

IPS ACADEMY

INSTITUTE OF ENGINEERING & SCIENCE

Indore (M.P.)



A UGC Autonomous Institute
Affiliated to



Rajiv Gandhi Proudyogiki Vishwavidyalaya Bhopal

Annual Report (R &D)

2022-23

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Acknowledgement

A. About Research and Development (R & D) Cell



Vision

To be the fountainhead of novel ideas & innovations in science & technology & persist to be a foundation of pride for all Indians.

Mission

To develop and expand innovative research programs that align well with institutional mission and strategic plan, address important national and global needs, and through technology transfer and commercialization



Objectives

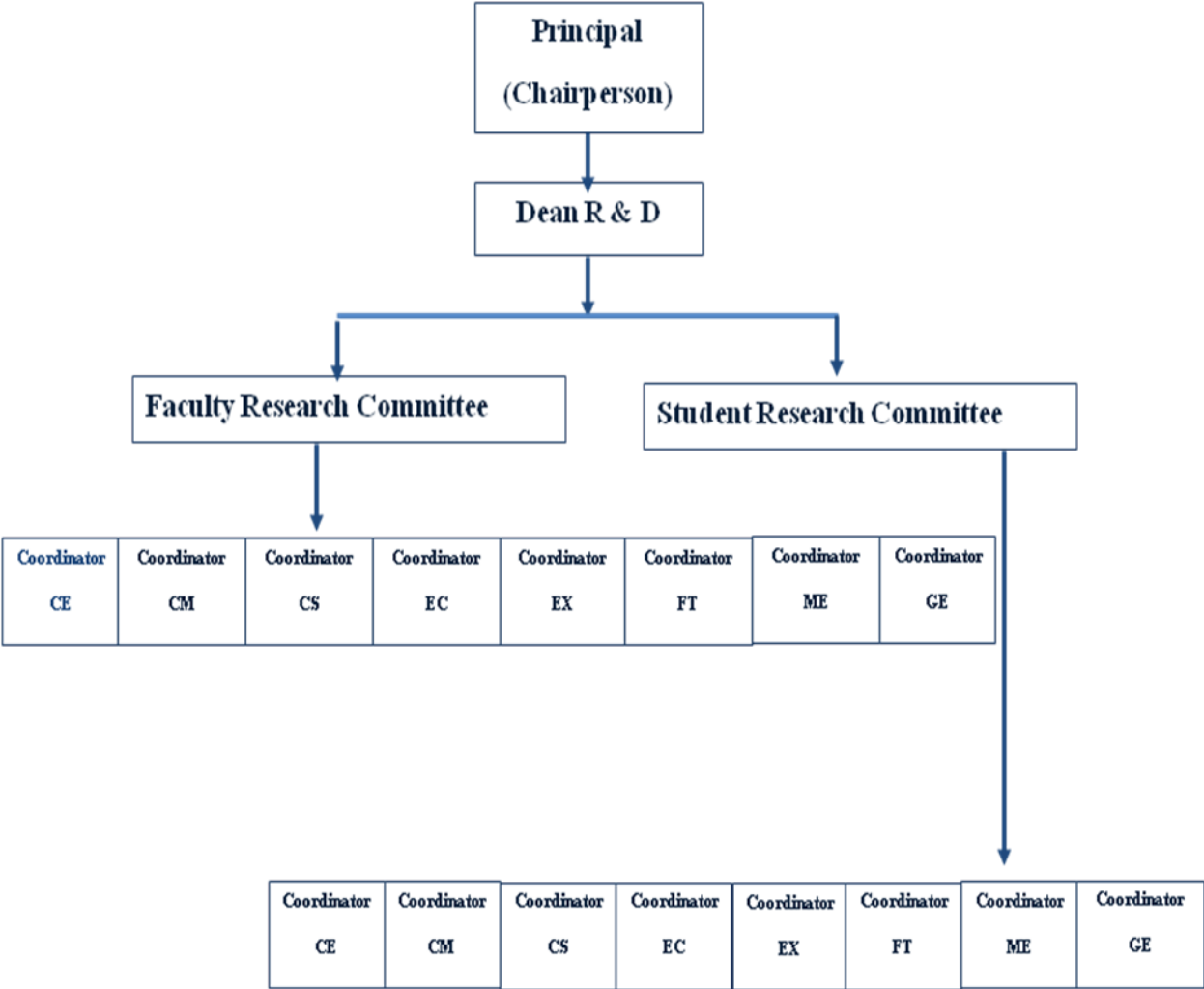
- R&D Cell aims to foster research culture in the College by promoting research in newly looming and challenging frontier areas of Engineering, Technology and Science.
- It encourages the students and faculty to undertake the research in in multidisciplinary fields.
- This fortifies the general research capability of budding technocrats by way of participating in conferences, seminars, workshops, project competition, etc
- To encourage young Engineers to take up challenging R&D activities.
- To encourage patenting facilities to Engineers in the country for Indian and foreign patents on a sustained basis.



Functions of R & D

- Identification of thrust areas of research in each Department.
- Advise and encourage the faculty to carry out research in-house and in collaboration with other organizations.
- Visit various departments and meet the faculty to encourage and motivate them to undertake research projects and to scrutinize the proposals before submitting to funding agencies.
- Identification of physical and human resources to carryout research.
- Identify the budgetary requirements and resources for funding the research.
- Review the progress of research and offer necessary guidance whenever required.
- Monitor and propose the funding from college budget for promotion of research activities.
- Identify different organizations/ industries to undertake collaborative research on current topics of mutual interest.
- To develop state of art laboratories such microfluidics lab and heavy structure lab.
- To develop earthquake research center in the institute.

Proposed Structure of R & D



Constitution of Research Advisory Committee

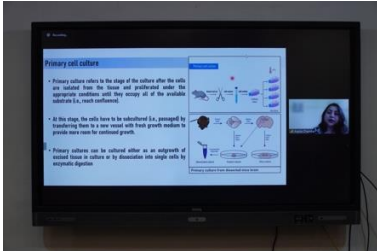
Constitution of Research and Development Cell (RDC)

The constitution of Research & Development Cell (RDC) is as follows:

1. Dr. Archana Keerti Chowdhary, (Principal) Chairperson
2. Dr. Amit Sharma, Professor, Dean, Research Development Cell
3. Dr. Abhinesh Prajapati, Associate Professor, Coordinator
4. Dr. J. Ponomozhi, Professor, Mechanical Engineering, Member
5. Dr. Dharmendra Singh Yadav, Professor, Electronics & Communication Engineering, Member
6. Dr. Sumit Bhatiya, Professor, Fire Technology and Safety Engineering, Member
7. Dr. Devanshi Jagwani, Professor, Civil Engineering, Member
8. Dr. Neeraj Shrivastava, Associate Professor, Computer Science and Engineering, Member
9. Dr. Vaishali Gupta, Associate Professor, Computer Science and Engineering, Member
10. Dr. Kanti Kumar Athankar, Associate Professor, Chemical Engineering, Member
11. Dr. V. G. Sadh, Associate Professor, Humanities, Social Science and Management, Member
12. Dr. Nisha Agrawal, Associate Professor, General Engineering, Member

The responsibility of the research and development cell (RDC) is to implement & monitor the framed policies which help to the promotion of research activities for the benefit of all.

B. Research Project (Ongoing)

Sr. No.	Title of Project	Name of the collaborating agency with contact details	Name of the participant from Institute	Financial Year	Amount	Duration
1	Drug diffusion studies on skin-on-a-chip: Influence of shear stress (Internal Funding 2023)	<p>Collaboration with CNCI – Dr. Arpita Banerjee, Chittaranjan National Cancer Institute</p> 	Dr. J. Ponmozhi	2023 - 2026	Amount from IPSA-IES:28.0 L	3 years
2	Creating an Environment and integrated it with Haptic Gloves		Ms. Pooja Kothari	2023 - 2024	Amount from IPSA-IES:15.50 L	1 years

C. (i) Research Publication (July2022- June 2023)

S. No	Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Journal	Month and Year of publication	ISSN
1	Dr. Yogendra Dohare, Dr. Indra Kumar Shah and Dr. Dharmendra S. Yadav	Electrical and Electronics Engg.	ICIC: A Dual Mode Intra-Cluster and Inter-Cluster Energy Minimization Approach for Multihop WSN	IEEE ACCESS	Jul-22	2169-3536
2	Dr. Abhinesh Kumar Prajapati and Dr. Chhaya Rekhate ,	Chemical Engineering	Removal of heavy metal from electroplating wastewater using electrocoagulation: a review	Desalination and Water Treatment	Aug-22	1944-3986
3	Dr. Kanti Kumar Athankar,	Chemical Engineering	Optimization and simulation of heat loss in pyrolysis reactor	Materials Today: Proceedings	Sep-22	2214-7853
4	\Dr. Manish Sahajwani and Mrs. Namrata Nebnanai	EX	Modelling Of Solar Based Power Generation Grid And Islanding Effect Analysis Pv Connected Load Flow Bus	Neuroquantology	Oct-22	3556-3562
5	Dr. Ritesh Gupta	EC	Sample And Hold Circuit Design Using Double Sampling Without Op Amp	Neuroquantology	Nov-22	1303-5150
6	Mr. Sharad Jain	Computer Science and Engineering	Cooperative spectrum Sensing in Cognitive Radio Networks:A systematic Reivew	Recent Advances in Computer Science and Communications	Nov-22	2666-2558

7	Dr. Ranjana Ahirwar	Chemical Engineering	Progression of Quantum Dots Confined Polymeric Systems for Sensorics	Polymers	Jan-23	2073-4360
8	Dr. Ranjana Ahirwar	Chemical Engineering	Synthesis of Transition-Metal-Doped Nanocatalysts with Antibacterial Capabilities Using a Complementary Green Method	Molecules	Mar-23	1420-3049
9	Dr. Shamal Sen, Dr. Abhinesh Prajapati and Jitendra Patidar	Chemical Engineering	Effect of operating parameters on the sludge settling characteristics by treatment of the textile dyeing effluent using electrocoagulation	Chemical Product and Process Modeling	Apr-23	1934-2659
10	Dr. Devaanshi Jagwani	CED	QSAR and Quantum chemical study of sulfonamide derivatives with Carbonic Anhydrase (CA-II) Inhibitory Activity and its probabilistic Molecular Dynamic simulation approach	European Chemical Bulletin, Volume -12, Special Issue-1(Part-A) , April 2023, Page 1938-1952	Apr-23	ISSN 2063-5346.
11	Dr. Deepak Sharma	Chemical Engineering	Removal of chromium (VI) and lead from synthetic solution using electrocoagulation: optimization and performance study	Brazilian Journal of Chemical Engineering	May-23	0104-6632
12	Dr. Abhinesh K. Prajapati	Chemical Engineering	Treatment of debrominated wastewater by electrocoagulation using Mild Steel electrodes	Materials Today: Proceedings	May-23	2214-7853
13	Mr. Vijay Shankul	FT&SE	A Study on The Hazard Identification, Risk Assessment Process and Highest Risk Task of The Daily Practices in The Large-Scale Food Manufacturing Industry	ANVESAK	Jun-23	0378-4568

14	Dr. Aditya Tiwary	FT&SE	An approach for assessment of Reliability indices considering omission of Fixed Repair time for Electric Traction system applying Monte Carlo simulation	Reliability: Theory and Applications	Jun-23	1932-2321
15	Dr. J Ponmozhi	Mechanical Engineering Department	Models for barrier understanding in health and disease in lab-on-a-chips	Tissue Barriers	Jun-23	2168-8362
16	Dr. Savita Dubey, Dr. Abhinesh Prajapati	Chemical Engineering	Process optimization of electrocoagulation reactor for treatment of distillery effluent using aluminium electrode: Response surface methodology approach	Chemical Data Collections	Jun-23	2405-8300
17	Dr. Abhinesh K. Prajapati	Chemical Engineering	Applicability of electrocoagulation process for removal of contaminants from debrominated wastewater	Chemical Engineering and Processing-Process Intensification	Jun-23	0255-2701

Conference (July 2022 - June 2023)

Sr. No	Name of the Author(s)	Department of the Author(s)	Title of the Paper	Name of the Conference	Month and Year of publication	DOI
1	Ms. Kalyani Tiwari	CSE	Traffic Accident Investigation and Hospital Prediction Using Machine Learning	ICNCC-2022	Sept-2022	https://thegrenze.com/index.php?display=page&view=journaldetails&id=8
2	Dr. Vaishali Gupta	CSE	Lungs Disease Classification using VGG-16 architecture with PCA	International conference on Advancement in Computation & Computer Technologies- 2023	June 2023	10.1109/InCACCT57535.2023.10141690

Book Published (July 2022 - June 2023)

Sl. No .	Name of the Teacher	Title of the Book published	Year and month of publication	ISBN of the Book/Conference Proceeding	Name of the Publisher
1	Mr. Sharad Jain	Internet of Things For Business Professionals	Aug-2022	ISBN:9789355152787	Book Rivers

Book Chapters Published (July 2022 - June 2023)

Sl. No.	Name of the teacher	Title of the book chapters published	Title of the paper	Year of publication	ISBN/ISSN number of the proceeding	Name of the publisher
1	Deepak Sharma, Abhinesh Prajapati	Membrane and Membrane-Based Processes for Wastewater Treatment	Removal of Cr (VI) and Pb from Electroplating Effluent Using Ceramic Membrane	March 2023	9781003165019	CRC Press
2	Dr. Rekha Dhoot	Woman and Her Stance in Indian Customs and Rituals”, in 2022	Cultural Confluence a View on Changes with Reference to Vijaya Jahagirdar’s Karmayogini : Life of Ahilayabai Holkar	2022	978-93-5529-191	Author Press(In India Thompson Press)
3	Dr. Rekha Dhoot	All About My Father	Father: An Epitome of Honesty & Sacrifice	2023	978-93-5749-776-3	JEC Publication
4	Dr. Rupali Chaturvedi	Woman and Her Stance in Indian Customs and Rituals	"Picture of Hindu Tradition Through Literary Devices in Mistress of Spices"	August 2022	• ASIN : B0BC6 LXWR7	Authors press
5	Dr. V. G. Sadh	An Insight on English Language Teaching	Second Language Acquisition and Socialization	March 2023	978-9951-764-77-3	International Writers Association (IWA Bogdani) Pristina, Kosova Bogdani Publication

D. MoU(s)

Organization with which MoU is signed	Name of Coordinators corporate house	Year of signing MoU	Duration	List the activities under each MOU year-wise
SIEVES'S Environmental Service, Indore	Dr. Rajesh Kaushal	January 2023	1 Year	Lecture + Career Counseling
Empirical Exergy Pvt Ltd Indore	Dr. Rajesh Kaushal	January 2023	1 Year	Lecture + Career Counseling
Rubixe Think Ahead Innovations Bengaluru	Dr. Deevanshi Jagwani	2022-23 (Nov 2022)	1 Year	Lecture + Career Counseling + Internships
University of Paradeniya (UoP), Srilanka	Dr. J. Ponmozhi	2022-2023	1 Year	Oral cancer related work

E. Collaboration (s)

Sl. No.	Title of the collaborative activity	Name of the collaborating agency with contact details	Name of the participant	Year of collaboration	Duration	Nature of the activity
1	Molecular docking study for Cancer	Sivas Cumhuriyet University, Turkey (CE)	Dr Burak Tuzun	2022-2023	2 years	Experimental work is going on. One article is communicated

H. Patent (s)

S. No.	Patents / Copyright Approved	Name	Year	Status
1	Device for electricity generation from wastewater treatment 387460-001	Dr. Devaanshi Jagwani	2023	Design Accepted and Published 01/06/2023
2	Machine vision based colorimetric test kit for arsenic identification in water 389145-001	Dr. Devaanshi Jagwani	2023	Submitted
3	Artificial intelligence for ventilator management and optimization in intensive care units 202341040672 A	Dr. Vaishali Gupta	2023	Patent published 30/06/2023
4	Machine Learning Based Approaches for Rainfall Prediction System for Smart Cities 202341041525 A	Dr. Swati Mehra	2023	Patent published 07/07/2023
5	IoT controlled Charger for Electric Vehicles 379558-001	Dr. Manish Sahajwani, Mr. Manoj Gupta, Mr. Namrata Nebhnani	2023	Design Accepted and Published 03/02/2023
6	A Microchannel Multiorgan-on-a-chip	Dr. J.Ponmozhi	2023	Submitted
7	Machine learning and image processing base approaches for lung tumor classification and prediction 202341037702	Dr. Ranjana C. Ahirwar	2023	Patent published 16/06/2023

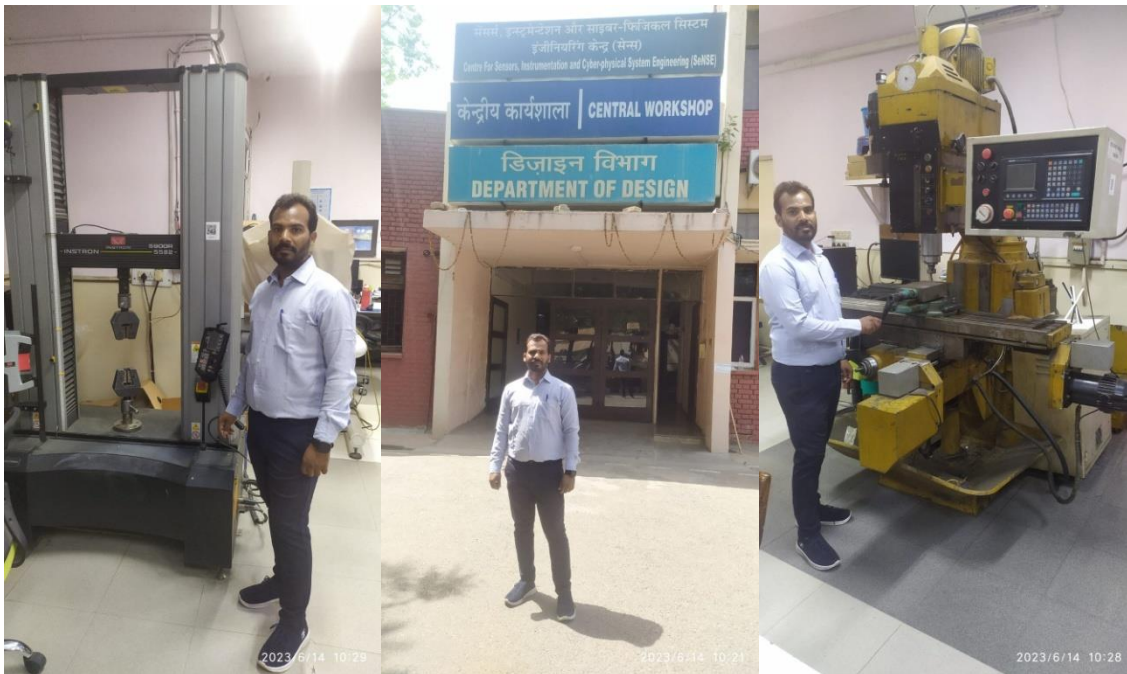
8	Analysing the impact of copper and bismuth incorporated cations perovskite solar cells by one solution 202311004699A	Dr. Ranjana C. Ahirwar Dr. Smita B. Karmankar	2023	Patent published 10/02/23
9	Smarter and green energy generation systems using photovoltaics in machine learning approach (202241060640)	Dr. Devaanshi Jagwani	2022	Patent published 28/10/2022
10	Lead toxicity detector and water cleaning machine (362825-001)	Mr. Nitesh Parmar	2022	Copyright Accepted & Published 8-7-2022
11	Internet Of Things Based Equipment For Control Of Electric Power 373963-001	Ms.Namrata Nebhnani, Mr. Hemant Mehar	2022	Design Accepted and Published 03/02/2023

I. Visits

- Mr. Avinash Pal and Ms. Bhawana Lakhani has joined the Annual Summer Faculty Research Fellowship (SFRF) programme in online mode organized by IIT Delhi.
- Mr. Vijay Shankul Sir, faculty member, FT&SE Dept., IPS Academy Institute of Engineering and Science working on **Root Cause Analysis of Electric Vehicle Fire and Safety Issues** with Dr. Abhishek Das, Associate Professor, Department of Mechanical Engineering, IIT Delhi under the summer faculty research fellowship 2023 program. The program was organized by QIP CEP IIT Delhi. The Lab Visit was completed at IIT Delhi.



Mr. Yashwant Buke, Assistant Professor, FT&SE Department, IPS Academy, Institute of Engineering and Science working on Hazard analysis and their safety measure during and after joining process of Li-ion battery pack and BESS-Fire & Safety aspect with Dr. Abhishek Das, Associate Professor, Department of Mechanical Engineering, IIT Delhi under the summer faculty research fellowship 2023 program. The program was organized by QIP CEP IIT Delhi. The Lab Visit was completed at IIT Delhi.



J. Special lecture(s)

Sr. NO.	Title	Details of Experts	Date of lecture Delivered
1	Workshop on design thinking, critical thinking and innovation design	Mr. Sumeet Gupta Assistant Prof, IPS Academy, IES	31/01/2023
2	Earthquake Instrument Training (Session III and IV)	Major Dr. C.S.Sanghvi Professor and Head, Government College of Engineering, Modasa	20/01/2023
4	Earthquake Instrument Training (Session I and II)	Major Dr. C.S.Sanghvi Professor and Head, Government College of Engineering, Modasa	19/01/2023
6	Current Research Opportunities in Computer Science Engineering	Dr. Yashwant Patel, Thapar University, Punjab, India	30/12/2022
7	Research paper Writing	Dr. Neelima Satyam IIT Indore	14/09/2022
8	Research methodologies	Dr. Dhinakaran Shanmugam IIT Indore	15/09/2022
9	Interactive Session On Recent Research Opportunities in Geo-Environmental Engineering at IPS Academy	Dr. Krishna R. Reddy, University Scholar, Distinguished Researcher & Professor of Civil & Environmental Engineering, University of Illinois at Chicago USA was the Expert.	20/09/2022

Lecture series photographs

Workshop Photos with experts delivering lectures





<https://sites.google.com/view/jponmozhimicrofluidics/photos/karyashala-2022?authuser=0>







<https://sites.google.com/view/jponmozhimicrofluidics/workshop-microfluidics?authuser=0>

Ph.D Awarded

- (1) Dr. Ashish Nim
- (2) Dr. Mohd. Nasim
- (3) Dr. Barkha Sahu
- (4) Dr. Indra Kumar Shah
- (5) Dr. Kavita Thorat Upadhyay
- (6) Dr. Chhaya Rekhate

Research Proposals Submitted

S. No	Funding Agency	Proposal Type	Title	PI	CO-PI	Dept.	Foreign Collaboration
1	SERB-DST	SERB-POWER	“An Innovative Approach: In-Situ remediation of heavy metals in groundwater by electro-coagulation”	Dr. Archana Keerti Chowdhary	Dr. Devanshi Jagwani Dr. Shamal Sen	CE & CM	
2	SERB-DST	SERB-SURE (State University Research Excellence)	Water Against Cancer- Exploring the possibility of enriched	Dr. Devaanshi Jagwani	Dr. Savita Dubey	CE	Dr. BURAK TUZUN, Sivas Cumhuriyet University, Faculty of Science, Department of Chemistry
3	SERB-DST	SERB-SURE	Seismic performance assessment of confined masonry building. A comparison of Analytical and Experimental investigation	Dr. Amit Sharma	Dr. Rakesh Kumar Khare, Professor, Shri G.S.I.T.S, Indore	CE	Dr. Vasiely Golubev Senior Researcher & Head, Laboratory of Applied Numerical Geophysics, MIPT Russia
4	SERB-DST	SERB-SUPRA	Masonry Performance of Eco-Friendly Blast Furnace Slag Based Walling Materials	Dr. Ashish Nim		CE	
5	DST	DST-WMT (Waste Management Technology)	Harnessing Construction and Development Wastes for Sustainable Development and Circular Economy	Dr. Devaanshi Jagwani	Dr. Nasim	CE	

6	SERB-DST	SERB-CRG (Core Research Grant)	“Studies on the Synthetic and Structural aspects of some Arsenic(III) and Antimony(III) Derivatives of Sulphur and / or Oxygen Donor Ligands	Dr. Sumit Bhatiya	-	FT & SE	-
7	SERB-DST	SERB-SUPRA	Design of Post-Combustion Carbon dioxide Absorption Process with Ionic Liquids	Dr. Kanti Kumar Athankar	Dr. Kailas L. wasewar	CM	-
8	SERB-DST	SERB-SURE	The Applicability of Electrocoagulation Technology as a Post Treatment of Industrial Effluent for Persistent Removal of Reclaimed Contamint	Dr. Abhinesh Kumar Prajapati	Dr. Deepak Sharma	CM	-
9	DST	Technology Development Programme (TDP)	Techno-Economic Evaluation of Electrocoagulation process for Green Hydrogen Generation from Textile Dyeing Effluent: A Sustainable Approach for Cleaner Technoloy	Dr. Shamal Sen	Dr. Kavita Upadhyay	CM & EC	-
10	SERB-DST	SERB-SURE	An Innovative Approach: In-situ remediation of heavy metals in groundwater by electro-coagulation	Dr. Archana Keerti Chowdhary	Dr. Shamal Sen & Dr. Dewanshi Jagwani	CM & CE	-
11	SERB-DST	SERB-SURE	Production of green hydrogen from sewage wastewater: The fuel for future	Dr. Shamal Sen	Dr. Rajesh Kumar Kaushal	CM	-
12	SERB-DST	SERB-SURE	Water Against Cancer- Exploring the possibility of enriched	Dr. Devanshi Jagwani	Dr. Savita Dubey	CM & CE	-

13	SERB-DST	SERB-SUPRA	Oxidation of Cyclohexanol to Cyclohexenone with a Green Catalyst	Dr. Ranjana Choudhary Ahirwar	-	CM	-
14	SERB-DST	Empowerment and Equity Opportunities for Excellence in Science (EMEQ)	Innovations in Nanotechnology: Designing a Multi-Functional Nano Platform for Enhanced Cancer Therapy	Dr. Ranjana Choudhary Ahirwar	-	CM	-
15	SERB-SURE	SERB-SURE	Development of Different Language Processing Resources for Machine Translation in Urdu Language	Dr. Vaishali Gupta	Dr. Nisheeth Joshi	CSE	T. Uthayasanker
16	SERB-DST	SERB-SURE	Development of Energy Efficient Wireless Sensor Network	Dr. Indra Kumar Shah	-	CSE	-
17	SERB Core Research Grant	SERB-CRG	Development of Favourable NVH Electric Motor for Electrical Vehicles	Dr. Yogendra Singh Dohare	Dr. Manish Sahajwani	Electrical and Electronics Engineering	
18	SERB Core Research Grant	SERB-CRG	Study of structural and transport properties of doped and undoped strongly correlated perovskite functional materials	Dr. Kavita Soni		Electrical and Electronics Engineering	
19	SERB-DST	SERB-CRG	Indoor Fire and Explosion Hazards Evaluation Techniques Enlargement by Exploitation of Contemporary Gadgets	Dr. Praveen Patel	Dr. Aditya Tiwary	FT & SE	-

20	SERB-DST	SERB-CRG	“Studies on the Synthetic and Structural aspects of some Arsenic(III) and Antimony(III) Derivatives of Sulphur and / or Oxygen Donor Ligands	Dr. Sumit Bhatiya		FT & SE	
21	Sree Padmavathi Venkateswara Foundation	Sree Ramkrishna Paramahansa Research Grant	Pesticide Exposure in agriculture field and public health safety	Mr. Hemendra Patil	Mr. Yashwant Bukey	FT & SE	
22	SERB-SURE	SERB-SURE	Profit Distribution Tactics of Transportation Problem	Dr Rina Joshi		Mathematics	
23	IPS Academy Indore	Seed Money	Development of Different Language Processing Resources for Machine Translation in Urdu Language	Dr. Vaishali Gupta		CS	
25	IPS Academy Indore	Seed Money	Treatment of pulp and paper mill effluent	Dr. Abhinesh Prajapati	Dr. ShamalSen	CM	
26	IPS Academy Indore	Seed Money	Metrological data assesment for climate, crop and water resources of Indore city	Dr. Lalitesh Sinha	Dr. Devanshi Jagwani	CE	
27	IPS Academy Indore	Seed Money	Creating an environment and Itegrated it with Haptic Gloves	Ms. Pooja Kothari		CS	
28	IPS Academy Indore	Seed Money	Drug diffusion studies on skin-on-a-chip: Influence of shear stress	Dr. J. Ponmozhi	-	ME	

29	DST-SERB	SERB-Vritika	Microfluidics in Engineering & Biomedical sciences: Training programme	Dr. J. Ponmozhi		ME	
30	DBT	Aquaculture and Marine Biotechnology	Rapid detection of microorganisms in a fish infection microfluidics platform: Experiments and Computational Fluid Dynamics simulations	Dr. S. Dhinakaran	Dr. J. Ponmozhi	ME	
31	AICTE	Mission Amrit Sarovar – Jal Dharohar Sanrakshan	Mission Amrit Sarovar – Jal Dharohar Sanrakshan Bairad Talab, Shivpuri (M.P.)	Mr. Lalitesh Sinha		CE	Not Applicable
32	AICTE	Mission Amrit Sarovar – Jal Dharohar Sanrakshan	Mission Amrit Sarovar – Jal Dharohar Sanrakshan Mankheda Lake, Piprai, Ashok Nagar(M.P.)	Mr. Neeraj Mishra		CE	Not Applicable

Research Proposals Granted

Sr. No.	Funding Agency	Proposal Type	Title	PI	CO-PI	Dept.	Foreign Collaboration	Key Publications related to topic	Amount Sanctioned	
1	AICTE	Mission Amrit Sarovar – Jal Dharohar Sanrakshan	Mission Amrit Sarovar – Jal Dharohar Sanrakshan Bairad Talab, Shivpuri (M.P.)	Mr. Lalitesh Sinha		CE	Not Applicable	Internship Training	2,00,000 INR	Granted
2	AICTE	Mission Amrit Sarovar – Jal Dharohar Sanrakshan	Mission Amrit Sarovar – Jal Dharohar Sanrakshan Mankheda Lake, Piprai, Ashok Nagar(M.P.)	Mr. Neeraj Mishra		CE	Not Applicable	Internship Training	2,00,000 INR	Granted
3	IPS Academy Indore	SEED Money	Creating an environment and Integrated it with Haptic Gloves	Ms. Pooja Kothari		CS	Not Applicable	Lab establishment	15,50,000 INR	Granted
4	IPS Academy Indore	SEED Money	Drug diffusion studies on skin-on-a-chip: Influence of shear stress	Dr. J. Ponmozhi		ME	Not Applicable	Lab establishment	23,50,000 INR	Grnated

AICTE ATAL FDP Submitted

S. N O.	TOPIC	DEPT.	CO-ORDINATOR	DESIGNATION	CO CO-ORDINATOR	DESIGNATION	FDP
1	The Rise of AR/VR: An Evolution in Virtual Reality	CSE	Dr. Neeraj Shrivastava	Asso. Prof. & Head	Mr. Sunil Nimawat	Asst. Prof.	Basic
2	Design and Implementation of a Secure Optical Network Leveraging Quantum T	EC	Dr.Dharmendra Singh Yadav	Professor	Rajesh Babu Ahirwar	Astt.Prof	ATAL FDP
3	Implementation of Artificial Intelligence & IoT based systems for Wireless Sensor Network	EC	Dr. Nitin Kumar Jain	Professor	Smt. Smita Patil	Assistant Professor	ATAL FDP
4	Design and simulatin of next generation Semiconductor devices and its application for bio sensing	EC	Dr.Kavita Thorat Upadhyay	Associate Professor	Ms. Poonam Lihare	Astt.Prof.	ATAL FDP
5	Future Trends on Multilevel Inverter Topologies in Electric Vehicles	EEE	Dr. Manish Sahajwani	Professor & Head	Dr. Yogendra Singh Dohare	Asistant Professor	Basic

6	Treat Water and Save Environment: Recent Trends and Advancement in Treatment of Effluent Water	CM	Dr. Rajesh Kumar Kaushal	Professor & Head,	Dr. Kanti Kumar Athankar	Associate Professor	Basic
7	Fire and Explosion Hazards Evaluation Techniques Enlargement by Exploitation of Contemporary Gadgets for Hazardous Materials	FT&SE	Dr. Praveen Patel	Professor & Head	Dr. Sumit Bhatiya	Professor	Basic
8	Exploitation of Contemporary Gadgets for Hazardous Materials”	FT&SE	Dr. Sumit Bhatiya	Professor	Mr. Yashwant buke	Assistant Professor	Basic
9	Indian Knowledge Systems & Its Relevance in contemporary Era	Humanities	Dr. Rekha Dhoot	Associate Professor	Dr. Rachna Bairagi	Assistant Professor	Basic
10	Indian Knowledge Systems Concepts & Beliefs	Humanities	Dr. V.G.Sadh	Associate Professor	Ms. Neetu Shrivastava	Assistant Professor	Basic
11	Sustainable Infrastructure	CE	Dr. Ashish Nim	Associate Professor	Mr. Neeraj Mishra	Assistant Professor	Basic
12	Earthquake Mitigation and Risk Analysis	CE	Dr. Amit Sharma	Professor	Dr. Moh. Nassem	Assistant Professor	Basic

AICTE ATAL FDP Granted

S.NO	TOPIC	DEPT	CO-ORDINATOR	DESIGNATION	CO CO-ORDINATOR	DESIGNATION	FDP	Amount Sanctioned
1	Earthquack Mitigation and Risk Analysis	CE	Dr. Amit Sharma	Professor	Dr. Moh. Nassem	Assistant Professor	ATAL FDP	350000
2	Treat Water and Save Environment: Recent Trends and Advancement in Treatment of Effluent Water	CM	Dr. Rajesh Kumar Kaushal	Professor & Head,	Dr. Kanti Kumar Athankar	Associate Professor	ATAL FDP	350000
3	Design and simulatin of next generation Semiconductor devices and its application for bio sensing	EC	Dr.Kavita Thorat Upadhyay	Associate Professor	Ms. Poonam Lihare	Astt.Prof.	ATAL FDP	350000

Workshop/ FDP/ Conference/Any Activity Submitted to External Agency

S. N O.	TOPIC	DEPT	CO-ORDINATOR	DESIGNATION	CO CO-ORDINATOR	DESIGNATION	*FDP/ Workshop/ Conference/ Any Activity	External Agency
1	Treat Water and Save Environment: Recent Trends and Advancement in Treatment of Effluent Water	CM	Dr. Rajesh Kumar Kaushal	Professor & Head,	Dr. Kanti Kumar Athankar	Associate Professor	FDP	AICTE
2	Contemporary Techno-Economic Advancement in Waste Mitigation	CM	Dr. Deepak Sharma	Accociate Professor	Dr. Kanti Kumar Athankar	Associate Professor	Workshop	DST-SERB
3	CO2 Capture Technologies for Future Energy Solutions	CM	Dr. Kanti Kumar Atahankar	Accociate Professor	Prof. Yadunandan Deshmukh	Assistant Professor	Workshop	DST-SERB
4	Carbon Neutrality for Sustainable Development: Challenges and Advances	CM	Dr. Chaya Rekhate	Accociate Professor	Prof. Yadunandan Deshmukh	Assistant Professor	Workshop	DST-SERB
5	The Potential for New Technologies to Mitigate Plastic Pollution and Promote Sustainable Waste Management Practices	CM	Dr. Savita Dubey	Accociate Professor	-		Workshop	DST-SERB

6	International Conference on “Computational, Communication and Information Technology ”	CSE	Dr. Neeraj Shrivastava	Associate Professor	-	-	International Conference	IEEE
7	Mathematical Modelling and its Application	Maths	Dr. Manoj Dubey	Asso. Professor and Head	Dr. Neha Yadav	Asst. Professor	Seminar	SERB
8	National Mathematics Day Celebration	Maths	Dr. Rina Joshi	Assistant Professor	Dr. Abhilasha Sharma	Assistant Professor	National Mathematics Day Celebration	MAPCOST
9	Accelerate Vigyan – SERB funded workshop for conducting High-End Karyashala on the title “Early diagnosis of Oral cancer biomarkers of saliva in Oral cancer - A non-invasive diagnosis of Oral cancer in a Microfluidic platform	ME	J. Ponmozhi	Professor			Workshop	SERB
10	Microfluidics in Engineering & Biomedical sciences: Training program	ME	J. Ponmozhi	Professor			STTP	SERB

11	Recent Advances in Heating Ventilation and Air Conditioning and Refrigeration (HVAC&R) System and Their Application	ME	Rahul Sharma	Asst. Professor	Piyush Laad	Asst. Professor	Workshop	SERB
12	Non-Linear stress strain properties of brick masonry in Indore region	CE	Dr. Amit Sharma	Professor & Head,		CE	Workshop	MPCST
13	Workshop on Sustainable Transport planing and mobility in the current environment condition	CE	Dr. Amit Sharma	Professor & Head,		CE	Workshop	MPCST
14	National workshop on Waste to wealth- Recent Trends and technological advancement in water treatment	CE	Dr. Archana Keerti Chowdhary,	Professor & Principal	Mr. Lalitesh Sinha	Asst. Professor	Workshop	SERB

Workshop/ FDP/ Conference/Any Activity Granted from External Agency

S. N O .	TOPIC	DEPT	CO-ORDINATOR	DESIGNATION	CO CO-ORDINATOR	DESIGNATION	*FDP/ Workshop/ Conference/ Any Activity	External Agency	Amount Sanctioned
1	Treat Water and Save Environment: Recent Trends and Advancement in Treatment of Effluent Water	CM	Dr. Rajesh Kumar Kaushal	Professor & Head,	Dr. Kanti Kumar Athankar	Associate Professor	FDP	AICTE	350000
2	Contemporary Techno-Economic Advancement in Waste Mitigation	CM	Dr. Deepak Sharma	Associate Professor	Dr. Kanti Kumar Athankar	Associate Professor	Workshop	DST-SERB	100000
3	Carbon Neutrality for Sustainable Development: Challenges and Advances	CM	Dr. Chaya Rekhate	Associate Professor	Prof. Yadunandan Deshmukh	Assistant Professor	Workshop	DST-SERB	150000
4	Accelerate Vigyan – SERB funded workshop for conducting High-End Karyashala on the title “Early diagnosis of Oral cancer biomarkers of saliva in Oral cancer - A non-invasive diagnosis of Oral cancer in a Microfluidic platform	ME	J. Ponmozhi	Asso. Professor			Workshop	SERB	500000

5	Microfluidics in Engineering & Biomedical sciences: Training program	ME	J. Ponmozhi	Asso. Professor			STTP	SERB	150000
6	Recent Advances in Heating Ventilation and Air Conditioning and Refrigeration (HVAC&R) System and Their Application	ME	Rahul Sharma	Asst. Professor	Piyush Laad	Asst. Professor	Workshop	SERB	200000
7	National workshop on Waste to wealth- Recent Trends and technological advancement in water treatment	CE	Dr. Archana Keerti Chowdhary,	Professor & Principal	Mr. Lalitesh Sinha	Asst. Professor	Workshop	SERB	2,00,000
8	Humanitarian Engineering Practices in Fire, Industrial Safety & Disaster Management	FT	Dr. Praveen Patel	Professor & Head	Mr. Vijay Shankul	Asst. Professor	International Conference	SERB	100000
9	Mathematical Modelling and its Application	Mathematics	Dr. Manoj Dubey	Asso. Professor and Head	Dr. Neha Yadav	Asst. Professor	Seminar	SERB	100000

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