Evaluation Results of First Connect FIRP Project Proposals Call-2019

We are pleased to inform you that 24 First Connect FIRP project proposals have been approved for the support. The review was done by about 11 experts (external to IITD System). The general opinion of the experts was that the project proposals were of high technical quality. Out of 37 submitted project proposals top 24 project proposals could be accepted. Others details are given in the table below.

Approved First Connect FIRP Project Proposals Call-2019

S. No.	Proposal No.	Proposal ID	Project Title	PI & Dept.	Co-PI & Dept.
1	244	FIRP/Proposal-151	Solar Assisted Water Purification using Forward Osmosis with Membrane Distillation	K Ravi Kumar Centre for Energy Studies (CES) .	B Premachandran Dept. of Mechanical Eng.
2	221	FIRP/Proposal-136	Development of Ultrafast Photo-detector and AC Solar Cell Based on Electric Double Layer Assisted Transient Opto-Electronic Conversion at Semiconductor-Ionic Liquid Interfaces	Supravat Karak Centre for Energy Studies (CES)	Samaresh Das CARE
3	267	FIRP/Proposal-170	Plasma treatment of sewage water for inactivation of antibiotic resistance bacteria	Satyananda Kar Centre for Energy Studies (CES)	T Sreekrishnan & SZ Ahammad DBEB
4	262	FIRP/Proposal-166	Modelling and validation of dinucleotide frequencies in the human genome	Vikas Vikram Singh Dept. of Maths	Vivekanandan Perumal School of Biological Sciences

5	265	FIRP/Proposal-155	Designing and assessing impacts of clean and efficient agricultural residue-fuel (biomass pellets) based heating systems for Jaggery making in northern India	S K Tyagi Centre for Energy Studies (CES)	Krishnakant Agrawal Dept. of Mech. Eng. & Upasana Sharma Dept. of Humanities & Social Sciences
6	243	FIRP/Proposal-149	Investigation of the interface between electrochemically-active microorganisms and self-assembled graphene/carbon nanotubes over polymeric surfaces.	Lucinda Elizabeth Doyle DBEB	Jayati Sarkar Dept. of Chemical Engineering
7	230	FIRP/Proposal-140	Development of Vibration and Sound Damping Materials from Biochar Obtained from Waste Lignocellulosic Biomass	Shahab Fatima Industrial Tribology, Machine Dynamics & Maintenance Eng.	Kamal Kishore Pant Dept. of Chem. Eng.
8	268	FIRP/Proposal-171	Development of Flame Retardant Dyes for Technical Textiles	Javed Nabibaksha Sheikh Dept. of Textile & Fibre Engineering	Mohammad Ali Haider Dept. of Chem. Eng.
9	253	FIRP/Proposal-158	Energy harvesting using droplet-based microfluidics for self-powered wearables.	Ankur Goswami Dept. of Material Science & Engineering	Dhiman Mallick Dept. of Electrical Eng.
10	249	FIRP/Proposal-153	A Multiscale Study of Shear Response of Single-Particle and Continuum Materials Interface for Geotechnical Applications	Prashanth Vangla Dept. of Civil Engineering	Nityanand Goswami Dept. of Material Science & Eng.

11	236	FIRP/Proposal-157	Tuning the molecular habits to zeolite crystals on the backbone of rationally designed polymers.	Manjesh Kumar Dept. of Chemical Engineering	Leena Nebhani Dept. of Material Science & Eng.
12	237	FIRP/Proposal-144	A Generalised Activity Generation and Scheduling Framework Following Machine Learning Techniques	Manoj M Dept. of Civil Engineering	Prathosh AP Dept. of Electrical Eng.
13	217	FIRP/Proposal-135	Robustness Analysis of Port-Hamiltonian Systems and their Applications	Punit Sharma Dept. of Mathematics .	Subhashish Dutta & Deepak Umakant Patil Dept. of Electrical Eng.
14	266	FIRP/Proposal-168	Exciting vector beams on a chip for nonlinear optical processing	Amol Choudhary Dept. of Electrical Engineering	Kedar Khare Dept. of Physics
15	256	FIRP/Proposal-163	Development of a low cost wireless sensor network for monitoring urban air pollution	Jay Dhariwal Dept. of Design	Seshan Srirangarajan Dept. of Electrical Eng.
16	239	FIRP/Proposal-156	Development of High Voltage DC (HVDC) Circuit Breaker	Sumit Kumar Pramanick Dept. of Electrical Engineering	Krishna Kant Agrawal Dept. of Mechanical Eng.
17	246	FIRP/Proposal-154	Design and fabrication of all conventional transistor based neuromorphic chip for real time bio-informatics application	Debanjan Bhowmik Dept. of Electrical Engineering	Kolin Paul Dept. of Computer Science & Eng.

18	234	FIRP/Proposal-150	Improved interface circuitry for patch-clamp current measurements in physiological experiments	Ankesh Jain Dept. of Electrical Engineering	Tapan K Nayak School of Biological Science
19	222	FIRP/Proposal-148	Development of a renewable source emulator and its behaviour in Microgrid environment	Soumya Shubhra Nag Dept. of Electrical Engineering	Sumit Kumar Paramanick & Sumit Kumar Chattopadhyay Dept. of Electrical Eng.
20	238	FIRP/Proposal-147	Design of quantum dot based thermoelectric devices: An experimental and multiscale modelling approach	Nirat Ray Dept. of Material Science & Engineering	Sushma Santapuri Dept. of Applied Mechanics & Sameer Spare Dept. of Chemistry
21	259	FIRP/Proposal-165	Electrochemical model-based framework for optimal charge/discharge profiles for enhanced cyclic life of battery	Mohan Kumar Singh Verma Dept. of Chemical Engineering	Santanu Kapat Dept. of Electrical Eng.
22	231	FIRP/Proposal-142	Spintronic device based neuromorphic computing	Debanjan Bhowmik Dept. of Electrical Engineering	Pranaba Kishore Muduli Dept. of Physics

23	255	FIRP/Proposal-162	Development of Molecular Anodes for Electrocatalytic Water Oxidation	Sayantan Paria Dept. of Chemistry	Gholap Shaivajirao Lahu Dept. of Chemistry
24	229	FIRP/Proposal-145	The development of robust single-site metal-organic framework catalysts for chemoselective borylation and silylation of light hydrocarbons including detailed reaction kinetic studies	Kuntal Manna Dept. of Chemistry	Sreedevi Upadhyayula Dept. of Chem. Eng.