

7.1 SPONSORED RESEARCH PROJECTS SUMMARY (F.Y. 2024-25)							
Sr. No	DEPARTMENTS	Ongoing Projects		Completed Projects		Total Projects	
		No of Projects	Sanctioned Amount	No of Projects	Sanctioned Amount	No of Projects	Sanctioned Amount
1	Department of Mechanical Engineering	36	11,29,24,180	3	2,39,41,036	39	13,68,65,216
2	Department of Chemistry	12	5,05,17,609	1	31,81,040	13	5,36,98,649
3	Department of Mathematics & Humanities	3	89,72,234	2	16,70,518	5	1,06,42,752
4	Department of Physics	12	3,47,08,197	3	98,70,200	15	4,45,78,397
5	Department of Civil Engineering	26	10,84,77,305	2	61,31,495	28	11,46,08,800
6	Department of Chemical Engineering	12	4,75,60,511	1	25,30,884	13	5,00,91,395
7	Department of Computer Science and Engineering	4	2,78,44,430	1	2,50,000	5	2,80,94,430
8	Department of Electronics Engineering	22	6,74,73,105	3	1,30,57,920	25	8,05,31,025
9	Department of Electrical Engineering	8	3,50,03,412	1	32,94,500	9	3,82,97,912
	Total	135	49,34,80,983	17	6,39,27,593	152	55,74,08,576

Department of Mechanical Engineering						
Sr. No.	Name of Project	Name of Coordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	Combustor Technology Development for small Gas Turbine / Turbofan Engine	Dr S A Channiwal	1,74,32,000	2 Years	02.05.17	Completed
2	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
3	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
4	Linear Stability Analysis of Interface Dynamics in Two-Phase Jets	Dr. Jyotirmay Banerjee	6,60,000	3 Years	04.03.20	Ongoing
5	Development Of A Novel High-Entropy Alloy Reinforced Magnesium Composites to Reduce Tension-Compression Yield Asymmetry Through Ultrasonic Assisted Liquid State Processing Route	Dr. Biranchi Narayan Sahoo	28,64,340	2 Years	27.11.20	Completed
6	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
7	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	18.3.21	Ongoing
8	A loop Heat pipe-based Novel BTMS for Hybrid Vehicles/ Electric Vehicles	Dr. Hemant Mehta Dr. V. M. Patel Dr. Naresh Yamsetty	36,44,696	2 Years	04.01.22	Completed
9	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
10	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

11	DST-FIST - To strengthen 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	8.3.22	Ongoing
12	Finishing of 3D-printed parts using an axial abrasive flow machining process	Dr Bhargave Prajwal Pathri (Woxen University, Hyderabad, Telangana), Dr.Shailendra Kumar (Mentor)	18,30,000	3 years	17.3.22	Ongoing
13	Development, Characterization, and Performance Evaluation of Multi-Phase Composite Panels	Dr. Achchhe Lal	14,22,283	2 years	22.3.22	Ongoing
14	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	5.5.22	Ongoing
15	Design and Development of PCM-based passive cooling system of E House	Dr. Manish K Rathod, Dr. Jyotimay Banerjee	32,09,200	3 years	5.5.22	Ongoing
16	Development of Multi-Material Welding approach for Ultrahigh-Strength Steel and 7xxx aluminium alloys to promote light-weighting and green mobility in the automobile sector	Dr. Vivek D Kalayankar Dr. Mukund H Bade	15,70,000	2 years	5.5.22	Ongoing
17	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 Chaudhary	19,51,790	2 years	18.10.2022	Ongoing
18	Development of 4-axis Extrusion-based 3D 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
19	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	1.2.23	Ongoing

20	Design, Development, and fabrication of an Electro catalytic Reactor for energy efficient and cost-effective Production of biodiesel from higher generation feedstock	Dr. Kamlesh Arun Sorate	12,48,500	3 years	24.2.23	ongoing
21	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
22	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. Christian (CED)	22,19,800	3 years	16.3.23	Ongoing
23	Design and development of solar-driven desalination systems based on Air-Humidification Technique using Nano-Fluids	Dr. Amit Kumar Dr. Rajesh Chaudhary	39,70,771	3 years	22.3.23	Ongoing
24	Combustion Dynamics of Rocket Engine and its Active Control using high High-Energy Plasma Discharge for Phase Desynchronization	Dr. Nikhil Baraiya	19,50,000	2 years	1.5.23	Ongoing
25	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
26	Development of a Novel Tapered Variable Channel Width Microchannel Heat Sink for Futuristic High-End Microelectronics Cooling	Dr. Jyotirmay Banerjee Dr. Hemant Kumar B Mehta	14,20,000	2 years	09.05.23	Ongoing
27	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
28	Design and Development of Active Greenhouse Solar Dryer for Potential Food Products	Dr. Vikram P. Rathod, Dr. Vimal K. Patel	11,16,000	3 years	15.05.23	Ongoing
29	Design, Development and techno-economic evaluation of humidification dehumidification desalination system assisted by solar-driven heat pump for sustainable water recovery from RO reject of textile industry in landlocked region of Surat City	Dr. P V Bhale Dr. Rohan Pande	24,94,800	3 years	01.06.23	Ongoing

30	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
31	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
32	Development of hybrid fibres-metal laminates with nano additives for high temperature Application of stiffened panel: Experimental and numerical studies	Dr. A. A. Shaikh Dr. R. Srilakshmi	31,93,344	2 years	21.2.24	Ongoing
33	A Novel approach for continuous fabrication of tailored blanks for automotive applications	Dr. Sunil Kumar	26,63,672	2 years	23.2.24	Ongoing
34	Development of a pulsating heat pipe-based hybrid pyramid-type solar still for efficient desalination	Dr. Y. Naresh Dr. J. Banerjee	31,73,808	2 year	13.5.24	Ongoing
35	Investigation on Explosion Dynamics of Hydrogen-Rich Fuels with A Parametric Variation of Fuel Components and Obstacles	Dr. Nikhil A. Baraiya, Dr. Meenatchidevi Murugesan (IIT Dharwad), Dr. Sudipto Mukhopadhyay (IIT Jodhpur)	61,93,176	2 year	11.6.24	Ongoing
36	Development of thermal gradient assisted self-positioning laser head for photo thermal therapy Application	Dr. Vipul M Patel, Dr. Hemant B Mehta, Dr. Sumit Khare	31,24,088	2 Years	12.6.24	Ongoing
37	Development of Artificial Intelligence Controlled Internal Cylindrical-Electromagnetic magnetic Abrasive Machining (IC-EMAM) system	Dr. Ram Singar Yadav Prof. Harit K. Raval	38,75,816	3 year	13.6.24	Ongoing
38	Strengthening, Modernisation and Up-gradation of the existing laboratory facilities to develop state of a art advanced welding research centre for promoting the indigenous industry-academia R&D activities.	Dr. V. D. Kalyankar Dr. S.N. Pandya Dr. Mukund H. Bade	2,00,00,000	5 years	14.6.24	Ongoing
39	Development of Correlation between Chirpy Value and Fracture Toughness for Tungsten Heavy Alloy (WHA)	Dr. Biranchi N. Sahoo Dr. Jyoti Meghani Dr. Raju Prasad Mahto	88,19,316	3 years	19.7.24	Ongoing

Department of Chemistry						
Sr. No.	Name of Project	Name of Coordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	SERB Project - Functional Variants of Mussel-Inspired Biomaterial Surface; Effect to Surface Functional Groups on ant biofilm Properties\	Dr. Rajendra Kumar	28,91,000	3 years	08.03.16	Ongoing
2	Syntheses of Biologically active Heterocyclic Drug cores via multiple C-H bond Activation	Dr. Togati Naveen	33,95,830	3 years	29.9.21	Ongoing
3	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	Completed
4	Waste Water Treatment: Polymoxometalates Hybrids as Adsorbents of Organic Dyes	Dr. Ritambhara Jangir Dr. B.Z. Dholakiya	25,18,200	3 years	3.6.22	Ongoing
5	DST-FIST	Dr. Suresh Kumar Prof. Smita Jauhari Dr. B.Z. Dholakiya Dr. Suban Sahoo Dr. Naved Malek Dr. K.C. Maheria Dr. Premkata Kumari Dr. Ketan Krupekar	2,03,00,000	5 years	05.01.23	Ongoing
6	Designing and Synthesis of Fluorescent Metal-Organic Frameworks for Sensing Applications	Ms. Foziya Yusuf Vadia Dr. Suresh Kumar Kailasa Dr. Naved I. Malek	21,45,320	3 years	9.2.23	Ongoing
7	Development of Eco-Friendly Optical Probes for Monitoring of important growth hormones and pesticides in agricultural soil	Dr. Suresh Kumar Kailasha Dr. Sanjay jha (Navsari Agriculture	23,12,320	2 years	27.3.23	Ongoing
8	Hydrogel Promoted Transdermal Permeation Anti-Cancer Drug for Breast Cancer Treatment	Dr. Naved I Malek, Dr. Sugam Kumar (BARC)	45,000	1 year + up to Expandable	22.5.23	Ongoing
9	Amphiphilic Hydrogel Formulation as Emerging Templates in Drug Delivery Systems	Dr. Ketan C. Kruperkar	2,43,240	2 years	07.07.2023	Ongoing
10	Synthesis and design of metal-organic frameworks as enzyme mimics	Dr. Lata Rana	42,39,400	3 years	21.12.24	Ongoing

11	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
12	Waterless Anti-Freezing Eutectogel: De Navo Platform for the protection of skin against cold-Induced Injuries	Dr. Naved I Malek	33,71,550	3 years	9.10.24	Ongoing
13	Highly Flexible, self-recoverable and self-lubricated ionic liquid infused super hydrophobic MOF based coating with Anti-Isocong performance in aerospace application	Dr. Naved I Malek Dr. Bharat Z. Dholakia	60,80,249	3 years	28.1.25	Ongoing

Department of Mathematics & Humanities						
Sr. No.	Name of Project	Name of Coordinator	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	Completed
2	A Need-based Approach to Understanding the Employ ability skills of engineers	Dr. Urvashi Kaushal	50,000	2 years	17.06.21	Completed
3	To Strengthen the research facilities in the department	Prof. A. K. Shukla Prof. V. H. Pradhan Dr. sushil Kumar Dr. Jayesh M Dhodiya Dr. Ramakanta Maher	70,00,000	5 years	8.3.22	Ongoing
4	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
5	Profit and cost Investigation of Retrial Queueing Models under Admission Control Policies	Dr. Sudeep Singh Sanga	13,12,234	2 years	13.2.24	Ongoing

Department of Physics						
Sr. No.	Name of Project	Name of Coordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	BRNS Project –Ground – State properties of low dimensional quantum systems.	Dr L K Saini	14,49,250	3 years Extended up to 31.12.16	27.09.13	Ongoing
2	SERB Project – Strongly – correlated electronics materials, Topological quntumnano – materials	Dr L K Saini	14,04,000	3 years	24.02.14	Ongoing
3	SERB Project - Novel perovskite-based solar cells : Investigation of potential properties using ab-initio approaches	Dr Y A Sonavne	30,09,000	3 years	02.03.17	Completed
4	conducting polymer nanocomposite (CPC) for selective and sensitive sensor detection of explosive array	Dr. Swati Saxena	19,20,000	2 years	25.09.18	Ongoing
5	FIST - 2017	Dr. Vipul Kheraj	1,18,00,000	5 years	18.06.19	Ongoing
6	"TEC Data ingestion to ionosphere models from Indian EIA region to improve models predictions"	Dr. Sheetal P Karia	25,50,000	3 Years	05.07.19	Ongoing
7	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	Completed
8	Group III-V Inorganic Semiconductor Clusters for Future Nano electronics Applications	Dr. Debesh Roy	33,67,513	3 Years	16.01.21	Ongoing
9	Investigation of Novel Haussler Alloy thin Films for Energy and spintronic Applications	Dr. Himanshu Pandey	47,30,000	3 years	6.12.21	Completed
10	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
11	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
12	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

13	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
14	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
15	Determination of higher order deformations of atomic nuclei by quasi-elastic scattering	Dr. Dipika B Patel	26,94,720	3 years	3.7.24	Ongoing

Department of Civil Engineering						
Sr. No.	Name of Project	Name of Coordinator	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	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
3	Unnat Bharat Abhiyan Cell	Dr K A Chauhan	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 Dili Patel	8,36,900	6 Months + up to Expandable	21.07.17	Ongoing
5	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
6	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 Sanction Date)	Ongoing
7	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	Completed

8	Development of Framework to Measure Sustainability Index Of Transportation Systems In Indian Metropolitan Cities	Dr. Shriniwas Arkatkar Dr. G J Joshi	82,32,000	3 years	22.02.19	Ongoing
9	Warrant for Automation of toll Plazas under Mixed Traffic Conditions	Dr. Ashish Dhamania	7,67,000	2 Years	13.4.21	Ongoing
10	Graphene-Based Nano materials in Property Enhancement of Cement Composites & Concrete under GIJCOST STI Policy	Dr. Gaurang R. Vesmawala Dr. Yogesh D. Patil	27,77,500	3 Years	08.06.21	Ongoing
11	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
12	Development of Trip Generation Manual for Indian cities	Dr. Shriniwas Arkatkar Dr. G J Joshi	8,69,000	3 Years	31.12.21	Ongoing
13	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
14	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
15	CCPDM-Circular Cementations Products Embedding Digital Manufacturing	Dr. D. A. Patel Dr. Kashyap Patel Dr. B. Kondrivendam	4,04,160	1 years	11.02.22	Ongoing
16	Performance Evaluation of Cement Concrete Pavements in Rural Roads	Dr. Shriniwas Arkatkar Dr. G J Joshi	22,04,000	1 year	30.3.22	Ongoing
17	Enhancing the Service Life of Concrete Structures through Cement less Concrete or Geopolymer Concrete	Dr. B. Kandraivendhan Dr. C D Modhera	17,23,200	2 years	5.5.22	Ongoing
18	Examine Congestion Mitigation Strategies for India Cities Towards Accomplishment of Sustainable Habitat	Dr. Shriniwas Arkatkar Dr. G J Joshi Dr. Bhavesh Gohil	27,88,200	3 years	31.5.22	Ongoing
19	Construction Demolition Waste & Safety Management	Dr. D.A.Patel Dr. Kashyap Patel	3,00,000	1 year	10.11.22	Ongoing
20	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

21	Making Village groundwater Visible: Outscaling MARVI	Dr. J. Patel +investigators from WSU Australia and other institute of India	2,80,000	6 Months	05.06.23	Completed
22	Enhancing Cultural Resilience of the third-generation diaspora through digital Technology and Storytelling of India Tangible & Intangible Heritage	Dr. Dilip A. Patel Dr. Gayatri Vyas Dr. Maria Cerreta (univ. DEGLI studi di federcoII) Dr. Gabriella epsoste De Vita	55,19,994	2 year	02.08.2023	Ongoing
23	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
24	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
25	Design and Development of semi active and Hybrid Control Systems for Building stocks in Surat City	Dr. Vishist Bhैया Dr. Sumit Khare (MED)	19,58,264	3 years	4.3.24	Ongoing
26	Towards a Circular Economy: Exploring Nano-Technology, Plastics and Additive Manufacturing for Development of Sustainable Concrete	Dr. Kaustav Sarkar (IIT Mandi) Dr. KashyapKumar A. Patel Dr. Lukman Mansuri (Nirma Univ.)	44,16,000	2 years	29.7.24	Ongoing
27	Calculating Compressive strength and permeability of Concrete through its Microstructural features	Dr. B. Kondraivendhan Dr. C.D. Modhera	1,01,89,857	5 years	04.12.24	Ongoing
28	Impact of Climate Change on Water Resource and River Morpho-dynamics of Narmada Basin	Dr. P. V. Timbadiya Prof P.L. Patel	1,02,65,200	3 Years	27.12.24	Ongoing

Department of Chemical Engineering						
Sr. No.	Name of Project	Name of Coordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	SERB Project - " A Study on ultrasound assisted crystallization of clopidogrel hydrogen sulphate"	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 (Pi) Dr. Alka A. Mungray(Co-Pi) Dr. Suresh Kumar Kailasa(Co-Pi)	17,05,000	3 Years	28.07.15	Ongoing
3	Ultrasonic Micro reactor for Production of Nano-Micro Particles of Poorly water Soluble Active Pharmaceutical Ingredients (API)	Dr. Sanjaykumar Ramesh Bhai Patel	51,41,750	3 years	01.06.19	Ongoing
4	Development of composite thin films with simultaneous different and magnetic properties	Dr. V N Lad	25,30,884	2 Years	25.02.20	Completed
5	Synthesis of Artificial Sweeteners and High Value Chemicals from Bio renewable Resources using Noble Metal Aerogel Catalysts	Prof K K Pant, IIT Delhi Prof. Jigisha Prarikh	21,45,264	3 Years	19.3.20	Ongoing
6	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
7	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
8	Sustainable infrastructure development under FIST programme	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
9	Synthesis and Rheological characterization of liposome stabilized Emulsion- Hydrogel Matrix for Controlled Release of Essential Oil	Dr. Sundar S K Dr. Jigisha Parikh	43,95,200	3 years	31.5.22	Ongoing
10	Selective air oxidation of 2 chloro toluene to 2 chlorobenaldehyde 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

11	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
12	A Study Evaluating the efficiency of smart carbonated water injections in maximizing both, the amount of Co2 sequestered and oil recovered, during enhanced oil recovery process in a mature oil field in India	Dr. Shilpa Kulbhushan Nandwani Dr. Mousumi Chakraborty (mentor)	40,66,269	3 years	06.09.22	Ongoing
13	A Stimuli -responsive PNIPAM based block copolymer aggregates as building blocks of smart aggregates for biomedical applications	Dr. Vijay Kumar Ishverlal Patel (Navyug Sci. College, VNSGU) Prof. Jigisha Parikh	18,00,000	3 years	17.10.22	Ongoing

Department of Computer Science and Engineering

Sr. No.	Name of Project	Name of Coordinator	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	Completed
3	Computational Techniques based investigation for diabetic foot Ulcers complications	Dr. Chandra Prakash	39,99,430	3 years	8.3.24	Ongoing
4	Urban flow revolution: Unveiling the Potential of AI , Computer Vision and Cloud for design and Development of Adaptive Traffic System	Dr. Dipti P. Rana Dr. A.D. Darji Dr. Suresh Dahiya	4,95,000	3 years	29.2.24	Ongoing
5	Information Security Education & Awareness (ISEA) Project Project-Phase-III	Dr. Sankita J. Patel Dr. Bhavesh N Gohil	47,80,000	5 years	13.5.24	Ongoing

Department of Electronics Engineering						
Sr. No.	Name of Project	Name of Coordinator	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	Completed
2	Study & implementation 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
3	Fractal metamaterial and its application to wearable antennas	Dr. Kirti Inamdar Dr. Upena D Dalal	30,14,420	3 years	10.10.18	Completed
4	Deep learning based signal classification for position accuracy of NavIc/GPS.	Dr. Darshna dipen Jaggiwala Dr. Sweta shah (Mentor)	24,80,220	2 years	12.10.21	Ongoing
5	Caps Network-International Network for capsule Imaging in Endoscopy	Norway University of Science and technology (NTNU) DR. Kishor P. Upla (Co-pi)	61,00,000	5 years	3.02.22	Ongoing
6	Design and development of MEMS -based portable platform with inoselesctive 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
7	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)	1,87,09,100	5 years	31.10.22	Ongoing
8	Polarization Tuneable Circularly Polarized Antenna with Graphene for Ka band Applications	Dr. Shilpi Gupta Druga Prasad (Student)	71,500	1 year	02.05.23	Completed
9	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
10	Design and Fabrication of BiOI-based Indoor Photovoltaic Devices for Development of Self-Powered IoT Ecosystems	Dr. Vivek Garg Dr. Deepak Joshi Dr. Nithi Chatterjee Dr. Abhishek Acharya	11,00,000	1 year	29.09.2023	Ongoing

11	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
12	Machine Learning based mobile Application for Early Shrimp Disease Diagnosis in Aquaculture	Dr. Kamal captain Dr. Deepak Joshi Dr. Suman Deb	11,00,000	1 year	29.09.2023	Ongoing
13	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
14	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
15	I HUB Surat Supported by I HUB Divya Sam park	Dr. Deepak Joshi	20,00,000	2 years	27.10.2023	Ongoing
16	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
17	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

18	Secure Energy-efficient Mixed domain compute in memory-based AI accelerator chip for edge applications	(1)Dr. Pinal Kumar Engineer Dr. Anand darji Dr. Zuber M Patel Dr. Abhishek Acharya Dr. Rasika dhavse (2) Indian Institute of Technology (IIT) Gandhinagar(Joycee Mekie -PI, Nihar Ranjan Mahopatre Tarun Kunar Agrawal) (3) Dhirubhai Ambani Institute of Information and Communication Technology (DA-IICT), Gandhinagar (Vinay Palaparthi - PI, Dr. Yash Agrwal Dr. Sreeja Rajendran) (4) Institute of Technology, Nirma University, Ahmedabad (Prof. Usha Mehta -PI, Prof. Piush Bhatasana Prof. Akash Mecwan)	96,00,000	5 years	25.1.24	Ongoing
19	Design and Development of sustainable Light-weight, Cost-effective Biochor-polymer based composites as electromagnetic shields for preventing the hazardous EMI effects in different Electromagnetic environments	Dr. Kirti Inamdar Dr. P. V. bhale	26,22,818	3 years	31.1.24	Ongoing
20	Development of Anti-Jamming and Anti -Spoofing baseband signal processing algorithms for NaVLC RS receiver provisioned UAVs	Dr. Suresh Dahiya	31,88,747	2 years	19.2.24	Ongoing
21	Design and Characterization of Radiation Hardened slandered cell library using Nano sheet Field effect transistors: improving on Design Margins/reliability	Dr. Abhishek Acharya	21,69,178	3 years	17.2.24	Ongoing
22	Design of Electronic Speed Controller (ESC) for Drone	Dr. A. A. Darji	2,50,000	1 year	17.4.24	Ongoing

23	Development of IoT Edge Computing Applications using Optimized near threshold voltage (NTV) standard Cells with OPENLANE	Dr. Abhishek Acharya	25,58,100	5 years	25.10.24	Ongoing
24	Navic Vavaj: Navic Enabled Uav Eith Anti-Jamming	Dr. Shweta Shah Dr. Upena Dalal	30,04,720	3 years	25.11.24	Ongoing
25	Utilizing UAVs Equipped with AI & ML technologies for rescuer Operations in flood-affected areas	Dr. Pratha Das Prof. Ritu Tiwari Dr. Abhilasha Chaudhuri	11,96,720	8 months	16.12.24	Ongoing

Department of Electrical Engineering						
Sr. No.	Name of Project	Name of Coordinator	Grant Sanctioned	Duration	Date of Allotment	Status
1	Design and control of renewable energy based AC Micro grid Systems	Dr.Rajeseckharareddy Chilipi	32,94,500	2 years	29.12.21	Completed
2	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
3	Wide Band Gap Device Based Next-Generation Intelligent Electric Traction Drive System for Electric Vehicle Application	Dr. Sukanta Halder	30,91,061	3 Years	31.3.22	Ongoing
4	Intelligent Control for Active Shunt Compensator in Wind based Renewable Energy System for Remote Power Application	Dr. Sabha Raj Arya Dr. Rajaseckharareddy Chilipi DR. Ashutosh K Giri (G.E.C. Bharuch)	43,78,200	3 years	4.5.22	Ongoing
5	USBL Tracking and Passive Localization of Targets using Correntropy and Moving Horizon Estimates	Dr. S.N.Sharma	12,76,505	18 Months	13.12.22	Ongoing
6	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
7	Design and Development of smart BMS with Cell Surface Temperature Estimation	Dr. Mahmdasraf A Mulla Dr. Sanjay Tolani	62,92,264	3 years	27.01.23	Ongoing

8	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
9	Implementation of Novel Speed Control Strategies for photo voltaic based permanent magnet assisted synchronous reluctance Motor (PMaSyRM) drives in electric vehicles	Dr. Kunisetti V. Praveen, Dr. Rajeshsekhera Reddy Chilipi Dr. Suresh Lakhimsetty	44,04,400	3 years	8.2.24	Ongoing