## AUC-71 APPROVED PROPOSALS FOR AMS

AUC ID	PI NAME	TITLE	UFR STATUS
71120	Dr. Rachna Raj	Late Quaternary-Holocene palaeoclimate and sea level fluctuations from the northwestern India: evidence from multiproxy studies.	-
71121	Dr. Rajeev Saraswat	Variations in ventilation ages in the northern Indian ocean.	-
71122	Dr. Sabyasachi Rout	Understanding the C-14 Dynamics in the Terrestrial and Aquatic system.	-
71123	Dr. Manoj Kumar Kurmi	AMS dating of Charcoal samples from Kalibangan (Harappan Site), Tehsiil- Pilibangan, Dist-Hanumangarh, Rajasthan.	-
71125	Prof. Javed N Malik	Dating exposed coral boulders from Lakshadeep Archipelago: Implications to Holocene sea level and shoreline geomorphic changes.	-
71128	Dr. Aninda Mazumdar	Radiocarbon dating of foraminifera.	-
71131	Dr. Maria Brenda Luzia Mascarenhas	14C AMS dating of four short sediment cores from the Bay Of Bengal.	-
71134	Dr. Thejasino Suokhrie	Temporal variation in coastal hypoxia from eastern Arabian Sea.	-
71135	Prof. Anil Kumar Gupta	Reconstruction of paleoclimatic variability using multiple proxies from the lake sediments.	-
71136	Dr.T. Subramani	Late Quaternary Climate Change and Evolution of Lower Cauvery Deltaic Plain, South East India.	-
71138	Dr. Vikas Kumar Singh	Chronology of the site Sakas, District Sasaram (Rohtas), Bihar based on the AMS C-14 dating of charcoal and Seeds samples.	-
71141	Dr. Pankaj Kumar	International interlaboratory comparison of 14C samples under GIRI program.	-
71143	Dr. Prem Chand Kisku	Quantification of sediment transportation rate in basalt derived weathering profile of Rajmahal traps.	-
71150	Dr. Dinesh Kumar Naik	Reconstruction of regional climate variability from sediment core record of Chilika Lake.	-
71154	Dr. Prakasam M.	Holocene Indian Summer Monsoon variability from the central Himalayan lake: A multi-proxy approach.	-

71230	Mr. Manmohan Kukreti	Reconstruction of Palaeoclimatic changes from palaeolake deposits of Bhimtal and Bhikiyasain area,	-
71231	Ms. Neha kholia	Kumaun Himalaya. High resolution holocene climatic changes in Himachal Pradesh using	-
71232	Ms. Reshma K V	lake deposits. Indian Summer Monsoon variability during the Holocene in southern India: Evidence from lacustrine sediments.	-
71233	Ms. Ammoose K Jayan	Evolution of the Indian Summer Monsoon during Marine Isotope Stage (MIS) 1 and 2: Inferences from the South-western Bay of Bengal sediments.	-
71234	Mr. Mohd Azhar Ansari	Tectono-Geomorphic and Paleoseismic studies along the foothill zone of Kumaon Himalaya, Central Himalaya, India.	-
71235	Ms. Pooja Chand	Study of climate change during the last millennium recorded in selected lakes of NW Himalaya.	-
71247	Ms. Anchana P	Climate Interpretation from Peat Based Proxy.	-
71250	Mr. Shashi Shekhar Shukla	Palaeo-geomorphic features and its environment: A geomorphological study of Sai-Ganga Doab.	-
71251	Mr. Brijesh Kumar	Late Quaternary paleoceanographic reconstruction from the Equatorial Indian Ocean: emphasis on Indian Ocean Dipole.	-
71253	Ms. AL Fathima	Landscape evolution and basin dynamics of the Cauvery Basin, South India: implications on paleoclimate and tectonics.	-
71259	Mr. Aqib Jamal Ansari	Paleoclimate reconstruction from a lacustrine archive in the Ghaghara-Rapti interfluve, Ganga Plains.	-
71263	Mr. Prasoon Shukla	To determine Paleoclimate and Paleo-ocean circulation in the central Indian ocean using shark teeth and polymetallic nodules.	-
71264	Mr. Sayantan de	Isotopic and geochemical study of hydrothermal ridge sediments in Indian Ocean.	-
71267	Ms. Sruthy Rose Baby	Planktonic foraminifera from northeastern Arabian Sea for monsoonal variability and upwelling records during Holocene.	-

71269	Mr. Nikhil Rajeshchandra Singh	Paleoclimate and Paleo-environmental studies of Corals in the last 1000 years.	-
71358	Dr. Punarbasu Chaudhuri	Application of 14C bomb spike to understand the history of anthropogenic contaminations in Antarctica.	UFR not approved
71401	Ms. Sreevidya E	Late Cenozoic pteropod abundances/preservation records from the Indian Ocean.	-
71402	Prof. Karunakara. N	Validation of liquid scintillation spectrometry based carbon-14 measurements techniques by AMS and development of reference materials for environmental monitoring applications around nuclear power plant.	-

## AUC-71 APPROVED PROPOSALS FOR MATERIALS SCIENCE & ATOMIC PHYSICS

AUC ID	PI NAME	TITLE	UFR STATUS
71507	Dr. Jyoti Rajput	Study of hydrogen migration and bond rearrangement in simple hydrocarbons.	-
71124	Dr. Alka Garg	Designing and Study of Light Weight Portable Polymer based Bismuth Tri-iodide Composite Radiation detector for Medical Applications.	-
71127	Dr. Vishnu Chauhan	Influence of SHI irradiation on high performance metal-insulator-metal capacitor fabricated by oxide based high-k dielectrics for memory applications.	-
71129	Dr. P. P. Pradyumnan	Tailoring The thermoelectric properties of CuO and CuS with Heavy ion irradiation.	-
71130	Dr. P. P. Pradyumnan	Effect of heavy ion implantation on the thermoelectric properties of Tin Selenides.	-
71137	Prof. Somnath C Roy	Modifying optical absorption characteristics and electronic energy band structure of TiO2 nanostructures through high energy ion beam irradiation.	_
71140	Dr. Pushpal Ghosh	Exploration of ion beam mediated thermoluminescence of lanthanide doped binary/ternary fluoride	-

		nanocrystals prepared via ionic liquids.	
71151	Dr. Jyoti Ranjan Mohanty	Inducing magnetism in two dimensional transition metal dichalcogenides via defect engineering using ion beam irradiation.	-
71239	Mr. Darshan M	Reliability study of semiconductor devices for extreme environment applications.	-
71243	Ms. Deepika Gupta	Synthesis, characterizations and low energy ion beam induced modifications of two-dimensional molybdenum disulfide thin films for device applications.	-
71248	Mr. Amit Joshi	Effect of ion irradiation on structural, morphological, electrical, and magnetic properties of neodymium doped ferrite/polythiophene nanocomposites.	-
71254	Mr. Yogendar Singh	Understanding the evolution of bubbles in nano-structured ceramic for nuclear waste form applications.	-
71260	Mr. Teki Mahesh	Studies of ion beam irradiation induced mixing effects and fabrication of germanium nanoparticles embedded in high-k dielectric HfO2.	-
71262	Mr. Vivek Kumar	Development of radiation resistant materials for the advanced nuclear fuels.	-
71337	Prof. Shakeel Khan	Effect of Swift Heavy Ion irradiation on the structural, electrical and magnetic properties of Ni doped SmFeO3 multiferroic nano materials.	UFR not approved
71340	Dr. Shyamal Kumar Das	Unravelling the influence of swift heavy ion irradiation on the electrochemical activity of graphite electrode for application in rechargeable aluminum-metal battery.	UFR not approved
71343	Dr. E. Kayalvizhy	Ion beam induced modification on starch based CaCO3 nanocomposite hydrogels for convalescent drug delivery system and heavy metal adsorption.	UFR not approved
71346	Dr. Archana Tiwari	Swift heavy ion irradiation mediated reduction of graphene oxide for thermoelectric applications.	UFR approved.
71352	Dr. Charu Dwivedi	Effect of ion beam irradiation on the electronic properties of the titanium aluminum carbide based MXene.	UFR not approved

71355	Dr. Karthikeyan Balasubramanian	Investigation of ion irradiation effect on the structural, morphological, and electrochemical properties of forsterite nanocomposites for energy storage	UFR not approved
71357	Dr. Rahul Singhal	devices. Study of Au-Fullerene nanocomposite under low energy ion irradiation.	UFR approved.
71365	Prof. Nikesh A. Shah	Tuning of electrical properties through field effects for manganite based n-n Junctions: Role of Swift Heavy Ion Irradiation.	UFR approved.
71367	Dr. Yogita	Ion irradiation induced structural transition and its correlation with thermoelectric properties of Ge-Sb-Te (GST) alloys.	UFR approved.
71369	Dr. Dilip Kumar Singh	Tuning response of Doped-ZnO Nanowires based optical and sensing devices through defect engineering.	UFR not approved
71370	Dr. Koteswara Rao Peta	Fabrication and characterization of ion induced graphene quantum dots abetted Field-Effect Transistors (I-GQDs-FETs) for detection of allergen bio-compounds.	UFR not approved
71372	Prof. Sunita Rattan	Cost effective anion exchange polymeric membranes for fuel cell applications : Through swift heavy ion track grafting technique.	UFR not approved
71374	Dr. Dhirendra Kumar Chaudhary	Tunning the work function of transparent conducting oxides via Ion Implantation technique for Perovskite Solar Cell Devices.	UFR not approved
71502	Dr. Neeraj Shukla	Carbon and Helium ions irradiation experiment on MoS2 Bulk.	-
71510	Mr. Anmol Mahendra	Tunable axis Magnetic Sensor- ion beam modification.	-
71512	Dr. Poonam Rani	Impact of Ion implantation in Topological Insulator.	-
71514	Dr. (Mrs.) Jalaj Tripathi Devgan	Effect of low energy ion beam and gamma radiation on polymer nanocomposites for potential application as hydrogen storage material.	-
71516	Dr. Pratap Kumar Sahoo	Study of Fano-resonance line shape in TiO2 system by low energy ion beams.	-
71518	Dr. Javid Ali	Study the influence on the structural and electronic properties of the Graphene irradiated by low energy ion beam of Carbon, Argon, and Silver ions.	-

	Dr. P. Pazhanisamy Prof. Om Prakash Sinha	Swift heavy ion irradiation on Fe3O4@ Au Nanocomposite Hydrogels to enhance the catalytic reduction, cytotoxicity and supercapacitors. To study the ion irradiation effect on the nanocomposites of metal oxides and 2-D (TMDC/Carbon-based) nanomaterials.	UFR not approved
71504 / 71126	Dr. Sandeep Nigam	Ion beam induced modification of mixed oxide particle prepared via soft chemical route.	-
71505 / 71349	Dr. Anand Yadav	Tuning of multiferroic property by ion irradiation in cobalt chromite.	UFR not approved
71506 / 71350	Dr. Nitu Katariya	Irradiation induced tunability properties in selective P-type delafossites of Opto-Electronic.	UFR not approved
71508 / 71351	Dr. K. Thangaraju	Ion Implantation on solution processed Alq3/ZnO hybrid thin films for efficient UV photodetector applications.	UFR not approved
71511 / 71142	Dr. Ashish Kumar	Investigations on the electrical, optical and structural properties of Swift Heavy Ion (SHI) irradiated Ga2O3 epitaxial layers and fabricated Schottky Barrier Diodes (SBDs).	-
71513 / 71145	Dr. Merry Gupta	Role of composition and metal capping layer on irradiation tolerance of SiOC thin films.	-
71515 / 71149	Dr. Pratap Kumar Sahoo	Ion beam induced epitaxial crystallization of MgO and MgO/NiO.	-
71517 / 71366	Dr. Sachin Kumar Singh	Ion-beam Irradiation induced modifications in functional properties of Chiral Liquid Crystals and their applications in fabrication of ultrasensitive chip-based Optical-Sensors.	UFR approved.

## AUC-71 APPROVED PROPOSALS FOR NUCLEAR PHYSICS

AUC ID	PI NAME	TITLE	UFR STATUS
71132	Dr. Chandrani Majumder	Study of spectroscopic properties of 125Ba.	-
71147	2	Heavy ion induced nuclear fusion-fission dynamics study and target burn-up estimation below 10 MeV/Nucleon.	-

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71152	Prof. (Mrs.) Pragya Das	Investigating shears mechanism for three- to five-quasi particle band in 137Pr through lifetime measurement.	-
71241	Mr. Dhananjaya Sahoo	Gamma ray spectroscopy of neutron deficient Bi & Po nuclei.	-
71242	Mr. Aman Sharma	Surrogate reactions a tool to study nuclear reactions without using neutrons.	-
71244	Ms. Vafiya Thaslim T T	Measurement of fission mass angular correlation for systems with A $\sim$ 200.	-
71245	Ms. Kodavandla Prameela	Fusion studies around the coulomb barrier for the medium mass compound nuclei.	-
71249	Mr. Amar Das	Simultaneous measurement of Quasi elastic excitation functions for beam-like and target-like particles using HIRA.	-
71261	Mr. Punit Dubey	Study of entrance channel effect on shell closure in fission dynamics.	-
71266	Ms. Jinu K V	Evaporation residue cross section measurement of 16O +170,172Yb reactions forming 186,188Pt compound nuclei.	-
71336	Prof. Sanjay Kumar Chamoli	lifetime measurements in neutron deficient rare earth nuclei with mass $A \sim 140$ .	UFR approved.
71341	Dr. Samarjit Sihotra	Multiparticle configurations and lifetime measurements in some proton rich nuclei in 160-180 mass regions.	UFR not approved
71344	Dr. Anagha Chakraborty	Search for coexistence of different shapes and excitation mechanisms in transitional nuclei.	UFR approved.
71353	Dr. Ajay Kumar Tyagi	Mapping of dissipation and entrance channel effects in heavy ion induced fusion reactions.	UFR approved.
71368 / 71362	Prof. Jiban Jyoti Das	Production and slowing down of fast neutron beam produced using 15-UD Pelletron accelerator and HIRA facility for AD-BNCT investigations at IUAC, Delhi.	UFR approved.