List of projects supported under Mission Innovation IC3 - Carbon, Capture, Utilization and Storage (CCUS) during F.Y. 2019-20

S.No	File No.	Title	PI and organization details	Duration(in months)	Sanctioned Cost(in Rs.)
1	DST/TM/EWO/MI/CCUS/17	Hierarchical porous Covalent Organic Nanosheets and Nanosheet –based Hybrid Membranes for Carbon capture and of Co2 Separation.	Dr. Rahul Banerjee Indian Institute of Science Education and Research Kolkata, Pune	36	5632000
2	DST/TM/EWO/MI/CCUS/10	Development of methods for Utilisation and conversion of Waste Co2 to Fuels.	Nandini Devi, CSIR-National Chemical Laboratory, Pune	36	6636729
3	DST/TM/EWO/MI/CCUS/01	Demonstration of 10,000 lit/day syngas generation	Ankur Bodoia, CSIR-Indian Institute of Petroleum, Dehradun	36	7236259
4	DST/TM/EWO/MI/CCUS/13	Development of Integrated technologies for reduction of anthropogenic / industrial waste Co2 to value added Chemicals and Fuels.	Sebastian C. Peter Jawaharlal Nehru Centre for Advanced Science Research (JNCASR), Bangalore, India.	36	32431920
5	DST/TM/EWO/MI/CCUS/24	A systematic large scale assessment for potential of Co2 enhanced oil and natural gas recovery in key sedimentary basins in India	Vikram Vishal, IIT Bombay	36	19849965
6	DST/TM/EWO/MI/CCUS/19	Development of hierarchicalnovaal Catalyst for one pot Conversion of Co2 rich synthesis gas to Dimethyl ether and scale-up Studies.	Prof. Kamal Kishore pant, Indian Institute of Technology, New Delhi.	36	16921470

7	DST/TM/EWO/MI/CCUS/21	Adsorption and separation of Co2 by porous carbon obtained from agro-residues and advanced micro porous materials through cost-effective, clean energy methodology.	Subarna Maiti, CSIR –Central salt & Marine Chemicals Research Institute, Bhavnagar	36	12995899
8	DST/TM/EWO/MI/CCUS/28	Integrated Co2 absorption and conversion to methanol in slurry phase reactors using metal complexes as catalyst.	Dr. Sreedevi Upadhyayula Professor, Department of Chemical Engineering, Indian Institute of technology Delhi	36	9024716
9	DST/TM/EWO/MI/CCUS/06	Development of hybrid multi electrode plasma reactor for energy efficient dry reforming of greenhouse gases.	Yugeswaran Subramaniam Pondicherry University (Central University), Pondicherry	36	7450001
10	DST/TM/EWO/MI/CCUS/31	Structure, Interaction and process for energy efficient Co2 separation using Noval lonic Liquids Supported Membranes	Swapnil Dharaskar Pandit Deendayal petroleum University , Gujarat	36	2801832
11	DST/TM/EWO/MI/CCUS/11	Study on new green Co2- Capturing Solvents	Dr. Prakash D. Vaidya Institute of Chemical Technology, Mumbai	36	4370458
12	DST/TM/EWO/MI/CCUS/26	Model Based Design, Synthesis and Evaluation of Combined sorbent catalyst Material (CSCM) for Co2 Capture.	Dr. Yarasi Soujanya CSIR-Indian Institute of Chemical Technology, Hyderabad	36	10685346
13	DST/TM/EWO/MI/CCUS/27	Nano engineered Inorganic Halide Perovskites for photo, Electro and Thermochemical (PETC) Co2 Reduction: Novel Artificial Photosynthesis Implementation for Clean Energy Generation .	Dr. Shravanti S Joshi, Marathwada Institute of Technology (MIT-E), Aurangabad, Maharashtra	36	2055900
14	DST/TM/EWO/MI/CCUS/18	Development of catalysts and a prototype device for conversion of Co2 to fuels / Chemicals.	Arindam Sarkar, Indian Institute of Technology, Bombay	36	4906828

15	DST/TM/EWO/MI/CCUS/16	Development of low cost, efficient and scalable materials for Co2 captures using naturally available nontoxic stable materials and industrial solid wastes.	Chinmay Ghoroi, Indian Institute of Technology Gandhinagar, Gandhinagar	36	6009380
16	DST/TM/EWO/MI/CCUS/15	Demonstration of a Novel Concept for Converting Solar Energy into Chemical Energy.	S Garai, National Institute of Technology, Tiruchirappalli.	36	6942452
17	DST/TM/EWO/MI/CCUS/20	Studies on CO fuels self- sustaining Unmixed Combustion (UMC) reactor for integrated Co2 capture and power/ Steam generation.	Dr. Srinivas Krishnaswamy, BITS Pilani K K Birla, Goa Campus	36	4500000
18	DST/TM/EWO/MI/CCUS/12	Development of ageomechanical model for CO2 injection and methane release through experimental studies of matrix shrinkage / swelling, mechanical properties, and permeability of coals.	Pratik Dutta, Indian Institute of Engineering Science and Technology, Shibpur	36	4910890
19	DST/TM/EWO/MI/CCUS/25	Bench-Scale Design and Development: Investigation of High-Frequency, High-Intensity Ultrasonics for Carbon-Rich Solvent Regeneration in Solvent-Based Post-Combustion CO2 Capture Process (PCCC) for Reducing CO2 Capture Energy Demand	Dr. B. Ambedkar , SSN College Of Engineering, Chennai	36	20896833