

<b>S. No.</b>	<b>Project Title</b>	<b>Principal Investigator (PI)</b>	<b>Funding Agency</b>	<b>Total Financial Outlay</b>	<b>Status</b>
1.	SMDP-C2SD (Low power processor-based power management unit for Internet of Things (IoT) applications)	Prof. PN Kondekar	MeitY	268.5 lakhs	Ongoing (Project Extended)
2.	Structural, Electrical & Optical Properties Investigation of Ga <sub>2</sub> O <sub>3</sub> thin films for deep ultraviolet photodetector applications	Dr Pankaj Sharma	INUP IISc	Lab Access	Ongoing
3.	Fabrication of High-Performance Metal Oxide Nanostructure Based Gas Sensors for Toxic Gas Sensing Applications	Dr Pankaj Sharma	IITDM Jabalpur	5,00,000/-	Ongoing
4.	Development of Teaching Learning Centre at IIT Pune under PMMMNMTT	Dr Pankaj Sharma	AICTE	14,70,000	completed
5.	Development of Li doped ZnO based electrolyte for low temperature solid oxide fuel cell (SOFC)	Dr Pankaj Sharma	DST SERB	33,86,750/-	Ongoing
6.	Interface Investigation of $\beta$ -(Al <sub>x</sub> Ga <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> /Ga <sub>2</sub> O <sub>3</sub> Heterojunctions for High Electron Mobility Transistor Applications	Dr Pankaj Sharma	UGC DAE CSR	2,45,480/-	Ongoing
7.	Device-Circuit Co-Design Approach for Junction-less FET (JLFET) /Doping-less JLFET (DL-JLFET) Digital	Dr Pushpa Raikwal	PDPM IITDM Jabalpur	7.10 Lac	Ongoing

	Circuits and Memory applications.				
8.	Stability Improvement of Memristor based Futuristic Memory Element	Dr Koushik Dutta	FIG (IIITDMJ)	775000/-	Ongoing
9.	Analytical Modelling and Simulation of III-V nanostructure-based Hybrid Solar Cells	Dr D P Samajdar	DST SERB	2670170/-	Completed
10.	Studies on electronic and optical properties in group III-V-N quaternary semiconductor quantum dots using density functional theory and k dot p method	Dr D P Samajdar Dr John A Peter	CSIR	1710000/-	Ongoing
11.	Simulation of Photodetectors based on InSbBiN alloys and Quantum Dot Structures using COMSOL Multiphysics for Long Wave Infrared (LWIR) Applications	Dr D P Samajdar	PDPM IIITDM Jabalpur	150000/-	Completed
12.	Design and Performance Investigation of Negative Capacitance Tunnel FET for Digital/Analog Applications	Dr Navjeet Bagga	PDPM IIITDM Jabalpur	750000	Ongoing

<b>S. No.</b>	<b>Project Title</b>	<b>Principal Investigator (PI)</b>	<b>Funding Agency</b>	<b>Total Financial Outlay</b>	<b>Status</b>
1.	Design, simulation and development of conformal phased array antenna for airborne applications	Dr Dinesh Kumar V Dr Manoj S Parihar	DRDO, India	52.78 Lakhs	Ongoing
2.	Research facility for Advance Microwave & Communication Engineering	Dr Dinesh Kumar V Dr Manoj S Parihar Dr Matadeen Bansal	DST, India	2.05 Crore	Ongoing
3.	Universal UHF-RFID Antenna: Design and Development	Dr Trivesh Kumar	PDPM IITDM Jabalpur	1,50,000	Ongoing
4.	An efficient use of discarded heterogeneous electronic waste for development of cost-effective microwave absorber	Dr Ravi Panwar	SERB	43,94,770	Ongoing
5.	Optimal design of multilayered microwave absorbing structures for stealth applications	Dr Ravi Panwar	PDPM IITDM Jabalpur	1,50,000	Ongoing
6.	Design and prototyping of deep neural network enabled innovative conformal exterior stealth tanker drone	Dr Ravi Panwar		3,60,000	Ongoing
7.	Development of Advance Microwave and Communication Lab under FIST 2017	Dr Dinesh Kumar V Dr Manoj Singh Parihar & Dr Matadeen Bansal	DST	205.2 Lakhs	Ongoing

8.	Design, simulation and development of conformal phased array antenna for airborne applications	Dr Dinesh Kumar V Dr Manoj Singh Parihar	DRDO	50.998 Lakhs	Ongoing
9.	Low Profile Dielectric Resonator Antennas for Compact, Wideband and Conformal Applications	Dr Biswajeet Mukherjee	SERB, DST	2600000	Ongoing
10.	ATAL AICTE Sponsored FDP	Dr Biswajeet Mukherjee	AICTE	93000	Completed
11.	Technology Intervention in Product design for the Elderly - Case Studies on Umbrella and Stick Designs	Dr Biswajeet Mukherjee	SEED, DST	1568640	Ongoing
12.	Design Solutions with Technological intervention of Walker for patients and the elderly	Dr Biswajeet Mukherjee	Design Innovation Centre (DIC), Jabalpur	195000	Completed
13.	Design, Development and Miniaturization of Dielectric Antennas for wireless and high-power applications	Dr Biswajeet Mukherjee	IIITDM, Jabalpur	114409	Ongoing
14.	Investigation of Compact and Miniaturized Dielectric resonator Antenna loaded with metamaterial-based structures for Wireless Application	Dr Biswajeet Mukherjee	MPCST, Bhopal	700000	Completed
15.	Fractal based dielectric resonator antennas for compact, wideband and high gain applications	Dr Biswajeet Mukherjee	SERB, DST	3076000	Completed

<b>S. No.</b>	<b>Project Title</b>	<b>Principal Investigator (PI)</b>	<b>Funding Agency</b>	<b>Total Financial Outlay</b>	<b>Status</b>
1.	Genomic & Proteomic Signal Processing	Dr Sanjeev N. Sharma	ATAL Online FDP Grant	93,000/-	
2.	Development of Signal Processing Based methods for Condition Monitoring of Machines	Dr Sanjeev N. Sharma	TEQIP-II Grant for Research Project	3,22,820/-	
3.	International Conference on Signal Processing	Dr Sanjeev N. Sharma	DST Grant	1,00,000/-	
4.	Two Week Staff Development Program	Dr Sanjeev N. Sharma	AICTE Grant	6,98,550/-	
5.	Design and Analysis of Multiplier less Multirate Filterbank with Low Complexity	Dr Anil Kumar	SERB-DST	18, 79,680	Complete
6.	Computer Aided Design for Development of Hardware prototype for Diagnosis of Diabetes using ECG Signals	Dr Varun Bajaj	CSIR	20 Lakh	Ongoing
7.	FPGA prototype of non-recursive key based cryptosystem for secure transmission of real-time privacy signal	Dr Varun Bajaj Dr Sarban Kumar Mohanti	DST/ICPS	24 Lakh	Completed
8.	Brain computer interface for classification of human emotions,	Dr Varun Bajaj	Research Initiation Grant in IIITDM Jabalpur	100000/-	Completed
9.	Development of Efficient Image Watermarking Techniques	Dr Irshad Ahmad Ansari	PDPM IIITDMJ	150000/-	Completed
10.	Investigation of Computational Intelligence Capabilities for Digital Signal Protection	Dr Irshad Ahmad Ansari Dr Om Prakash Verma	STEM-RS, UP	3,00,300/-	Ongoing
11.	Design and Development of ADHAAR (Autonomous Drone for Himalayan region	Dr. Om Prakash Verma	JCBRO, GB Nagar, UP	3,08000/-	Ongoing

	Analysis, Assessment and Rescue)	Dr Irshad Ahmad Ansari			
12.	Smart Walker for Elderly People	Dr Irshad Ahmad Ansari	ARTPARK, IISC, Bengaluru	360000/-	Ongoing
13.	A Deep Convolutional Neural Network (CNN) and Generative Adversarial Networks (GANs)-based Product Development for the Detection of Skin Cancer using Enlarged Training Image Datasets	Dr Amit Vishwakarma	Faculty initiation Grant, PDPM IITDM Jabalpur	35600/-	Ongoing
14.	Rice disease detection using machine learning	Dr Amit Vishwakarma Dr Anil Kumar	CFCL INDIA (0046036111)	342000	Ongoing
15.	Cassava plant disease analysis	Dr Amit Vishwakarma	ISTEM IISC Bangalore (AMITVISH002)	Availability of GPU and Travel facility (Worth Rs. 600000)	Ongoing

<b>S. No.</b>	<b>Project Title</b>	<b>Principal Investigator (PI)</b>	<b>Funding Agency</b>	<b>Total Financial Outlay</b>	<b>Status</b>
1.	Smart Room Ventilator (SRV)	Prof. Prabin Kumar Padhy Prof. V K Gupta	DIC, MHRD, Govt of India	276900/-	
2.	Improved controlled design for AQM routers supporting TCP flows	Prof. Prabin Kumar Padhy	DST, Govt of India	300000/-	
3.	Brain Controller Mobile Robot	Prof. Prabin Kumar Padhy Prof. V K Gupta	DST, Govt of India	1850000/-	
4.	Start Up Centre IIITDM Jabalpur	Prof. P. Tandon Dr Sraban K Mohanty, Dr Dr Sachin K. Jain	MHRD and DST, GoI		Award
5.	Time-varying harmonics and inter harmonics estimation in real-time for online applications	Dr Sachin K. Jain	SERB-DST		Complete
6.	Study of specific areas registering high failure rate of distribution transformers to analyse the cause of failure and suggest a solution to overcome this problem by applying IT technology and integrating it with metering solutions.	Dr Sachin K. Jain	SERB-DST		Complete
7.	Study of specific areas registering high failure rate of distribution transformers to analyse the cause of failure and suggest a solution to overcome this problem by applying IT	Dr V K Jain Dr S K Jain	DSIR DST Awarded		

	technology and integrating it with metering solutions.				
--	--	--	--	--	--



<b>S. No.</b>	<b>Project Title</b>	<b>Principal Investigator (PI)</b>	<b>Funding Agency</b>	<b>Total Financial Outlay</b>	<b>Status</b>
1.	Energy efficiency optimization of MIMO cognitive relay networks	Dr Matadeen Bansal	PDPM IIITDM Jabalpur	2 Lac	Ongoing
2.	Performance Analysis of DCSK Modulation with Transmit Antenna Selection without Requiring Channel State Information	Dr Atul Kumar	IIITDM Jabalpur	1.5 Lac	Ongoing