

**Department of Science & Technology**  
**International Division**

An Indo-Korean call for Joint Research Proposals under the Programme of Cooperation with the Ministry of Science and ICT of the Republic of Korea in the areas of (i) Green Mobility (ii) Renewable Energy (iii) Engineering Sciences and (iv) Materials Science & Technology was advertised in March 2020. In total, 176 common proposals were received against the joint call for which last date was 8<sup>th</sup> May 2020. Based on scientific merit, complementarities of the project objectives, scientific strengths of the project coordinators, national priorities of both the countries and availability of fund, Department of Science & Technology, India and Ministry of Science and ICT of the Republic of Korea have jointly decided to support following 12 proposals. The duration of the project would be for 3 years. Project coordinators are being informed separately to complete administrative formalities for release of DST grant.

<b>SI No</b>	<b>Title</b>	<b>Indian Coordinator</b>	<b>Korean Coordinator</b>
1.	Prototype Development and Experimental Investigation of CNG Fueled Direct Injection Spark Ignition Engine <b><u>TPN: 51558</u></b>	Prof. Avinash Kumar Agarwal, Indian Institute of Technology, Kanpur	Prof. Suhan Park Chonnam National University, Gwangju
2.	Permanent Dropwise Condensation via Amphiphilic Additives in Vapor Phase <b><u>TPN: 51600</u></b>	Dr. Rishi Raj Indian Institute of Technology Patna	Dr. Youngsuk Nam Kyunghee University (Global Campus), Yongin
3.	Development of MXene-Transition Metal Compound (sulfide and phosphide) Hetero-Nanostructures as Electrocatalysts for Overall Water Splitting <b><u>TPN: 49337</u></b>	Dr. Nitin K. Chaudhari Pandit Deendayal Petroleum University, Gandinagar	Dr. Kwangyeol Lee Korea University, Seoul
4.	Digital Mental Healthcare for Older Adults Via Visually-Induced Hippocampal Activation Therapy <b><u>TPN: 51467</u></b>	Dr. Anup Nandy National Institute of Technology, Rourkela	Dr. Sang Ah Lee Korea Advanced Institute for Science and Technology (KAIST) Daejeon
5.	A simple method to control microdrop generation of various liquids for bio-printing and heat management <b><u>TPN: 51606</u></b>	Prof. Prosenjit Sen Indian Institute of Science, Bangalore	Dr. Choongyeop Lee Kyunghee University (Global Campus), Yongin

6.	Design and development of Ultra-Low Power CMOS IC for wireless neural monitoring system <b><u>TPN: 51614</u></b>	Dr. Sandeep Kumar National Institute of Technology, Karnataka, Surathkal	Dr. Hanjung Song Inje University, Gyeongnam
7.	Development of ultrahigh-repetition-rate soliton light sources based on high-quality optical waveguide resonators <b><u>TPN: 51664</u></b>	Prof. Shailendra Varshney, Indian Institute of Technology, Kharagpur	Dr. Myeong Soo Kang Korea Advanced Institute for Science and Technology (KAIST) Daejeon
8.	Functionalized microelectrode arrays combined with ion concentrators for the electrochemical sensing of groundwater and wastewater contaminants <b><u>TPN: 51385</u></b>	Dr. Kamalesh Chaudhari International Centre for Clean Water (ICCW), IIT Madras, Chennai	Dr. Sung Jae Kim Seoul National University Seoul
9.	Development of photoelectrochemical catalysts for efficient CO <sub>2</sub> reduction based on novel combinations of 2D materials and 3D nanoscaffold hierarchical structures <b><u>TPN: 51620</u></b>	Jitendra Pratap Singh Indian Institute of Technology Delhi	Dr. Jong Kyu Kim Pohang University of Science and Technology (POSTECH), Pohang
10.	Two-Photon Lithography-Raman Spectroscopy (TPL-RS) System for 3D printed Functional Microdevices <b><u>TPN: 51597</u></b>	Dr. Yoosaf Karuvath CSIR- National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram	Dr. Cheolwoo Ha Korea Institute of Industrial Technology (KITECH), Gyeonggi
11.	Designing 3D Printable Smart Composite Hydrogel-Inks for Tissue Engineering Applications <b><u>TPN: 49228</u></b>	Dr. Garima Agrawal Indian Institute of Technology Mandi	Dr. Sung Soo Han Yeungnam University, Gyeongsan
12.	Fast-curable immune-informed bioinks for tissue-mimetic 3D bioprinting <b><u>TPN: 51691</u></b>	Dr. Sourabh Ghosh Indian Institute of Technology Delhi	Dr. Seung Yun Yang Pusan National University, Busan