

Department of Mechanical Engineering, NIT Raipur

Research Grants

S.No.	No & Title of The Project	Co-Ordinators	Research Grant	Funding Agency	Year Of Sanction	Current Status
(A) Externally Sponsored Projects:						
1	NITRR/RP/ Electrical/2022/ 3D Printed substrate Integrated Hollow Waveguide based Photoacoustic Interferometry for eNO detection	Dr. Srinivasu G. (Co-PI)	57,81,864/-	SERB, DST, Govt. of India	2022	On Going
2	NITRR/RP/ Mech/2021/151: Development of a Framework for Successful Knowledge Management Implementation in Steel Industry in Developing Countries	Dr. Suraj Mukti	13,53,648/-	SERB, DST, Govt. of India	2022	On Going
3	NITRR/RP/Mech/2021/139: Development of Eco- Friendly Bricks/ Particle Boards from Waste natural Resources for Low-Cost Housing Structures: A Green Manufacturing Technology for Rural Industrialization and Entrepreneurship Development in Chhattisgarh Region	Dr. Jagdish & Dr. Sudhakar Pandey	1,00,000/-	CRDT, UBA, Delhi	2021	Completed (2022)
4	NITRR/RP/Mech/2021/140: Skill Development Campaign for Low –Cost Bamboo-Based Skewer Sticks Making Technique in Bendri Village of Chhattisgarh	Dr. Jagdish & Dr. Sudhakar Pandey	50,000/-	CRDT, UBA, Delhi	2021	Completed (2022)
5	UTR. 8652101029080, Development of cross flow turbine for rural electrification	Dr. Vivek Kumar Gaba	50,000/-	CRDT, UBA, Delhi	2021	Completed (2022)
6	NITRR/ RP/Mech/ 2018/ 93: Experimental Investigation and Modelling of Ultrasonic Jet Electrodeposition and Machining for micro part Fabrication	Dr. Mridul Singh Rajput & Dr. H. K. Narang	31,05,093/-	SERB, DST, Govt. of India	2018	Completed (2021)
7	AR&DB/01/1051914/M/I, Design analysis of adhesively bonded composite patch repair of cracked aluminum aircraft panels	Dr. Somnath Bhattacharya (Co-PI)	14,34,000/-	ARDB, DRDO	2019	Completed (2021)
8	CSVТУ/CRPTEQIP-III/95, Dated 05 Oct 2019, Development of Functionally graded material and mechanical object disk	Dr. Sanjay Singh, Lakshman Sondhi, Dr. Shubhankar Bhowmick	2,00,000/-	CSVТУ	2019	Completed (2020)
9	NITRR/ RP/Mech./2016/ 67: Characterization of Strain Induced Behaviours of Electro- active Polymers (EAP) for Sensor and Actuator Applications	Dr. Raj Kumar Sahu	31,52,600/-	SERB, DST, Govt. of India	2016	Completed (2020)

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10	CCOST/2230/CCOST/MRP/15 dated 23.12.2015. Development, characterization of functionally graded material with self-lubrication property for cutting tool application	Dr. Raj Kumar Sahu & Dr. Srinivasu G.	3,50,000/-	CGCOST	2015	Completed (2019)
11	UNICEF/2500232086 , Design and validation of existing bike-based patient carrier and proposing design of bike trailer assembly	Dr. S. Bhowmick & Dr. Govardhan Bhat	10,00,000/-	UNICEF	2015	Completed
12	CCOST/MRP/14 , Determination of Operating Conditions for hydro-transport of mineral slurry based on wall shear stress and head loss measurement for mineral industries of Chhattisgarh State	Dr Shobha Lata Sinha & Dr. Satish Kumar Dewangan	5,00,000/-	CGCOST	2014	Completed (2016)
13	Strategies for Effective Environmental Management in Thermal Power Plants in Chhattisgarh	Dr. A.M. Rawani NITRR, & Mr. Jeetendra Tiwari, SSCET, Bhilai	5,00,000/-	CCOST	2013	Completed

(B) SEED Grant Projects NIT Raipur:

14	NITRR/Seed Grant/2021-22/37 , “Manufacturing of High-Strength and Corrosion-Resistant Hastelloy C-276 Stirrer For Petrochemical Industries”.	Dr. Kalinga Simant Bal	5,00,000/-	NIT Raipur	2022	On Going
15	NITRR/Seed Grant/2021-22/39 , “Synergetic Impact of Pioneer UVMC Setup on Weldability of 316Ti Austenitic Stainless Steel and Inconel 718 Superalloy Welds”.	Dr. Sanjeev Kumar	5,00,000/-	NIT Raipur	2022	On Going
16	NITRR/Seed Grant/2021-22/40 , Model Analysis of Isotropic and Composite Plate	Dr. Ankur Gupta	4,99,040/-	NIT Raipur	2022	On Going
17	NITRR/Seed Grant/2021-22/78 , Study of Modern Industrial Air Purification and Sterilization Techniques	Dr. Anuj Kr. Shukla	4,65,000/-	NIT Raipur	2022	On Going
18	NITRR/Seed Grant/2016-17/004 , “Experimental Investigation and Modelling of Micro Milling Assisted Ultrasonic Jet Electrodeposition (MAUJE) for Micro Part Fabrication”.	Dr. Mridul Singh Rajput	4,47,000/-	NIT Raipur	2017	Completed

Abbreviations:

SERB: Science and Engineering Research Board,

ARDB: Antibiotic Resistance Genes Database,

CCOST/CGCOST: Chhattisgarh Council of Science & Technology, **SEED:** Science for Equity Empowerment and Development Division, DST

CRDT, UBA: Centre for Rural Development & Technology, Unnat Bharat Abhiyan

CSVU: Chhattisgarh Swami Vivekanand Technical University