

## Projects List

S.NO	Funding Agency	Project Title	PI	Status
1	PSF/NSFC China	Regulating electrode-electrolyte interfaces through cellulose graft chemistry, aiming to develop sustainable, durable, and practical paper-based aqueous zinc-ion batteries.	Prof. Dr. Aamir Razaq	In progress
2	CUI-CRGP	Nano-structured Low Temperature Ceramic Fuel Cells (LTCeFCs) designed for fuel flexibility, in collaboration	Prof. Dr. Ghazanfar Abbas	In progress
3	NRPU-HEC	The development of flexible and highly absorbing paper-based electrodes for next-generation hybrid energy storage and conversion devices	Dr. Ishrat Sultana	In progress
4	NRPU-HEC	Next-Generation Breast Cancer Radiotherapy: Nanoparticle-Based Phantoms for Improved Therapeutic Outcomes.	Dr. Naima Amin	In progress
5	EU-EMERGE	Stretchable Nanogenerators for Self-Powered Electronics using Printing Technology.	Dr. Amna Mir	In progress
6	EU-EMERGE	Printed flexible Piezoelectric Nanogenerators for self-powered sensor systems	Dr. Amna Mir	In progress
7	NRPU-HEC	The development of a ternary nano bio-composite designed to fabricate commercial screen-printed electrodes for the detection of neurological disorders.	Dr. Akbar Ali	Completed
8	NRPU-HEC	Fabrication of Nanocellulose and Conductive Polymer Based Flexible and Environmentally Safe Paper Electrodes for Development of Energy Storage Devices Via Indigenous Resources	Prof. Dr. Aamir Razaq	Completed
9	NRPU-HEC	Cost-effective nano-structured materials for low-temperature fuel cells (300–600°C),	Prof. Dr. Ghazanfar Abbas	Completed
10	NRPU-HEC	Study of charge transport properties of molecular devices	Dr. Abdul Sattar	Completed
11	NRPU-HEC	Development of magnetic nanostructure for energy efficient applications based on	Dr. Yasir Rafique	Completed

		ultra strong permanent magnet and soft magnet		
12	NRPU-HEC	Study of Electrostatic modes in semiconductor Plasmas	Prof. Dr. Muhammad Jamil	Completed
13	SRGP-HEC	Synthesis and characterization of Silver nanoparticles by chemical reduction method	Dr. Arslan Usman	Completed
14	SRGP-HEC	Formation of microchannel for Microfluidic Devices on Polymers by Direct Laser Writing Technique	Dr. Muhammad Imran	Completed
15	SRGP-HEC	Synthesis and Characterization of Transition Metal Oxides Nanomaterials	Dr. Hassan Mahmood	Completed
16	CUI-CRGP	Synthesis and I-V characterization of Colloidal quantum dots for LED applications	Dr. Faiza Mustafa	Completed
17	SRGP-HEC	Synthesis and electrical characterization of BiFeO <sub>3</sub>	Dr. Muhammad Idrees	Completed
18	SRGP-HEC	Development of nanocomposite materials for solid oxide fuel cells (SOFCs)	Prof. Dr. Ghazanfar Abbas	Completed
19	SRGP-HEC	Compact wide band planar antenna for navigation satellite system	Dr. Amna Mir	Completed
20	SRGP-HEC	Parameterization of potential model and propertied of conventional and hybrid bottonium mesons	Dr. Nosheen Akbar	Completed
21	SRGP-HEC	Development of flexible electrodes with conducting polymer nanocomposites for efficient high redox supercapacitor technology	Dr. Farah Alvi	Completed
22	SRGP-HEC	Fabrication of zinc oxide nanorods on wastepaper-pulp fibers for development of low input voltage light emitting wallpaper to replace incandescent bulb	Prof. Dr. Aamir Razaq	Completed
23	SRGP-HEC	Structural and magnetic parameters of hexagonal ferrites for high frequency applications	Dr. Mukhtar Ahmad	Completed
24	SRGP-HEC	Synthesis & characterization of magnetic nanomaterials for antenna applications	Dr. Majid Niaz Akhtar	Completed
25	SRGP-HEC	Synthesis & characterization of magnetic nanoparticles and their medical applications	Dr. Akbar Ali	Completed
26	SRGP-HEC	Zno/CuO nanostructure fabrication using low temperature techniques	Prof. Dr. Muhammad Asif	Completed
27	SRGP-HEC	Electrochemical characterization of nanocomposite materials for energy devices	Dr. Muhammad Ajmal Khan	Completed