AUC-72 APPROVED PROPOSALS FOR MATERIALS SCIENCE & ATOMIC PHYSICS**

<b>AUC ID</b>	<b>PI NAME</b>	<b>TITLE</b>	<b>UFR STATUS</b>
72120	Dr. Sejal Shah	Radiation induced defect studies in ceramic composites for Nuclear reactor applications.	-
72137	Subhabrata Dhar	Exploring the possibility of controllable p-type doping of epitaxial (111)NiO epitaxial layers through ion irradiation.	-
72153	Subodh Srivastava	Effect of SHI Induced surface defects and structural changes on physicochemical properties of MXene and their composites.	-
72159	Sunil Kumar	In-situ and post-irradiation structural evolution of monolayer graphene by SHI irradiation: assessment of the environmental effect.	-
72160	Bharti	Ion irradiation induced surface engineering for Enhanced Triboelectric Nanogenerator.	-
72167	Hysen Thomas	Investigation on Exchange Bias modification of Multiferroic Oxide bilayer system by Swift Heavy Ion Irradiation.	-
72203	Mohd. Ikram	Structural, optical, magnetic and transport properties of Transition Metal Doped Tripple Pervoskite.	-
72207	Dr. Neeraj Shukla	Defect induced magnetic ordering in ZnO samples using low energy ion beam (Z=2 to 16).	-
72216	PROF. R.C. RAMOLA	Development and energetic ion induced modifications of Doped/Co-Doped Titanium Dioxide thin films for sensor Applications.	-
72219	Prof. Narendra Kumar Pandey	Studies on Synthesis, Characterization, Optical and Structural Properties of Transition Metal Oxides and There Applications as Humidity Sensors and Gas Sensors.	-

72220	Sharmistha Dey	Enhancing room temperature ferromagnetism in pure MoS <sub>2</sub> and MoO <sub>3</sub> by Ar and Xe ion irradiation.	-
72228	Dr. Vivek Gupta	Investigation of thermoelectric properties of Metal Chalcogenides.	-
72231	PROF. NARENDRA KUMAR PANDEY	Studies on Synthesis and Characterization of metal oxide(s) for applications in humidity and gas sensing.	-
72235	Nidhi Pathak	Radiation damage in tungsten nanocomposites using surrogate method of heavy ion beam irradiation.	-
72242	Om Prakash	Synthesis of plasmonic nanostructures by Ion Bombardment and its application.	-
72301	Ravi Kumar	Effect of swift heavy ion irradiation induced strain on spin and orbital ordering in RVO <sub>3</sub> thin films (R= La, Pr, Y).	UFR approved.
72304 & 72502	Dr. K. Senthilkumar	Photocurrent performance of ion implanted Iron Pyrite (FeS <sub>2</sub> ) thin film as hole transport layer for the CZTS based solar cell.	UFR approved.
72307 & 72507	Dr. Himani Sharma	Z-scheme based WS <sub>2</sub> -WO <sub>3</sub> and TiO <sub>2</sub> -WS <sub>2</sub> nanostructures for Hydrogen evolution reaction investigation.	UFR approved.
72309	Dr.B.GOKUL	Synthesis of tetrataenite (L1 <sub>0</sub> -FeNi) permanent magnet through ion beam irradiation.	UFR approved.
72311	Prof. S. Balakumar	Ion beam interaction on Combeite Phase Bioactive Material for enhanced Bio-compatibility and bone bonding efficiency.	UFR not approved
72315	Dr. Hareesh K	Mechanism of swift heavy ion beam and low energy ion beam effects on quaternary solar cells.	UFR not approved
72316	Dr. Arvind Kumar	Understanding the impact of Swift Heavy Ion (SHI) on nanostructured Zirconia and Hafnia film based devices and tuning of electron affinity.	UFR approved.
72317 & 72513	Dr. Ashish B. Ravalia	Tailoring multiferroic and magnetodielectric properties of DyMnO <sub>3</sub> thin films using ion irradiation and implantation.	UFR approved.

72318	Sheo Kumar Mishra	SHI irradiation induced surface modification of metal-oxide nanophosphors and investigation of luminescence and photoconductivity properties for luminescent and sensing devices.	UFR not approved
72319	Farooq Hussain Bhat	Effect swift heavy ion irradiation on structural, electrical and magnetic properties of Co doped LaMnO <sub>3</sub> thin films.	UFR approved.
72321	Vinay Kumar	Study the impact of Swift heavy ion irradiation on Molybdenum disulfide (MoS <sub>2</sub> ) for Application as Gas Sensor.	UFR approved.
72322	Prof. Ranjana Jha (P.I.) /Prof. N.L. Singh (Co-P.I.)	Study of ion irradiation-induced disorder in nuclear ceramics for immobilization of radionuclides waste.	UFR not approved
72323	Ratnesh Gupta	Tailoring electrical and optical absorption characteristics and electronic energy band structure of TiO <sub>2</sub> / ZnO nanostructures through high energy ion beam.	UFR approved.
72503	Dr. Shubra Singh	Tuning of photoactivity of efficient modified Brownmillerites by swift heavy ion irradiation for energy and environmental applications.	-
72504	Dr. S. Shanmuga Sundari	Effect of Ag and Au ion implantation on the optical properties of Alkali Borophosphate glasses.	-
72509	Aditya Sharma	Ion-implantation induced local electronic structure amendment for enhancing the PCE of perovskite based photo-voltaic devices.	-
72510	Prof. M.S. Ramachandra Rao (FInstP)	Lithium doped in diamond: Investigations on electrical, optical and field emission properties, lattice distortions lithium diffusion and next generation device applications.	-
72512	Prof. M. S. Ramachandra Rao, FInstP	Hunting for shallow n-type donor in diamond for realization of diamond p-n junctions for practical use and study of electrical and optical properties of diamond with S, NO (Nitrogen-Oxygen co-doping) ion-implantation.	-
72514	Dr. K. Sethuraman	Effect of ion implantation on chalcopyrite and kesterite based materials for efficient solar cell applications.	-

72515	Saptarshi Pal	Investigation of nitrogen related non-equilibrium defects in $\beta$ -Ga <sub>2</sub> O <sub>3</sub> .	-
72516	DESHRAJ MEENA	Influence of low energy (KeV) ion irradiation on structural and optical properties of Ta <sub>2</sub> O <sub>5</sub> nanostructures towards gas sensing application.	-
72518	Shyamal Chatterjee	Ion beam engineered 2D hybrid nanomaterials for gas sensing studies.	-
72519	sekar c	Microstructurally engineered nanocrystalline Calcium Phosphates for Biosensing Applications.	-
72206	Deepak Kumar Swami	Study of charge exchange phenomenon In Ion Solid Collision.	-
72505	Dr. Amandeep Singh	Induced M-shell X-Ray Production Cross-section measurement at low energies on heavy Z targets.	-
72506	Jyoti Rajput	Study of dissociation dynamics of propylene molecules.	-
72517	Vishant Kumar	Investigation of fragmentation dynamics of Ozone subjected under low energy ion beam irradiation.	-

**AUC-72 APPROVED PROPOSALS FOR NUCLEAR PHYSICS**

<b>AUC ID</b>	<b>PI NAME</b>	<b>TITLE</b>	<b>UFR STATUS</b>
72221	Sunil	Quasi-elastic and transfer reaction studies around the Coulomb barrier.	-
72237	Anjali Merin	Fusion and transfer studies in the <sup>28,30</sup> Si+ <sup>142,150</sup> Nd reactions at energies around the Coulomb barrier.	-
72238	Dr. Dharmendra Singh	Study of entrance channel effects on fusion and transfer reactions induced by heavy ions.	-
72240	AVINASH AGARWAL	Study of Incomplete fusion dynamics with weakly bound nuclei at near barrier energies.	-
72303	Samarjit Sihotra	Nuclear structure studies in some neutron deficient nuclei in A~100 Mass Region Nuclei.	UFR approved.