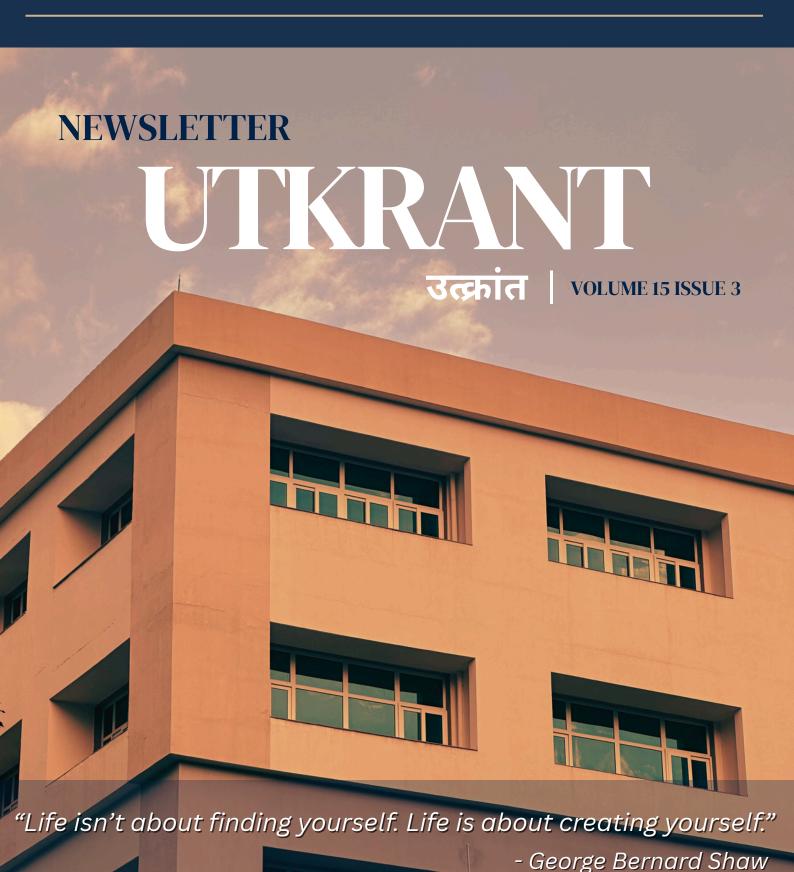


# राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर <sup>(एक राष्ट्रीय महत्व का संस्थान)</sup> National Institute of Technology Hamirpur

(An Institute of National Importance)



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# MESSAGE

DIRECTOR'S

With immense delight, I present to you this edition of our institute newsletter, Utkrant, which offers a glimpse into the vibrant academic as well as non-academic life thriving at NIT Hamirpur.

publication beautifully captures the overall This achievements, initiatives, and collective spirit that drive forward the continuous growth and excellence of our institution. These initiatives have been able to expertly embody our dedication not only to technical excellence but also to our social responsibility and holistic development. One of our standout innovations this year includes Aviation Supply Chain Security, a small but powerful step towards our commitment to sustainability and creative problem-solving. It's this kind of ingenuity that keeps NIT Hamirpur at the forefront of engineering education and research.



At the heart of our institution lies a culture driven by curiosity, collaboration, and compassion. Our faculty work with deep commitment to shape students into not just successful professionals but also responsible citizens of this country.

We aim to build an environment where innovation is nurtured, values are respected, and learning continues far beyond the classroom. This newsletter is more than just a record of achievements; it's a reflection of our shared vision of a sustainable and brighter future. Even as we move forward, we remain close to our vision of progressing knowledge that empowers, research that transforms, as well as experiences that inspire.

At the end of this message, I express my sincere appreciation and thanks to everyone who contributed in the making of this edition. Your passion and enthusiasm are what make our story always worthwhile.

Warmest regards,

Dr. H.M. Suryawanshi

Director, National Institute of Technology, Hamirpur

### 02. Journal Papers Published

Sr. No.	Title of the paper	Journal Status [SCI/Scopus/Web of SC]	Authorship [Name of author/ Co-Author(.)]
1	Advances in Nitrogen- Functionalized Cellulose Aerogels for CO₂ Capture	Korean Journal of Chemical Engineering, (2025), DOI: https://doi.org/10.1007/s11 814-025-00537-7	A Jain, AK Tiwari, RK Arya, T Palai
2	Insight into the Sunlight-driven Photocatalytic Activity of ZnO and ZnO/Ag Hybrid Nanostructures	Next Materials, 8, 100733 (2025), DOI: https://doi.org/10.1016/j.nx mate.2025.100733	Samriti, A Pujara, S Thakur, T Palai, R Gupta, HC Swart, A Kuznetsov, J Prakash
3	Biotransformation of Hexavalent Chromium from Wastewater using Bacillus firmus	Journal of Water Chemistry and Technology, 47 (3), 245- 254 (2025). DOI: https://doi.org/10.3103/S1 063455X2503004X	Pragatisheel, A Kumar, LM Aeshala, T Palai
4	Bioelectrochemical Reduction of CO2 into Formic Acid using Escherichia coli Whole-cell Biocatalyst	Journal of Applied Electrochemistry, 55, 1201– 1212, (2025). DOI: https://doi.org/10.1007/s1 0800-024-02236-3	A Kumar, LM Aeshala, T Palai



5	Removal of ciprofloxacin and amoxicillin from wastewater using photocatalysis and biological treatment methods: a mini review	International Journal of Chemical Reactor Engineering, 2025 DOI: https://doi.org/10.1515/ijcr e-2025-0053	Ritu Arya, Alok Garg, Subhajit Majumder
6	Cassia fistula seeds as a natural coagulant for turbidity reduction: efficacy and optimization via central composite design	Biomass Conversion and Biorefinery,15(7),10997- 11010, 2025. DOI: https://doi.org/10.1007/s1 3399-024-05929-z	Akanksha Thakur, Virender Shivay, Surjit Singh Katoch, Amit Arora, Alok Garg
7	Dynamic Response of Double Deck Cable-Stayed Bridge Subjected to Train Load on Lower Deck	Journal of Vibration Engineering &Technologies, 13, 20 (2025). SCI Extended, Q2  DOI:https://doi.org/10.100 7/s42417-024-01562-2	Saket Kumar and Nallasivam .K
8	Modal Analysis of Multi- Panelled Concrete Pavement Airport Runway Using Finite Element Technique	Journal of Vibration Engineering &Technologies,13, 13 (2025). SCI Extended DOI:https://doi.org/10.100 7/s42417-024-01695-4	Sandeep Bharti and Nallasivam .K





9	Dynamic response of a PSC box-girder bridge impacted by high-speed train load using the finite element approach	Innovative Infrastructure Solutions,10, 22 (2025). SCI Extended, Q2 DOI:https://doi.org/10.1007 /s41062-024-01845-3	Sahil Kumar and Nallasivam .K
10	Evaluation of modal performance in a multi-span suspension bridge implementing a finite element approach	Innovative Infrastructure Solutions,10:142(2025). SCI Extended, Q2 DOI:https://doi.org/10.1007 /s41062-025-01891-5	Surbhi Aswal and Nallasivam .K
11	Modal and Dynamic Response of Elevated Water Tanks of Different Shapes to Earthquakes	Journal of Vibration Engineering & Technologies,13:243(2025).  SCI Extended, Q2 DOI:https://doi.org/10.1007 /s42417-025-01793-x	Mitresh Kaul and Nallasivam.K
12	Dynamic Analysis of a Coupled Ballastless Railway Track and Horse Shoe Shape Shield Tunnel Linked to a Box-Girder Bridge with Substructure Using Finite Element Method	Innovative Infrastructure Solutions,10:144(2025). SCI Extended, Q2 DOI:https://doi.org/10.1007 /s41062-025-01939-6	Aniket Chaudhary and Nallasivam.K
13	Dynamic simulation of aircraft vehicle-rigid pavements interaction on Pasternak foundation using finite element based MATLAB algorithm	Innovative Infrastructure Solutions,10, 277 (2025). SCI Extended, Q2 DOI:https://doi.org/10.1007 /s41062-025-02074-y	Khair Ul Faisal Wani and Nallasivam .K



14	Seismic response assessment of concrete gravity dam with dam-foundation-reservoir interaction by adopting finite element technique	Journal of Vibration Engineering & Technologies,3:332(2025), SCI Extended, Q2 DOI:https://doi.org/10.1007 /s42417-025-01905-7	Abhishek Sharma,Sahil Thakur and Nallasivam .K
15	Modal response simulation of a sea crossing cable-stayed bridge implementing a finite element approach	Innovative Infrastructure Solutions, 10, 423 (2025). SCI Extended, Q2 https://doi.org/10.1007/s41 062-025-02238-w	Shubhansu Sharma and Nallasivam .K
16	Modal analysis of tunnel and track vibrations in rock environments via computational modelling	Journal of Vibration Engineering & Technologies,3, 482 (2025).  SCI Extended, Q2 https://doi.org/10.1007/s42 417-025-02058-3	Akash Kumar and Nallasivam .K
17	Understanding the Predictors of Sustainable Food Consumption Behavior: A Pathway to Achieving Sustainable Development Goals	Sustainable Development SCI DOI:https://doi.org/10.100 2/sd.70076	Vivek Thakur, Shampy Kamboj, Mohd Adil
18	Mapping the terrain of employer branding and HR constucts: a review paper leveraging SPAR-4-SLR technique and TCM framework	Emerald Publishing Limited Scopus  DOI: https://doi.org/10.1108/GK MC-06-2024-0352	Shiwani Choudhary, Dr. Richa Joshi





19	AI capability and environmental sustainability performance: Moderating role of Green Knowlwdge management	ABDC-C Category, SSCI, Scopus, Q1 DOI: https://doi.org/10.1016/j.te chsoc.2025.102870	Sachin Kumar, Vinod Kumar, Ranjan Chaudhuri, Sheshadri Chatterjee, Demetris Vrontis
20	What drives consumers to continually use food delivery apps? The moderating role of coupon proneness	ABDC-B Category, Scopus, Q2 DOI: https://doi.org/10.1108/GK MC-05-2024-0318	Richa Joshi, Prerna Garg, Sachin Kumar, Neeraj Dhiman
21	Employee happiness in the tourism industry: a systematic review, synthesis and future research agenda	Emerald Publishing Limited Scopus  DOI: https://doi.org/10.1108/GK MC-09-2024-0577	Divyansh and Neeraj Dhiman
22	Fostering Managers' Hope: A Multi-analysis Perspective on How Green Initiatives Drive Organizational Performance	Journal of Cleaner Production  DOI: https://doi.org/10.1016/j.jclepro.2025.145165	Mohd Adil, Hasan, S.M.F., Hormoz, A., Sadiq, M., Sekhon, H., Amrollahi, A.
23	Differential power analysis resistant secured S-box circuit using CMOS transmission gate logic	IETE Technical Review, Taylor & Francis Pub, vol. 42, no. 3, pp. 373-383. https://doi.org/10.1080/02 564602.2025.2501951	Paksham Mahajan and Rajeevan Chandel
24	Modeling of Differential Multibit Through-Glass-Via for3D Integration	IETE Journal of Research, Taylor & Francis Publication. DOI: 10.1080/03772063.2025.24 76748 SCIE	Yachana Arora, Ajay Kumar, Rajeevan Chandel and Rohit Dhiman



25	A New High-Performance Hybrid Full-Adder Design for VLSI Applications	Journal of Active and Passive Electronic Devices, Old City Publishing, Inc., vol. 18, no. 3, pp. 169-183. Web of SC, ESCI  DOI: https://doi.org/10.1007/97 8-981-97-7384-8_31	Himanshu Chaurasia and Rajeevan Chandel
26	Cluster Synchronization in Switched Complex Dynamical Networks Using Delayed Pinning Impulsive Control	Iranian Journal of Science and Technology, Transactions of Electrical Engineering (SCI)  DOI: https://doi.org/10.1007/s4 0998-025-00851-0	Y. Chauhan and B Sharma
27	Output feedback-based strategy for cluster synchronization in a diffusively coupled network of nonlinear systems	Nonlinear Dynamics, Springer Publisher (SCI)  DOI: https://doi.org/10.1007/s11 071-025-11501-9	R. K. Ranjan, and B. B. Sharma
28	Synthesis and Study of Pure and Nitrogen-Doped Graphene Quantum Dot Thin Films as a Transparent and Conducting Electrode	Journal of Electronic Materials (Springer SCI) DOI:https://doi.org/10.100 7/s11664-025-12260-4	Adesh Kumar, Seema Azad and Subhash Chand
29	Synthesis of Doped-ZnO Thin Films and Study of Optical and Low-Temperature-Dependent Electrical Properties for Applications as Transparent and Conducting Oxide Nanomaterial	Journal of Electronic Materials (Springer SCI) DOI: https://doi.org/10.1007/s11 664-025-12270-2	Seema Azad, Adesh Kumar and Subhash Chand



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30	Exploring the role of menopausal symptoms and self-compassion in postmenopausal women: Implications for social wellbeing	Health Care for Women International (Scopus)  DOI:https://doi.org/10.108 0/07399332.2025.2519481	Sripha, Sunder Kala Negi
31	Deleuzo-Guattarian De- construction of the Mind to Re- evaluate Undeath	Theoretical Medicine and Bioethics (Scopus)  DOI: https://doi.org/10.1007/s11 017-025-09726-1	Ms Ujjwal Kaur, Dr Preeti Puri
32	Freud's Dream Analysis and Graphic Medicine: Unveiling the Unconscious Dimensions of Infertility in Paula Knight's The Facts of Life (2017)	International Forum of Psychoanalysis (Scopus)	Ms Anubhuti Walia, Dr Preeti Puri
33	Fostering Love for Innovative Sustainable Brands: A Multi- Study, Multi-Method Approach	Journal of Consumer Behaviour DOI: https://doi.org/10.1002/cb. 2472	Hasan, S.M.F., Mohd Adil, Hormoz, A., Abid, M., Gary Mortimer, Amrollahi, A.
34	Negative perceptions, attitudes, and adoption intentions: Unravelling metaverse adoption challenges	Journal of Consumer Behaviour DOI: https://doi.org/10.1002/cb. 70036	Kirmani, D., Ahsan, S, Fateh, S.M., Adil, M. and Park, T.
35	Examining Human Interactions with Smart Retail Technology: A Hybrid SEM- fsQCA Investigation	International Journal of Human–Computer Interaction  DOI: https://doi.org/10.1080/10 447318.2024.2352213	Fazal-e-Hasan; Gary Mortimer; Adapa, S.; Mohd Adil; Balaji; Mohd Sadiq, Ali R. Amrollahi



36	From insight to impact: Unravelling the dynamics of big data-backed growth hacking	Journal of Business Research DOI: https://doi.org/10.1016/j.jb usres.2024.115083	V Kumar, S Kumar, R Chaudhuri, S Chatterjee, A Thrassou, G Sakka
37	Enhancing Organizational Readiness for Generative Al Integration: An empirical investigation	International Journal of Organizational Analysis	V Kumar, Sachin Kumar, P Durana, R Chaudhuri, D Vrontis, S Chatterjee
38	Impact of Industry 4.0 Capabilities and Ambidexterity on Sustainable Performance of Start-Ups: The Moderating Role of Resource Orchestration Capabilities.	International Journal of Innovation Science  DOI: https://doi.org/10.1108/IJIS -02-2025-0091	Kumar, S; Gupta, K; Kumar, V; Rana, S.
39	Exploring the Antecedents and Consequences of Pester Power: The Role of Parental Guidance in Shaping Materialism Among Children	Young Consumers  DOI: https://doi.org/10.1108/YC- 10-2024-2272	Vandana; Kumar, Sachin; Kumar, Vinod
40	The Digital Shift in Finance: Examining FinTech Adoption Through PLS-SEM and fsQCA Analysis	Asia Pacific Journal of Information Systems	Mittal, K., Gupta, S. K., Gupta, K., Kumar, S., Kumar, A.
41	Does Ethical Leadership Foster Employee Green Behavior? The Mediating Role of Psychological Ownership	Indian Journal of Corporate Governance (Sage) DOI: https://doi.org/10.1177/097 46862251314963	Honey and Neeraj
41	The Roles of Cognitive and Affective Factors on Employees' Current and Future Pro-Environmental Behaviors	Global Business and Organizational Excellence	Honey and Neeraj



42	Minecrafter: A Secure and Decentralized Consensus Protocol for Blockchain- enabled Vaccine Supply Chain	Peer to Peer Networking and Applications, Springer DOI:https://doi.org/10.1007 /s12083-025-01980-3	M. Sreenu, Nishant Singh Hada, Chandrashekar Jatoth, Nitin Gupta, Ugo Fiore, Pradip Kumar Sharma
43	Deep Learning-Based Scientific Document Summarization Considering Citation	SN Computer Science, Springer Scopus DOI:https://doi.org/10.1007 /s42979-025-03821-9	Divya Jyoti, Dharmendra Prasad Mahato, Jyoti Srivastava
44	Speech signal's phase information-based Alzheimer's disease detection using deep learning-	International Journal of Speech Technology Scopus	Mohit Kumar, Sushant, · Arun Kumar Yadav
45	Robust classification model for identifying stroke patients utilising a machine learningbased ensemblestacking method	Engineering Research Express. IOP Publishing Ltd ESCI DOI:https://doi.org/10.1088 /2631-8695/adad3a	Mondal, S., Choudhary, P., & Rathee, P.
46	Efficient Workflow Scheduling in Cloud Computing Using Hybrid Algorithm.	IETE Journal of Research, Taylor and Francis SCI	Tewari, A., Goyal, N., Awasthi, L. K., & Priyanka.
47	Enhancing IoT security: A comprehensive exploration of privacy, security measures, and advanced routing solutions.	Computer Networks, Elsevier SCI DOI:https://doi.org/10.1016 /j.comnet.2025.111045	Naik, A. C., Awasthi, L. K., Rathee, P., Sharma, T. P., & Verma, A.
48	ScrutNet: a deep ensemble network for detecting fake news in online text.	Social Network Analysis and Mining, Springer SCI	Verma, A., Priyanka, P., Khan, T., Singh, K., Yesufu, L. O., Ariffin, M. M., & Ahmadian, A.



49	Real-Time Analysis of Sensitive Data Security in Manuscript Transition	Recent Advances in Computer Science and Communications Scopus	Farhat Firoz, Jyoti Srivastava, Fahad A Al-Abbasi, Firoz Anwar
50	Leveraging Sentiment Analysis to Detect Fake Reviews Using Deep Learning	SN Computer Science, Springer DOI:https://doi.org/10.1007/ s42979-025-03792-x	Mohit Kumar, Adarsh Rana, Arun Kumar Yadav, Divakar Yadav
51	Exploring hate speech detection: challenges, resources, current research and future directions	Multimedia Tools and Applications Scopus DOI:https://doi.org/10.1007/ s11042-025-20716-2	Geetanjali, Mohit Kumar
52	Performance of Square Footing Resting on Clay Reinforced with Granular Columns	Transportation Infrastructure Geotechnology ESCI and Scopus	R K Dutta, V N Khatri, A Sharma and V.Gayathri
53	Pullout capacity of plus- shaped multi-plate horizontal anchors in sand	International Journal of Mining and Geo-Engineering Scopus	N Kumar, V Rawat, RK Dutta
54	Slope Stability Analysis of The Dhalli and Battakufer Landslides and Adjacent Slopes Along National Highway 5, Shimla, India.	Indian Geotechnical Journal Scopus https://doi.org/10.1007/s400 98-025-01342-z	Jugraj Singh, Kunal Pathania, Mahesh Thakur, T.N.Singh, Rajeshwar Singh Banshtu
55	Use of GIS for identification and resolution of workspace conflicts in repetitive construction projects.	ASCE Journal of Architecture Engineering, 31(1), 04024048. Scopus	Bansal V. K. and Tomar, A.,





56	Post-Pandemic Public Spaces-A Case Study of Public Parks in Kerala, India.	Journal of Urban Regeneration and Renewal Scopus DOI:https://doi.org/10.6955 4/SOEG5603	Kapoor, N., Sam, N, and Bansal, V. K.
57	Estimation of internal pressure coefficients for a pyramidal roofed low-rise building through CFD simulation	Structures SCI-Q1 DOI: https://doi.org/10.1016/j.istr uc.2025.109771	Jagbir Singh, Amrit Kumar Roy
58	Wind induced vibration and aerodynamic response of triangular shape high-rise building under interference effect	Innovative Infrastructure Solutions ESCI, SCOPUS -Q2 DOI:https://doi.org/10.1016/ j.jobe.2021.103681	H Yadav, AK Roy
59	Analyzing the effect of reduced graphene oxide on the physical, mechanical, and long-term durability performance of rubberized concrete	Fullerenes, Nanotubes and Carbon Nanostructures. Vol 33(9),946-964 SCOPUS/SCI/SCImago(Q2)/P roQuest	Gyanendra Kumar Chaturvedy, Paras Krishna Kothari & Umesh Kumar Pandey
60	A nonlinear stability analysis for magnetized ferrofluid heated from below in the presence of couple stresses for combination of different bounding surfaces	Numerical Heat Transfer Part B: Fundamentals" (U.K.), 86(1), 106–122. SCI DOI: 10.1080/10407790.2023.227 5728	Akanksha Thakur, Sunil Kumar and Reeta Devi
61	Influence of Rotation and Couple Stresses on Convective Stability in Navier- Stokes-Voigt Fluids	Archives of Mechanics 77(3), 305-332 (2025). SCIE DOI:https://doi.org/10.2442 3/aom.4650	Deepak Kumar, Sunil, Reeta Devi



62	Effect of vertical rotation and salt on the stability of a couple stress fluid layer	Chinese Journal of Physics, 96, 245-257 (2025). DOI:https://doi.org/10.1016 /j.cjph.2025.04.022	Shalu Choudhary, Reeta Devi, Amit Mahajan, Sunil, Vishal Chandel, Manoj Sharma, Sarita, Dhananjay Yadav
63	New exploration on controllability of nonlinear Ψ-Caputo fractional Sobolevtype stochastic system with infinite delay via measure of noncompactness	Journal of Mathematical Analysis and Applications (Elsevier) DOI: https://doi.org/10.1016/j.jm aa.2024.129199	O. P. K. Sharma, R. K. Vats and A. Kumar
64	Unraveling the chemistry of PVP in engineering CdS nanoflowers for sunlight- driven photocatalysis	Journal of Materials Chemistry C DOI: https://doi.org/10.1039/D5 TC00917K	Rupam Sharma, J. R., Mathivathani, Sahil Thakur, Sathiyan Govindasamy, Raj Bahadur Singh, Hendrik Christoffel Swart, and Jai Prakash
65	Measuring Micro-Economic Resilience Post Cyclone Disaster in Case of Bhubaneswar	Journal of Harbin Engineering University	Sumanjeel, Amanjeet Kaur, Bhupender Panwar
66	Impact of Urban Developments on the Historic Character of Temple Towns: Insights from Ekamra Kshetra, Odisha, India	Journal of the International Society for the Study of Vernacular Settlements DOI:https://doi.org/10.6127 5/ISVSej-2025-12-02-10	Mukherjee, G., Dutta, S. and Roy, M.

#### 03. Conference Papers Published

Sr. No.	Title of paper	Conference Status [SCI/Scopus/Web of SC]	Authorship [Name of Author/Co-Author(.)]
1	Electric Fields Turn the Tide: Paper-Based Device Harnesses Voltage to Tame Fluid Instabilities	National Symposium on Porous Media Research (NSPMR) 2025	Shubhonil Sarkar, Rohit Kumar, Sania Arora, Rohit Dhiman, Niloy De, Sampad Laha, Suman Chakraborty
2	Fusion of Handcrafted and Deep Convolution Networks Learned Features for Image Retrieval	6th International Conference on Recent Advances in Information Technology (RAIT) (pp. 1-6). IEEE	S. Sharma & A. K. Mallick
3	Visualizing Explanations of DCNN-Based Plant Leaf Disease Detection Using Combined Grad- CAM and LRP	International Conference on Electronics, AI and Computing (EAIC), Jalandhar, India, 2025, pp. 1-6, Doi: https://doi.org/10.1109/EAIC6648 3.2025.11101326	B. Singh and R. P. Sharma
4	Framework for Traffic Sign Detection Based on Selective State Space Model	International Conference on Electronics, AI and Computing (EAIC), Jalandhar, India, 2025, pp. 1-6, Doi: https://doi.org/10.1109/EAIC6648 3.2025.11101327.	Krithika. R, S. Sharma and R. P. Sharma
5	Sustainable Urban Planning and Design Principles for Hill Towns of India: A Review	1st International Conference on Smart Innovations, Engineering Systems & Design (SIESD-2025), Organized by Quantum University, Roorkee	M. Aamir & S. Dutta



# राष्ट्रीय प्रौद्योगिकी संस्थान, हमीरपुर

6	The Significance of Inclusive Design: Bridging Gaps in Accessibility	International Conference on Material Optimization and design Innovation for Sustainable Future (MODI 2025), Chennai	Himanshi and S. Dutta
7	Leveraging Big Data and Artificial Intelligence for Sustainable Urban Planning: Building Smarter Cities for the Future	International Conference on Material Optimization and design Innovation for Sustainable Future (MODI 2025), Chennai	M. Aamir and S. Dutta
8	Efficient FPGA-Based CNN Accelerator with Reduced Latency	International Conference on Power and Intelligent Control Systems (PICS-2025), NIT Hamirpur HP, 4-5 July 2025.  Scopus	Prashant Kumar Bhaiya and Rajeevan Chandel
9	Performance Analysis of Junction-less Tunnel Field Effect Transistor and its Comparative Study with Conventional Technologies	Accepted in International Conference on Power and Intelligent Control Systems (PICS-2025), NIT Hamirpur HP, 4-5 July 2025 Scopus	Shivansh and Rajeevan Chandel
10	Three-Dimensional Multiprocessing Gray Scale Image Encryption	Accepted in IEEE International Conference on Electronics, AI and Computing (EAIC-2025), Dr. B.R. Ambedkar NIT Jalandhar, 5-7 June 2025. IEEE	Saurav Gupta and Rajeevan Chandel
11	FPGA-based Edge Detection for Diabetic Retinopathy Screening	Accepted in IEEE International Conference on Electronics, AI and Computing (EAIC-2025), Dr. B.R. Ambedkar NIT Jalandhar, 5-7 June 2025. IEEE	Kartik Chauhan and Rajeevan Chandel



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12	FPGA Based Design of Approximate Subtractors and Dividers for Image Processing Applications	International Women Researchers in Electronics & Computing WREC-2025 (Springer Conf), Dr. B.R. Ambedkar NIT Jalandhar, 18- 19 April 2025. Scopus	Mohit Jathayar and Rajeevan Chandel
13	Memristor based Combinatorial Logic Circuits – Design and Performance Analysis	International Women Researchers in Electronics & Computing WREC-2025 (Springer Conf), Dr. B.R. Ambedkar NIT Jalandhar, 18- 19 April 2025.	Plaksha Sharma, K. Madhukiran, and Rajeevan Chandel
14	Active Sliding Mode Control Based Synchronization of Hyperchaotic Systems with Circuit Design for Implementation	3rd International Conference on Advances in Information, Telecommunication and Computing (AITC-2025), May 31- June 2, 2025 (Scopus)	Anshuman Sharma & B. B. Sharma
15	Distribution Network Reconfiguration using Cuckoo Search Algorithm	7th International Conference on Energy, Power and Environment (ICEPE 2025) May9-11, Meghalaya Scopus	Ms. Neha Kumari and Dr Sushil Chauhan
16	Prediction of Air Temperature for Defining Heatwaves in Himachal Pradesh using Machine Learning Approach	2nd International Conference on Engineering and Technological Innovation for Sustainable Development (ICETISD-2025) organized by Poornima University in Association with NIT Hamirpur and Hokkaido University, Japan, during 24th to 26th April 2025 at Jaipur.	Apurav Dhiman and Ray Singh Meena



17	Integration of Zinc-Air Batteries with PEM Fuel Cell-Lithium-Ion Battery Based Hybrid Energy System for Sustainable Rail Transport in Himachal Pradesh, India	Scopus	R. Sharma, U. Sarma, and Ram Niwash Mahia
18	Integrated Longitudinal and Lateral Model Predictive Control for a Linear Parameter Varying Model of an Autonomous Vehicle	Scopus	Rithik Bhardwaj, Himesh Handa, Vivek Sharma
19	Redox Mediated Bioelectrochemical Reduction of CO2 into Formic Acid using E. coli	4th International Conference on New Frontiers in Chemical, Energy, and Environmental Engineering-2025 (INCEEE- 2025), held on June 25-26, 2025, at NIT Warangal, India	A Kumar, LM Aeshala, T Palai
20	Digital Connection and Social Disconnection: The Socio-Psychological Paradox of IoT in Society	International Conference on Innovative Computing & Communication (ICICC) 2024 Scopus	Sunder Kala Negi
21	"Trauma Comes Back as a Reaction, Not a Memory": Child Sexual Abuse, Post Traumatic Stress Disorder and Graphic Medicine	International Conference on Graphic Narratives and Comic Studies as World Literature Phenomenon organized by the Department of Indian and World Literatures, School of Literary Studies, The English and Foreign Languages University, (EFLU) Hyderabad from 12th to 14th February	Ms. Manu Chauhan and Dr. Preeti Puri



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# National Institute of technology Hamirpur

22	Comparative Analysis of Katz and Eigen Centrality Metrics on Word Adjacency Networks for the classification of Poetry and Prose	AIP Conference Proceedings: International Conference on Innovations in Computing and Applications (ICICA-24) 22–23 May 2024 Jaipur, India Scopus	Garvita Goel and Kamlesh Dutta
23	Machine Learning-Based Effort Estimation Models for Software Development Projects Related Dataset with Diverse Features	2nd Conference on Computational Intelligence, Communication Technology, and Network (CICTN 2025), 6th-7th February 2025 IEEE Scopus	Vaishali Thakur and Kamlesh Dutta
24	Unsupervised Fabric Defect Detection via Autoencoder Reconstruction and One- Class SVM Analysis	2nd International Conference on Artificial Intelligence, Machine Learning & Intelligent Systems (ICAMS) Scopus	Ramakrishna Miryala and Kamlesh Dutta
25	Cybersecurity for Industrial IoT: a Review on Vulnerabilities and Attacks	8th International Conference on Electronics, Material Engineering and Nano- Technology, IEEE Kolkata Scopus	Reetu Kumari, Sunil Kumar, Amandeep Noliya, Kamlesh Dutta, and Aparna Kumari
26	Randomized SVD-Based Mode Shape Identification for Intelligent Structural Health Monitoring of Steel Truss Bridges	International Conference on Electrical, Electronics & Automation (E2ACON2025) March 8-9, 2025 at Dr B R Ambedkar NIT Jalandhar. Scopus	Kamlesh Kumar, Kamlesh Dutta, Hemant Kumar Vinayak, and Monimoy Saha
27	Performance Analysis of Multimodal API Recommendation with UnixCoder, CodeReviewer and raphCodeBERT	International Conference on Communication, Computer Sciences and Engineering (IC3SE-2025) IEEE Scopus	Aman Kumar, Kamlesh Dutta and Suraj Nishad

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28	Deep Learning Multimodal Fashion Product Recommendation via Transfer Learning of VGG19	5th International Conference on Computer Vision and Robotics (CVR 2025) to be held at National Institute of Technology Goa Scopus	Suraj Nishad, Kamlesh Dutta, Aman Kumar, and Ramakrishna Miryala
29	Exploring Security Threats in FANETs: A Study of Vulnerabilities and Attacks	9th International Conference on Information and Communication Technology for Intelligent Systems ICTIS Scopus	Suman, Sunil Kumar, Dharmender Kumar, Kamlesh Dutta
30	Smart Contract-Enabled Land Registration: Ensuring Secure Buying and Selling with Mutual Authentication	2025 International Conference on Computer, Information and Telecommunication Systems (CITS)	Neeraj Kumar, Mohammad S Obaidat, Rifaqat Ali and Balqies Sadoun
31	Cardiovascular Disease Detection using TabNet: Attentive Interpretable Tabular Learning	5th International Conference on Computer Vision and Robotics (CVR 2025) Scopus	Avinash Kumar, Sangeeta Sharma and Ram Prakash Sharma
32	Analysis of aerodynamic coefficients of a Cable - Stayed Bridge Using Three- Dimensional Computational Fluid Dynamics	International Conference on Innovations and Sustainability in Civil Engineering (ISCESTI 2025), Department of Civil Engineering, National Institute of Technology Patna, May 14- 16, 2025.	Vedant Jamwal, Amrit Kumar Roy



Utkrant

# राष्ट्रीय प्रौद्योगिकी संस्थान, हमीरपुर

33	Analysis of PSC Box Girder Bridge Considering Time Dependent Material Properties	International Conference on Innovations and Sustainability in Civil Engineering (ISCESTI 2025), Department of Civil Engineering, National Institute of Technology Patna, May 14- 16, 2025.	Anurag Kapoor, Amrit Kumar Roy
34	The Use of Himalayan Blue Pine Adsorbent for the Removal of Copper From Water	International Conference on Engineering and Technological Innovation for Sustainable Development (ICETISD-2025)	Akshit Thakur and Dr. Dharmendra
35	Optimized Manganese Removal Using KOH - Activated Pinus roxburghii Biochar	International Conference on Engineering and Technological Innovation for Sustainable Development (ICETISD-2025)	Vishesh Choudhary and Dr. Dharmendra
36	Chromium Removal from Water Using Activated Pine Cone Biochar: A Sustainable Adsorption Approach	International Conference on Engineering and Technological Innovation for Sustainable Development (ICETISD-2025)	Nikhil Kumar and Dr. Dharmendra
37	Green Synthesis and Characterization of KOH - Treated Pinus Roxburghii Biochar: An Efficient and Sustainable Adsorbent	International Conference on Engineering and Technological Innovation for Sustainable Development (ICETISD-2025)	Priya Sharma and Dr. Dharmendra
38	Hybrid Energy Management Strategy for Electric Vehicles: Integrating Zinc-Air Batteries and Supercapacitors for Enhanced Performance and Efficiency	Scopus	A. Kumar, Ram Niwash Mahia, and U. Sarma



# राष्ट्रीय प्रौद्योगिकी संस्थान, हमीरपुर

39	Prioritizing groundwater potential and soil erosion-prone zones using morphometric, hypsometric, and compound factor approaches in the Beas basin, Himachal Pradesh	10th International Groundwater Conference (IGWC-2025) on Groundwater Vision 2047: Towards Water Security under Changing Climate during 05 – 07 March 2025 at the National Institute of Hydrology, Roorkee.	Rajat Kumar and Ray Singh Meena	
40	Smart Contract-Enabled Land Registration: Ensuring Secure Buying and Selling with Mutual Authentication	2025 International Conference on Computer, Information and Telecommunication Systems (CITS)	Neeraj Kumar, Mohammad S Obaidat, Rifaqat Ali and Balqies Sadoun	



#### 04. Book Chapters Published

Sr. No.	Title of the Chapter	Name(s) of author(s) of chapter	Title of the book	Name(s) of the editor(s)	Year of publicati on	Publisher
1	Current Trends and Future Research Possibilities on Child Consumerism: A Bibliometric Analysis (1978- 2024)	Vandana, Vinod Kumar, Sachin Kumar	Review of Management Literature	Dr. Sudhir Rana	2025	Emerald
2	Pervaporation, Chapter 13	T Palai, A Kumar, L M Aeshala	Chemical Engineering Essentials 1: Comprehens ive Chemical Engineeing	RK Arya, GD Verros, JP Davim	2025	Wiley-ISTE
3	Securing IoMT-Based Healthcare System: Issues, Challenges, and Solutions in Artificial Intelligence and Cybersecurity in Healthcare	Ashok Kumar, Rahul Gupta, Sunil Kumar, Kamlesh Dutta and Mukesh Rani	Divivedi Series: Advances in Cyber Security	Ganesh Gopal Devarajan, and Rajiva Ranjan	2025	Scrivener Publishing



#### 05. Books Published

Sr. No.	Title of the Book with ISBN	Name(s) of author(s)	Year of publication	Publisher
1	Research Handbook on Information Systems and Society ISBN- 978 1 0353 1814 8	Arti Jain, John Wang, and Arun Kumar Yadav	2025	Edward Elgar Publishing Limited



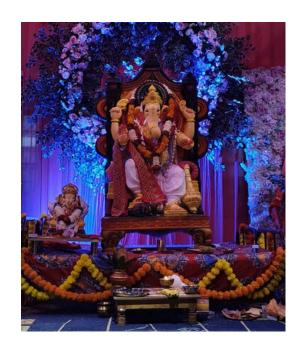


#### **05. GANESHOTSAV 2025**

Ganesh Chaturthi 2025 at Chhatrapati Ganeshotsav Mandal unfolded as a vivid reflection of tradition, community strength, and cultural enthusiasm. From August 27 to September 6, the Mandal transformed the campus into a center of faith, spirited activities, and social initiatives, as documented across event posts and banners visible on the Mandal's official feed.

#### DAY 1: GANESH STHAPANA – AN AUSPICIOUS BEGINNING

The festival commenced with the ceremonial installation of Lord Ganesha's idol, captured in the Mandal's photo posts . The day was marked by a traditional procession, upbeat dhol-tasha rhythms, group folk dances, and the joyous call of "Ganpati Bappa Morya." Residents, students, and staff participated actively, adorned surroundings, floral arches, and aarti ceremonies ensured a sacred atmosphere for all. Notably, the organizers set the tone for environmental responsibility by displaying banners that encouraged sustainable worship through the use of clay idols and green decor.



#### DAILY DEVOTIONAL ACTIVITIES

Every morning and evening, the Mandal hosted collective prayers and aartis, drawing people from across the campus and nearby community. Bhajan sessions and distribution of prasad were highlights, fostering a shared sense of positivity and unity. Special pujas were arranged to include all sections of the community, the children, students, and elders underlining the inclusive spirit of the celebration



#### **ECO-FRIENDLY INITIATIVES**

Staying true to the message sustainability, all festival activities natural emphasized materials minimal plastic usage. The Mandal's visible signage and committed volunteers inspired everyone to respect both tradition and the environment.

#### THE LADDU AUCTION (LADDUPAATA)

A major highlight was the "LADDUPAATA," the campus laddu auction, where the 11 kg laddu, offered at Lord Ganesha's feet for ten days, was enthusiastically bid for by students, faculty, and guests. The funds raised from this special event were directed to support the LITERACY MISSION initiative at NITH, making the auction a focal point for social responsibility on campus

Ganesh Chaturthi 2025 at Chhatrapati Ganeshotsav Mandal was a testament to collective faith, ecoconscious celebration, and the power of art and charity. The culminating Visarjan procession celebrated both tradition and togetherness, leaving an inspiring legacy for years to come, echoed in the smiles and canopies, the artwork, the aartis, and the blessings that pervaded every day.



#### **CULTURAL PERFORMANCES AND STUDENT TALENT**

Evenings featured a vibrant schedule of cultural events such as dance shows, folk and classical music, drama, and poetry recitations. Social media posts show energetic dance groups, musical ensembles, and enthusiastic audiences enjoying the festivities. All performances were coordinated by the student community and various club volunteers, ensuring that the festival was not only devotional but also an artistic showcase.





#### 06. Workshops Organised

# Empowering Women Engineers through Pedagogical Skills (EWPS-2025)

February 21-22, 2025

Under the aegis of the ANRF (SERB)-INAE Women Engineering Program, the institute hosted this impactful workshop aimed at enhancing the teaching and mentoring abilities of women engineers. The sessions covered innovative teaching methodologies, research funding proposal writing, soft skills, and effective implementation of the New Education Policy (NEP 2020), providing participants with a robust toolkit to excel as educators and leaders.

#### **Faculty Updation Program on Mobile Device Security**

February 24-28, 2025

Sponsored by the Ministry of Electronics and Information Technology (MeitY), the Department of Computer Science & Engineering conducted this intensive program. Featuring speakers from IITs, NITs, and industry, it covered essential topics such as mobile threats, forensics, application security, and ethical hacking. Hands-on practice sessions empowered faculty members and researchers with practical knowledge for their teaching and research pursuits.

# Online Short Term Course on Advances in Nanomaterials for Energy and Environment Applications (ANEEA-2025)

March 3-7, 2025

The Department of Chemical Engineering organized this five-day e-STC to educate young researchers and students on the synthesis, engineering, and characterization of nanomaterials. Participants explored recent interdisciplinary developments in nanomaterials, with applications spanning energy, environment, and biomedical engineering.

#### Research Trends – Thermal Energy and Management (RT-TEM-2025)

March 17-21, 2025

Organized by the Mechanical Engineering Department, this online short-term course addressed critical challenges and opportunities within the thermal energy sector. Focused on innovative approaches for sustainable energy solutions, it catered to Master's and Ph.D. students, scholars, and faculty keen on pursuing careers in thermal energy and management.



#### **07. Conferences**

# Online Faculty Development Programme on Transforming Healthcare in India through Medical Technology

May 26-30, 2025

The Department of Electronics and Communication Engineering hosted this five-day program to explore innovative medical technologies addressing accessibility, affordability, and quality in India's healthcare system. Academicians, healthcare professionals, and technologists discussed strategies leveraging medical devices, telemedicine, and digital health solutions for universal health coverage.

# 2nd International Conference on 'Molecules to Materials: Chemistry for Sustainable Future' (M2ChemSF-2025)

September 4-6, 2025

The institute proudly hosted this landmark conference, providing a platform for researchers, academicians, and students to discuss the latest advancements in chemistry for a sustainable future. The event featured keynote addresses, book releases, technical paper presentations, and poster sessions, fostering a vibrant environment for knowledge exchange and collaboration.

#### **Special Initiatives**

#### **Initiation into Mathematics (InitMath)**

September 15-20, 2025

Conducted by the Department of Mathematics & Scientific Computing under the aegis of MTTS Trust and funded by the National Board for Higher Mathematics (NBHM), this program aimed to inspire bright undergraduate students with the excitement of mathematics. Through courses in Linear Algebra, Real Analysis, and Foundations, participants explored mathematical concepts independently, following the unique MTTS teaching methodology that promotes discovery and critical thinking





#### 08. NITH IN NEWS



पंजाब TUE,16 SEPTEMBER 2025 केत्राही EDITION: HAMIRPUR KESARI, PAGE NO. 3

#### एन.आई.टी. में मोबाइल डिवाइस सुरक्षा पर १ सप्ताह का पाठ्यक्रम शुरू

हमीरपुर, 15 सितम्बर (राजीव): एन.आई.टी. हमीरपर के कम्प्यूटर विज्ञान व अभियंत्रण विभाग में सोमवार को मोबाइल डिवाइस सरक्षा पर 1 सप्ताह का लघु अवधि पाठयक्रम का शुभारंभ हुआ। यह कार्यक्रम आई.एस.ई.ए. फेज-3 परियोजना के अंतर्गत आयोजित किया जा रहा है. जिसे इलैक्ट्रॉनिक्स व सूचना प्रौद्योगिकी मंत्रालय द्वारा प्रायोजित किया गया है।

इस पहल का नेतृत्व पाठ्यक्रम संयोजक व परियोजना के मुख्य अन्वेषक डा. टी.पी. शर्मा व सह संयोजक डा. नवीन चौहान कर रहे हैं, जबिक समन्वयन डा. राजीव कुमार व डा. नितिन गुप्ता कर रहे हैं। इस अवसर पर मुख्यातिथि प्रो. राकेश सहगल ने उद्घाटन सत्र की अध्यक्षता की और मोबाइल उपकरणों की सरक्षा व सरक्षित डिजिटल पारिस्थितिकी तंत्र बनाने की आवश्यकता पर बल दिया।

वहीं विशिष्ट अतिथि रजिस्ट्रार डा. अर्चना



हमीरपुर : एन.आई.टी. हमीरपुर में आयोजित मोबाइल डिवाइस सुरक्षा पर 1 सप्ताह का लघु अवधि पाठ्यक्रम के शुभारंभ अवसर पर रजिस्ट्रार डा. अर्चना ननोटी व अन्य सदस्य सामृहिक चित्र में।(राजीव)

ननोटी ने विभाग के प्रयासों की सराहना की।

इस अवसर पर एन.आई.टी. के निदेशक प्रो. सुर्यवंशी ने संयोजकों व सी.एस.ई. विभाग को वधाई देते हुए कहा कि आई.एस.ई.ए. फेज-3 परियोजना के अंतर्गत ऐसे कार्यक्रम साइबर सुरक्षा शिक्षा व जागरूकता को मजबूत करने की दिशा में महत्वपूर्ण कदम हैं और डिजिटल इंडिया के विजन से पूरी तरह मेल खाते हैं। इस दौरान डा.

शर्मा ने परियोजना की गतिविधियों का परिचय देते हुए देश में साइबर सुरक्षा प्रशिक्षित मानव संसाधन तैयार करने की आवश्यकता पर बल दिया।

बता दें कि इस पाठयक्रम में लगभग 75 प्रतिभागी हाईब्रिड मोड में भाग ले रहे हैं। इस पाठयक्रम में मोबाइल सुरक्षा खतरों, समाधान तकनीकों व प्रायोगिक प्रशिक्षण पर विशेष सत्र आयोजित किए जाएंगे।

The Department of Computer Science and Engineering hosted a one-week program on Mobile Device Security. It was coordinated by Dr. T.P Sharma, Dr. Naveen Chauhan, Dr. Rajeev Kumar and Dr. Nitin Gupta. The aim of the program was to train students to be skilled human resources in the field of mobile security, threat detection, data protection and safe usage practices.

60 Research papers were read out at the 2 day International Conference at NIT Hamirpur, from 4th to 6th September. Following the recommendations of the NEP 2020, the conference promised to open new avenues for Inter-disciplinary research. Chief Guest, Professor Rajeev Ahuja, Director of IIT Ropar, delivered a keynote address on the importance of sustainable materials the for development of the nation. The inspired students conference and participants to open new start-ups based on the research presented.

#### एनआईटी हमीरपुर में अंतरराष्ट्रीय सम्मेलन शुरू दो दिन तक सभागार में चलने वाले आयोजन में पढे जाएंगे 60 शोधपत्र

संवाद न्यूज एजेंसी

हमीरपुर। एनआईटी हमीरपुर में वीरवार को अंतरराष्ट्रीय सम्मेलन शुरू हुआ। छह सितंबर तक चलने वाले सम्मेलन में देश-विदेश के लगभग 60 प्रतिभागी मौखिक और पोस्टर प्रस्तुति के रूप में अपना शोध प्रस्तृत करेंगे।

सम्मेलन के उद्घाटन के दौरान एनआईटी हमीरपुर के निदेशक प्रो. हीरालाल मुरलीधर सूर्यवंशी ने रसायन विज्ञान विभाग के प्रमुख डॉ. केएस घोष और सम्मेलन के आयोजन अध्यक्ष एवं सचिव जय प्रकाश और डॉ. राज कौशल को बधाई दी।

उन्होंने कहा कि यह सम्मेलन नई शिक्षा नीति (एनईपी), 2020 की सिफारिशों के अनुसार विषय अनुसंधान के लिए नए रास्ते खोलेगा। समारोह के मुख्य अतिथि, आईआईटी रोपड़ के निदेशक प्रो. राजीव आहूजा



एनआईटी हमीरपुर में सम्मेलन के शुभारंभ पर मुख्यातिथि एवं अन्य। स्रोत : संस्य

रहे। उन्होंने देश के विकास के लिए टिकाऊ सामग्रियों के महत्व पर प्रकाश डाला। यह सम्मेलन अनुवाद संबंधी शोध में मदद करेगा और शोधकर्ताओं को नए स्टार्ट-अप के लिए प्रेरित करेगा जो देश के विकास में मदद करेंगे कार्यक्रम के अतिथि प्रो. हेंडिक स्वार्ट और प्रो. कूस टेरब्लांस, जो दक्षिण अफ्रीका के फ्री स्टेट विश्वविद्यालय से व्यक्तिगत रूप से एनआईटी हमीरपुर का दौरा कर रहे हैं।

सहयोगात्मक अनुसंधान संबंध बनाने में मदद करेगा। सम्मेलन में आईआईटी इंदौर, सीएसआईआर-आईएचबीटी, पालमपुर, वीएनआईटी नागपुर, एनआईटी श्रीनगर, एनआईटी दुर्गापुर, पंजाब विश्वविद्यालय, पंजाब केंद्रीय विश्वविद्यालय और कई अन्य राष्ट्रीय और अंतरराष्ट्रीय संस्थानों और विश्वविद्यालयों के संकाय सदस्य शामिल हुए। हिमाचल प्रदेश विश्वविद्यालय शिमला के कुलपति यह सम्मेलन संकाय सदस्यों और प्रो. महावीर सिंह भी सम्मेलन में वैज्ञानिकों और युवा छात्रों के बीच अपना पूर्ण मुख्य व्याख्यान देंगे।



NIT Hamirpur received a major research project from DST, Government of India, on a technology-based on a magnetic field that enables wireless power transfer to electric vehicles. The project aims to deliver a system for static charging (when the vehicle is parked) and dynamic charging (when the vehicle is in motion). The project received a grant of Rs. 2.15 crores that will last for three years.

देश के छह एनआईटी और आईआईटी मिलकर करेंगे शोध, एनआईटी हमीरपुर में हाई पावर ईवी चार्जर होगा विकसित

# बिना तार और प्लग के चार्ज होंगे अब इत

कमलेश रतन भारद्वाज

हमीरपर। अब बिना तार-प्लग के वायरलेस चार्जर सिस्टम से इलेक्ट्रिक वाहन चार्ज हो सकेंगे।

केंद्र सरकार के अनुसंधान राष्ट्रीय शोध फाउंडेशन (एएनआरएफ) की ओर से शुरू किए गए मिशन फॉर हाई इंपेक्ट एरिया कार्यक्रम के अंतर्गत इलेक्ट्रिक वाहन

चार्जिंग तकनीक पर आधारित उच्च स्तरीय अनुसंधान परियोजना को मंज्री दी गई है। इस परियोजना की बेहद कम समय में चार्ज हो सकेंगे इलेक्ट्रिक व्हीकल | एनआईटी हमीरपुर में इसके लिए तीन वर्ष के भीतर 30 किलोबाट का

लैब मॉडल प्रोटोटाइप तैयार किया जाएगा। प्रोजेक्ट 25 किलोवाट से अधिक क्षमता वाले ग्रिड-फ्रेंडली कंडक्टिव हाई पावर ईवी चार्जर के विकास पर केंद्रित है। यह बस,

ट्रक और बड़े वाहनों को बेहद कम समय में चार्ज करने में सक्षम होगा। यह सौर ऊर्जा से संचालित होगा।

कुल लागत 18.36 करोड रूपये होगी। ने इस एएनआरएफ

प्रोजेक्ट को डेक्लपमेंट ऑफ हाई पावर ग्रिड फ्रेंडली एंड स्टैटिक वायरलेस चार्जर फॉर ई-व्हीकल नाम भौजूद बैटरी इस मैग्नेटिक फील्ड के

दिया है। बिना प्लग वायरलेस सिस्टम को विकसित करने के लिए हाई कंटडिटव क्वाइल के सेटअप से एक तरह मैग्नेटिक फील्ड तैयार की जाएगी, जिससे इलेक्ट्रिक व्हीकल में संपर्क में आने से ऑटो चार्ज होना शुरू हो जाएगी। विदेशों में इस तरह की तकनीक वर्तमान में है, लेकिन भारत में अभी तक इस क्षेत्र में व्यापक स्तर पर कार्य किया जाना बाकी है। बहसंस्थानीय अनुसंधान परियोजना आईआईटी खड़गपुर के नेतृत्व में चलाई जाएगी, जिसमें कुल छह प्रतिष्ठित संस्थान शामिल हैं।

एनआईटी हमीरपुर इस परियोजना का एक सहयोगी संस्थान है। संस्थान के इलेक्ट्रिकल इंजीनियरिंग विभाग के तीन फैकल्टी डॉ. आरके जरियाल, डॉ. जीवनजोत सिंह, डॉ. उपासना

शर्मा प्रमुख अन्वेषक के रूप में इस शोध को करेंगे। एनआईटी में ग्रिड-फ्रेंडली कंडिक्टब हाई पावर ईवी चार्जर विकसित किया जाएगा। प्रोजेक्ट पर 2.15 करोड खर्च होंगे। इस प्रोजेक्ट को केंद्र सरकार के साथ छह बड़े उद्योग भी स्पांसर कर रहे हैं। अक्तूबर में एएनआरएफ ने विभिन्न संस्थानों के विशेषज्ञों और उद्यमियों को सेमिनार में बुलाकर इस विषय पर विचार मांगे थे। एनआईटी हमीरपुर के निदेशक एचएम सुर्यवंशी, रजिस्ट्रार अर्चना नानोटी ने इस उपलब्धि के लिए विशेषज्ञों को बधाई दी है। संवद

To meet increasing demands of quality educators in the field of science and mathematics, NIT Hamirpur initiated a five year integrated M.Sc. program in Science. This course will be run in collaboration with various Central and State Universities and Scientific Organizations.



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हमीरपुर, 13 मई (राजीव): राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपर में मंगलबार को जटिल जैविक तंत्र की गतिशोलता को समझने के लिए वैव संगत एनालॉग्स के दिजाइन और विकास शीर्षक पर आधारित एक सप्ताह तक चलने वाले जान पाठपक्रम का उदघाटन किया गया।

यह पाठ्यक्रम भारत सरकार के शेशा मंत्रालय की प्रतिच्छित वैश्विक र्रोक्षणिक नैटवर्क पहल ज्ञान पाठपक्रम के तत्वावधान में 15 मई तक वर्चुअल मोड में आयोजित केवा जा रहा है, जिसका उद्देश्य भारतीय उच्च शिक्षा संस्थानों के साथ सहयोग को खड़ावा देकर वैज्ञानिकीं, शक्षाविदों और उद्यमियों के वैश्विक प्रतिभा पूल का दोहन करना है। यह भारत के शैक्षणिक पारिस्थितिकी तंत्र

को समृद्ध करने, शोध क्षमताओं को आगे बढ़ाने और वैश्विक दृष्टिकीण को कक्षा में लाने के लिए एक शक्तिशाली मंच के रूप में कार्य करता है।

इस अवसर पर डा. पमिता अवस्थी ने कहा कि एन.आई.टी. हमीरपुर अपनी स्थापना के बाद से इस पहल में एक सक्रिय भागीदार रहा है। उन्होंने बताया कि इस कार्यक्रम में 2 प्रसिद्ध अंतर्राष्ट्रीय विशेषज्ञों फ्रांस विश्वविद्यालय से डा. एलिसा, स्ट्रासबर्ग व जैव प्रौद्योगिकी विभाग आई.आई.टी. रुडकी से प्रो. रितु वर्षवाल उपस्थित रहेंगे।

अवस्थी ने बताया कि इस पाठपक्रम के लिए कुल 56 प्रतिभागियों ने पंजीकरण करवाया है, जिनमें आई.आई.टी., एन.आई.टी.,

केंद्रीय और राज्य विश्वविद्यालयों जैसे प्रमुख संस्थानों के संकाय और छात्र शामिल हैं।

इस अवसर पर राष्ट्रीय ग्रीद्योगिकी संस्थान हमीरपुर के निदेशक प्रो. एच.एम. सूर्यवंशी ने ज्ञान योजना के तहत इस राष्ट्रीय स्तर के शैक्षणिक कार्वक्रम के सफल आयोजन के लिए समन्वयक डा. पमिता अवस्थी और डा. जगन्नाथ को क्याई दी और प्रतिभागियों का हार्दिक स्वागत भी किया। वहीं संस्थान की रजिस्टार डा. अर्चना नैनोटी ने रसायन विज्ञान विभाग की पहल और उत्कृष्टत के लिए निरंतर प्रतिबद्धता की सरहना की, जबकि रसायन विज्ञान विभाग के विभागाध्यक्ष ने विभाग की शैक्षणिक और शोध गतिविधियों का अवलोकन प्रदान किया।



हमीरपुर : राष्ट्रीय प्रौद्योगिकी संस्थान हमीरपुर में आयोजित ज्ञान पाठ्यक्रम के उट्टबाटन अवसर पर निदेशक थे. एच.एम. सुर्पवंशी व अन्य सदस्य सामृतिक चित्र में। (एकंव)

पादक अविल सोवी की मात राजेंद्र सोवी की रस्म किरया 13 नई की

हिमाचल मीडिया ग्रुप के प्रधान संपादक अनिल सोनी की माता राजेंद्रा सोनी की रस्म किरवा रविवार 18 मई

धर्मशाला, 13 मई (ब्यूरो): दिव्य हुआ था। उनके निधन पर क्षेत्र की विभिन्न सामाजिक संस्थाओं के प्रतिनिधियों व राजनीतिक क्षेत्र से जुड़े लोगों ने शोक व्यक्त किया है।

रस्म किरया उनके राजेंद्रा सोनी का निधन 6 मई को अप्पर सकोह में होगी।





IIRF Engineering Survey 2025 placed NIT Hamirpur at 37th position. This achievement was attributed to the institution's reforms. key student-faculty improved research ratio, enhanced output, and high graduate placements (up to ₹50 lakh CTC), solidifying its position as a leading technical hub in the The achievement further boosts Himachal's educational prestige, with neighbouring IIT Mandi placed at 20th position.

#### NIT Hamirpur Shines with National Rank 37: IIRF Engineering Survey

Hamispur In a significant achievement for Himachal Pradesh's higher education landscape, the National Institute of Technology (NIT) Hamirpur has been maked 97th among the top engineering institutions in the country, according to the Indian Institutional Ranking Frame-work (IIRF) 2025 survey. This national recognition places the institute firmly among India's leading technical education hubs and highlights its growing stature on the academic map.

The latest ranking is especially noteworthy as NIT Hamirpur surpassed sever-al reputed engineering colleges located in metropolitan areas. In a further boost to the state's educational prestige, neighboring HT Mandi secured the 20th position.



underscoring Himachal Pradesh's rising prominence in the field of technical edu-

The HRF survey, known for its rigorous evaluation methodology, assessed institutions on a range of parameters including graduate outcomes, research output, teaching quality, industry alignment, and student support systems, NET Hamirpur performed strongly across these metrics, with particu-

lar emphasis on employability, higher education placements, innovative teaching practices, and a future-ready curriculum.

Registrar Dr. Archana Nanoti attributed the achievement to a collective effort. This recognition is a reflection of the visionary leadership of our Director, the unwavering dedication of our faculty, the brilliance of our students, and the steadfast support of our staff,"

Under Dr. Nanoti's administrative leadership, the institute has implemented key reforms that contributed to its upward trajectory. These include an improved student-faculty ratio, modernized eampus infrastruo ture, and expanded part-nerships with industry, all of which have significantly enhanced placement out-

The institute's perform-ance in the IIRF rankings not only marks a milestone for NIT Hamirpur but also reinforces the potential of institutions located beyond traditional urban education. hubs. As the hill state continues to strengthen its aca demic ecosystem, NIT Hamirpur's success serves as a beacon for aspiring students and educators across the region.



2025-07-22 हिमाचल (1)

उपलब्धि • एनआईटी हमीरपुर का शोध अमेरिका से हुआ पेटेंट

# वोल्टेज बढ़ाने व सिग्नल पकड़ने में मदद करेगा 'हाई पावर ट्रांजिस्टर', रक्षा क्षेत्र में होगा उपयोगी

अश्वनी वालिया हमीरपुर

प्रदेश के एकमात्र राष्ट्रीय प्रौद्योगिकी संस्थान (एनआईटी) हमीरपुर ने शोध के क्षेत्र में बहुत बड़ी उपलब्धि हासिल की है। इस संस्थान के इलेक्ट्रॉनिक्स एवं संचार अभियंत्रण विभाग के डॉ. गार्गी खन्ना, डॉ. प्रिया कौशल, और अरिहंत राज सिद्धार्थ के हाई पावर डॉ. प्रिया कौरात। ट्रांजिस्टर को अमेरिका से पेटेंट मिल गया है। खास डिजाइन के यह उपकरण रक्षा क्षेत्र के वोल्टेज बढाने और सिग्नल पकड़ने में मददगार साबित होगा। • शेष पेज ७ पर



डॉ. गार्गी खन्ना ने भास्कर को बताया कि हाई पावर ट्रांजिस्टर वोल्टेज बढाने और सिग्नल पकड़ने में मदद करेगा। इसमें सिलिकॉन कार्बाइड का प्रयोग किया गया है। इसमें कई परतें हैं, जिनमें एक खास 2 डी सामग्री एमओएसओ टू भी शामिल है। इस खास डिजाइन से ट्रांजिस्टर के अंदर इलेक्ट्रॉनों की गति तेज हो जाती है और वह ज्यादा अच्छी तरह से काम करता है। यह तकनीक खासतौर पर उन इलेक्ट्रॉनिक सर्किटों के लिए उपयोगी है जो बहुत ताकत और तेजी से काम करते हैं। इलेक्टिक गाडियों के पावर सिस्टम, ऑटोमोबाइल रडार और रक्षा क्षेत्र के हाई-स्पीड कम्युनिकेशन के

लिए यह उपयोगी सिद्ध होगा।

जानें कैसे कार्य करेगा हाई पावर टांजिस्टर

NIT Hamirpur achieved significant breakthrough in the technical field. A high-power transistor developed by Dr. Gargi Khanna. Dr. Priya Kaushal, and Arihant Siddharth from the institute's Electronics and Communication Engineering Department have received a US patent. This special design is expected to be instrumental boosting voltage catching signals in the highfrequency range. Its utility is anticipated in the defense sector.



In the prestigious NIRF Rankings 2025, the institute rose 30 positions, successfully breaking into the top 100 engineering institutions by securing the 97th rank. This landmark milestone was accompanied by its engineering programs climbing significantly in major national evaluations.

This ranking breakthrough is further supported by the institute's robust research and development portfolio. NIT Hamirpur was also placed at 37th rank in the IIRF 2025 Survey, reinforcing its high academic standing.

#### From 127th to 97th: NIT Hamirpur now among top 100 engineering institutions



by Swapnil Chauhan · September 5, 2025













The National Institute of Technology (NIT) Hamirpur has made a significant comeback in the National Institutional Ranking Framework (NIRF) 2025, returning to the top 100 institutions in the engineering category. The institute improved by 30 positions, rising from 127th rank in 2024 to 97th this year. संस्थान पत्निका

# उत्क्रात

संस्करण 15 अंक 3

"हार तो वो सबक है, जो आपको बेहतर होने का मौका देगी"

HIS HER THE THE PARTY OF THE PA

DR. NEETU KAPOOR

FACULTY INCHARGE

**CHINMAY SHARMA** 

**EDITOR IN CHIEF** 

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