

**INDIAN INSTITUTE OF TECHNOLOGY ROPAR**

**Consultancy / Sponsored Project money Sanctioned from Non-Internal Sources as on 07.01.2020**

(Rs. in Crores)

<b>Sr. No.</b>	<b>Funding Agency</b>	<b>Name of Faculty Member</b>	<b>Department</b>	<b>Title of Project</b>	<b>Total Sanctioned Amount</b>	<b>Project Status</b>
1	DST	Dr. Rajendra Srivastava	Chemistry	Synthesis and catalytic applications of hierarchical/nano crystalline zeolite catalysts	0.37	Complete
2	DST	Dr. Ashoka Biswas	Physics	Detection of entanglement in many-spin systems by spin-spin correlations	0.08	Complete
3	DST Indo -Russia	Prof. P. K. Raina	Physics	Theoretical and Experimental Investigation of a possibility to use Sn-124 in modern double beta decay experiments	0.16	Complete
4	DST	Dr. Harpreet Singh	SMMEE	Surface Engineering to control erosion-corrosion of steam generating plants by nano particle coatings.	0.43	Complete
5	DST	Dr. Prabal Banerjee	Chemistry	Development of [3+3]- cycloaddition of azomethine ylied towards the construction of piperdine ring system: application to the alkaloids synthesis	0.19	Complete
6	DST	Dr. T.J. Dhillip	Chemistry	H2 Storage and fuel cell materials for renewable energy: funda	0.13	Complete
7	DST	Dr. Manoranjan Mishra	Mathematics	Modeling and simulation of various fingering instability between two miscible fluids in liquid chromatographic conditions	0.16	Complete
8	DST	Dr. Daya Gaur	Computer Science & Engieering	Approximation Alogrorithams for NP-Hard optimization problems	0.34	Closed
9	DST Indo-Mexican	Dr. Narinder Singh & Dr. R. Srivastava	Chemistry	Synthesis of Au(I) complexes Luminescent Based Benzimidazole Pyridyl and Amine: Gold Nano-Particles for sensor Development	0.13	Complete

10		Dr. Narinder Singh	Chemistry	Design and synthesis of Quantum dot-based benzimidazole-complexed chemosensors	0.08	Complete
11	DST	Dr. Nitin Auluck	Computer Science & Engineering	Duplication based Real-Time scheduling algorithms for Heterogeneous Multiprocessors	0.14	Complete
12	Dst-Indo-Italian	Prof. P.K. Raina	Physics	Simulation NTME Calculation and half life measurement for Double Beta Decay of Sn Nuclei	0.05	Complete
13	DST	Dr. C. M. Nagaraja	Chemistry	Development of Porous chiral metal-organic frameworks for heterogeneous asymmetric catalysis	0.26	Complete
14	DST	Dr. Ranjana Sodhi	Electrical Engineering	Enhancement of Power system monitoring and stability assessment using synchrophasor technology	0.17	Complete
15	DST	Dr. J.S. Sahambi	Electrical Engineering	Smart phone based real time remote monitoring of cardiac patients from hospital CCU's	0.32	Complete
16	DST	Dr. S. Dasgupta	Physics	Energy and coherence dynamics in photo synthetic bacteria	0.14	Complete
17	DST	Dr. Himanshu Tyagi	SMMEE	Investigation into direct absorption of solar energy using nano	0.26	Complete
18	DST	Dr. Anupam Agrawal	SMMEE	Development and analysis of deformation machining: A new h	0.22	Complete
19	DST	Dr. Apurva Mudgal	Computer Science & Engineering	Algorithms in computational geometry	0.14	Complete
20	DST	Dr. Rajinder Srivastava	Chemistry	Synthesis and catalytic applications of crystalline mesoporous materials prepared using hierarchical structure directing agents	0.33	Complete

21	DST	Dr. Kamal Kumar Choudhary	Humanities & Social Science	Neurocognition of ergative languages	0.45	Complete
22	DST	Dr. D. Mandal	Chemistry	Fluorous approach towards anion recognition for overcoming the Hofmeister bias	0.26	Complete
23	DST	Dr. Rohit Sharma	Electrical Engineering	Design and optimization of an ultra low-loss interconnect link on silicon interposer	0.22	Complete
24	DST	Dr. Subhendu Sarkar	Physics	Investigation of pattern formation in binary alloy systems	0.39	Complete
25	DST	Dr. Ekta Singla	SMMEE	Modular strategy for development of customized industrial robotic arms	0.25	Complete
26	DST	Dr. Chakradhar Reddy	Electrical Engineering	Experimental Investigations on Breakdown Phenomenon In power Cable	0.55	Complete
27	DST	Dr. Jitendra Prasad	SMMEE	Invertible computer model for bone adaptation to mechanical environment	0.15	Complete
28	DST	Dr. Avijit Goswami	Chemistry	Syntheses and application of heteroatom substituted cyclooctatetraenes (COTs)	0.52	Complete
29	DST	Dr. Ravibabu Mulaveesala	Electrical Engineering	Matched Filter Approach for Chirp Excited Infrared Imaging for Non-destructive Characterization"	0.45	Complete
30	DST	Dr. Ramjee Repaka	SMMEE	Assessment of thermally induced damage of healthy cell volume during radiofrequency ablation of breast malignant tissues	0.21	Complete
31	DST	Dr. Deepti R Bathula	Computer Science & Engineering	Neuroimaging: Towards Integrated Analysis of Multi-site Functional MRI Data	0.19	Complete

32	DST	Dr. S C Martha	Mathematics	Surface Wave interaction with irregular bottom topography and barriers	0.13	Complete
33	DST-DAAD	Dr. Partha Sharathi Dutta	Mathematics	Non-equilibrium Dynamics and Predictability of Plankton Communities in a seasonal Environment	0.07	Complete
34	DST	Dr. Harpreet Singh	SMMEE	Engineering Driven Sustainable Supply Networks - A UK/India Collaborative	0.49	Complete
35	SERB	Dr. T J Dhilip Kumar	Chemistry	Quantum dynamics of energy transfer processes in atom-molecules	0.24	Complete
36	DST	Ms. Anamika Chhabra	Water Science & Engineering	Crowd sourced annotations: A next generation e-textbook technology	0.19	Complete
37	DST	Dr. Mukesh Kumar	Physics	Studies on the growth kinetics of earth abundant Cu-Zn..... through photon management	0.54	Complete
38	DST	Dr. Asoka Biswas	Physics	Spin assisted squeezing and quantum computing in cavity optomechanics	0.23	Complete
39	DST	Dr. Narinder Singh	Chemistry	Design and Synthesis of 1,8-Naphthalimide-Based Receptors Chemosensor and Biosensor Development	0.39	Complete
40	DST-SERB	Dr. Partha Sharathi Dutta	Mathematics	Dispersal Synchrony and Stability in Population Dynamics	0.16	Complete
41	DST	Dr. G. Sankara Rajukosuru	Mathematics	On The Existence of Best Proximity Pairs and Generalized Equilibrium for Constrained Games	0.15	Complete
42	DST-Fellowship	Dr. Gunjan Khera	Humanities & Social Science	Lobe and Late Positivity in mental rotation task for Hindi & Latin Letters	0.15	Closed

43	Inspire Faculty A	Dr. Vimal Kumar	Chemistry	Innovation in Science Pursuit for Inspired Research (Inspire)	0.69	Complete
44	CSIR	Dr. Narinder Singh	Chemistry	Design and synthesis of new ratiomertic fluorescent chemosensors: excited state proton transfer involving keto-enol tautomerism	0.17	Complete
45	CSIR	Dr. Rajendra Srivastava	Chemistry	Synthesis and catalytic applications of nanoporous II-conjugated polymer-silica nanocomposite materials	0.17	Complete
46	CSIR	Dr. Avijit Goswami	Chemistry	Design and synthesis of a new class of salen based metal complexes: A search for catalytic activity	0.18	Complete
47	CSIR	Prof. P.K. Raina	Physics	Computation of Nuclear Transition Matrix Elements for Neutrinoless Double Beta Decay within Deformed Haptree-Fock Model	0.16	Complete
48	CSIR	Dr. Harpreet Singh	SMMEE	Development of slurry erosion resistant coating for hydro rurbines	0.15	Complete
49	CSIR	Dr. C. M. Nagaraja	Chemistry	Development of Novel Transition Metal Complexes with Pincer-type Ligands for Splitting of water	0.19	Complete
50	CSIR	Dr. S. Sarkar	Physics	Scaling And Related Studies On Chemically Eroded Silicon Surfaces	0.16	Complete
51	CSIR	Dr. T J Dhilip Kumar	Chemistry	A First-Principales Study of Metal Grafted Calix{n}Arenes as Hydrogen Storage Materia	0.05	Complete
52	CSIR	Dr. Rajendra Srivastava	Chemistry	Synthesis of Mono-Cationic and Multi-Cationic Ionic Liquids and Their Application in Catalysis and Material Synthesis	0.05	Complete
53	DRDO	Dr. Harpreet Singh	SMMEE	Development of Magnesium Alloy Based In-Situ Nano Composites for Improved Material Properties Using Friction Stir Processing	0.14	Complete

54	DRDO	Dr. Navin Kumar	SMMEE	Hyper Velocity impact induced deformation of the target-projectile system	0.30	Complete
55	DRDO	Dr. Ravi Babu	Electrical Engineering	Non-Destructive Testing of Carbon Fiber Reinforced Polymers (CFRP) Using Non-Stationary Thermal Technique	0.22	Complete
56	DRDO	Dr. Rohit Y Sharma	Electrical Engineering	Design verification and analysis of electronic impact cum time delay sensing module	0.10	Complete
57	DRDO	Dr. C C Reddy	Electrical Engineering	Design and Development of Compact Firing Circuit	0.09	Complete
58	DRDO - Consultant	Dr Navin Kumar	SMMEE	Design an effective noise barrier for the Baffle Range	0.17	Complete
59	DAE	Dr Debaparsad Mandal	Chemistry	New Archetype of Ionic Liquids & their Applications in Electrolytes & Other Systems	0.24	Complete
60	DAE	Dr. Manju Khan	Mathematics	Normal Complement in the Unit Group and its Structure	0.10	Complete
61	DAE	Dr. Mukesh Kumar	Physics	Growth and characterization of 2-D MoS2 monolayers for high	0.23	Complete
62	DAE	Dr Harpreet Singh	SMMEE	Development of Thick pure Cu cladding/coating on SS 304/SS316 substrates with cold spray technology	0.45	Complete
63	Industrial Consultant	Dr. Rajendra Srivastava	Chemistry	Consultancy-Nominee Honorary Director	0.03	Complete
64	Industrial Consultancy	Dr. Nitin Kumar Goel	Electrical Engineering	System Validation, Testing and Results Analysis of DWDM Network Design Tool-CND 5.0	0.08	Complete

65	Industrial Consultancy	Dr. Nitin Kumar Goel	Electrical Engineering	System Engineering System Validation Testing and Results Analysis of DWDM Network Design Tool Ciena Network Designer CND-5.1	0.08	Complete
66	Industrial Consultancy	Dr Nitin Auluck	Water Science & Eng	Patent Review Platform	0.00	Complete
67	Industrial Consultancy	Dr. Ravi Shankar R. Velampati	Electrical Engineering	Developing Semiconductor thin film layers in next generation toolsets for advanced semiconductor devices.	0.00	Closed
68	Industrial Consultancy	Dr. Jitendra Prasad and Dr. Anshu Dhar Jayal	SMMEE	Tire Engineering / Mechanics	0.02	Complete
69	Industrial Consultancy	Dr. Subrahmanyam Murala	Electrical Engineering	Development of Image Recognition Technology, Android Application to collect image and data and online reports/dashborad for Retail Store Tracking	0.12	Complete
70	RUTAG	PI-Dr Harpreet Singh	SMMEE	Rural Technology Action Group	1.20	Complete
71	ICSSR	Dr. Samaresh Bardhan	Humanities & Social Science	Finance and Growth: Regional Perspectives in India"	0.04	Complete
72	CPRI	Dr. C C Reddy	Electrical Engineering	Investigations on new nano-composite materials for electrical insulation	0.65	Complete
73	FITT Project Grant	Dr. Himanshu Tyagi	SMMEE	FITT Project	0.03	Complete
74	NKN	Dr Ekta Singla	SMMEE	Creation of Virtual Classrooms at IIT-ROPAR	0.99	Complete
75	NAM S&T Centre Research Training	Dr. Manoranjan Mishra	Mathematics	Study of the Transient Flow of Hydrogen-Natural Gas Mixture in Pipeline Networks	0.03	Complete

76	DRDO	Dr. Harpreet Singh	SMMEE	Parametric Studies on modulation assisted machining of difficult-to-machine materials and its effect on chip characteristics	0.25	Complete
77	INDO-US Science & Technology Forum	Dr. Himanshu Tyagi	SMMEE	Energy Efficient Technology for Smart Building	1.46	closed
78	DST	Dr. C.K. Narayanan	Computer Science & Engineering	Activity Learning in Smart Environments	0.19	Complete
79	Industrial Consultancy	Dr. Dhiraj Kumar Mahajan	SMMEE	“Design & Development of a Customized Elastomeric Balloon for a Constant Air Pressure Output Bio- Medical Device”	0.05	Complete
80	DST	Dr. Shilpi Chaoudhary	Physics	National Post-Doctoral Fellowship	0.19	Complete
81	DST	Dr. Santanu Kaley (N-PDF) under the mentorship of Dr. S.C. Martha	Mathematics	National Post-Doctoral Fellowship	0.19	Closed
82	DST	Dr. RaviShankar Reddy Velampati	Electrical Engineering	Nonvolatile Memory Devices Using Microwave - Synthesized Metal Nanocrystals	0.18	Closed
83	DRDO	Dr. Narinder Singh	Chemistry	Design, synthesis and development of chemosensors for explosive materials, warfare chemicals and organophosphates	0.44	Complete
84	DST	Dr. Rakesh Kumar Maurya	SMMEE	Soot Particle number Emission Characterization and Investigation of Load Constraints in Reactivity Controlled Compression Ignition (RCCI) Engines	0.49	Complete
85	Industrial Consultancy	Dr. Navin Kumar	SMMEE	Mechanical and Thermal Characterization of Ceramic Packages	0.13	Complete
86	DST	Dr. Meenakshi Verma (N-PDF) under the mentorship of Dr. Narinder Verma	Chemistry	National Post-Doctoral Fellowship	0.19	Complete



87	Industrial Consultancy	Dr. C.K Narayanan	Computer Science & Engineering	Unrestricted Grant : awarded to Prof. Narayanan C Krishnan for Research Collaborations	0.01	Complete
88	Industrial Consultancy	Prof. Ramesh Garg	Electrical Engineering	Expert for Mobi Antenna Technologies (Shenzhen) Co. Ltd. in C.S. (OS) 1989 of 2010 before Delhi High Court	0.05	Complete
89	Industrial Consultancy	Dr. Putul halder	Civil Engineering	Vetting of Structural Design for Structural Stability of Boundary Wall Drawing No. S/9/202	0.02	Complete
90	Industrial Consultancy	Dr. Ramjee Repaka	SMMEE	Veetting of Air Conditioning Plant Design of ATC Building, Af Station, Ubhampur	0.01	Complete
91	Industrial Consultancy	Dr. Ramjee Repaka	SMMEE	Vetting of air conditional plant design at AF Station, Udhampur	0.00	Complete
92	Industrial Consultancy	Dr. C.C. Reddy	Electrical Engineering	Evaluation of 11Kv Earthed HT Xlpe Cable Conductor Resistance and High Voltage Performance as per IS7098 part-II	0.00	Complete
93	Industrial Consultancy	Dr. Ramjee Repaka	SMMEE	Determine the efficacy of the Radio Frequency Generator and Electrodes Based on the Results From Experimental Study on Tissue Mimicking Phantom Gels	0.05	Complete
94	Industrial Consultancy	Dr. Narinder singh	Chemistry	Formulations Development for skin care Application	0.00	Complete
95	Industrial Consultancy	Dr. Putul halder	Civil Engineering	Structural Assessment of Partially Constructed Ohsr at Moga Town, Punjab	0.04	Complete
96	Industrial Consultancy	Dr. Abhinav Dhall	Computer Science & Engineering	Automatic Facial Expression Recognition	0.09	Complete
97	Industrial Consultancy	Dr. Putul halder	Civil Engineering	Training Programme on Building Construction for 50 PUDA P	0.02	Complete

98	DBT	Dr. Narinder singh	Chemistry	Surface modulation of CuS quantum dots using biginelli comp	0.14	Complete
99	Industrial Consultancy	Dr. Abhinav Dhall	Computer Science & Engineering	Automatic Eye Gaze Detection	0.17	Complete
100	Industrial Consultancy	Dr. Rohit Y. Sharma	Electrical	Bridging the Innovation Gap	0.03	Complete
101	Industrial Consultancy	Dr. Abhinav Dhall	CSE	Automatic Skin Analytics	0.03	Complete
102	Industrial Consultancy	Dr. Putul Halder	Civil Engineering	Redevelopment of Old Cement Godown Area Whole Sale Vegetable and Fruit Market Azadpur, New Delhi	0.01	Complete
103	Industrial Consultancy	Dr. Chakradhar Reddy	Electrical Engineering	Transition Joint : Material, Interfacial and Design Investigations	0.05	Complete
104	Industrial Consultancy	Dr. Ramjee Repaka	SMMEE	Vetting of Air Conditioning Plant Design at af Station, Udhampur	0.01	Complete
105	Industrial Consultancy	Dr. Somdev Kar	Humanities & Social Science	Cleopatra Annotation Bengali' under Clarabridge Language Pack	0.01	Complete
106	Industrial Consultancy	Dr. Rohit Y. Sharma	Electrical Engineering	Technical Reviews of MCM layout & SI-PI analysis and guidance for Package performance optimization	0.01	Complete
107	Industrial Consultancy	Dr. Reet Kamal Tiwari	Civil Engineering	Digital Survey of 5 villages of Ropar District	0.02	Complete
108	Industrial Consultancy	Dr. C.C. Reddy	Electrical Engineering	HT Cable Test	0.02	Complete

109	Industrial Consultancy	Dr. Rajendra Srivastava	Chemistry	Synthesis of 2-Methoxy Napthalene by the Reaction of Methanol and Napthol using Zeolite Catalyst	0.01	Complete
110	Industrial Consultancy	Dr. Abhinav Dhall	CSE	Automatic Human Behavior Analysis	0.05	Complete
111	Industrial Consultancy	Dr. Abhinav Dhall	CSE	Developing Smart Collage and Face Spoofing Detection Feature For Mobile Phones Using Complex Acgorima	0.10	Complete
112	Industrial Consultancy	Dr. Narinder Singh	Chemistry	Analysis of Ground Water Near Secured Land Fill Site Inside the Guru Gobind Singh Refinery (GGSR), Surrounding Villages and the Canal Feeding Refinery	0.15	Complete
113	Industrial Consultancy	Dr. Putul Halder	Civil Engineering	Concrete Mix Design of Grade M10, M15, M25, M30, M40,M45 for Construction of Various Building Under Phase-1C at IIT Ropar	0.02	Complete
114	Industrial Consultancy	Dr. Amar Nath Roy Chowdhury	Civil Engineering	Approval for Facade Cladding Design Calculation for IIT Ropar Boy's Hostel, IIT Ropar Phase 1B	0.00	Complete
115	Industrial Consultancy	Dr. Reet Kamal Tiwari	Civil Engineering	Fixing of Control Points with DGPS at Tunnel no. 5 of USBRL project located at Granmorh & Bakal in Reasi Distt. (Jammu & Kashmir) at both ends	0.01	Complete
116	Industrail Consultancy	Dr. Devarshi Mrinal Das CI & Dr. Rohit Y. Sharma Co-CI	Electrical Engineering	To improve the DC rating and switching characteristics of a 3-speed blower switch	0.00	Complete
<b>Total</b>					<b>22.63</b>	