



#### MESSAGE FROM DIRECTOR

Greetings from the National Institute of Technology Hamirpur, Himachal Pradesh!

Issuing this newsletter is a great pleasure for all of us, and for myself, as it is like providing my service to the Institute I am very attached to. By publishing this newsletter we are taking a step ahead toward knowledge sharing. It is only through sharing knowledge that we evolved as the "learned" species in this widely diverse world of organisms. The current edition of the NIT Hamirpur newsletter is a humble effort to share and showcase to our members the learnings, and the insights of the research & innovation going on in the institute. I heartily congratulate all for initiating such a new concept for our institute in the form of this newsletter. Despite some bottlenecks, our learned faculty has always been enthusiastic about the pursuit of knowledge, and through this newsletter makes a humble effort to share knowledge with peers in the field of engineering education. The NIT Hamirpur newsletter is



DR. H.M. SURYAWANSHI DIRECTOR

a step forward in knowledge sharing. It is a matter of pride for the whole of the NIT Hamirpur family, as we constantly march ahead in teaching-learning, research and innovation and keep pace with all other institutes of eminence in the field of Engineering and Technology.

NIT Hamirpur has always provided regional development services through the guidance and direction of the Government of India initiatives. The faculty believed in developing intelligence from diverse sources and using the same for the upliftment of those sections of society who look up for guidance in any field. Intelligence is related to knowing something that can be confidently applied to a particular context. But new situations require new solutions, and in these times we need to work and think in new ways. This shift in stance causes a change in perspective. Changes in perspective, large or small, help us acquire new knowledge. Through this Newsletter, showcasing some of our activities, we seek to spread the word about our humble contribution to engineering education. The parameters of the NIRF ranking system are being meticulously worked upon and by the following year, we are sure to be at a higher ranking. Our valued faculty addresses the gap between what we are giving and what we are capable of giving, and once we direct all our resources and strengths, we will become what we aim for. ...the best! When we feel connected to the moral purpose of our work, we develop new perspectives and begin to behave differently. Speaking of "moral purpose" teaching our students to be good human beings along with good engineers is all that defines our moral purpose.

DR. H.M. SURYAWANSHI
DIRECTOR

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Published by Faculty Incharge (News Bulletin)



#### **Research and Development Projects**

Sr. No.	Title of R&D Project/Patent	Name of Funding Agency and Amount	Name of PI ( Department), Name of co-PI (Department)	Present Status of Project [Completed / Ongoing]
1	Scalable small scale business model for E-waste management through 3Rs, deep learning collection system, and market chain in NIT Hamirpur (HP)	Ministry of Education for Funding under the Swachhta Action Plan Scheme Rs.41.04 Lakhs	Centre for Energy Studies	Ongoing
2	Advanced microalgal biorefinery approach for the recycling of domestic sewage wastewater for a cleaner and greener Indian Himalayan region	National Mission on Himalayan Studies Ministry of Environment, Forest & Climate Change (MoEF&CC) Govt of India	Centre for Energy Studies	Ongoing

#### **Patents Filed**

Sr. No.	Title	Patent Application Number	Inventor/ Author
1	Solar Photovoltic based Device for Telecom Tower	390097-001	Dr. Sumit, Y.R Sood, Vivek, Jitendra, Vineet, Md Fahim, Pawan, Neha, Pankaj
2	Driver drowsiness detection and water sprinkler alarm system for vehicles	202311038263	Dr. Arun Kumar Yadav, Dr. Mohit Kumar, Aryan Verma, Manav Yadav, Manish Thakur, Mohit Kumar Singh, Abhishek Sheoran, Rohit Kumar
3	Device for conversion of normal projection surface to touch sensitive smart projection screen	202311030560	Dr. Arun Kumar Yadav, Dr. Mohit Kumar, Aryan Verma, Mohit Kumar Singh, Manav Yadav, Abhishek Sheoran, Manish Thakur, Rohit Kumar
4	Advanced Mainframe based hybrid organizational structure	202311049749 A	Dr. Vivek Tiwari



### MOU(s) signed with National and International Organizations

Sr. No.	Name of the Party with whom MOU signed	Date of Signing
1	EPACK Durable Limited (Uttar Pradesh) The MOU involves collaboration between EPACK Durable Limited and NITH for the Research and Academic Development and mutual growth in terms of technology which is binding on parties. Collaboration in Teaching, Consultancy Activities, and Research & Development in the areas (a) Thermodynamics (b) AI & Machine Learning (c) Data Science (d) Electronics (e) IOT (f) Prime movers (g) Material Science (h) CFD (i) Design (j) Energy (k) Future technology (l) Industry 4.0, and any other area of mutual interest to both NITH and EPACK Durable Limited. This also includes collaboration in setting up and upkeep the relevant infrastructure in both the Entities.	28-08-2023

#### Ph.D. completed Period

Sr. No.	Title of Thesis	Supervision Status	Ph.D Thesis Status
1	Modelling the Factors Influencing Traveler Behavior Towards Online Travel Purchase	Dr. Mohd. Adil	Thesis Submitted
2	Investigating the Role of Emotional Intelligence and Career Success on Employees' Turnover Intention	Dr. Vivek Tiwari	Thesis Submitted
3	Investigating the Role of Techno-stress and Work-life Balance on Employees' Turnover Intention	Dr. Vivek Tiwari	Thesis Submitted
4	Colorimetric and Fluorometric Chemo sensing and Cellular Bio-imaging of Cu2+, Al3+ and Fe2+ through complexation with synthesized Schiff Bases	Dr. K S Ghosh	Submitted
5	Synthesis and Functionalization of Silica Nanoparticles for Adsorptive Removal of Water Pollutants	Dr. Jai prakash (co- supervisor) Dr. Raj Kaushal (Supervisor)	Submitted

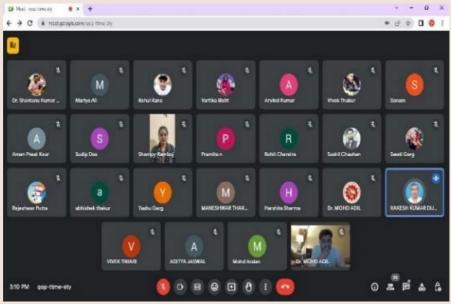


#### National conference organized

2-Day National Conference (Hybrid mode) on Advances in Marketing Paradigms for Research, Innovation and Technology (AMRIT-2023) from 17th to 18th July, 2023

The Department of Management Studies, NITH organised a 2-Day National Conference (Hybrid mode) on Advances in Marketing Paradigms for Research, Innovation and Technology (AMRIT-2023) from 17th to 18th July, 2023. AMRIT 2023 aimed at bringing leading academicians, researchers, and practitioners together, to exchange and share their experiences and research results on all aspects of advances in marketing and changing marketing paradigms with advertising and brand management, consumer behavior, services marketing, digital marketing, tourism marketing, sustainable marketing, general marketing and many more. Being conducted in a hybrid (online/offline presentations) manner, the platform provided a premier inter-disciplinary base for researchers, practitioners, & educators, to present and discuss recent advancements made in the field along with innovations, and practical challeges encountered and solutions adopted.







#### Workshops

#### E-workshop on Wellness and Life Skills on July 10–14, 2023

five-day E-workshop on Wellness and Life Skills was conducted by Department of Humanities and Social Sciences, NITH from July 10–14, 2023. This Workshop aims to promote holistic well-being, teach practical information, empower people to build important skills, and create personal development, resilience, healthy lifestyles, and meaningful connection for a happier and more satisfying life. The five-day Workshop equips participants with the skills to live balanced, healthy lives and succeed in life. The training includes life skills and hands-on activities to clarify the subject.





# Workshop on "Scale Development and Impactful Publication in Social Sciences" conducted from 19th July to 23rd July, 2023

A 5-Day Hybrid Workshop on "Scale Development and Impactful Publication in Social Sciences" was organised by the Department of Management Studies during 19th July to 23rd July, 2023. Much of the quantitative research in management and social sciences deals with latent constructs - their operationalization, and their interrelationships. The operationalization process predominantly involves either development of measure(s) for new construct(s) or refinement of existing measure(s) for given construct(s). This 5-days workshop intends to cover both of these aspects with special focus on developing new measures. The motivation behind conducting this workshop is based on the philosophy that in a research anything can be measured and can be managed effectively. In the development of a scale, we start from an abstract phenomenon (generally called concept), define its meaning and scope, and develop its measure. It is a multi-stage scientific process which incorporates qualitative ways to set up the conceptual scope of phenomenon and robust quantitative assessments to establish reliability and validity.

This 5-days workshop provided a comprehensive and in-depth understanding of scale construction and development process. Sessions overviewed with an understanding of scale development process and procedure. More specifically, it explored how and when scale development is required in social science research. With the insights gained from this workshop, participants were better equipped to conduct rigorous and impactful research



in their respective fields of study. Overall, the workshop received positive feedback from the participants, who appreciated the well-structured curriculum and the expertise of the resource persons. The event undoubtedly contributed significantly to the advancement of social science research and is expected to have a lasting impact on the academic community in the years to come.





#### Workshop on "Sustainable Technologies" conducted on February 23–24-2023

workshop on "Sustainable Technologies" at the Centre for Energy Studies, National Institute of Technology Hamirpur (NITH) during February 23–24, 2023.

### WORKSHOP (OFFLINE MODE) ON INTEGRATED HYDROLOGICAL AND HYDRAULIC MODELLING USING MIKE+ AND MIKE SHE from 15th - 19th to May 2023

This 5-days hands-on course, jointly organized by the Department of Civil Engineering, NIT Hamirpur, and DHI (India) New Delhi-110020, gave an introduction to integrated hydrological modelling, basin management, and uncertainty analysis. The objective of this course was to impart knowledge of numerical modelling of the different processes in the hydrological cycle. This course provided an overview of the basic physical concept and numerical modelling of hydrological, hydrodynamics, and hydrogeological processes, calibration, and uncertainty analysis.

#### **Topics Covered:**

- Day 1-2: Introduction to hydrological processes, various approaches of modelling, need for numerical modelling, hydraulic modelling such as flooding, flood forecasting and flood management, dam break analysis, structure operations, sediment transport.
- Day 3-4: Fully integrated/ coupled models considering overland flow, unsaturated flow, groundwater flow, and fully dynamic channel flow, including all their complex feedbacks and interactions. It is also planned to model processes such as vegetation-based evapotranspiration, irrigation, snowmelt, and water quality.
- Day 5: Model output analysis, and development of different management scenarios.





# Workshop on Applications of ANSYS in Engineering (Extending FEA capabilities and Fluid Flow Analysis) From July 24-28, 2023

The primary aims of this workshop are to enhance technical and professional competency as well as organizing skills of the faculty members for Applications of Ansys in Engineering. The workshop will promote interaction with professionals working in specific areas of research in Academic Institutions, Research Labs, and Industries. Also, exposure will be provided to the audience from renowned speakers on the latest developments in Academia, Research and Industry. This program will bring a positive transformation among the faculty members, research scholars and participants from industries towards their research work, and enable the participants to develop competence in understanding recent advances/techniques in FEM and ANSYS.

The series of lectures covered in this workshop are Ansys introduction, SpaceClaim Basics, Structural & thermal analysis, Modal & Contact Analysis, Explicit Dynamics, Ansys CFD Workflow, CFD pre-processing, Turbulent Flow Analysis, Heat transfer analysis, Fluid Structural Interaction(FSI), System coupling Analysis etc. All the lectures were very informative and full of knowledge. In the workshop, the participants were educated with the most advanced technologies in the field of Applications of Ansys in Engineering. The course would be very much



helpful for the participants who are at the beginning of their research career and those who are at their middle level of research and those who are in practice. The course will motivate and inspire the participants to work in this advanced field of structural engineering.





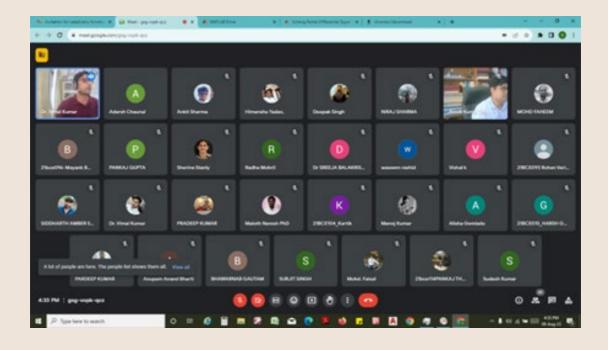
#### Five Days e-Workshop On MATLAB Applications in Civil Engineering From August 4-8, 2023

The primary aims of this e-Workshop are to enhance technical and professional competency as well as organizing skills of the faculty members for MATLAB Applications in Civil Engineering. The Workshop will promote interaction with professionals working in specific areas of research in Academic Institutions, Research Labs, and Industries. Also, exposure will be provided to the audience from renowned speakers on the latest developments in Academia, Research and Industry. This program will bring a positive transformation among the faculty members, research scholars and participants from industries towards research work, and enable the participants to develop competence in understanding recent advances in the proposed topic of the workshop.

The series of lectures covered in this course are Getting Started with MATLAB, Solving Problems with MATLAB, Using Simulink and Simscape for Modeling, FE analysis of a beam using MATLAB, Concepts and Estimation of Flood Frequency Curves, Application of SIMULINK for Civil Engineers, MATLAB Applications in Hydrology and Water Resources Engineering, Analysis of framed structures using MATLAB, Artificial Neural Network (ANN) modeling using MATLAB, MATLAB Onramp, Simulink Onramp, Simscape Onramp, Optimization in MATLAB, Solving PDE in MATLAB, MATLAB for solving Civil Engineering Problems etc. All the lectures were very informative and full of knowledge. In the course, the participants were educated with the most advanced technologies in the field of MATLAB applications. The course would be very much helpful for the participants who are at the beginning of their research career and those who are at their middle level of research and those who are in practice. The course will motivate and inspire the participants to work in this advanced field of engineering.









### Journal papers published

Sr. No.	Title of the paper	Journal Status [SCI / Scopus/	Authorship	
51.110.	The of the paper	Web of SC]	[Author / Co-Author(.)]	
1.	Planning and optimization of sustainable grid integrated hybrid energy system in India., Sustainable Energy Technologies and Assessments (Accepted)	Scopus	Malik, P., Awasthi, M. &Sinha, S.)	
2.	A techno-economic investigation of grid integrated hybrid renewable energy systems, Sustainable Energy Technologies and Assessments	Scopus	Malik, P., Awasthi, M.&Sinha, S	
3.	E-waste: A review. Nanoworld Journal	Scopus	Vaibhav, K., &Awasthi, M	
4.	A Comprehensive Review on Stochastic Optimal Power Flow Problems and Solution Methodologies	SCI	Ankur Maheshwari, Yog Raj Sood & Supriya Jaiswal,	
5.	Flow direction algorithm-based optimal power flow analysis in the presence of stochastic renewable energy sources.	SCI	Maheshwari, Ankur, Yog Raj Sood, and Supriya Jaiswa	
6.	A novel hybrid model for predicting hourly global solar radiations on the tilted surface	SCOPUS	Mughal, S. Nabi, Y. R. Sood, and R. K. Jarial.	
7.	Automatic image caption generation using deep learning, Multimedia Tools and Applications	SCI	Akash Verma, Arun Kumar Yadav, Mohit Kumar,Divakar Yadav	
8.	Blockchain Based Smart Contract for Cooperative Spectrum Sensing in Cognitive Radio Networks for Sustainable Beyond 5G Wireless Communication	Scopus	Archit Jain, Nitin Gupta, M. Sreenu	
9.	A Comprehensive review of 'Internet of Healthcare Things': Networking aspects, technologies, services, applications, challenges, and security concerns, Computer Science Review, Elsevier	SCI	Himanshu Verma, Naveen Chauhan, Lalit Awasthi	
10.	A Study on Seismic Analysis of Underground Tunnels for Delhi Metro	Scopus	Rahul Shakya, Manendra Singh	



11.	Effect of graphene oxide on the microscopic, physical and mechanical characteristics of rubberized concrete	ESCI	Gyanendra Kumar Chaturvedy, Umesh Kumar Pandey, Harit Kumar
12.	Investigating the effect of graphene oxide on the physical and mechanical properties of high-strength rubberized concrete using RStudio	ESCI	Gyanendra Kumar Chaturvedy, Umesh Kumar Pandey
13.	Identification of erosion-prone areas using morphometric, hypsometric, and compound factor approaches in the Ruvu River Basin, Tanzania	SCOPUS	Deus Michael, Ray Singh Meena, Brijesh Kumar & Joel Nobert
14.	Finite element analysis of interlocking masonry subjected to static loading	SCI	S Rasul, V Kumar
15.	Numerical investigation of reinforced concrete beams under impact loading	SCI	P Dhiman, V Kumar
16.	Influence of prestressing force on performance of concrete plates under impact loading	SCI	V Kumar, MA Iqbal, AK Mittal
17.	Structural health monitoring of ASCE benchmark building using machine learning algorithms	SCI	Chandesh Palsara, Vimal Kumar, Joy Pal, M Naresh
18.	A machine learning approach for health monitoring of a steel frame structure using statistical features of vibration data	SCI	Maloth Naresh, Vimal Kumar, Joy Pal
19.	Application of Taguchi method and Response Surface Methodology (RSM) for parametric optimisation of natural convection heat transfer inside a triangular porous enclosure with in-line rectangular finned array	Scopus	Abhishek, Pushkal Sharma
20.	A kinetic study and thermometric analysis on waste cooking oil	SCI	Vishal Kumar, Vijay Mahato
21.	Performance improvement of solar still by using float wicks in different proportion of covered area, Energy Sources, Part A: Recovery, Utilization, and Environmental Effects	Scopus	Sudhir Kumar Singh, Shubham Jain, Madhup Kumar Mittal & Deepak Sharma
22.	Numerical Investigation on Pool Boiling Heat Transfer of Silica and Alumina Nanofluids	Scopus	Sudhir K. Singh, Deepak Sharma & Akshay Kumar Singh



23.	Experimental investigation and analysis of cooling performance of solar thermoelectric refrigerator, Solar Energy	Scopus	Noor Alam, Mohammed Salman Ali, Syed Sajid, Deepak Sharma
24.	A comprehensive investigation of surface morphology during grinding of Inconel 625 using conventional grinding wheels	Scopus	Kamal Kishore, Manoj Kumar Sinha, and Sant Ram Chauhan
25.	Application of machine learning techniques in environmentally benign surface grinding of Inconel 625	Scopus	Kishore, K., Chauhan, S. R., & Sinha, M. K.
26.	Investigating the machinability behaviour of Al7075/SiC5CS5 hybrid composite with the variation of tool geometry	Scopus	Setia, S., & Chauhan, S. R.
27.	Machinability study of silicon carbide and cenosphere reinforced Al7075 composite using three different tool materials.	Scopus	Setia, S., & Chauhan, S. R.
28.	Demystifying tourists' intention to purchase travel online: the moderating role of technical anxiety and attitude	SSCI	Dogra, N.; Mohd. Adil; Sadiq, M.; Rafiq, F. & Paul, J.
29.	Organic food consumption and contextual factors: An attitude-behavior-context perspective	SSCI	Sadiq, M., Mohd. Adil, & Paul, J.
30.	The Impact of Memorable Tourism Experiences on Customer-Based Destination Brand Equity: The Mediating role of Destination Attachment and Overall Satisfaction	Scopus	Ayush Guleria; Richa Joshi and Mohd. Adil
31.	What resists millennials to adopt hotel booking apps? An empirical analysis based on extended innovation resistance theory in Foresight	Scopus	Sachin Kumar, Neeraj Dhiman, Honey Kanojia, Richa Joshi
32.	Examining the effects of brand authenticity and brand identification on consumers' willingness to pay premium published in International Journal of Internet Marketing and Advertising published by	Scopus	Richa Joshi, Prerna Garg, Shampy Kamboj
33.	Review of work–life interface: a systematic literature analysis	Scopus/Web of SC	Indu Sharma, Vivek Tiwari
34.	A Bibliometric Analysis of Turnover Intention in the Field of Business and	Scopus/Web of SC	Indu Sharma, Vivek Tiwari



	Management: (2002–2022)		
35.	Enhancing value in customer journey by considering the (ad)option of artificial intelligence tools	SSCI and Scopus	Neeraj Dhiman a, Mohit Jamwal b, Ajay Kumar
36.	Consumers' Continuance Intentions to Consume Green Tea: An Extended Theory of Planned Behaviour Perspective	Scopus	Neeraj Dhiman, Mohit Jamwal, Honey Kanojia
37.	Investigating the Impact of Online Service Convenience on Customer Engagement, Attitude and Intention to Use Food Delivery Apps	Scopus	Vandana, Sachin Kumar, V Kumar, P Goyal
38.	Employee's Intentions to Use HR Analytics: Technology Acceptance Model with Job Relevance and Self-Efficacy	Scopus	Neeraj Dhiman, Sachin Kumar, Tanya Nagpal
39.	A Microscopic look into the Occupational Stress and Quality of Life: Insightful study between Blue and White-collar Shoe Employees of Agra	SCOPUS	Dr. Sunder Kala Negi
40.	Adsorptive Removal of Arsenic(III) from Contaminated Water Using Rice Husk, Tea Waste and Sugarcane Bagasse Bio- adsorbents	SCI	J Singh, A Kumar, A Pathak, T Palai
41.	Method for highly selective, ultrasensitive fluorimetric detection of Cu <sup>2+</sup> and Al <sup>3+</sup> by Schiff bases containing <i>o</i> -phenylenediamine and <i>o</i> -aminophenol	SCI	Sharma, S., Chayawan, A., Debnath, J., Ghosh, K.S.
42.	Inhibition of amyloid fibrillation of bovine serum albumin by zinc oxide nanoparticles	SCOPUS	Sharma, A., Ghosh, K.S.
43.	A highly selective 2-hydroxybenzhydrazone based dual sensor for Cu <sup>2+</sup> and Fe <sup>2+</sup> ions: Spectroscopic, computational, cell imaging studies and logic gate construction	SCI	Sharma, S., Chayawan, Jayaraman, A., Debnath, J., Ghosh, K.S.
44.	Highly Selective Aminopyrazine-Based Colorimetric Probe for "Naked-Eye" Detection of Al <sup>3+</sup> : Experimental, Computational Studies and Applications in Molecular Logic Circuits	SCI	Sharma, S., Chayawan, Jayaraman, A., Debnath, J., Ghosh, K.S.



48.	Emerging Nanomaterials in the Detection and Degradation of Air Pollutants  Graphene family nanomaterials as emerging sole layered nanomaterials for wastewater treatment: Recent developments, potential	Scopus	Samriti, M Rumyantseva, S Sun, A Kuznetsov, J Prakash A Ojha, S Thakur, J Prakash
50.	hazards, prevention and future prospects  CdS based 3D Nano/Micro-Architectures: Formation Mechanism, Tailoring of Visible Light Activities and Emerging Applications	SCI/Scopus	Jai Prakash et al.
51.	in Photocatalytic H2 Production, CO2 Reduction and organic pollutant degradation  Fabrication Methods and Mechanisms for Designing Highly-Efficient Photocatalysts	SCI/Scopus	Samriti, R. Pal, Jai Prakash,
52.	for Energy and Environmental Applications  Facile Tailoring of Photoluminescence Properties of Surface-Modified TiO2 Nanocrystals	SCI/Scopus	O Ruzimuradov, R Xasanov, I Gonzalo-Juan, D Fang, Jai Prakash, R Riedel,
53.	High performance self-healing polymeric nanocomposite coatings, Progress in Organic	SCI/Scopus	Shalini Parihar Bharti Gaur
54.	Coating  Self healing approaches in polymeric	SCI/Scopus	Shalini Parihar Bharti Gaur



### Conference papers published

Sr.		Conference Status	Authorship	
No.	Title of the paper	[SCI / Scopus/ Web of SC]	[Author / Co-Author(.)]	
1	Dung Beetle Optimizer Algorithm Based OPF Solution considering Renewable Energy Sources	Scopus	Supriya Jaiswal, Yog Raj Sood, Ankur Maheshwar, Vineet Kumar, Sumit Sharma, Mukesh Singh	
2	Recent Advances in DL-based Text Summarization: A Systematic Review	Scopus	Utkarsh Dixit, Sonam Gupta, Arun Kumar Yadav, Divakar Yadav	
3	Application of Deep Learning on Skin Cancer Prediction	Scopus	Abhishek Dhiman, Naveen Chauhan	
4	Task Offloading Using Queuing Theory in Fog-Assisted IoMT	Scopus	Nitish Kumar, Himanshu Verma, Naveen Chauhan & Lalit Kumar Awasthi	
5	Computational analysis on thermodynamic aspects of relaxation phenomena in supercooled liquid water at different cooling rates	Renowned national conference	Nandlal Pingua, Arvind K. Gautam	
6	Molecular dynamic study to investigate the system size effects on tetrahedral materials in supercooled region	Renowned national conference	Arvind K. Gautam, Nandlal Pingua, Avinash Chandra	
7	Microbial Electrosynthesis of Useful Hydrocarbons from CO2	National Conference	D Suri, T Palai	
8	Membranes for Reduction of Carbon Dioxide to Valued Added Chemicals	National Conference	S Akhther, T Palai, LM Aeshala	
9	Comparative behaviour of stone columns and vertical drains for mitigation of liquefaction	Scopus	Krishna Kotiyal, Manendra Singh	
10	Static and Dynamic Analyses of a Cut Slope in Himachal Pradesh, India	Scopus	Ghanshyam Gupta, Manendra Singh and Ritu Raj Nath	



### **Book chapter published**

Sr.No.	Title of the Chapter	Name (s) of author(s) of chapter		
1	Analysis of urbanization and assessment of its impact on groundwater & land use land cover using GIS techniques "A case study of Bhopal & Gurugram district"	Shubham Bhardwaj, PreritMachiwar, Chander Kant,Shivukumar Rakkasagi, RaySingh Meena, and ManishKumar Goyal	(Ecosystem Restoration: Towards Sustainability and Resilient Development	Anil Kumar Gupta, Manish Kumar Goyal, S. P. Singh, Springer
2	Domestic Waste Management And Their Utilization	Arvind K. Gautam, Nandlal Pingua, Avinash Chandra, Raj Kumar Arya	From Waste to Wealth	Raj Kumar Arya, George D. Verros , Om Prakash Verma, and Chaudhery Mustansar Hussain, Springer Nature Singapore Pte Ltd.
3	Impoved Enhanced Oil recovery - Role of Sonicatrion: An Overview	Ritesh S. Malani & Rahul Saha	Ultrasoun Technology for Fuel Processing	Sankar Chakma, Bentham Books
4	Green Synthesis of Silver Nano-Particle from Cyanobacteria and Effect on Microalgal Growth nad Production of Exopolysaccharide	Shailendra Yadav and Mamta Awasthi	Recent Advances and New Perspectives	Intech open
5	Recent Advancement and Efficiency Hindering Factors in the Wastewater Treatment Plant: A Review	Awasthi, M., Moten, T.	In: Recent Trends in Wastewater Treatment. Madhav, S., Singh, P., et.al (eds)	Springer, Cham.



#### **Awards**

Sr.No.	Name of faculty	Name of organisation	Date	Award
1	Dr. Jai	Stanford University,	21-08-	Listed in Worlds Top 2% Most Influential
	Prakash	USA	2023	Scientists in 2023

### **Significant outreach Institute out Activities**

S.No	Faculty name and Name of Activity	Duration of Activity
1	Dr. Arvind K. Gautam, Expert Talk on "Employment & Scope of Molecular Simulation Approach in Chemical Engineering"	20th April 2023
2	Dr. Tapas Palai, Invited Lecture on "Bioremediation of Heavy Metals from Wastewater", at Online Short-Term Course entitled Advances in Energy and Environment for Sustainable Development (AEESD 2023) organized jointly by Department of Chemical Engineering and Centre for Energy and Environment, Dr. B.R. Ambedkar NIT Jalandhar, India.	June 01-05, 2023.
3	Dr. Nitin Gupta was Publicity Chair for IEEE International Conference on Computer, Information, and Telecommunication Systems, IEEE CITS 2023, Genao, Italy,	Jul 11-13, 2023
4	Dr. Mohd. Adil is on the FYR panel of Australian Catholic University (Australia) to assess the quality and feasibility of the project.	01-08-2023



#### **NIT Hamirpur in News**

### NIT Hamirpur excels in academic pursuits

Hamirpur The hallmark of any es-teemed educational institution lies in the eminence of its faculty members and academic pursuits. Their pro-lific research, scholarly publications, and patent contributions serve as the linchpin propelling the institution toward a trajectory of excel-

Under the stewardship of Prof H.M. Suryavanshi, the Director of NIT Hamirpur, a resounding achievement has been unlocked - the successful recruitment of faculty members. A total of 129 fac ulty appointments, adhering scrupulously to the pre-scribed norms and regulations, have been consum-mated. Notably, a cohort of eminent external faculty members, numbering 51, has been ushered in. This illustrious group encompass-es 19 Postdoctoral Fellows and 15 research projects supported by funding.

In tandem with this external recruitment drive, in-ternal faculty members were



also duly inducted in com pliance with the stipulated guidelines. The reverbera-tions of this triumphant faculty recruitment endeavor have cultivated a profoundly positive atmosphere amongst the academic staff, inciting enthusiasm that had

been long-awaited.
Dr. Archana Nanoty, the
Registrar of NIT Hamirpur, has expressed optimism regarding the institution's promising future, attributing it to the sagacious leadership of Bert Suramanaki of Prof Suryavanshi.

Simultaneously, non-fac-ulty positions are poised to

be filled through the National Testing Agency (NTA). A total of 84 posi-tions will be filled via written

tions will be filled via w

examinations conducted by

Since the arrival of Dr. Archna Nanoty as the new registrar at NIT Hamirpur, a remarkable transforma-tion has been witnessed in the institution's administrative processes. Dr. Nan-oty's dedication and visionory's dedication and viscoing ary leadership have not only reinvigorated the adminis-tration but have also pro-pelled it towards unparal-leled efficiency. A notable achievement under income stewardship is the swift and fair handling of the departmental requirements.

One of the most remarkable feats attributed to her

tenure is securing the cov-eted permission from COA for the Architecture Department. This accomplish-ment had languished in bu-reaucratic limbo for far too long due to the lackluster performance and apathetic approach of previous interapproach of previous inter-im administrators, Dr. Nan-oty's proactive approach and relentless pursuit of excel-lence have not only broken down these barriers but have also paved the way for NIT Hamirpur's Architec-ture Department to flourish. Her arrival heralds a new ern of progress and profes-

era of progress and profes-sionalism, instilling confi-dence that NIT Hamirpur will continue to ascend to greater heights under her guidance. Dr. Archna Nanoty's appointment as regis-trar stands as a testament to her unwavering commit-ment to the institution's growth and success.

### तकनीकी और अनुसंधान उपलब्धियों में एनआईटी प्रथम, दिल्ली में मिला सम्मान



तकनीकी और अनुसंधान उपलब्धियों के लिए दिल्ली में सम्मान लेते हुए।

हमीरपुर | राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर को तकनीकी और अनुसंधान उपलब्धियां के लिए देश भर में प्रथम स्थान मिला है। दिल्ली के हाट पीतमपुरा में आयोजित 9वें वाइब्रेंट इंडिया 2023 में कृषि और बागवानी वैश्वक जैविक और प्राकृतिक खेती एक्सपो के आयोजित कार्यक्रम में इस संस्थान को यह सम्मान मिला। प्रदर्शनी 3 से 5 नवंबर तक वहां आयोजित की गई। इस कार्यक्रम में एनआईटी के अलावा देश भर के प्रमुख अनुसंधान संस्थानों, तकनीकी शिक्षा और अनसंधान

केन्द्रों ने अपनी उपलब्धियों का प्रदर्शन किया। एनआईटी की ओर से डीन छात्र कल्याण डा अशोक कुमार सहित की ओर से तकनीकी और अनुसंधान उपलब्धियों प्रदर्शित किया जिसमें प्रथम पुरस्कार जीता।

निदेशक एचएम सर्यवंशी का कहना है कि इस एक्सपो में एनआईटी हमीरपुर की भागीदारी न केवल तकनीकी प्रगति के प्रति संस्थान की प्रतिबद्धता को उजागर करती है, बल्कि शिक्षा और अनुसंधान से एक उज्जवल भविष्य को आकार देने के लिए अट्टट समर्पण को भी रेखांकित करती है।

# NIT हमीरपुर में MIND 2023 कॉन्फ्रेंस शुरू



कंचन शर्मा/देवभूमि मिरर

हमीरपुर। आज राष्ट्रीय प्रौद्योगिकी संस्थान (एनआईटी), हमीरपुर में मशीन लर्निंग, इमेज प्रोसेसिंग, नेटवर्क सुरक्षा और डेटा साइंसेज (एमआईएनडी 2023) पर बहप्रतीक्षित पांचवें अंतर्राष्ट्रीय सम्मेलन की शुरूआत हुई। कंप्यूटर विज्ञान और इंजीनियरिंग विभाग द्वारा आयोजित दो दिवसीय सम्मेलन, मशीन इंटेलिजेंस और डेटा विज्ञान में नवीनतम प्रगति पर विचार करने के लिए दुनिया भर के प्रमुख विशेषज्ञों, शोधकताओं और उत्साही लोगों को एक साथ लाता है। MIND 2023 मशीन इंटेलिजेंस और डेटा विज्ञान के गतिशील क्षेत्रों में अत्याधुनिक अनुसंधान, अंतर्दृष्टि और नवीन विचारों के आदान-प्रदान के लिए एक मंच बनने के लिए तैयार है। 10 से अधिक देशों के प्रतिभागी मुख्य भाषणों, पेपर प्रस्तृतियों और इंटरैक्टिव



आईआईटी जम्मू के निदेशक, प्रोफेसर मनोज सिंह गौर

सत्रों की एक श्रंखला में भाग ले रहे हैं, जो एक मंच पर सहयोग और ज्ञान साझा कर रहे हैं। इस सम्मेलन में कुल नौ सत्र रख्खे गए हैं, जिनमें से पांच सत्र आज सफलतापूर्वक सम्पन्न हुए। सम्मेलन के मुख्य संरक्षक एनआईटी हमीरपुर के निदेशक प्रो एच एम सूर्यवंशी और संरक्षक एनआईटी हमीरपुर के डीन प्रो अनूप कुमार रहे। सम्मेलन की शुरूआत दीप प्रज्वलित कर की गई तथा सम्मेलन की सोविनीयर



प्रो एच एम सूर्यवंशी, निदेशक, एनआईटी, हमीरपुर।

पस्तक का विमोचन किया गया। आईआईटी जम्मु के निदेशक, प्रोफेसर मनोज सिंह गौर नें सम्मेलन के मुख्यअतिथि के रूप में शिरकत की।

मुख्यअतिथि ने अपने वक्तव्य में मशीन लर्निंग, इमेज प्रोसेसिंग, नेटवर्क सुरक्षा आदि के सही इस्तमाल और भविष्य में सुधार हेत् अच्छी गुणवत्ता को अनुसंधान पर बल दिया। सम्मेलन के पहले दिन अडतालिस / ४८ विज्ञानिकों ने भाग लिया।





NIT Hamirpur में पूर्व छात्र सम्मेलन के साथ सिल्वर जुबली रीयूनियन का उद्घाटन, 25 वर्षों के बाद एनआईटी पहुंचें पूर्व

🗂 June 23, 2023 🛔 Priyanka 🖠 Alumni Meet, Dainik Savera News, Dainik Savera No 1 News, Dainik Savera TV News, Hin News, Latest News, NIT Hamirpur, Silver Jubilee Reunion Inaugurated

हमीरपुर (कपिल): एनआईटी हमीरपुर में शुक्रवार को पूर्व छात्र बैठक-2023 के साथ ही सिल्वर जुबली रीयुनियन (1998 बैच) का उद्घाटन किया गया। इस दो दिवसीय कार्यक्रम की शुरूआत पूर्व छात्रों के गर्मजोशी भरे खागत से हुई। अपनी पुरानी यादों को महसूस कर रहे, पूर्व छात्रों का अपने शिक्षकों एवं मित्रों से मिलन, अत्यंत रोमांचकारी था। एनआईटी के निदेशक प्रो. एच. एम. सूर्यवंशी कार्यक्र म के मुख्य अतिथि के रूप में उपस्थित रहे। समारोह की शुरु आत पारंपरिक दीप प्रज्वितन समारोह और सरस्वती से वंदना की गई जो कि ज्ञान, बुद्धिमत्ता का प्रतीक है। इसके बाद एनआईटी एलुमनी एसोसिएशन (एनआईटीएचएए) के अध्यक्ष इंजिनियर अजय सिंघानिया ने सभा को सम्बोधित करते हुये सभी का आभार व्यक्त किया और पूर्व छात्रों की भागीदारी और समर्थन के महत्व पर जोर दिया। पूर्व छात्र मामलों के डीन प्रोफेसर वाईडी शर्मा ने पूर्व छात्र संबंधों को मजबूत करने के लिए संस्थान द्वारा की गई पहल पर एवं अन्य संबंधित विषयों पर प्रकाश डाला।

प्रतिभागियों को एनआईटी का एक विडियो भी दिखाया गया, जिसमें उनके स्नातक स्तर की पढ़ाई के बाद से हुए विकास को प्रदर्शित किया गया। सिल्वर जुबली बैच के सभी पूर्व छात्रों को उनके संबंधित क्षेत्रों में उनके असाधारण योगदान और उपलब्धियों को मान्यता देते हुए एक विशेष सम्मान समारोह के दौरान सम्मानित किया गया एवं उनके समर्पण और सफलता के लिए सराहना की गई। अनेक छात्र अपने परिवार के सहित 25 साल के अंतराल के बाद एन.आई.टी. में पहुंचे थे।



### NIT-Hamirpur shines at national championship

OUR CORRESPONDENT

HAMIRPUR, DECEMBER 27 The National Institute of Technology (NIT) excelled at the Inter-NIT Faculty and Staff badminton and table tennis championship, which concluded at the Maulana Azad National Institute of Technology in Bhopal. The team members were accorded a rousing welcome on

their arrival here today. As many as 16 NITs from across the country participated in the championship. In the 'above 50 category' the NIT-Hamirpur bagged

gold in team event, Dr Manoranjan Rai Bharti bagged gold in singles event and Dr Surender Kumar Soni bagged a bronze medal. Dr Rajesh Kumar Sharma won a bronze medal in the 'below 50 category'. The table tennis team also reached quarterfinals for the first time ever in the Inter-NIT championships

Twenty faculty and staff members of the institute, led by Dr Ashok Kumar (Dean Students Welfare) as the team manager, participated in the championship held at Bhopal.

# नई प्रणाली का आविष्कार, बिजली की खपत होगी कम

#### एनआईटी हमीरपुर के शिक्षकों और विद्यार्थियों ने उपकरणों की ऊर्जा खपत की निगरानी के लिए ईजाद की तकनीक

संवाद न्यूज एजेंसी

हमीरपुर। राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर के इलेक्ट्रॉनिक्स एंड कम्युनिकेशंस विभाग के शिक्षकों और विद्यार्थियों ने विजली उपकरणों की ऊर्जा खपत की निगरानी और नियंत्रण के लिए नई डिजाइन किया गया है ताकि प्रणाली का आविष्कार किया है।

इंटरनेट ऑफ थिंग्स सक्षम ऊर्जा कम हो सके। प्रबंधन प्रणाली नामक इस एनआईटी हमीरपुर के निदेशक आविष्कार प्रोजेक्ट को भारत प्रो. एचएम सूर्यवंशी और

स्वीकृति मिली है। इस प्रोजेक्ट पर विभाग के एसोसिएट प्रोफेसर डॉ. रोहित धीमान, प्रोफेसर राजीवन चंदेल और विद्यार्थियों एम चेतन चौधरी, वी रवि तेजा और टी अनिरुद्ध ने कार्य किया है। इसे इंटरनेट ऑफ थिंग्स के माध्यम से उपभोक्ताओं का बिजली का बिल

परकार के पेटेंट कार्यालय से कुलसचिव डॉ. अर्चना नानोटी ने

बिजली प्रवाह के निर्धारण के लिए सेंसर नोड़स शामिल आविष्कार में बिजली प्रवाह को निर्धारित करने के लिए सेंसर नोइस शामिल हैं। आविकार में बिजली प्रविद्ध को नियारत करने के लिए, स्सर नीड्स शामन्त है। आविकार की प्रणाली में जब बिजली खपत प्रेमोण्ड से अधिक हो, तब बिजली सिवय को बंद करने और माइक्रोकंट्रोलर को निर्देश भेजने के लिए क्रांटिमगर किया गया है। इसके अलावा, ऑन-टाइम, ऑफ्-टाइम विस्लेषण और मोबाइल जैसे कंप्यूटिंग डिवाइस पर बिजली उपकरण को कर्जा खपत का प्रतिपादन, वर्तमान आविकार की अन्य महत्वपूर्ण विशेषताए है। वर्तमान प्रणाली को लोकप्रिय रूप से किल-बिल नाम भी दिया जा सकता है।

पेटेंट स्वीकृति पर प्रसन्नता व्यक्त की। उन्होंने डॉ. रोहित धीमान और धीमान एनआईटी हमीरपुर में प्रो. राजीवन चंदेल को बधाई दी। इलेक्ट्रॉनिक्स और उन्होंने उच्च शोध गतिविधियों को इंजीनियरिंग विभाग में एसोसिएट बढ़ाने के लिए कड़ी मेहनत करने

संचार हैं। इससे पहले उन्हें

इंटरनेट ऑफ थिंग्स सक्षम ऊर्जा प्रबंधन प्रणाली के पेटेंट को भारत सरकार से मिली स्वीकृति

इलेक्ट्रॉनिक्स प्रौद्योगिकी मंत्रालय भारत सरकार से यंग फैकल्टी रिसर्च फेलोशिप भी प्रदान की गई है। उन्हें विज्ञान और इंजीनियरिंग अनुसंधान बोर्ड भारत सरकार, नई दिल्ली से युवा वैज्ञानिक पुरस्कार से सम्मानित किया जा चुका है। उन्होंने पांच तकनीकी पुरतकें भी लिखी हैं। प्रो.



डॉ. रोहित धीमान, प्रो. राजीवन चंदेल

इलेक्ट्रानिक्स और संचार इंजीनियरिंग विभाग में प्रोफेसर के रूप में कार्यरत हैं और दो कार्यकाल के लिए विभाग के प्रमुख रहे हैं।

### संस्थान पत्रिका



संस्करण १३, अंक २

संभव की सीमा जानने का एक ही तरीका है, असंभव से भी आगे निकल जाना। ~ स्वामी विवेकानंद

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