IPS ACADEMY

INSTITUTE of ENGINEERING & SCIENCE

Indore (M.P.)

An Autonomous Institute under UGC, NewDelhi

Affiliated to

Rajiv Gandhi Proudyogiki Vishwavidyalaya Bhopal

Research & Development Cell

Annual Report
2023-24

Content

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

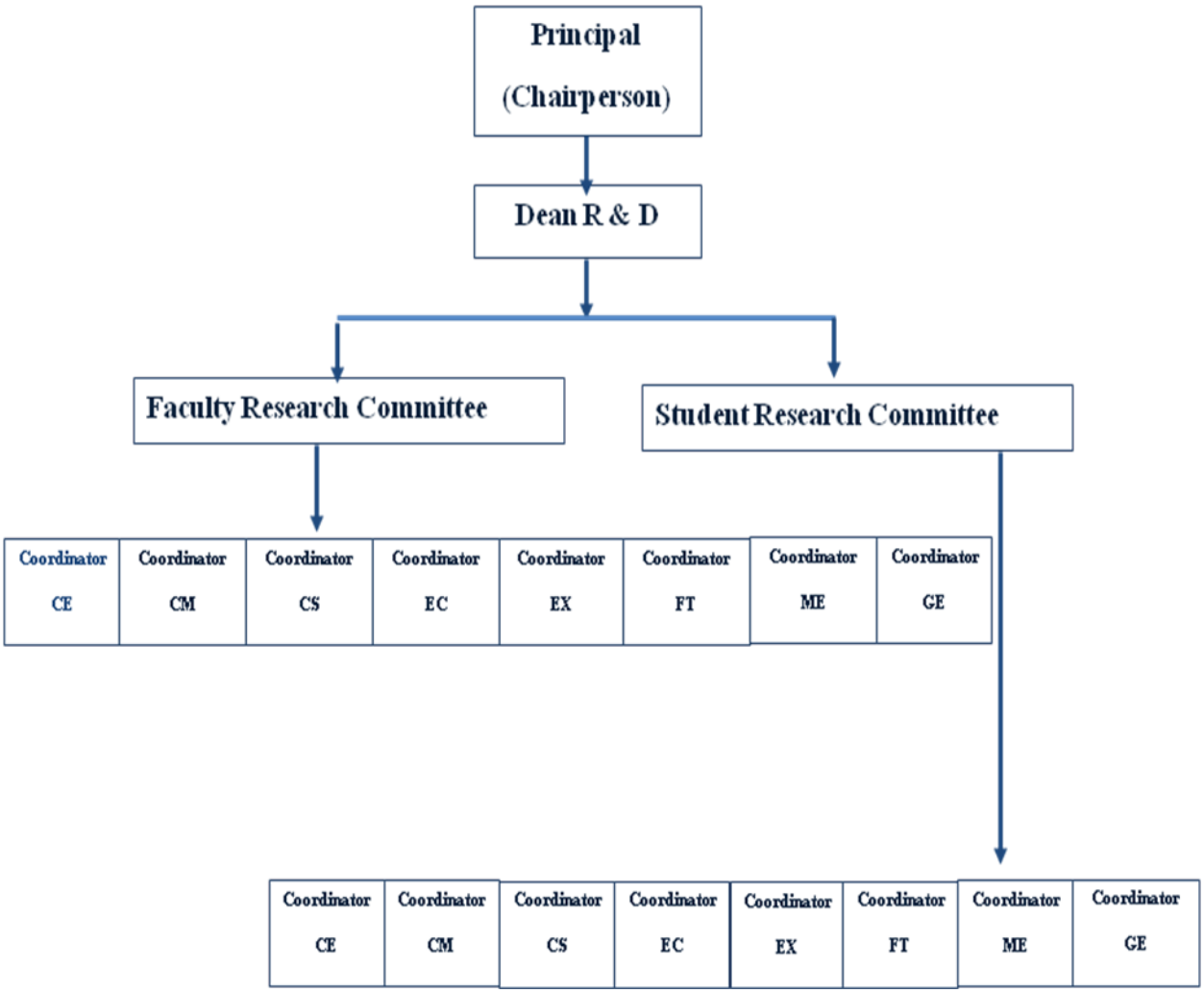
Objectives

- 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

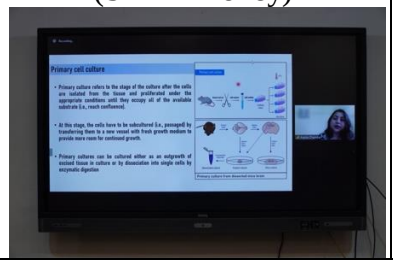
Constitution of Research and Development Cell (RDC)

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.
3. Dr. Abhinesh Prajapati Professor, Coordinator
4. Dr. J. Ponomozhi, Professor, Mechanical Engineering Member.
5. Dr. Dharmendra Singh Yadav, Professor, Electronics & Communication
6. Engineering, Member.
7. Dr. Sumit Bhatiya, Professor, Fire Tech &; Safety Engineering, Member.
8. Dr. Indra Kumar Shah, Associate Professor, Computer Science & Information Technology Engineering, Member.
9. Mr. Kapil Vyas, Associate Professor, Computer Science Engineering, Member.
10. Dr. Vaishali Gupta, Associate Professor, Associate Professor, Computer Science & Information Technology Engineering, Member.
11. Ms. Shubha Dubey, Assistant Professor, Data Science, Member.
12. Ms. Vandana Dubey, Assistant ProfessorAI & ML, Member
13. Dr. Kanti Kumar Athankar, Associate Professor, Chemical Engineering, Member.
14. Dr. Kavita Soni, Assistant Professor, Electrical & Electronics, Member.
15. Dr. Mohd. Nasim, Assistant Professor, Civil Engineering, Member
16. Dr. Devanshi Jagwani, Professor, Civil Engineering, Member.
17. Dr. V. G. Sadh Associate Professor, Humanities, Social Science and Management, Member.
18. Dr. Nisha Agrawal, Assistant 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 Projects (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	Creating an Environment and integrated it with Haptic Gloves	**SEED Money**	Ms. Pooja Kothari	2023-24	**Amount from IPSA-IES :15.5L**	1 Year
2	Organ-on-chip model for real-time visualization of effect of different drugs for cancer cell progression (Device development for Alternate to animal study) (Internal Funding 2023)	**Collaboration with CNCI – Dr. Arpita Banerjee,** Chittaranjan National Cancer Institute (SEED Money) 	Dr. J. Ponmozhi	2023 - 2026	**Amount from IPSA-IES:**28.0 L	3 years

C. (i) Research Publication (July2023- June 2024)

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	General category
1	Pooja Bhatt	Electical and Electronics Engineering	A tensile wearable SHF antenna with efficient communication in defense beacon technology	Defence Technology	Jun-24	2214-9147	SCI
2	J Ponmozhi	Mechanical engineering Department	Fluid Dynamics Optimization of Microfluidic Diffusion Systems for Assessment of Transdermal Drug Delivery—An Experimental and Simulation Study	Scientia Pharmaceutica	Jun-24	2218-0532	ESCI
3	Abhinesh Kumar Prajapati	Chemical	Ozone assisted alternating current-electrocoagulation technique for color and COD removal with determination of electrical energy from industrial wastewater	Separation and Purification Technology	May-24	1383-5866	SCI
4	Vandana Dubey	CSE-AIML	Designing of intelligent PID controller for cardiac pacemaker using artificial bee colony algorithm	Systems Science & Control Engineering	May-24	2164-2583	ESCI

5	Roopesh Makwana	CSE (Branch-CSIT)	Demand Forecasting on Pharmacy Sales using Deep Learning Approach	Indian Journal of Natural Sciences	Apr-24	0976-0997	UGC Care-II
6	Vaishali Gupta	CSE (Branch-CSIT)	Demand Forecasting on Pharmacy Sales using Deep Learning Approach	Indian Journal of Natural Sciences	Apr-24	0976-0997	UGC Care-II
7	Rajesh Babu Ahirwar	EC	ϒ-Alumina Vanadate (AlV2O7) Nanoparticles: Synthesis and Characterization	Oriental Journal of Chemistry	Apr-24	0970-020X	Emerging Source Citation Index
8	Ranjana Choudhary Ahirwar	Chemical	ϒ-Alumina Vanadate (AlV2O7) Nanoparticles: Synthesis and Characterization	Oriental Journal of Chemistry	Apr-24	0970-020X	Emerging Source Citation Index
9	Abhinesh Kumar Prajapati	Chemical	Catalytic thermal treatment (catalytic thermolysis) of textile dyeing effluent	Materials Today Proceedings	Mar-24	2214-7853	Scopus
10	Abhinesh Kumar Prajapati	Chemical	Optimizing distillery effluent treatment through sono-electrocoagulation: A response surface methodology approach	Total Environment Advances	Mar-24	2950-3957	Elsevier
11	Chhaya Rekhate	Chemical	Catalytic thermal treatment (catalytic thermolysis) of textile dyeing effluent	Materials Today Proceedings	Mar-24	2214-7853	Scopus

12	Chhaya Rekhate	Chemical	Optimizing distillery effluent treatment through sono-electrocoagulation: A response surface methodology approach	Total Environment Advances	Mar-24	2950-3957	Elsevier
13	Savita Dubey	Chemical	Catalytic thermal treatment (catalytic thermolysis) of textile dyeing effluent	Materials Today Proceedings	Mar-24	2214-7853	Scopus
14	Savita Dubey	Chemical	Optimizing distillery effluent treatment through sono-electrocoagulation: A response surface methodology approach	Total Environment Advances	Mar-24	2950-3957	Elsevier
15	Sharad Jain	Electical and Electronics Engineering	Artificial Neural Network Based Spectrum Sensing in Wireless Regional Area Network	IEEE Access	Mar-24	2169-3536	SCI
16	Indra Kumar Shah	Electical and Electronics Engineering	Artificial Neural Network Based Spectrum Sensing in Wireless Regional Area Network	IEEE Access	Mar-24	2169-3536	SCI
17	Dr. Amit Sharma	CED	Optimizing distillery effluent treatment through sono-electrocoagulation: A response surface methodology approach	Total Environment Advances	Mar-24	Online ISSN: 2950-3957	Elsevier
18	Kavita T. Upadhyay	EC	Schottky Barrier Dependent 2DEG Model for GaN/AlInGaN/AlN/GaN Heterostructure	Nano world journal	Mar-24	2379-1101	Scopus

19	Nitin Kumar Jain	EC	Modified Leach Ant Colony Optimization Hybrid Algorithm for Energy-Harvesting Wireless Sensor Network	SSRG International Journal of Electrical and Electronics Engineering	Mar-24	2348-8379	Scopus
20	Angeeta Hirwe Chouhan	EC	Modified Leach Ant Colony Optimization Hybrid Algorithm for Energy-Harvesting Wireless Sensor Network	SSRG International Journal of Electrical and Electronics Engineering	Mar-24	2348-8379	Scopus
21	Manoj Gupta	Electical and Electronics Engineering	Optimal design of hybrid renewable-energy microgrid system: a techno–economic–environment–social–reliability perspective	Clean Energy	Feb-24	2515-4230 2515-396X	Emerging Source Citation Index
22	Manoj Gupta	Electical and Electronics Engineering	Optimal selection and analysis of microgrid energy system using Markov process	Sustainable Energy Technologies and Assessments	Jan-24	2213-1388	SCI
23	Rajesh Babu Ahirwar	CSE	Health Risk Prediction using Deep Learning Approach	Indian Journal of Natural Sciences	Dec-23	0976 – 0997	Web of Science
24	Neeraj Shrivastava	CSE	Health Risk Prediction using Deep Learning Approach	Indian Journal of Natural Sciences	Dec-23	0976 – 0997	Web of Science

25	Prateek Nahar	CSE	Health Risk Prediction using Deep Learning Approach	Indian Journal of Natural Sciences	Dec-23	0976 – 0997	Web of Science
26	Dr. Aditya Tiwary	FT&SE	An Innovative approach for Reliability Modeling of HVDC converter station	Reliability: Theory and Applications	Dec-23	1932-2321	Scopus
27	Kanti Kumar Athankar	Chemical Engineering	Appraisal of the capacity of natural oils for partitioning of itaconic acid via reactive extraction	Journal of Chemical Technology & Biotechnology	Oct-23	0268-2575	SCI
28	Chhaya Rekhete	Chemical Engineering	Removal of heavy metal from electroplating wastewater using electrocoagulation: a review	Journal of Water Chemistry and Technology	Sep-23	1063-455X	SCI
29	Savita Dubey	Chemical Engineering	Removal of heavy metal from electroplating wastewater using electrocoagulation: a review	Journal of Water Chemistry and Technology	Sep-23	1063-455X	SCI
30	Abhinesh Kumar Prajapati	Chemical Engineering	Removal of heavy metal from electroplating wastewater using electrocoagulation: a review	Journal of Water Chemistry and Technology	Sep-23	1063-455X	SCI
31	Indra Kumar Shah	CSE	An energy minimization strategy based on transmission time and re-clustering (TTRC) for wireless sensor network	Internet Technology Letter	Sep-23	2476-1508	SCI
32	Dharmendra Singh Yadav	CSE	An energy minimization strategy based on transmission time and re-clustering (TTRC) for wireless sensor network	Internet Technology Letter	Sep-23	2476-1508	SCI

33	Kanti Kumar Athankar	Chemical Engineering	Reactive extraction system: A study on recovery of itaconic acid using different natural oils	Materials Today: Proceedings	Sep-23	2214-7853	Scopus
34	Smita Badur Karmankar	Chemical Engineering	Cost cutting approach of distillery effluent treatment using solar photovoltaic cell driven electrocoagulation: Comparison with conventional	Journal of Water Process Engineering	Aug-23	2214-7144	SCI
35	Alka Sharma	Chemical Engineering	Cost cutting approach of distillery effluent treatment using solar photovoltaic cell driven electrocoagulation: Comparison with conventional	Journal of Water Process Engineering	Aug-23	2214-7144	SCI
36	Ranjana Choudhary Ahirwar	Chemical Engineering	Cost cutting approach of distillery effluent treatment using solar photovoltaic cell driven electrocoagulation: Comparison with conventional	Journal of Water Process Engineering	Aug-23	2214-7144	SCI
37	Swati Mehra	Chemical Engineering	Cost cutting approach of distillery effluent treatment using solar photovoltaic cell driven electrocoagulation: Comparison with conventional	Journal of Water Process Engineering	Aug-23	2214-7144	SCI
38	Abhinesh Kumar Prajapati	Chemical Engineering	Cost cutting approach of distillery effluent treatment using solar photovoltaic cell driven electrocoagulation: Comparison with conventional	Journal of Water Process Engineering	Aug-23	2214-7144	SCI

39	Kanti Kumar Athankar,	Chemical Engineering	The Aptness of Organic Diluents with Tri-n-Butyl Phosphate for Liquid-Liquid Equilibria of Acrylic Acid	Chemical Engineering Technology	Aug-23	0930-7516	SCI
40	Dharmendra Singh Yadav	CSE	RDMSR: A reactive defragmentation with minimum spectrum route strategy for mixed grid optical network	Int J Commun Syst	Aug-23	1099- 1131	SCI

(ii) Conference (July 2023 - June 2024)

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	ISBN No.	DOI
1	Deepesh Bhati	Electical and Electronics Engineering	Enhancing DFIG-based wind farm performance: Virtual estimation using dual moth flame optimization and additional frequency control	2nd EEE Conference Proceedings	Feb-24	979-8-3503-8793-3	-
2	Ms. Vandana Dubey	Book Chapter	A Disaster Management SystemPowered by AI and Built for Industry4.0	Industry 4.0 and Healthcare	Dec-23	978-981-99-1949-9	Springer, Singapore
3	Ms. Kalyani Tiwari	-	IOT based Ventilator System withIV Bag Monitoring and Alerting System an Affordable Solution for Emergency Situation	MLIP-2023 Conference, Hyderabad	Dec-23	01.GIJET.10.1.183	Grenze Scientific Society

Book Published/Book Chapter (July 2023 - June 2024)

Sl. No.	Name of the teacher	Title of the book published/Book Chapter	Title of the chapters published	Title of the paper	Title of the proceedings of the conference	Year of publication	ISBN/ISSN number of the proceeding	Name of the publisher
1	Dr. Vaishali Gupta	Computer System Organization	-	-	-	Apr-24	978-81-1966-220-3	Ane Books Pvt. Ltd.
2	Smita Badur Karmankar, Swati Mehra, Alka Sharma & Ranjana Ahirwar Choudhary	Biotechnology for Advanced Applications	Chapter 9 - Understanding the Mechanism of Microbe-Mediated Nanosynthesis A Molecular Approach	-	-	Mar-24	9781003362258	CRC Press
3	Dr.V.G.Sadh	Culture, Gender and Society Literature	Quest of Cultural Identity in the Selected Work of Khushwant Singh	NA	-	Jan-24	978-9951-394-05-5	International Writers Association (IWA Bogdani) Pristina, Kosova Bogdani Publication
4	Ms. Divyani Joshi	Conversational Artificial Intelligence	Conversational AI—A State-of-the-Art Review	-	-	Jan-24	ISBN:9781394200801	Willey

5	Dr.V.G.Sadh	Contemporary Indian Literature in English	Exploring Memory & Trauma in Khushwant Singh's Literary Work: A comprehensive Analysis	NA		Aug-23	978-93-5529-720-4	Author Press

D. MoU(s)

Sr. No.	Organization with which MoU is signed	Name of Coordinators corporate house	Year of signing MoU	Duration	List the activities under each MOU year-wise
1	University of California (UCLA)	Dr. Archana Keerti Chowdhary Dr. Eric A. Bullard	Jul-24	5 Years	-
2	The Airports Authority of India	Mr. Girish Kumar Dr. Praveen Patel	May-24	5 Years	-
3	Jimma Institute of Technology, Jimma University, Ethiopia	Dr. P Asaithambi Dr. Abhinesh Prajapati	Apr-24	1 Year	Research Paper Titled "Ozone assisted alternating current-electro coagulation technique for color and COD removal with determination of electrical energy from industrial wastewater" is Published in SCI Journal (Separation and Purification Technology).
4	Sieves Environmental Services, Indore	Er. Bhupendra Giri Dr. Rajesh Kaushal	Apr-24	1 Year	-
5	Worcester Polytechnic Institute	Dr. Arthur C. Heinrichei Dr. Praveen Patel	Mar-24	5 Years	-

6	VLSI Society of India (VLSI)	Dr. Satya Gupta Prof. Rupesh Dubey	18-3-2024	VLSI Society of India (VLSI)	-
7	Ultratech Cement	Er. Manish Malviya. Er. Siddharth Chincholikar Dr. Amit Sharma	Mar-24	-	1. Establishment of Center of Excellence Lab for Suistainable Construction Material, 2. Technical Talk on " Revolutionizing Infrastructure: The promise of Self Healing Concrete in Strutural Engineering, by Dr. Mohd. Nasim in 79th Technocrats Forum, (29-4-2024), 3. Technical Talk on "Navigating Challenges & Innovation in Construction Projects, by Er. Sumit Gupta in 81st Technocrats Forum (26-7-24)
8	Techfest IIT Bombay	Er. Tushar Titodia Prof. Rupesh Dubey	28-8-2023	3 Years	IITX IES Robotic Workshop, 23rd Sept, 2023
9	CSIR-National Institute of Interdisciplinary Sciences and Technology	Dr. Deevanshi Jagwani Er. Sourabh Sakhre	17-Jul-24	1 year	Working on B.Tech Project Work titled "Spatio-Temporal Mapping of Kanh River In Indore Region, M.P. Using, Remote Sensing & Qgis". (Apurva Kishore Mahashabde, Aryan Chouhan, Hemant Singh Chouhan, Vikramaditya Gupta) Summer Internship -B.Tech Student Ms. Manya Thakur (May-June 2024)

10	Institute of Computer Aided Design of RAS Russia	Dr. I. Nikitin Dr. Amit Sharma	9-Sep-23	3 years	Online Research Session on Computer simulation of wave, deformation and destruction processes Online Research Session on Computer simulation of wave, deformation and destruction processes Mr. Boris Stratula, Mathematical Modeling of Fatigue Fracture using the Theory Nonlocal Cyclic Damage.
11	Laboratory of Applied Numerical Geophysics, Moscow Institute of Physics and Technology (MIPT) Russia	Dr. Vasily Golubev Dr. Amit Sharma	9-Sep-23	1 year	Online Research Session on Computer simulation of wave, deformation and destruction processes Online Research Session on Computer simulation of wave, deformation and destruction processes Dr. Vasily Golubev , Mathematical Modeling of Elastoviscoplastic Media Dynamics.
12	Bad Business Delhi	Er. Pratham Sahu Prof. Rupesh Dubey	29-6-2024	3 Years	Bad Talk Event
13	Shakti Pumps	Er. Bharat Doongarwal Dr. Manish Sahajwani	22/12/2023	1 Year	1. Visit of Shakti Pumps. 2. Expert Lecture by Er. Chinmay Jain, 3. Internship
14	Maven Silicon Softech Pvt. Ltd, Bengaluru	Mr. S.K.U. Udayachandar Prof. Rupesh Dubey	24-11-2023	3 Years	-
15	Consortium of DEWATS Dissemination Bangalore	Ms. Rohini Pradeep Dr. Deevanshi Jagwani	19-Nov-23	1 year	-

16	Indian Environment Consultancy and Research Services Nagpur	Dr. Ratna Kumar Mudliar Dr. Deevanshi Jagwani	17-Jul-23	1 year	M.Tech Project Work Titled "Spatial Distribution of Ground Water Quality Index using Remote Sensing and GIS Techniques of Indore Region Madhya Pradesh) (Apporv Jaiswal)Student- Apporv Jaiswal, Faculty- Dr. Devvanshi Jagwani
17	Microbia Biotechnology Unit (MBU), National Institute of Fundamental Studies, Kandy, Sri Lanka	Dr. J Ponmozhi	2020-25	until the objectives are acieved (5 years)	A student is hired working towards the objectives (Finding the beneficial and pathogenic microbes for rice plant) of the proposed 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	Slope Stability Analysis of Rock cut Road in Jhabua Region (M.P.),	IIT Indore	Ms. Omanshi Rathore (B.Tech Scholar)) Dr. Neelima Satyam (IIT Indore)	2024	15th May 2024 to 15th July 2024	B. Tech Internship
2	Experimental Flume Modeling of Debri Flow. Rock Slope Stabilty Using Finite Element Modeling.	IIT Indore	Mr. Krishna Gangrade (B.Tech Scholar) Dr. Neelima Satyam (IIT Indore)	2024	15th May 2024 to 15th July 2024	B. Tech Internship
3	Statically Data Analysis of Water Quality in a River.	IIT Indore	Mr. Nikhil Kumar Vyas (B.Tech Scholar) Dr. Priyank J Sharma (IIT Indore)	2024	13th May 2024 to 13th July 2024	B. Tech Internship
4	Meta Material	IIT Indore	Aniruddh Batham (M.Tech Scholar) Dr. Neelima Satyam (IIT Indore)	2023	25th October 2023- 15th January 2023	Post Graduate Student Internship

H. Patent (s)

S. No.	Patents / Copyright Approved	Name	Year	Status
1	Machine vision based colorimetric test kit for arsenic identification in water (389145-001)	Dr. Archana Keerti Chowdhary Dr. Mohd. Nasim Dr. Devaanshi Jagwani	**2023**	Application Accepted, Certificate of Design not Generated. (1-9-2024)
2	A Construction Block (201921003257 A)	Dr. Archana Keerti Chowdhary Dr. Keerti K. Chowdhary Dr. Ashish Nim Mr. Vishwas Khurasiya	**2023**	Granted (25-11-23)
3	Decorative tiles made from waste & broken tiles (201721005607 A)	Dr. Archana Keerti Chowdhary Dr. Keerti K. Chowdhary Dr. Ashish Nim Mr. Shivam Nema	**2023**	Granted (11-12-23)
4	Light weight high strength paver block (201721019801 A)	Dr. Archana Keerti Chowdhary Dr. Keerti K. Chowdhary Dr. Ashish Nim Mr. Shivam Nema	**2024**	Granted (2-12-23)
5	Safety Helmet for civil engineer 407925-001	Mr. Vijay Kumar Baradiya	2024	Design Accepted and Published, Journal No is 16/2024 and Journal Date is 19/04/2024
6	Foldable solar panel array for Portable energy generation 412006-001	Dr. Rina Joshi	2024	**Design Granted**
7	Machine Learning Based Approaches for Rainfall Prediction System for Smart Cities 202341041525 A	Dr. Swati Mehra	**2023**	Patent published 07/07/2023

I . Establishment of Center of Excellence Lab by Ultratech Cement at the Institute

- Ultratech Cement establishes center of excellence lab for sustainable material at IPS academy, Institute of Engineering & Science on 21-3-2024 with following objectives
- To Organize Skill Development Programs. Technical Seminars, Workshops, Industrial Visits etc.
- To carry out collaborative research in cement and construction industry,
- To provide solutions for technical complexities at ULTRATECH based on the UG level and PG level research projects carried out at IPS Academy, Institute of Engineering & Science.

दैनिक भास्कर इंदौर 22-03-2024

CITY PLUS

आईपीएस एकेडमी में सेंटर ऑफ एक्सिलेंस फॉर सस्टेनेबल मैटेरियल्स का उद्घाटन

इंदौर। आईपीएस एकेडमी के इंस्टीट्यूट ऑफ इंजीनियरिंग एंड साइंस में अल्ट्राटेक सीमेंट लिमिटेड द्वारा स्थापित सेंटर ऑफ एक्सिलेंस फॉर सस्टेनेबल मैटेरियल्स का उद्घाटन समारोह हुआ। यह सेंटर सिविल इंजीनियरिंग छात्रों एवं प्रैक्टिसिंग इंजीनियर्स को सस्टेनेबल कंस्ट्रक्शन के लिए उपयोग होने वाले मटेरियल्स एवं उनसे जुड़ी हुई रिसर्च एंड डेवलपमेंट की जानकारी देने के लिए बनाया गया है। प्रेसिडेंट आर्किटेक्ट अचल चौधरी ने अपने उद्बोधन में कहा कि अल्ट्राटेक सीमेंट कंस्ट्रक्शन क्षेत्र का विश्व विख्यात नाम है और इसके द्वारा हमारे संस्थान में सेंटर ऑफ एक्सीलेंस की स्थापना एक गौरवपूर्ण क्षण है। प्रिंसिपल डॉ.अर्चना कीर्ति चौधरी ने कहा कि इस सेंटर से छात्रों एवं इंजीनियर्स को इस दिशा में एक प्रभावी आयाम मिलेगा। सिविल विभाग के प्रमुख डॉ. अमित शर्मा ने कहा कई वर्षों से आईपीएस एकेडमी में सिविल इंजीनियरिंग विभाग सस्टेनेबल कंस्ट्रक्शन एवं मैटेरियल्स पर प्रोजेक्ट्स कर रहा है।

J. International Conference Organized

(1) International Conference (IC-HEFSD 2024) "Humanitarian Engineering Practices in Fire, Industrial Safety & Disaster Management " March 05th, 06th & 07th, 2024

(2) International Conference IC-RAMAE-2024 "Recent Advances in Mechanical and Automotive Engineering" (23rd-24th February 2024).

(3) International Conference "Emerging Techno-Economic Development for Sustainable Environment (12th -13th , January, 2024).

(4) International Conference NESDRi-2023 "Numerical Methods and Experimental Techniques for Sustainable and Disaster Resilient Infrastructure" (8th-9th September, 2023)

(1) International Conference (IC-HEFSD 2024) "Humanitarian Engineering Practices in Fire, Industrial Safety & Disaster Management " 05th- 07th, March 2024.

IPS Academy, Institute of Engineering & Science, Department of Fire Technology & Safety Engineering organized International Conference on **"Humanitarian Engineering Practices in Fire, Industrial Safety & Disaster Management"** from 05th to 07th March 2024 in collaboration with Science & Engineering Research Board (SERB), Department of Science and Technology, Government of India and **Indian Institution of Industrial Engineering Mumbai, India.**

In this conference total five Technical sessions and 10 keynote talks were delivered. 178 abstracts were received and 42 research papers were presented.

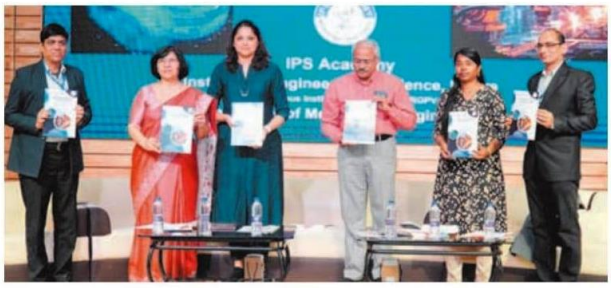
Glimpses of IC-HEFSD 2024

(2) International Conference IC RAMAE -2024 "Recent Advances in Mechanical and Automotive Engineering" (23rd-24th February 2024).

IPS Academy, Institute of Engineering & Science, Department of Fire Technology & Safety Engineering organized International Conference on "Recent Advances in Mechanical and Automotive Engineering" from 23rd to 24th Feb, 2024. The conference preparations started with the call for abstracts; 40 abstracts were received out of which 34 were accepted and these papers were finalized for Conference Proceedings and Oral Presentations. In this conference total five Technical sessions and 4 keynote talks were delivered.

Glimpses of IC-RAMAE 2024

IPS Academy hosts int'l symposium on Advancements in Mechanical and Automotive Engg



OUR STAFF REPORTER
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'Constant efforts are being made in the country towards electric and hydrogen-based vehicles and in the coming time only electric and hydrogen vehicles are expected to operate, leading to environmental conservation and reducing dependence on other nations for fuel', Sanjay Wadnerkar, Director of Naval Business Solutions said during the 'International Symposium' organised in the Mechanical Department of the Institute of Engineering at the IPS Academy.

He also expressed that one of the benefits of hydrogen vehicles is reduced charging time and increased travel distance. Additionally, he highlighted improvements in the performance of these vehicles, making them more environmentally friendly and practical for manufacturing and usage.

Principal Archana Kirti Choudhary stated that the purpose of the conference is to bring together leading educators, researchers and research scholars on a common platform to contribute their experiences and research findings to all aspects of new experiments in the fields of Mechanical and Automotive Engineering.

As the distinguished guest of the programme, Kshama Jain, Director of Kehems Group, shed light on various points related to the Mechanical field. Amit Chanda, head of the Mechanical Department, welcomed everyone at the symposium.

दैनिक भास्कर इंदौर सिटी भास्कर 24-02-2024

आने वाले समय में सड़कों पर सिर्फ इलेक्ट्रिक, हाइड्रोजन व्हीकल दिखेंगे

अंतरराष्ट्रीय सम्मेलन में कई एक्सपर्ट ने लिया हिस्सा

इंदौर | देश में इलेक्ट्रिक और हाइड्रोजन आधारित वाहनों पर लगातार काम हो रहा है। आने वाले समय में यही वाहन हमें सड़कों पर दिखाई देंगे। इससे पर्यावरण की रक्षा तो होगी और ईंधन बचने से हमारी दूसरे देशों पर निर्भरता भी खत्म होगी। यह बात नोवल बिजनेस सॉल्यूशन के निदेशक संजय वाडनेरकर ने आईपीएस एकेडमी के इंस्टिट्यूट ऑफ इंजीनियरिंग के मैकेनिकल विभाग द्वारा आयोजित अंतरराष्ट्रीय सम्मेलन में कही। उन्होंने कहा, हाइड्रोजन वाहनों का यह भी लाभ है कि इनमें चार्जिंग का समय कम होता है और यात्रा की दूरी भी बढ़ाई जा सकती है। यह उपयोग करने में ज्यादा बेहतर है। एकेडमी की प्रिंसिपल डॉ. अर्चना कीर्ति चौधरी ने कहा, इस सम्मेलन का उद्देश्य मैकेनिकल और ऑटोमोटिव के क्षेत्र में हो रहे नए प्रयोग के सभी पहलुओं पर अपने अनुभवों और शोध परिणामों का आदान-प्रदान करना है। इस दौरान विशिष्ठ अतिथि केहम्स ग्रुप की निदेशक क्षमा जैन थीं। मैकेनिकल विभाग के प्रमुख डॉ. अमित चांडक सहित कई प्रोफेसर्स और स्टूडेंट्स इस सम्मेलन में शामिल हुए।

(3) International Conference "Emerging Techno-Economic Development for Sustainable Environment (12^{th}-13^{th}, January, 2024).

As the demand for natural resources continues to soar and competition intensifies in emerging economies due to urbanization and industrialization, the need for sustainable practices has never been more critical. In response to this pressing challenge, the first international conference was organized by the esteemed Institute of Central India, IPS Academy Institute of Engineering & Science. This ground breaking event serves as a global forum where the world of research and industry converge to explore the transformative power of chemical engineering technological advancements in achieving sustainable development. ETDSE 2024 aims to facilitate profound discussions on green chemistry, biotechnology, software's in chemical engineering, and other cutting-edge solutions that will shape the future of our societies.

In the conference 50 abstracts were received out of which 30 were accepted and these papers were finalized for Conference Proceedings and Oral Presentations. In this conference total four technical sessions and 4 keynote talks were delivered.

Glimpses of ETDSE 2024

(4) International Conference on "Numerical Method and Experimental Technique for Sustainable and Disaster Resilient Infrastructure (NESDRi-2023)", 8th to 9th Sept, 2023.

International Conference on "Numerical Method and Experimental Technique for Sustainable and Disaster Resilient Infrastructure (NESDRi-2023)" was organized by IPS Academy, Institute of Engineering and Science Indore in association with Indian Geotechnical Society.

The primary objective of this conference was to bring together top academics, researchers, technocrats, practitioners, and students to exchange and share their experiences and research findings on all facets of Sustainable and Disaster Resilient Infrastructure in Civil Engineering. It was intended to offer an outstanding interdisciplinary forum for presenting and debating the most recent innovations, trends, and issues, as well as the practical difficulties faced and the solutions chosen in the discipline of civil engineering. The committee finalized 18 themes: Seismic Resilient Infrastructures, Disaster Management, Risks and Uncertainty, Disaster Resilient Infrastructures, Infrastructure Systems, Innovative Resilient Materials, Mechanistic and Diagnostics Approaches, Structural Health Monitoring, Seismic Risk and Hazard Analysis, Resilience and Risk Mitigation, Seismic Retrofitting, Solid Dynamics and Earthquake Engineering, Dynamic Soil Structure Interaction, Sustainably-Resilient Structures, Grid Characteristics Method and Dynamic Analysis Problem, Geotechnical Earthquake Engineering, Geo-environmental Engineering, Numerical Modeling and Experimental Techniques for Disaster Risk Reduction.

The gathering included more than 120 research scholars, faculty members, students, and important national and international figures to discuss recent advancements in civil engineering with a focus on of Sustainable and Disaster Resilient Infrastructure. The conference came to a close with a series of presentations of real-world cases highlighting noteworthy new initiatives.

In the conference 40 abstracts were received out of which 30 were accepted and these papers were finalized for Conference Proceedings and Oral Presentations. In this conference total five technical sessions and 10 keynote talks were delivered.

Glimpses of NESDRI 2023

दैनिक भास्कर इंदौर सिटी भास्कर 09-09-2023

City Plus

आईपीएस एकेडमी में आपदा प्रबंधन पर अंतरराष्ट्रीय सम्मेलन

इंदौर | आईपीएस एकेडमी के इंस्टिट्यूट ऑफ इंजीनियरिंग के सिविल विभाग में अंतरराष्ट्रीय सम्मेलन की शुरुआत हुई। सम्मेलन का उद्देश्य सतत् और आपदा प्रतिरोधी बुनियादी ढांचे के सभी पहलुओं पर अपने अनुभव साझा करना था। प्रेसीडेंट अचल चौधरी ने बताया कि विभिन्न देशों जैसे अमेरिका, रूस, जर्मनी, न्यूजीलैंड और भारत के प्रसिद्ध विशेषज्ञ इस सम्मेलन में विचार-विमर्श करेंगे। प्रिंसिपल डॉ.अर्चना कीर्ति चौधरी ने कहा कि प्राकृतिक आपदाएं लंबे समय से मानव जाति को भयभीत करती रही है। ऐसी घटनाओं की पुनरावृत्ति ने जीवन और संपत्तियों को बुरी तरह से नष्ट कर रही है, इसलिए एक लचीला बुनियादी ढांचा समय की मांग है। सिविल विभाग के प्रमुख डॉ.अमित शर्मा ने कहा कई वर्षों से एकेडमी में सिविल इंजीनियरिंग विभाग आपदा प्रबंधन के क्षेत्र में कार्य कर रहा है।

Ph.D Awarded

1) Dr. Mohd. Nasim

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