

SPONSORED RESEARCH PROJECTS

Sr. No.	Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned Amount Rs. In Lakhs	Status	Sanctioned year
1.	Dr. B. N. Sahoo	SERB	Development of a Novel High Entropy Alloy Reinforced Magnesium Matrix Composites to Reduce Tension Compression Yield Asymmetry Through Ultrasonic Assisted Liquid State Processing Route	28.64	Ongoing	2020-21
2.	Dr. J. Banerjee	MATRICS, SERB	Linear Stability Analysis of Interface Dynamics in Two Phase Jets	6.00	Ongoing	2019-20
3.	Dr. S. A. Channiwala	CSIR	Development Of Hybrid Plasma Gasification Technology for MSW Management	78.00	Ongoing	2019-20
4.	Dr. A. D. Parekh	SERB	Performance Optimization of Air Conditioning System for Automotive Sector using new low GWP-R1234yf refrigerant	21.45	Ongoing	2018-19
5.	Dr. S. A. Channiwala	DRDO	Combustor Technology Development for Small Gas Turbine / TurboFan Engine	174.22	Ongoing	2017-18
6.	Dr. S. A. Channiwala	DRDO	Design and Analysis of a Mixed Flow Compressor	67.68	Ongoing	2017-18
7.	Dr. J. V. Menghani	SERB	Study of Slurry Erosion Behavior of High Entropy Alloy coatings	27.72	Ongoing	2017-18
8.	Dr. H. B. Mehta	SERB	Investigation on a Novel Stacked Minichannel Heat Sink using Efficient Coolants	24.47	Ongoing	2017-18
9.	Dr. S. A. Channiwala Dr. Beena Baloni Dr. M. A. Zaveri Dr. J. J. Patel Dr. A. A. Shaikh	PSA	Design, Development and Demonstration of an Aerodynamically Advanced Un-Manned Air Vehicle for Stealth and Heavy Payload Applications	593.955	Completed	2017-18
10.	Dr. P V Bhale	GUJCOST	Towards higher generation Biofuel: Characterization, Material Compatibility, Storage Stability & Engine Performance	4.00	Completed	2016-17
11.	Dr. Achchelal	ARDB	Stochastic Progressive failure response of Piezoelectric laminated composite shell panels cutouts	8.16	Completed	2015-16

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12.	Dr. R Venkata Rao	DST	Optimization of sustainable advanced manufacturing processes	4.20	Completed	2015-16
13.	Dr. Achchelal	DRDO	Probabilistic Fracture response of laminated panels comprising functionally graded materials with cutouts	26.31	Completed	2014-15
14.	Dr. Shailendra Kumar	NRB	Investigation on the influence of Machining Parameters in the Machining of Carbon epoxy composite with Abrasive water jet machining to improve surface finish and minimize defects	22.95	Completed	2014-15
15.	Dr H K Raval Dr. K. P. Desai	GUJCOST	Study of effect of tooling on formability of 6XXX Aluminum Alloys during single point Die-less Rapid prototyping (Incremental Forming)	5.00	Completed	2014-15
16.	Dr. S. A. Channiwala	GUJCOST	Flame, Propagation & Stabilization studies in Gas Turbine Combustion Chambers using Hydrogen as Fuel	8.50	Completed	2014-15
17.	Dr H K Dave Dr. K. P. Desai	GUJCOST	Generation of Non-Circular Cavity Using Planetary EDM	2.50	Completed	2014-15
18.	Dr. Shailendra Kumar	MHRD	National Mission Project on Developing suitable pedagogical methods for various classes, intellectual calibers and research in e-learning	91.0 (total 13 courses)	Completed	2014-15
19.	Dr. Shailendra Kumar	NPST, KSU	Intelligent workshop in sheet metal dies	295.00	Completed	2014-15
20.	Dr. Shailendra Kumar	SERB	Automation of design of compound dies for sheet metal Industries	24.10	Completed	2014-15
21.	Dr. J. Banerjee	SERB	Experimental analysis of slug regime in Gasliquid two-phase flow through pipes	25.18	Completed	2014-15
22.	Dr. J. Banerjee Dr. R. D. Shah	ARDB	Parametric Investigation on Upward Swirl Can Type Gas Turbine Combustor	20.12	Completed	2014-15
23.	Dr. J. Banerjee	BRNS	Mathematical modelling of thermal dispersion of effluent released into moticher lake at KAPS.	24.99	Completed	2014-15

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24.	Dr. S. A. Channiwala Dr. Beena Baloni	GUJCOST	Analysis, Design and Experimental Investigations on Radial Inflow Micro Gas Turbine	5.00	Completed	2013-14
25.	Dr. H. B. Naik	BRNS	Development of Thermo acoustically driven pulse tube refrigerator	24.99	Completed	2013-14
26.	Dr. H. K. Raval	DST	Investigation of Bending Forces & Friction coefficient during continuous bending of Conical shells on 3 – roller bending machine	33.00	Completed	2012-13
27.	Dr. K. P. Desai Dr. H. K. Dave Dr. H. K. Raval	DST	Investigation on Metal Removal Rate in Electro Discharge Machining Process under Orbital Tool Movement	15.35	Completed	2011-12
28.	Dr H B Naik Dr. K P Desai	DST	Design, Development and Investigations on Two Stage GM Type Pulse Tube Cryocooler for 10 K Applications	29.00	Completed	2011-12
29.	Dr. R. V. Rao	GUJCOST	Process Parameters Optimization of Submerged arc welding for modified Cr-Mo Steel using advanced optimization techniques	4.15	Completed	2011-12
30.	Dr. J. Banerjee	CARS (DRDO)	Analysis of generated heat flow through linear motor and cooling solutions for project MFME-MK-II	5.84	Completed	2011-12
31.	Dr. J. Banerjee Dr. R. D. Shah	ARDB	Towards development of an upward swirl can type gas turbine combustor	18.73	Completed	2010-11
32.	Dr. J. Banerjee	BRNS	Development of a dispersion model for radionuclides for Motichar lake at Kakrapara nuclear power station	23.34	Completed	2010-11
33.	Dr. R. V. Rao, Dr. V. D. Kalyankar	GUJCOST	Parameter optimization of submerged arc welding of modified Cr-Mo Steels	4.15	Completed	2010-11
34.	Dr. Achchhelal	DST	Stochastic Hygrothermal buckling response of piezoelectric laminated composite plates based on micro mechanical model	4.50	Completed	2010-11

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35.	Dr. R. V. Rao, Dr. Dinesh Singh, Dr. V.D.Kalyankar	DST India and BMWF	Development of Decision Support Models for Environmentally Conscious Design and Manufacturing of Products	3.86	Completed	2010-11
36.	Dr. S. A. Channiwala	DST	Fabrication and Testing of Hybrid Drive Vehicle and Testing it	9.00	Completed	2008-09
37.	Dr. S. A. Channiwala	GUJCOST	Modelling and Analysis of Series of Hybrid Drive Train	4.96	Completed	2008-09
38.	Dr. H. B. Naik Dr. K. P. Desai Dr. J. Banerjee	DST FIST	Financial Assistance under FIST Program to Strengthen PG teaching and research in the department	140.00	Completed	2008-09
39.	Dr. Shailendra Kumar	DST	Development of an Intelligent System for Selection of Materials for Press Tool Components	3.60	Completed	2008-09
40.	H. K. Raval Dr. A. A. Shaikh	DST	Prediction of Machine setting parameters and roller configuration for continuous bending of conical shells on 3-roller bending machine	27.96	Completed	2007-08
41.	Dr. H. B. Naik Dr. K. P. Desai	BRNS	Development of a prototype thermo acoustic prime mover	15.01	Completed	2007-08
42.	Dr. R. V. Rao	CSIR	Development of Fuzzy Multiple Attribute Decision Support Systems and their Applications to the problems of Manufacturing Environment	6.38	Completed	2007-08
43.	Dr. K. P. Desai Dr. H. B. Naik	TEQIP	A Prototype Thermo Acoustic Refrigerator	1.10	Completed	2007-08
44.	Dr. D. V. Bhatt Dr. B. M. Sutaria		Tribology Performance Study on Two Stroke SI Engine	7.5	Completed	2006-07
45.	Dr. S. A. Channiwala	MHRD	Design, Development and Experimental investigations on annular type combustion chamber for small gas turbine applications	20.00	Completed	2004-05

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46.	Dr. H. B. Naik Dr. K. P. Desai	DST	Development and Investigations of Pulse Tube Nitrogen Liquefier of around 1 Litre / Hours Capacity	23.98	Completed	2004-05
47.	Dr. S. A. Channiwala	MHRD	Analytical and experimental investigations on multicylinder hydrogen fuelled engine	9.00	Completed	2003-04