

GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA

DEPARTMENT OF MECHANICAL & PRODUCTION ENGINEERING

Sr. No.	Project Description	Funding Agency	Amount
1	Agricultural Mechanization for In-Situ Management of Crop Residue Burning. File no. 8-75/FDC/RPS/POLICY-1/2021-22 dtd 10.02.22 PI: Dr. Jatinder Kapoor and Er. Rupinder Singh Dhillon	AICTE, New Delhi	Rs. 1113600/-
2	Vibration exposure and health effect among workers of agro-industry PI: Dr. Harwinder Singh Year: 2021 - 2024	AICTE, New Delhi	Rs. 17,90,195/-
3	Skill and Personality Development Program Centre for SC/ST students (SPDC) PI: Dr. Harwinder Singh Year: 2020 - 2023	AICTE, New Delhi	Rs. 6,22,916/-
4	Upgradation of Industrial Engineering Laboratory. PI: Dr. Harwinder Singh Year: 2020 -2022	AICTE, New Delhi	Rs. 9,50,000/-
5	Upgradation of Industrial Engineering Laboratory. PI: Dr. Harwinder Singh Year: 2019 -2021	AICTE, New Delhi	Rs. 16,12,000/-
6	Development of customized material for maintenance and repair of heritage structures by using additive manufacturing. PI : Dr. Rupinder Singh and Dr. Jasnminder Singh Grewal Year: 2019-2022 In collaboration with NITTER Chandigarh	Department of Science and Technology	Rs. 4327000/-
7	MODROBS Grant (Development of Non Traditional Machining Lab.) PI: Dr. Sehijpal Khangura Year: 2017	Department of Science and Technology	Rs. 3288000/-
8	Development of HAp ($\text{Ca}_5(\text{PO}_4)_3(\text{OH})$) reinforced biodegradable porous structures through polymer deposition technology for tissue engineering applications PI : Dr. Rupinder Singh and Dr. Jasnminder Singh Grewal Year: 2017-2021 In collaboration with NUS Singapore and UMP Malaysia.	AICTE, New Delhi	Rs. 1500000/-

9	<p>UGC Research Award (Strategic Implementation of Total Productive Maintenance in Small and Medium Enterprises of India for Enhanced Competitiveness.) Release of Grant-in-aid to Department of Mechanical Engineering at GNDEC, Ludhiana-141006, Punjab towards Salary & Research Grant. No. F.30-66/2015(SA-II) on Date:17-02-2017 PI: Dr. Harwinder Singh</p>	<p>University Grants Commission (Selection and Awards Bureau) Bahadur Shah Zafar Marg, New Delhi-110002</p>	Rs. 42,14,290/-
10	<p>Performance of a thermal energy storage system with PCM having different melting temperatures. PI: Dr. Harmeet Singh Year: 2017</p>	<p>The Institution of Engineers</p>	Rs. 75000/-
11	<p>On development of poly lactic acid, hydroxyapatite and chitosan based three dimensional scaffolds/ functional prototypes by using additive manufacturing for biomedical applications. PI : Dr. Rupinder Singh Year: 2017-2018</p>	<p>Institution of Engineers (India)</p>	Rs. 40000/-
12	<p>MODROBS Grant Development of nano-Hap composite polymer based non removable partial dentures. Year: 2017</p>	<p>AICTE, New Delhi</p>	Rs. 1400000/-
13	<p>Development of Radial Swaging Tool for cold working of inner Surface of a cylinder.(PROJECT I.D. PG 2016016) Ref:R.5/2/PG/15-16/PG2016016 Date :18-05-2016 PI: Dr. Sehijpal Singh Co-PI: Mr. Gulvir Singh, Dr. Jatinder Kapoor</p>	<p>The Institution of Engineers (India), 8 Gokhale Road, Kolkata 700020 under R&D Grant –in-Aid Scheme.</p>	Rs. 50,000/-
14	<p>UGC Research Award (CANDIDATE ID RA-2016-18-GE-PUN-6680) No. F.30-65/2016(SA-II) Date: April 18, 2016. PI: Dr. Gurinder Singh Brar</p>	<p>University Grants Commission (Selection and Awards Bureau) Bahadur Shah Zafar Marg, New Delhi-110002</p>	Rs.25,49,702/-
15	<p>Welding of dissimilar plastic based material by using hybrid filament of fused deposition moulding PI : Dr. Rupinder Singh Year: 2016-2019</p>	<p>Department of Atomic Energy</p>	Rs. 2629000/-

16	Weldability of dissimilar plastic based material by using hybrid filament of fused deposition moulding with friction stir welding. Release of Grant-in-aid to Department of Mechanical Engineering at GNDEC, Ludhiana-141006, Punjab towards Salary & Research Grant. PI : Dr. Rupinder Singh Year: 2016-2018	University Grants Commission (Selection and Awards Bureau) Bahadur Shah Zafar Marg, New Delhi-110002	Rs.42,12,937/-
17	Plastic waste management by recycling of polymer with reinforcement of metal powder for prototyping, milling and drilling applications. PI : Dr. Rupinder Singh Co-PI: Sudhir Kumar, Ranvijay Kumar and Vinay Kumar Year: 2016-2017	The Institution of Engineers	Rs. 50000/-
18	Polymer waste as fused deposition moulding feedstock filament for industrial applications. PI : Dr. Rupinder Singh Year: 2015-2018	Department of Science and Technology	Rs. 8524000/-
19	Development of in-house/indigenous composite wire based feed stock filaments of fused deposition moulding for biomedical applications. PI : Dr. Rupinder Singh Year: 2015-2018	SERB, Department of Science and Technology	Rs. 2103000/-
20	Investigations for mechanical properties of Nylon6-SiC-Al ₂ O ₃ based feed stock filament for fused deposition modeling (FDM). PI : Dr. Rupinder Singh Co-PI: Narinder Singh and Piyush Bedi Year: 2015-2016	The Institution of Engineers	Rs. 60000/-
21	Investigation of Biodynamic Responses among Indian Tractor Operators Exposed to Whole Body Vibration. PI: Dr.Harwinder Singh	The Institution of Engineers	Rs. 70000/-
22	Process capability analysis of hybrid rapid investment castings. PI : Dr. Rupinder Singh Year: 2012-2015	AICTE, New Delhi	Rs. 2915000/-
23	Development of rapid investment castings for industrial applications. PI : Dr. Rupinder Singh Year: 2012-2015	Council of scientific and industrial research, Extramural research division, New Delhi	Rs. 2203000/-
24	Experimental investigations for hybrid rapid mouldings. PI : Dr. Rupinder Singh Year: 2012-2015	Department of Science and Technology	Rs. 2119000/-

25	Development of rapid vacuum mouldings for industrial applications. PI : Dr. Rupinder Singh Year: 2012-2014	AICTE, New Delhi	Rs. 1105000/-
26	Micro mould fabrication of plastic components by vacuum casting. PI : Dr. Rupinder Singh Co-PI: Vipul Sharma Year: 2011-2012	The Institution of Engineers	Rs. 100000/-
27	Implementation of continuous improvement (CI) strategies in small and medium enterprises (SMEs) of Northern India manufacturing industry for strategic success. No. SR/FTP/ETA-0065/2011 Date: Nov. 21, 2011 PI: Dr. Harwinder Singh	Department of Science & Technology, New Delhi-110016	Rs. 8,26,000/-
28	Characterization and Machining performance of cryogenically treated cutting tools. PI : Dr. Rupinder Singh Year: 2008-2009	AICTE, New Delhi	Rs. 800000/-
29	Investigations for reducing wall thickness in shell casting using 3DP. (Under Career Award for Young Teachers (CAYT)) PI : Dr. Rupinder Singh Year: 2007-2008	AICTE, New Delhi	Rs. 1050000/-
30	Investigating the machining characteristics of titanium alloys using ultrasonic machining. PI : Dr. Rupinder Singh Year: 2005-2006	AICTE, New Delhi	Rs. 50000/-