

7.1 SPONSORED RESEARCH PROJECTS SUMMARY (F.Y. 2023-24)

Sr. No	Department	Ongoing Projects		Completed Project		Total	
		No of Project	Sanction Amount	No of Project	Sanction amount	No of Project	Sanction Amount
1	Department of Mechanical Engineering	35	9,53,87,946	06	47,92,500	41	10,01,80,446
2	Department of Chemistry	11	4,37,67,530	02	63,58,439	13	5,01,25,969
3	Department of Mathematics & Humanities	04	93,30,518	01	22,20,000	05	1,15,50,518
4	Department of Physics	14	4,18,83,677	03	81,41,594	17	5,00,25,271
5	Department of Civil Engineering	25	8,97,37,743	02	1,71,15,200	27	10,68,52,943
6	Department of Chemical Engineering	13	4,85,48,926	03	87,34,040	16	5,72,82,966
7	Department of Computer Science Engineering	03	2,28,19,430	00	00	03	2,28,19,430
8	Department of Electronics Engineering	21	7,35,21,485	02	32,49,000	23	7,67,70,485
9	Department of Electrical Engineering	09	3,87,97,912	02	73,07,470	11	4,61,05,382
	Total	135	46,37,95,167	21	5,79,18,243	156	52,17,13,410

Department of Mechanical Engineering

Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	Combustor Technology Development for small Gas Turbine / Turbo fan Engine	Dr S A Channiwal	1,74,32,000	2 Years	02.05.17	Ongoing
2	Investigations on a Novel Stacked Minichannel Heat Sink using Efficient Coolants	Dr H B Mehta	24,47,500	3 Years	05.10.17	Completed
3	Performance optimization of air conditioning system for automative sector using new LOW GWP R1234yf refrigerant	Dr. Ashok D Parekh	21,45,000	3 years	22.01.19	Completed
4	CSIR BHATNAGAR FELLOWSHIP 2018 "Development Of Hybrid Plasma Gasification Technology for MSW Management	Dr. S A Channiwala	78,00,000	3 years	01.01.19	Ongoing
5	Investigations on Wear Characteristics of NiCrBSi Overlay Surface on 304 SS with and without Tungsten Carbide Reinforcement	Dr. V D Kalyankar	1,20,000	18 Months	11.10.19	Ongoing
6	Linear Stability Analysis of Interface Dynamics in Two Phase Jets	Dr. Jyotirmay Banerjee	6,60,000	3 Years	04.03.20	Ongoing
7	Development Of A Novel High Entrophy Alloy Reinforced Magnesium Composites to Reduce Tension-Compression Yield Asymmetry Trough Ultrasonic Assisted Liquid State Processing Route	Dr. Biranchi Narayan Sahoo	28,64,340	2 Years	27.11.20	Ongoing
8	Industrial suitability and commercialization of novel SPIF process for DC04 steel and Ti Gr.2 materials	Dr. Amrut Shrikant Mulay	16,74,240	2 years	08.02.21	Ongoing
9	Investigations on Flow deflection about savonius Hydrokinetic Turbines and design evolution with Core Technical Concepts	Dr. Vimal K. Patel Dr. Vikram P. Rathod	20,24,000	3 years	18.03.21	Ongoing
10	Gujarat Robofest 2.0 Compitition (Making the robot at the power exoskeleton category)	Dr. Harshit K Dave	50,000	-	30.03.21	Completed
11	Gujarat Robofest 2.0 Compitition (Making the robot in the underwater robot category)	Dr. Harshit K Dave	50,000	-	30.3.21	Completed

12	Gujarat Robofest 2.0 Compitition (Making the robot at the pipe climbing robot category)	Dr. Harshit K Dave	50,000	-	30.3.21	Completed
13	Gujarat Robofest 2.0 Compitition (Making the robot at the four legged robot category)	Dr. Harshit K Dave	50,000	-	30.3.21	Completed
14	Solar Drying cum Moisture Extraction from Herbs	Dr. Rohan Pande	2,50,000	1 year	23.11.21	Ongoing
15	A loop Heat pipe based Novel BTMS for Hybrid Vehicales/ Electric Vehicles	Dr. Hement Mehta Dr. V. M. Patel Dr. Yaresh Yamsetty	36,44,696	2 Years	04.01.22	Ongoing
16	Mechanical and Microstructural Behaviour of Laser Based Direct Energy Deposited wire Arc-Additive Manufactured Ti-6Al-4V Components	Dr. Biranchi Narayan Sahoo Dr. Ajay Kumar (IIT, Tirupati) Dr. Raju Prasad Mahto Dr. D. V. Kiran (IIT Tirupati)	10,60,000	3 years	11.01.22	Ongoing
17	Design and Development of solar Driven Water Generation System based on Desiccant wheel	Dr. Amit Kumar	20,54,840	2 years	19.1.22	Ongoing
18	DST-FIST - To Strenghthen the research facilities in the department	Dr. J Benerjee Dr. P.V. Bhale Dr. H. B. Mehta Dr. R.D. Shah Dr. Nikhil A. Baraiya Dr. Y. Naresh Dr. Rohan Pande	1,02,00,000	5 years	08.03.22	Ongoing
19	Finishing of 3D-Printed parts using an axail abrasive flow machining process	Dr Bhargave Prajwal Pathri (woxen university Hydrabad, telangana) Dr.Shailendra Kumar (Mentor)	18,30,000	3 years	17.03.22	Ongoing
20	Development, Characterization and Performance Eveluatio of Multi-Phase Composite Panels	Dr. Achchhe Lal	14,22,283	2 years	22.03.22	Ongoing
21	Investigation of thermal and Emissions and Characteristics with Multi Tube Inverse diffusion flame burner	Dr. Rupesh D Shah DR. Baraiya Nikhil Ashokbhai	7,95,000	2 years	05.05.22	Ongoing
22	Design and Development of PCM based passive cooling system of E House	Dr. Manish K Rathod Dr. Jyotimay Banerjee	32,09,200	3 years	05.05.22	Ongoing
23	Development of Multi-Material Welding approach for Ultrahigh-Strength Steel and 7xxx aluminium alloys to promote	Dr. Vivek D Kalayankar Dr. Mukund H Bade	15,70,000	2 years	05.05.22	Ongoing

	light- weighting and green mobility in the automobile sector					
24	Design and Development of a novel battery thermal management system based on the direct flow boiling of a bi-phasic catalyst with nanoparticle suspension	Dr. Rajesh Choudhary	19,51,790	2 years	18.10.2022	Ongoing
25	Development of 4-axis Extrusion-based 3 D printer to Fabricate Cylindrical Topology Structures	Dr. Sandip T. Patel , GEC Valsad Dr. Harshit K. Dave	1,97,000	3 years	01.02.23	Ongoing
26	Experimental Investigation on Functionally Graded Cellular Materials Fabricated using Additive Manufacturing Process	Dr. Lalit S. Patel,GEC Valsad Dr.Harshit K. Dave	1,95,500	3 years	01.02.23	Ongoing
27	Design, Development and fabrication of Electrocatalytic Reactor for energy efficient and cost effective Production of Bio-diesel from higher generation feed stock	Dr. Kamlesh Arun Sorate	12,48,500	3 years	24.02.23	ongoing
28	Towards the performance of latent Heat Storage Unit: A Numerical Investigation	Dr. Digant S. Mehta Dr. Manish K. Rathod	2,00,000	2 years	07.03.23	Ongoing
29	Technology Upgradation of a traditional jaggery making plant through porous media combustion for emission reduction & waste heat recovery	Dr. Rohan R.Pande Dr. P.V. Bhale Dr. Kamlesh Sorate Prof. R.A. Chistian (CED)	22,19,800	3 years	16.03.23	Ongoing
30	Design and development of solar driven desalination system based on Air-Humidifaction Technique using Nano-Fluids	Dr. Amit Kumar Dr. Rajesh Chaudhary	39,70,771	3 years	22.03.23	Ongoing
31	Combustion Dynamics of Rocket Engine and its active Control using high energy plasma Discharge for phase desynchronization	Dr. Nikhil Baraiya	19,50,000	2 years	1.5.23	Ongoing
32	Development of Fuel flexible combustor operating at high-Pressure for optimum emissions and combustion dynamics	Dr. Rupesh D. Shah Dr. Baraiya Nikhil Ashokbhai	35,89,696	2 years	02.05.23	Ongoing
33	Development of a Novel Trpered Variable Channel Width Microchannel Heat Sink for	Dr. Jyotirmay Banerjee Dr.	14,20,000	2 years	09.05.23	Ongoing

	Futuristic High-End Microelectronics Cooling	Hemantkumar B Mehta				
34	Low cost selective power deposition process for 3D printing of Metal/ Ceramic composite for Industrial Applications	Dr. Harshit K. Dave Dr. K. P.Desai	33,77,200	3 years	09.05.23	Ongoing
35	Design and Development of Active Green House Solar Dryer for Potential Food Products	Dr. Vikram P. Ratod Dr. Vimal K. Patel	11,16,000	3 years	15.05.23	Ongoing
36	Design, Development and techno-economic evaluatin of humidification dehumidification desalination system assited by solar driven heat pump for sustainable water recovery from RO reject of textile industry in land-lock region of Surat City	Dr. P V Bhale Dr. Rohan Pande	24,94,800	3 years	01.06.23	Ongoing
37	Proposal for a Novel Hybrid PCM-based heat sink coupled with heat pipe for efficient thermal management of electronic systems	Dr. Jyotimay Banerjee Dr. Naresh Yarramsetty	28,70,340	2 Years	04.07.23	Ongoing
38	Theoretical Investigations and Development of novel pruning techniques for many-objective design optimization of selected thermal systems and devices	Dr. Ravipudi Venkata Rao	6,60,000	3 years	21.2.24	Ongoing
39	Development of hybrid fibermetal laminates with nano additives for high temprature Application of stiffened panel: Experimental and numerical studies	Dr. A.A.Shaikh Dr. R.Srilakshmi	31,93,344	2 years	21.2.24	Ongoing
40	Development of thermal gradient assisted self-positioning laser head for photothermal therapy Application	Dr. Vipul M Patel Dr. Hement B Mehta Dr. Sumit Khare	34,58,934	2 years	22.2.24	Ongoing
41	A Novel approach for continuous fabrication of tailored blanks for automotive applications	Dr. Sunil Kumar	26,63,672	2 years	23.2.24	Ongoing

Department of Chemistry						
Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	SERB Project - Functional Variants of Mussel Inspired Biomaterial Surface; effect to Surface Functional Groups on antibiofilm Properties\	Rajendra Kumar	28,91,000	3 years	08.03.16	Ongoing
2	Design of Green Synthetic Approaches for Automatically Precise Nanocluster their specific Interactions : Development of Miniaturised Analytical Method	Dr Suresh Kumar Kailasa (Co PI ZVP Murty)	35,04,655	3 Years	20.07.17	Ongoing
3	Syntheseses of Biologically active Heterocyclic Drug cores via multiple C-H bond Activation	Dr. Togati Naveen	33,95,830	3 years	29.09.21	Ongoing
4	Dye separation from Waste Water through Molecular Sieving Membranes of Covalent-Organic Frameworks	Dr. Ritambhara Jangir	28,53,784	2 Years	15.12.21	Ongoing
5	Development of autocatalytic enzyme-free nucleic acid amplification methods compatible with point of care diagnostics	Dr. subrata Dutta	31,81,040	2 years	04.01.22	Ongoing
6	Waste Water Treatment: Polymoxometalates hybrids as Adsorbent of Organic Dyes	Dr. Ritambhara Jangir Dr. B.Z. Dholakiya	25,18,200	3 years	03.06.22	Ongoing
7	DST-FIST	Dr. Suresh kumar Prof. Smita Jauhari Dr. B.Z.Dholakiya Dr. Suban Sahoo Dr. Naved Malek Dr. K.C. Maheria Dr. Premlata Kumari Dr. Ketan Krupekar	2,03,00,000	5 years	05.01.23	Ongoing
8	Designing and Synthesis of Fluroscent Metal Organic Frameworks for Sensing Applications	Ms. Foziya Yusuf Vadia Dr. Suresh Kumar Kailasa Dr. Naved I. Malek	16,66,000	3 years	09.02.23	Ongoing
9	Development of Eco-Friendly Optical Probes for Monitoring of important growth hormes and pesticides in agricultutre soil	Dr. Suresh Kumar Kailasha Dr. Sanjay jha (Navsari Agricututre	23,12,320	2 years	27.03.23	Ongoing

10	Hydrogel Promoted Transdermal Permeation Anti-Cancer Drug for the Breast Cancer Treatment	Dr. Naved I Malek Dr. Sugam Kumar (BARC)	45,000	1 year + up to Expandable	22.5.23	Ongoing
11	Amphiphilic Hydrogel Formulation as Emerging Templates in Drug Delivery Systems	Dr. Ketan C. Kruperkar	2,43,240	2 years	07.07.2023	Ongoing
12	Synthesis and design of metal-organic frameworks as enzyme mimics	Dr. Lata Rana	42,39,400	3 years	21.12.24	Ongoing
13	Synthesis of chiral lanthanide complexes for circularly polarized luminescence and chiral recognition of biomolecules	Dr. Areti Sivaiah	29,75,500	2 years	15.3.24	Ongoing

Department of Applied Mechanical Engineering

Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	DST - NIMAT (MOU - EDI) - To create techno-entrepreneurs and resource persons through Entrepreneur Development Programme Strategy	DR C D Modhera (Rakesh Kumar)	2,00,000	3 years	22.08.16	Ongoing

Department of Mathematics & Humanities

Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	computational study on multi-dimensional stefan problems in biological tissues based on non-Fourier heat transfer model using mesh-free method	Dr. Sushil Kumar	16,20,518	3 years	05.06.18	Ongoing

2	Simulation and Land data assimilation to community land model for improving rice crop dynamics	Dr. R K Jana	22,20,000	3 Years	11.03.20	Completed
3	A Need-based Approach to Understanding the Employ ability skills of engineers	Dr. Urvashi Kaushal	50,000	2 years	17.06.21	Ongoing
4	DST-FIST	Prof. A. K. shukla Prof. V. H. Pradhan Dr. sushil kumar Dr. Jayesh M Dhodiya Dr. Ramakanta Meher	70,00,000	5 years	8.3.22	Ongoing
5	Numerical Simulation of cancer treatment therapies hyperthermia and chemotheraph in multi dimensional irregular domain	Dr. Sushil Kumar	6,60,000	3 years	15.3.22	Ongoing

Department of Physics						
Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	BRNS Project –Ground – State properties of low dimensional quantum systems.	Dr L K Saini (33578593581)	14,49,250	3 years Wxtended up to 31.12.16	27.09.13	Ongoing
2	SERB Project – Srongly – correlated electronics materials, Topological quntumnano – materials	Dr L K Saini (33825879534)	14,04,000	3 years	24.02.14	Ongoing
3	SERB Project - Novel perovskite-based solar cells : Invetigation of potential properties using ab-initio approches	Dr Y A Sonavne	30,09,000	3 years	02.03.17	Ongoing
4	Development of Novel Cluster Assembled Material from Potential Cluster Motifs : A new Insight under density Functional Investigation	Dr Debesh Ranjan Roy	27,69,594	3 Years	03.07.17	Completed
5	conducting polymer nanocomposite (CPC) for selective and sensitiv sensor detection of explosive array	Dr. Swati Saxena	19,20,000	2 years	25.09.18	Ongoing
6	FIST - 2017	Dr. Vipul Kheraj	1,18,00,000	5 years	18.06.19	Ongoing

7	"TEC Data ingestion to ionospheric models from Indian EIA region to improve models predictions"	Dr. Sheetal P Karia	25,50,000	3 Years	05.07.19	Ongoing
8	Study of breakup reactions involving weakly bound projectile nuclei at Coulomb barrier energies	Dr. Dipika B Patel	21,31,200	2 Years	19.02.20	Ongoing
9	Group III-V Inorganic Semiconductor Clusters for Future Nanoelectronics Applications	Dr. Debesh Roy	33,67,513	3 Years	16.01.21	Ongoing
10	Physics and application of Plasma-surface interaction: tuning effect of Pulsed microwave electric field and magnetic field	Dr. Shail Pandey	35,00,000	6 years	16.07.21	Completed
11	Investigation of Novel Heusler Alloy thin Films for Energy and spintronics Applications	Dr. Himanshu Pandey	47,30,000	3 years	6.12.21	Ongoing
12	Nanostructured metal oxide-drug assemblies and their interaction mechanism with biomolecules: A joint experimental and first principal investigation for possible therapeutic applications	Dr. Sutapa Mondal Roy, Uka-Tarasadia univ. Dr. Debesh Ranjan Roy	18,30,000	3 Years	20.1.22	Ongoing
13	Systematic study of exotic nuclear systems using macro-microscopic and phenomenological approach	Dr. Rajni Sunil Kumar Dr. A.K.Rai (Mentor)	18,72,000	3 years	03.02.22	Transfer
14	Interface engineering of 3D/2D Lead-Free Halide Perovskites Materials for Solar Cell	Dr. Yogesh Sonavane	20,02,514	3 years	01.03.23	Ongoing
15	Development of Ink-Printed Flexible Solar Cell with Antimony based Nanostructured Perovskite using Slot-Die Coating	Dr. Vipul Amirbhai Kheraj Dr. A. K. Panchal (EED)	22,40,200	3 years	09.05.23	Ongoing
16	Role of rotating Magnetic field in the Microwave-induced Plasma source for clean energy: Directed motion and controlled energy distribution of charged particles	Dr. Shail Pandey Dr. Himanshu Pandey	7,70,000	2 year	27.09.2023	Ongoing
17	Various Decay Mechanism of Super Heavy Elements Using energy density functional theory	Dr. Rajni Sunil Kumar Dr. A.K.Rai (Mentor)	26,80,000	2 year	8.11.23	Ongoing

Department of Civil Engineering						
Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	Strengthens the research facilities in the area of :Flow Structures and Turbines	Dr V L Manekar	1,75,00,000	5 Years	21.11.14	Ongoing
2	Performance and design evaluation of test tracks of flexible pavement with waste materials in subbase and base Layers.	Dr. Satyajit Patel(Pi) Dr. C H Solanki (Co-Pi)	1,61,15,200	3 Years	31.03.16	Completed
3	Unnat Bharat Abhiyan Cell	Dr K D Yadav	1,75,000	1 years+up expandable	06.03.17	Ongoing
4	Preparation of Stale of Art Report (SOAR) on Preparation of Constriction Safety Manual	Dr Dilip Patel	8,36,900	6 Months+up to Expandable	21.07.17	Ongoing
5	IT Indian Heritage Platform Enhancing Cultural Resilience in India by Applying Digital Technologies to the Indian Tangible and Intangible Heritage	Dr D A Patel	10,00,000	2 years	15.02.18	Completed
6	Impact of Climate change on water Resources of Sabarmati Basin	Dr.Vimal Mishra, IIT Gandhinagar Dr.P L Patel	84,91,560	3 Years	19.03.18	Ongoing
7	Impact of Climate change on Water Resources of Tapi Basin	Dr.P L Patel Dr.P V Timbadiya Dr.Rohit Goyal, MNIT Jaipur Dr.Vishnu prasad , MNIt, Bhopal	1,35,84,560	3 Years	13.03.18 (07.11.2016 Saction Date)	Ongoing
8	Securing Water for Agricultural and Food Sustainability: Developing Transdisciplinary Approach to Groundwater Management	Dr. J N Patel	58,51,495	2 years	30.04.19	Ongoing
9	Development of Framework to Measure Sustainability Index Of Transportation Systems In Indian Metropolitan Cities	Dr. Shrinivas Arkatkar Dr. G J Joshi	82,32,000	3 years	22.02.19	Ongoing
10	Warrant for Automation of toll Plazas under Mixed Traffic Conditions	Dr. Ashish Dhamania	7,67,000	2 Years	13.4.21	Ongoing
11	Graphane-Based Nano materials in Property Enchancement of Cement Composities & Concrete under GIJCOST STI Policy	Dr. Gaurang R. Vesmawala Dr. Yogesh D. patil	27,77,500	3 Years	08.06.21	Ongoing

12	Conflict Assessment at Diverging and merging area of Toll plaza by surrogate safety measures under mixed traffic conditions	Dr. Ashish Dhamania Dr. A Mohan Rao Sr. Pr. CSIR, New Delhi	21,30,000	2 Years	10.08.21	Ongoing
13	Development of Trip Generation Manual for Indian cities	Dr. Shrinivas Arkatkar Dr. G J Joshi	8,69,000	3 Years	31.12.21	Ongoing
14	Augmenting Ridership in Operating Metro Rail in Indian Cities	Dr. Gaurang J. Joshi Dr. S.S. Arkatkar	10,50,000	1 year	25.1.22	Ongoing
15	Local scouring around tandem and staggered bridge piers on non uniform mobile bed	Dr. P. V. Timbadiya Prof P.L. Patel	58,75,890	3 years	03.02.22	Ongoing
16	CCPDM-Circular Cemetitions Products Embedding Digital Manufacturing	Dr. D.A.Patel Dr. Kashyap Patel Dr. B.Kondrivendam	4,04,160	1 years	11.02.22	Ongoing
17	Performance Evaluation of Cement Concrete Pavements in Rural Roads	Dr. Shrinivas Arkatkar Dr. G J Joshi	22,04,000	1 year	30.3.22	Ongoing
18	Enhancing the Service Life of Concrete Structures through Cement less Concret or Geopolymer Concrete	Dr. B . Kandraivendhan Dr. C D Modhera	17,23,200	2 years	5.5.22	Ongoing
19	Examining Congestion Mitigation Strategies for India Cities Towards Accomplishment of Sustainable Habitat	Dr. Shrinivas Arkatkar Dr. G J Joshi Dr. Bhavesh Gohil	27,88,200	3 years	31.5.22	Ongoing
20	Construction Demolition Waste & Safety Menagement	Dr. D.A.Patel Dr. Kashyap Patel	3,00,000	1 year	10.11.22	Ongoing
21	Development of Noise Prediction Model and Mitigation Strategies for Highway Passing through Residential Areas using Natural Vegetation Barrier	Dr. B.N. Tandel Dr. G.J.Joshi	14,86,200	3 years	25.5.23	Ongoing
22	Making Village groundwater Visible: Outscaling MARVI	Dr. J.N.Patel +investigatoers from WSU Australia and other institute of india	2,80,000	6 Months	05.06.23	Ongoing
23	Enhancing Cultural Resilience of the third-generation diaspora through digital Technology and Storytrlling of India Tangible & Intangible Heritage	Dr. Dilip A. Patel Dr. Gayatri Vyas Dr. Maria Cerreta (univ. DEGli studi di federcoll)	55,19,994	2 year	02.08.2023	Ongoing

		Dr. Gabriella epsoste De Vita				
24	Pilot Scale Development of Greywater treatment system by using constructed wetland technique for student hostel/ residential tower	Dr. Kunwar Durg Vijay Singh Yadav	4,80,000	1 year	26.12.23	Ongoing
25	High-Temperature Transient Creep in Fire resistance analysis of UHPC RC Columns: Experimental and numerical assessment	Dr. Banti A. Gedam	42,52,820	3 years	23.2.24	Ongoing
26	Design and Development of semi active and Hybrid Control Systems for Building stocks in Surat City	Dr. Vishist Bhaiya Dr. Sumit Khare (MED)	19,58,264	3 years	4.3.24	Ongoing

Department of Chemical Engineering

Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	SERB Project - " A Study on ultrasound assisted crystallization of clopidogrel hydrogen sulfate"	Dr S R Patel	15,76,000	2 Years	08.07.15	Ongoing
2	Study of Microbial Consortia in Microbial fuel cell	Dr A K Mungray	17,05,000	3 Years	28.07.15	Ongoing
3	The near future air cathode Osmotic microbial fuel cell (OMFC) for wastewater treatment,electricity generation and pure water extraction	Dr.Alka A Mungray	28,46,000	3 years	20.03.18	Completed
4	Mango Waste Valorization Through Biorefining Concept: A Sustainable and Greener Approach	Dr. Meghal A Desai Dr. Girirajsinh C. Jadeja	50,60,880	3 years	10.10.18	Completed
5	Ultrasonic Microreactor for Production of Nano-Micro Particles of Poorly water Soluble Active Pharmaceutical Ingredients (API)	Dr. Sanjaykumar Rameshbhai Patel	51,41,750	3 years	01.06.19	Ongoing
6	Development of composite thin films with simultaneous different and magnetic properties	Dr. V N Lad	25,30,884	2 Years	25.02.20	Ongoing
7	Synthesis of Artificial Sweeteners and High Value Chemicals from Biorenewable Resources using Noble Metal Aerogel Catalysts	Prof K K Pant, IIT Delhi Prof. Jigisha Parikh	21,45,264	3 Years	19.3.20	Ongoing
8	Development of Drug Delivery System Based on phase Change Materials	Dr. Jigisha Parikh Dr. S K Sundar	43,67,264	3 years	2.3.22	Ongoing
9	Production of Crude Oil and Phosphate Fertilizer from the Faecal Sludge : A Complete Solution for the Zero Liquid Discharge	Dr. Arvind Mugrey	36,13,764	3 years	5.3.22	Ongoing
10	DST-FIST-CHED	Dr. Jigisha parikh Dr. Meghal Desai Dr. Sanjay R. Patel Dr. G C Jadeja Dr. Chetan Patel	1,68,00,000	5 years	31.3.22	Ongoing
11	Catalytic Decomposition of Waste Biopolymers to value-added compounds	Dr. Parimal A Parikh	8,27,160	1 year	22.4.22	Completed

12	Synthesis and Rheological characterization of liposome stabilized Emulsion- Hydrogel Matrix for Controlled Release of Essential Oil	Dr. Sundar S K Dr. Jigisha Parikh	33,45,000	3 years	31.5.22	Ongoing
13	Selective air oxidation of 2 chloro toluene to 2 chlorobenzaldehyde using Mn-Cu: and CeO ₂	Dr. Milap G. Nayak (Vishwarkarma Government Engg. College Chandkheda) Dr. V.N.Lad	2,00,000	3 years	4.7.22	Ongoing
14	A Compact Novel Hybrid system for the human urine recycling and potable water recovery for long - term human space mission	Dr. Alka A. Mungray Dr. Arvind Kumar Mungray Dr. Shriram Sonawane, VNNIT Nagpur	17,50,000	2 years	26.7.22	Ongoing
15	A Study Evaluating the efficiency of smart carbonated water injections in maximizing both, the amount of CO ₂ sequestered and oil recovered, during enhanced oil recovery process in a mature oil field in India	Dr. Shilpa Kulbhushan Nandwani Dr. Mousumi Chakerabarty (mentor)	35,74,000	3 years	06.09.22	Ongoing
16	A Stimuli -responsive PNIPAM based block copolymer aggregates as building blocks of smart aggregates for biomedical applications	Dr. Vijaykumar Ishverlal patel (Navyug Sci. College, VNSGU) Prof. Jigisha Parikh	18,00,000	3 years	17.10.22	Ongoing

Department of Computer Science Engineering						
Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	ISEA Project - " Phase - II released Grant in Aid"	Prof. D.C. Jinwala	1,85,70,000	5 years	12.02.16	Ongoing
2	Drone Multi Model video & quantitative data warehouse management for precision farming	Dr. Dipti P. Rana Dr. A.D. Darji Dr. Suresh Dahiya	2,50,000	1 year	02.08.2023	Ongoing
3	Computational Techniques based investigation for diabetic foot Ulcers complications	Dr. Chandra Prakash	39,99,430	3 years	8.3.24	Ongoing

Department of Electronics Engineering

Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	SMDP Project - " SMDP C2SD Project"(Special Manpower Development Programme Chips to System Design	Dr A D Darji(Pi) Prof. Pinal J Engineer(Co. Pi)	99,72,000	5 years	04.02.15	Ongoing
2	" Young Faculty Research Fellowship	Dr Piyush N Patel	14,80,000	2 Year Ext up to 5 Years	15.01.18	Completed
3	study&implimentation of generative Aelversariaol network (GANS) for image super-resolution :Application to image capture using CCTV Camera	Dr. kishor p Upla	23,03,180	3 years	21.08.18	Ongoing
4	Fractal metamaterial and its application to wearable antennas	Dr. Kirti Inamdar Dr. Upena D Dalal	30,14,420	3 years	10.10.18	Ongoing
5	Design and Development of Co-Planar Waveguide based Wearable Bio-Sensor for Medical Application	Dr. Piyush Patel	17,69,000	3 Years	08.07.20	Completed
6	Deep learning based signal classification for position accuracy of Navlc/GPS.	Dr. Darshna dipen jaggiwala Dr. Sweta shah (Mentor)	24,80,220	2 years	12.10.21	Ongoing
7	Caps Network-International Network for capsule Imaging in Enoscopy	Norway University of Science and technology (NTNU) DR. Kishor P. Upla (Co-pi)	61,00,000	5 years	3.02.22	Ongoing
8	Design and development of MEMS -based portable platform with inoselective Self-Assemble Monolayer SAMs for the detection of toxic Metal Ions HMIs in ground water	Dr.Anand Darji Dr. Dinesh Rotake	34,27,402	3 years	30.3.22	Ongoing
9	Capacity building for human resource development in unmanned aircraft system (drone and related technology)	Dr. Anand Darji (chief investigator) Dr. Dipti Rana (chief investigator) Dr. Suresh Dahiya (Co-hief investigator)	1,87,09,000	5 years	31.10.22	Ongoing

10	Polarization Tunable Circularly Polarized Antenna with Graphene for Ka band Applications	Dr. Shilpi Gupta Durga Prasad (Student)	71,500	1 year	02.05.23	Ongoing
11	On-board image compression Algorithms with locally adjustment quality using FPGA	Dr. A.D. Darji Dr. Amit Joshi (MNIT, Jaipur)	18,62,920	2 years	04.05.23	Ongoing
12	Design and Fabrication of BiOI-based Indoor Photovoltaic Devices for Development of Self-Powered IoT Ecosystems	Dr. Vivek Garg Dr. Deepak Joshi Dr. Nithi Chatterji Dr. Abhishek Acharya	11,00,000	1 year	29.09.2023	Ongoing
13	Lead free Perovskite Indoor/Outdoor Solar Cell Design for Self-Sustainable Cyber Physical System Design: Bandgap Engineering and Cell Fabrication	Dr. Shivendra Yadav	11,00,000	1 year	29.09.2023	Ongoing
14	Machine Learning based mobile Application for Early Shrimp Disease Diagnosis in Aquaculture	Dr. Kamal aptain Dr. Deepak Joshi Dr. Suman Deb	11,00,000	1 year	29.09.2023	Ongoing

15	Design fabrication and characterization of optimized 2D - material SOT-MTJ for Energy Efficient Embedded Non Volatile Memory Application	Dr. Abhishek Acharya Dr. Deepak Joshi Dr. Vivek Garg Dr. Suman Deb Dr. Shashidhara M	11,00,000	1 year	29.09.2023	Ongoing
16	Development of a Speech Based Mobile Application for Lung Disease Detection	Dr. Suman Deb Dr. Deepak Joshi, Dr. Abhishek Acharya Dr. Kamal Captain	11,00,000	1 year	29.09.2023	Ongoing
17	iHUB Surat Supported by iHUB Divya Sampark	Dr. Deepak Joshi	20,00,000	2 years	27.10.2023	Ongoing
18	Compact Formation based swarming drone for coordinated surveying	Dr. Raghavendra Pal Dr. Suresh Dahiya Dr. dipti Rana (DOCSE) Dr, Anand D. Darji	2,50,000	1 Year	15.12.23	Ongoing
19	Packet capture (pPCAP) and internal protocol data record (IPDR) analysis tool for App identification and activity graph generation using artificial analysis and machine learning	Dr. Raghavendra Pal Dr. Suresh Dahiya	2,50,000	1 year	4.1.24	Ongoing

20	Secure Energy-efficient Mixed domain compute in memory-based AI accelerator chip for edge applications	<p>(1) Dr. Pinal kumar Engineer Dr.Anand darji Dr. Zuber M Patel Dr. Abhishek Acharya Dr. Rasika dhavse</p> <p>(2) Indian Institute of Technology (IIT) Gandhinagar (Joycee Mekie -PI, Nihar Ranjan Mahopatre Tarun Kunar Agrawal)</p> <p>(3) Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar (Vinay Palaparthi - PI, Dr. Yash Agrwal Dr. Sreeja Rajendran)</p> <p>(4) Institute of Technology, Nirma University, Ahmedabad (Prof. Usha Mehta -PI, Prof. Piush Bhatasana Prof . Akash Mecwan)</p>	96,00,000	5 years	25.1.24	Ongoing
21	Design and Development of sustainable Light-weight, Cost-effective Biochor-polymer based composites as electromagnetic shields for preventing the hazardous EMI effects in different Electromagnatic environments	Dr. Kirti Inamdar Dr. P.V.bhale	26,22,818	3 years	31.1.24	Ongoing

22	Development of Anti-Jamming and Anti -Soofing baseband signal processing algorithms for NaVLC RS receiver provisined UAVs	Dr. Suresh Dahiya	31,88,747	2 years	19.2.24	Ongoing
23	Design and Characterization of Radiation Hardened standered cell libRARY using Nanosheet Field effect transistores: improving on Design Margins/reliability	Dr. Abhishek Acharya	21,69,178	3 years	17.2.24	Ongoing

Department of Electrical Engineering						
Sr. No.	Name of Project	Name of Co-ordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	SERB Project - Development of Control Algorithms for shunt and series connected Custom Power Devices.	Dr. Sabha Raj Arya	44,10,560	3 years	17.08.16	Completed
2	Development of enhanced Predictive Current Control and Predictive Torue Control strategies for Open-end Winding Permanent Magnet Synchronous Motor Drive with less torque ripple for Electric Vehicales	Dr. Kunisetti V. Praveen kumar	28,96,910	2 Years	19.01.21	Completed
3	Design and control of renewable energy based AC Microgrid Systems	Dr.Rajesekharareddy Chilipi	32,94,500	2 years	29.12.21	Ongoing
4	Hardware Implementation of 3SS Inverter Configuration in solar Grid-Tried Systems for Effective energy Utilization Using Wide Bandgap Switches	Dr. Jammala Venkatramanaiah	46,31,264	3 years	16.3.22	Ongoing
5	Wide Band Gap Device Based Next-Generation Intelligent Electric Tranction Drive System for Electric Vehicle Application	Dr. Sukanta Halder	30,91,061	3 Years	31.3.22	Ongoing

6	Intelligent Control for Active Shunt Compensator in Wind based Renewable Energy System for Remote Power Application	Dr. Sabha Raj Arya Dr. Rajasekhara reddy Chilipi DR. Ashutosh K Giri (G.E.C. Bharuch)	48,78,200	3 years	4.5.22	Ongoing
7	USBL Tracking and Passive Localization of Targets using Correntropy and Moving Horizon Estimates	Dr. Rahul Radhakrishnan Dr. S.N.Sharma	12,76,505	18 Months	13.12.22	Ongoing
8	Development of Advanced Non-Liner Non- Gaussian state estimators with application to Real-Life Problems	Dr. Rahul Radhakrishnan Dr. S.N.Sharma	21,29,718	3 years	28.12.22	Ongoing
9	Design and Development of smart BMS with Cell Surface Temperature Estimation	Dr. Mahmadasraf A. Mulla Dr. Sanjay Tolani	62,92,264	3 years	27.01.23	Ongoing
10	FIST - 2022	Dr. Ashish K. Panchal Dr. Aeidapu Mahesh Dr. Sanjay Tolani Dr. Sushnigdha Gangireddy Dr. Suresh Lakhimsetty	88,00,000	5 years	02.08.2023	Ongoing
11	Implementantion of Novel Speed Control strategies for photo voltaic based permanent magnet assisted synchronous reluctance Motor (PMaSyRM) drives in electric Vehicals	Dr. Kunisetti V. Praveen Dr. Rajeshsekhera reddy chilipi Dr. Suresh Lakhimsetty	44,04,400	3 years	8.2.24	Ongoing