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NEWSLETTER DEPARTMENT OF ELECTRICAL ENGINEERING

Indian Institute of Technology Kanpur



www.iitk.ac.in/ee



Prof. Yogesh Singh Chauhan

Head EE IIT, Kanpur

Message from the Head of the Department

As the head of the department, I am thrilled to unveil the first edition of the newsletter for the year 2024 and look forward to continuing this trend in the future. Through these newsletters, I would like to celebrate our department's students, alumni, and faculty accomplishments and all the recent major developments. With all hope, I would like to serve this newsletter to bridge the communication gap between our alumni, students, faculty, and well-wishers from the industry/academia.

Since its inception in 1960, the Department of Electrical Engineering has been one of the pioneers in the field of engineering. Standing strong over the past six decades, today it expands wide through Advanced Centre for Electronic Systems (ACES), Western Lab (WL), Western Lab Extension (WLE), and Engineering Science Building 2 (ESB2), all testament to our commitment to cutting-edge research and development. The department encompasses a broad range of disciplines, including traditional fields like RF and microwave engineering, power engineering, control systems, signal processing, microelectronics, and VLSI, as well as modern areas such as artificial intelligence, machine learning, neuromorphic computing, hardware security, and future wireless communication networks like 5G, 6G, and mmWave. In the past year, we welcomed 5 new faculty members to our department; their diversified research interests will lead to a vibrant academic environment where intellectual curiosity amongst the students will be encouraged to reach new heights.

In this edition, we have collected all the achievements and accolades brought to the department in the past year, along with research developments and publications. In the year 2024, our department has been granted 34 patents, whereas 13 patents were filed. 25 students and 18 faculty members were awarded for their at-par contribution in the respective field. 133 journals and book chapters were published, and 11 short courses were introduced this year. 54 research and consultancy projects were initiated by the department's faculty under their research and development initiative, thus benefitting society. In addition to this, 17 short-term courses/workshops and conferences were conducted by the faculties to expand their reach and serve as a knowledge-sharing platform.

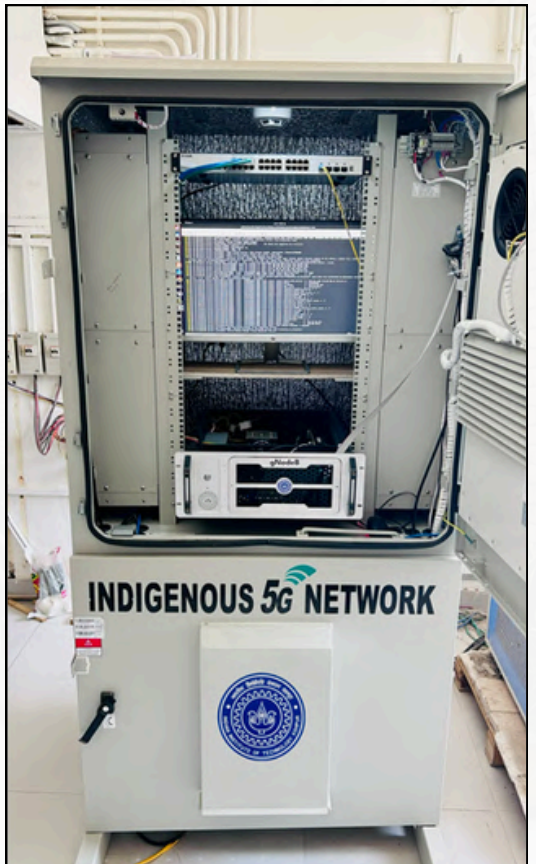
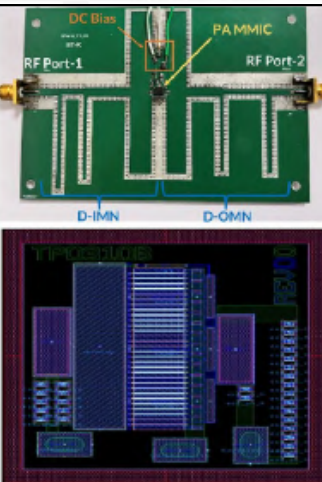
My heartiest congratulations to all the achievers of 2024, and best wishes to all the readers for 2025!



TECHNOLOGIES DEVELOPED



IIT Kanpur unveils "Anālākṣhya Metamaterial Surface Cloaking System," revolutionizing stealth technology against SAR imaging.



A 5G indigenous network complete hardware and software has been designed in-house from scratch, and based on our own intellectual property. This network has been installed in IITK campus and has been transferred to the TATA-Tejas networks and CDoT.



Prof. Debdatta Ray



Prof. Ebin Cherian Mathew

Homepage: <https://home.iitk.ac.in/~ebincm/>



**Prof. Koteswar Rao
Jerripothula**

Homepage: <https://sites.google.com/site/koteswarraojerripothula/>



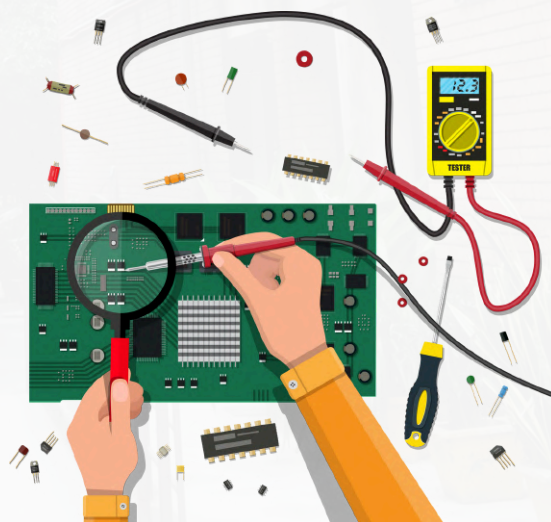
Prof. Utsab Kundu

Homepage: <https://sites.google.com/view/utsab-homepage/>



Prof. Washim Uddin Mondal

Homepage: <https://home.iitk.ac.in/~wmondal>





S.No.	Title of Patent	Inventors	Status
1	A Human-hand Detection System, Apparatus and a Method Thereof	Dr. K. S. Venkatesh (EE), Garima Jain	Granted
2	An Apparatus for Shadow-mask Deposition and Method Thereof	Anukul Prasad Parhi (Research Scholar, Physics), Prof. S.Sundar Kumar Iyer, (EE)	Granted
3	Apparatus and Method for Real Time Foreground Extraction	Saumik Bhattacharya (Student EE,), Megha Nahwal (Student, EE), Dr. K.S.Venkatesh (EE)	Granted
4	Hybrid Controlled Arrangement to Achieve Linear Electrical to Acoustic Conversion and Method Thereof	Dr. P.Sensarma, (EE) & Dr. Sridhar Joshi (PhD Student, EE)	Granted
5	A Single-phase Grid Connected Transformerless Photovoltaic Inverter	Dr. Sandeep Anand (EE), Mr.Anup Anurag (Research Associate, EE), Mr.Nachiketa Deshmukh (Research Associate, EE), Mr.Maguluri Avinash (M.Tech Student, EE)	Granted
6	RF Gas Sensor for the Detection of Hazardous Gases in the Environment	Dr. Md Jaleel Akhtar (EE), Dr. Kamal K Kar (ME), Mr.Prakrati Azad (Student, MSP), Mr.Sandeep Kumar Singh (PhD Student, MSP)	Granted
7	Metamaterial Inspired Planar RF Sensor for Simultaneous Measurement of Permittivity and Permeability of Magneto-dielectric Samples and Method Thereof	Dr. Md. Jaleel Akhtar (EE), Mr. Md. Shafi KT (M.Tech Student, EE), Mr. Abhishek Kumar Jha (PhD Student, EE), Mr. Nilesh Kumar Tiwari (PhD Student, EE)	Granted
8	Method and System for Dehazing Videos and Images in Real-time	Mr. Himanshu Kumar (Student, EE), Mr. Saumik Bhattacharya (Student, EE), Dr. Sumana Gupta (EE), Dr. K. S. Venkatesh (EE)	Granted
9	Low Complexity Detection in Multiple Input Multiple Output Systems and Adetector Thereof	Dr. A.K. Chaturvedi (EE), Mr. Abhay Kumar Sah (Student, EE)	Granted



S.No.	Title of Patent	Inventors	Status
10	A Method of Manufacturing an Organic Semiconductor Film having Improved Conductivity	Dr. S.S.K. Iyer (EE), Mr. Anirban Bagui (PhD Student, Physics)	Granted
11	A Sensor System and Method Thereof	Dr. Baquer Mazhari (EE), Mr. Biswanath Panda (REO, Samtel), Mr. Suraj Malik (Samtel)	Granted
12	Potential Well Based FDSOI MOSFET (PWFSOI MOSFET)	Dr. S. Qureshi (EE), Ms. Shruti Mehrotra (PhD Student, EE)	Granted
13	A Hybrid Large Area Display Device	Mr. Bishwanath Panda (REO, SCDT), Mr. Muralidharan Balakrishnan (Sr. REO, SCDT), Dr. Monica Katiyar (MSE), Dr. Mazhari Baquer (EE)	Granted
14	Electron Transport Layer Based on Doped ZnO Layer and Method Thereof	Mr. Dharendra Kumar Chaudhary (Proj. Scientist, NCFlexi), Dr. S S K Iyer (EE)	Granted
15	An Automatic Page Turning Device and Method Thereof	Dr. Ramprasad Potluri (EE), Mr. Amit Katheria (EE)	Granted
16	Super Buck for High Voltage Step Down Applications	Dr. P. Sensarma (EE), Mr. Vignesh Pogaku (Student, EE)	Granted
17	Current-driven Active Matrix Sensor Array and Method to Measure Sensor Resistance in the Same	Dr. Baquer Mazhari (EE), Mr. Nadeem Firoz (Student, EE)	Granted
18	A Method for Parameter Estimator of Untransposed Distribution Cable and System Thereof	Mr. Rajarshi Dutta (PhD Student, EE), Dr. Saikat Chakrabarti (EE), Dr. Ankush Sharma (EE)	Granted



S.No.	Title of Patent	Inventors	Status
19	A Portable Handheld Infrared Thermometer and Its Method of Operation	Dr. Baquer Mazhari (EE), Mr. Biswanath Panda (REO, SCDT & NCFlexE), Mr. Suraj Mallik (Proj. Engg., SCDT & NCFlexE), Mr. Vignesh Tirumalai Govindasamy (Proj. Engg., SCDT & NCFlexE)	Granted
20	Virtual Aperture Mask-lens Assembly for Coded Aperture Technique	Ms. Shweta Parihar (Student, EE), Dr. K. S. Venkatesh (EE)	Granted
21	System and Method for Music Training	Dr. Vipul Arora (EE)	Granted
22	Receiver Unit for Wireless Charging System	Mr. Balaji Sriram (PhD Student, EE), Ms. Pratyasha Das (PhD Student, EE), Mr. Ayush Trivedi (MS. Student, EE), Dr. Nandini Gupta (EE), Dr. Suvendu Samanta (EE), Mr. Vidya Sagar Devendran (Universiti Putra Malaysia), Dr. Sharmeela Chenniappan (CEG, Anna University, India), Dr. Sanjeevikumar Padmanaban (Aarhus University, Denmark)	Granted
23	System and Method for Procedures and Signaling Exchanges for Network-controlled Repeaters	Mr. Shyam Vijay Gadhai (Project Executive Officer, EE), Mr. Jyotirmay Saini (Senior Research Engineer, EE), Dr. Rohit Budhiraja (EE), Mr. Deepak Padmanabhan Maya (CEWiT, IIT Madras Research Park), Ms. Priyanka Dey (CEWiT, IIT Madras Research Park)	Granted
24	Face Image Generation System And Method For Generating Three-Dimensional Face Images Of Individuals	Ms. Hitika Tiwari (Student, EE), Dr. K. S. Venkatesh (EE)	Granted
25	Control Information and Signalling Methods for Network-controlled Repeaters	Mr. Shyam Vijay Gadhai (Project Executive Officer, EE), Mr. Jyotirmay Saini (Senior Research Engineer, EE), Dr. Rohit Budhiraja (EE), Mr. Deepak Padmanabhan Maya (CEWiT, IIT Madras Research Park), Ms. Priyanka Dey (CEWiT, IIT Madras Research Park)	Granted
26	Smart Electric Meter Device and Method for Enabling Meter Data Communication	Mr. Manish Kumar Gupta (Student, EE), Dr. Ankush Sharma (EE)	Granted



PATENTS IN 2024

S.No.	Title of Patent	Inventors	Status
27	Brushless DC (BLDC) Motor Design	Ms. Abirami S. (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Jay Harkishanbhai Prajapati (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Kartikeya Dixit (Post-Doctoral Fellow, ME), Mr. Mandeep Singh Rana (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Rushit Mansukhbhai Bhandari (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Ms. Sunita Mehta (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Ms. Supriya Das (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Harindra Prasad Sharma (Project Technical Officer, ME), Mr. Manoj Sharma (Technical Superintendent,	Granted
28	Pencil-Ruler	Dr. Aman Singh Solanki (B.Tech Student, BSBE), Ms. Saumya Saini (B.Tech Student, EE), Ms. Kalpana Nishad (M.Des, Design), Mr. Aman Rawat (M.Des, Design), Mr. Yogesh Kumar Singh Solanki (M.Des, Design), Dr. Nachiketa Tiwari (ME & Design)	Granted
29	Method and System of Adjusting Display Luminescence Using Artificial Intelligence	Dr. Yatindra Nath Singh (EE), Ms. Varsha Lohani (Senior Project Engineer, EE), Mr. Paresh Upadhyay (Student, EE)	Granted
30	VAD Demonstrator System with Mock Circulatory Loop for Testing, Demonstrating Functions and Performance of VAD	Ms. Abirami S. (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Jay Harkishanbhai Prajapati (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Kartikeya Dixit (Post-Doctoral Fellow, ME), Mr. Mandeep Singh Rana (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Rushit Mansukhbhai Bhandari (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Ms. Sunita Mehta (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Ms. Supriya Das (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Vikas Kannojiya (Project Executive Officer, Gangwal School of Medical Sciences and Technology), Mr. Harindra Prasad Sharma (Project Technical Officer, ME), Mr. Manoj Sharma (Technical Superintendent, ME), Mr. Phool Chand Gond (Project Technical Officer, ME), Dr. K. Muralidhar (ME), Dr. Pranav Joshi (ME), Dr. Niraj Sinha (ME), Dr. Kantesh Balani (MSE), Dr. Jayandharan Giridhara Rao (BSBE), Dr. Amitabha Bandyopadhyay (BSBE), Dr. Santanu Kumar Mishra (EE)	Granted
31	Method and System of Brainwave Controlled Wheelchair with Intelligent Tagging Assistant	Ms. Jayasandhya Meenakshinathan (PhD Student, EE), Dr. Tushar Sandhan (EE), Mr. Kuruseti Vinay Gupta (PhD Student, EE), Mr. Sachin Bhadang (B.Tech Student, ME), Dr. Laxmidhar Behera (EE)	Granted



PATENTS IN 2024

S.No.	Title of Patent	Inventors	Status
32	System for Temperature-compensated Biasing Circuit Integrated with Amplifier by Utilizing GaAs-based HEMTs	Ms. Neha Bajpai (Student, EE), Dr. Y. S. Chauhan (EE)	Granted
33	System for Providing An Automatic Shifting of Gear in A Bicycle and Method Thereof	Mr. Paresh Upadhyay (PhD Student, EE), Dr. Yatindra Nath Singh (EE)	Granted
34	Stable Rotational attachment for tuning of microwave structures	Ms. Vaishnavi Deepak Bhope (PhD Student, EE), Dr. A. R. Harish (EE)	Granted

S.No.	Title of Patent	Inventors	Status
1	Federated Learning-Based Battery Management System For Electric Vehicles	Dr. Yatindra Nath Singh (EE), Ms. Varsha Lohani (Senior Project Engineer, EE), Ms. Anjali Sharma (PhD Student, EE), Ms. Rashmi Kushwaha (PhD Student, EE), Ms. Pallavi Athe (Senior Project Engineer, EE), Ms. Kumari Akansha (PhD Student, EE)	Filed
2	Synthesis Of Activated Carbon From Indian Devil Tree Pollen Fibers For High-performance Symmetric Supercapacitors	Dr. Kamal Krishna Kar (ME & MSP), Mr. Kapil Dev Verma (Student, MSP), Mr. Kogara Rasi (Student, MSP), Mr. Kogara Rasi (Student, MSP), Ms. Pratiti Pradhan (Surge Student, MSP), Dr. Sri Niwas Singh (EE)	Filed
3	RESONANTSTRUCTURE FOR IMPROVED DIRECTIONALITY AND EXTRACTION OF PHOTONS	Mr. Praveen V BHALLAMUDI (Physics, IIT Madras), Mr. Sagar CHOWDHURY (Physics, IIT Madras), Mr. Srinivasan KRISHNAMURTHY (Physics, IIT Madras), Mr. Rituraj RITURAJ (EE, IIT Kanpur)	Filed
4	A Wearable Sensor Patch For Breast Abnormality Monitoring And Method Thereof	Mr. Shreya M. Nair (Biodesign fellow, SIB SHInE), Dr. Tushar Sandhan (EE), Dr. Pooja Ramakant (Department of Endocrine and Breast Surgery, KGMU Lucknow)	Filed



PATENTS IN 2024

S.No.	Title of Patent	Inventors	Status
5	System For Facilitating Autonomous Landings Of Fixed-wing Aircraft During Single-pilot Operations And Method Thereof	Mr. Dheeraj Bharti (Student, EE), Dr. K S Venkatesh (EE), Mr. Chiranjeev Prachand (Student, EE)	Filed
6	System And Method For Signaling And Enabling Machine Learning Based CSI Feedback In A Cellular Network	Mr. Shyam Vijay Gadhai (Project Executive Officer, EE), Mr. Abhishek Kumar Singh (Project Executive Officer, EE), Dr. Rohit Budhiraja (EE)	Filed
7	A System And Method For Accelerated Light Transport Matrix Acquisition For Dual Photography	Mr. Varun Meeniga (MS R Student, EE), Dr. K Venkatesh Subramanyam (EE)	Filed
8	Peer-to-Peer Live Streaming and Video-On-Demand Deployment System and Method	Dr. Yatindra Nath Singh (EE), Ms. Rashmi Kushwaha (Research Scholar, PhD, EE), Mr. Shreyas Kulkarni (Graduated M.S student, EE)	Filed
9	A SCADA Integrated Data Aggregation System And Method Thereof	Ms. Mansi Kumawat (Student, EE), Mr. Pratik Sharma (PhD Student, EE), Dr. Ankush Sharma (EE), Mr. Manish Kumar Gupta (MSR student, Smart Grid Centre, IIT Kanpur)	Filed
10	Methods And Signaling To Enable Life Cycle Management (LCM) Of Machine Learning Models In Cellular Network	Mr. Abhishek Kumar Singh (Project Executive Officer, EE), Mr. Shyam Vijay Gadhai (Project Executive Officer, EE), Dr. Rohit Budhiraja (EE)	Filed
11	Programmable Photonic Processor	Dr. Rituraj (EE), Mr. Onkar Sanjay Mane (MTech, Student, EE)	Filed
12	A Hollow Insulating Pipe With Proximal Electrode Integration For Non-Contact Sensing	Mr. Biswanath Panda (Sr. Research Establishment Officer, NCFlexE, IIT Kanpur), Dr. Baquer Mazhari (EE)	Filed
13	Dr. Kamal Krishna Kar (ME & MSP), Ms. Swati Gangwar (Ph.D Student, MSP), Dr. M. Jaleel Akhtar (EE & MSP)	Highly Flexible, Ultra-Light Weight, Ultrathin and Hydrophobic Electromagnetic Interference (EMI) Shielding Composite Based on Human Hair	Filed



S.No.	Details of Publications
1	Vijayan V.; Mohapatra A.; Singh S.N.; Tiwari A. IEEE Transactions on Automation Science and Engineering, 21, 684–695(1). doi: 10.1109/TASE.2022.3220523
2	Maity P.; Srivastava S.; Rajput K.P.; Venkategowda N.K.D.; Jagannatham A.K.; Hanzo L. IEEE Internet of Things Journal, 11, 1629–1643 (1). doi: 10.1109/JIOT.2023.3290108
3	Sharma P.A.; Mohapatra A.; Sharma A. IEEE Transactions on Power Systems, 39, 3471–3484 (2). doi: 10.1109/TPWRS.2023.3298417
4	Patel V.S.; Chakrabarti S.; Sharma A. IEEE Transactions on Industrial Informatics, 20 (3), 3530–3538. doi: 10.1109/TII.2023.3312402
5	Tripathy T.; Shima T. Automatica, 159, doi: 10.1016/j.automatica.2023.111315
6	Awasthi S.K.; Singh Y.N. IEEE Transactions on Circuits and Systems II: Express Briefs, 71, 1541–1545 (3). doi: 10.1109/TCSII.2023.3326182
7	Roy A.S.; Chandra N.; Krishnamurthy P.K. Optics Communications, 553, doi: 10.1016/j.optcom.2023.130089
8	Pandey A.K.; Sahu N.K.; Gangwar R.K.; Chaudhary R.K. IEEE Internet of Things Journal, 11, 11793–11799 (7). doi: 10.1109/JIOT.2023.3332169
9	Paul S.K.; Mohapatra A.; Das D.C. Electric Power Systems Research, 228. doi: 10.1016/j.epsr.2023.110009
10	Maurya S.K.; Soni A.K.; Mohapatra A.; Sharma A. International Journal of Electrical Power & Energy Systems, 156. doi: 10.1016/J.IJEPES.2023.109708
11	Kumar P.S.; Chawla A.; Srivastava S.; Jagannatham A.K.; Hanzo L. IEEE Open Journal of the Communications Society, 5, 185–201. doi: 10.1109/OJCOMS.2023.3340096
12	Mitra A.; Ghosh S.; Mohapatra A.; Chakrabarti S. IEEE Transactions on Smart Grid, 15 (2), 2387–2390. doi: 10.1109/TSG.2023.3343127
13	Jafri M.; Srivastava S.; Kumar S.; Jagannatham A.K.; Hanzo L. IEEE Open Journal of Vehicular Technology, 5, 200–218. doi: 10.1109/OJVT.2023.3349151
14	Saini S.; Ashok P.; Verma A. Applied Physics Letters, 124 (1). doi: 10.1063/5.0175803
15	Singh N.K.; Agarwal A.; Singh A.K.; Singh S.N. Solar Energy, 268. doi: 10.1016/j.solener.2023.112256
16	Shukla D.; Chakrabarti S.; Sharma A. International Journal of Electrical Power and Energy Systems, 155. doi: 10.1016/j.ijepes.2023.109631
17	Chauhan Y.S. IEEE Transactions on Electron Devices, 71 (1). doi: 10.1109/TED.2023.3340462
18	Kumari T.; Suman K.K.; Gangwar R.K.; Chaudhary R.K. AEU – International Journal of Electronics and Communications, 176. doi: 10.1016/j.aeue.2024.155150
19	Sharma A.K.; Verma N.K. Engineering Applications of Artificial Intelligence, 128. doi: 10.1016/j.engappai.2023.107498
20	Wang W.; Ranjan A.; Zhang W.; Liang Q.; MacMillan K.S.; Chapman K.; Wang X.; Chandrasekaran P.; Williams N.S.; Rosenbaum D.M.; De Brabander J.K. Bioorganic and Medicinal Chemistry Letters, 99. doi: 10.1016/j.bmcl.2024.129624
21	Singh S.K.; Wu T.L.; Chauhan Y.S. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3354213



S.No.	Details of Publications
22	Sharma S.; Sahay S.; Dey R. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2023.3335031
23	Mondal W.U.; Goyal V.; Ukkusuri S.V.; Das G.; Wang D.;Alouini M.S.; Aggarwal V. IEEE Networking Letters, 6 (2), 97–100. doi: 10.1109/LNET.2024.3365717
24	Soni A.K.; Mohapatra A.; Singh S.N., IEEE Transactions on Power Delivery, 39 (3), 1549–1562. doi: 10.1109/TPWRD.2024.3368624
25	Dabhi C.K.; Rajasekharan D.; Pahwa G.; Nandi D.; Karumuri N.;Turuvekere S.; Dutta A.; Swaminathan B.; Srihari S.; Chauhan Y.S.; Salahuddin S.; Hu C. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3363110
26	Bashir M.Y.; Jaiswal A.K.; Patel S.D.; Sahay S. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3365773
27	Roy S.D.; Sharma A.; Chakrabarti S.; Debbarma S. IEEE Transactions on Smart Grid. doi: 10.1109/TSG.2024.3370892
28	Singh A.; Rustagi R.; Hegde R.M. IEEE Transactions on Circuits and Systems II: Express Briefs. doi: 10.1109/TCSII.2024.3370686
29	Garg A.; Srivastava S.; Yadav N.;Jagannatham A.K.; Hanzo L. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3367751
30	Palla R.K.; Amudala D.N.; Budhiraja R. IEEE Transactions on Vehicular Technology. doi: 10.1109/TVT.2024.3364762
31	Pisharody J.N.; Rajoriya A.; Budhiraja R. IEEE Transactions on Wireless Communications. doi: 10.1109/TWC.2024.3374794
32	Seshasayanan S.; De S.; Sahoo S.R. IEEE Transactions on Automation Science and Engineering. doi: 10.1109/TASE.2024.3379430
33	Prakash T.; Chaudhary R.K.; Gangwar R.K. Microwave and Optical Technology Letters, 66,(4), doi: 10.1002/mop.34132
34	Zaid M.; Kumari P.; Pampori A.; Nazir M.S.; Goyal U.; Mishra M.; Chauhan Y.S. IEEE Access. doi: 10.1109/ACCESS.2024.3387108
35	Kar A.; Parihar S.S.; Huang J.Z.;Zhang H.; Wang W.;Imura K.; Chauhan Y.S. IEEE Journal of the Electron Devices Society. doi: 10.1109/JEDS.2024.3384008
36	Pandey N.;Chauhan Y.S. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3385393
37	Haritha H.;Amudala D.N.;Budhiraja R.;Chaturvedi A.K. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3392780
38	Pandey N.;Chauhan Y.S.;Register L.F.;Banerjee S.K. IEEE Electron Device Letters. doi: 10.1109/LED.2024.3394402
39	Vishwakarma A.K.;Chaurasia S.;Kumar K.;Singh Y.N.;Chaurasia R. Multimedia Tools and Applications. doi: 10.1007/s11042-024-19278-6
40	Aakash ; Bhattacharya S.; Jaiswal R.K.; Srivastava K.V. Microwave and Optical Technology Letters, 66 (5). doi: 10.1002/mop.34177
41	Singh S.P.;Tiwari P.;Singh S.N. Electrical Engineering. doi: 10.1007/s00202-024-02407-7
42	Zaid M.;Kumari P.;Nazir M.S.;Pampori A.;Goyal U.;Mishra M.;Chauhan Y.S. Microelectronic Engineering, 291. doi: 10.1016/j.mee.2024.112199



S.No.	Details of Publications
43	Pandey N.;Chauhan Y.S.;Register L.F.;Banerjee S.K. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3396780
44	Sabu N.V.;Gupta A.K. IEEE Transactions on Nanobioscience. doi: 10.1109/TNB.2024.3399188
45	Dimapasoc M.;Moran J.A.;Cole S.W.;Ranjan A.;Hourani R.;Kim J.T.;Wender P.A.;Marsden M.D.;Zack J.A. Pathogens and Immunity, 9 (1), 108–137. doi: 10.20411/pai.v9i1.673
46	Sharma A.;Hayat Zarkob Y.;Pahwa G.;Kumar Dabhi C.;Goel R.;Agarwal H.;Kubrak V.;Tang M.;Treiber M.;Hu C.;Singh Chauhan Y. IEEE Transactions on Electron Devices, 71 (7), 4240–4246. doi: 10.1109/TED.2024.3398620
47	Deka A.;Sharma S.;Krishnamurthy P.K. Photonic Network Communications. doi: 10.1007/s11107-024-01019-2
48	Saxena K.R.;Arora V. IEEE/ACM Transactions on Audio Speech and Language Processing. doi: 10.1109/TASLP.2024.3399614
49	Li Z.;Amaya L.;Ee A.;Wang S.K.;Ranjan A.;Waymouth R.M.;Chang H.Y.;Wender P.A. Journal of the American Chemical Society. doi: 10.1021/jacs.4c02704
50	Jafri M.;Srivastava S.;Kumar P.;Jagannatham A.K.;Hanzo L. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3403474
51	Chatterjee S.;Kumar S.;Gaidhane A.;Dabhi C.K.;Chauhan Y.S.;Amrouch H. Solid-State Electronics, 218. doi: 10.1016/j.sse.2024.108954
52	Heera B.S.;Sharma A.;Lohani V.;Singh Y.N. Photonic Network Communications. doi: 10.1007/s11107-024-01021-8
53	Rafiq M.;Chatterjee S.;Kumar S.;Chauhan Y.S.;Sahay S. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3405472
54	Azad P.;Kumari A.;Akhtar M.J. IEEE Journal of Electromagnetics, RF and Microwaves in Medicine and Biology. doi: 10.1109/JERM.2024.3402985
55	Agnihotri A.;Deka A.;Krishnamurthy P.K. IEEE Photonics Journal. doi: 10.1109/JPHOT.2024.3411039
56	Verma A.K.;Tripathi P.;Sinha A.S.K.;Singh S. Smart Materials for Science and Engineering, 269–285. doi: 10.1002/9781394186488.ch13
57	Rao A.K.;Singh K.P.; Tripathy T. Automatica, 167. doi: 10.1016/j.automatica.2024.111749
58	Thummaluru S.R.;Kumar R.;Chaudhary R.K. International Journal of RF and Microwave Computer-Aided Engineering, 2024. doi: 10.1155/2024/4303470
59	Liang F.X.;Kumar S.;Ni K.;Chakraborty W.;Chauhan Y.S.;Amrouch H.;Datta S.;Niemier M.;Hu X.S. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3408776
60	Tentu V.;Amudala D.N.;Burila O.P.;Budhiraja R. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3411789
61	Kanaujia V.;Scheurer M.S.;Arora V. SciPost Physics, 16 (5). doi: 10.21468/SCIPOSTPHYS.16.5.132
62	Sarkar D.U.;Prakash T.;Singh S.N. IEEE Transactions on Power Systems. doi: 10.1109/TPWRS.2024.3416753
63	Singh J.;Srivastava S.;Yadav S.P.;Jagannatham A.K.;Hanzo L. IEEE Transactions on Cognitive Communications and Networking. doi: 10.1109/TCCN.2024.3415620



S.No.	Details of Publications
64	Rafiq M.;Chauhan Y.S.;Sahay S. IEEE Journal of the Electron Devices Society. doi: 10.1109/JEDS.2024.3416441
65	Dey S.;Arora V.; Tripathi S.N. IEEE Transactions on Neural Networks and Learning Systems. doi: 10.1109/TNNLS.2024.3409364
66	Tripathi S.;Gupta A.K.;Amuru S.D. IEEE Transactions on Wireless Communications. doi: 10.1109/TWC.2024.3410382
67	Amudala D.N.; Vijaya Raj Y.;Budhiraja R. IEEE Transactions on Wireless Communications. doi: 10.1109/TWC.2024.3409352
68	Ravi N.; T T.R.;Arora V. IEEE/ACM Transactions on Audio Speech and Language Processing. doi: 10.1109/TASLP.2024.3416687
69	Rai S.;Singh P.;Sharma E.;Jagannatham A.K.;Hanzo L. IEEE Transactions on Vehicular Technology. doi: 10.1109/TVT.2024.3428974
70	Kumar S.;Chauhan Y.S.;Amrouch H. Advanced Intelligent Systems. doi: 10.1002/aisy.202400019
71	Routray G.;Hegde R.M. Digital Signal Processing: A Review Journal, 154. doi: 10.1016/j.dsp.2024.104688
72	Tentu V.;Burila O.P.;Amudala D.N.;Budhiraja R. IEEE Transactions on Wireless Communications. doi: 10.1109/TWC.2024.3423318
73	Chauhan Y.S.;Pampori A.U.H.;Ahsan S.A. GaN Transistor Modeling for RF and Power Electronics: Using The ASM-HEMT Model. 1-247. doi: 10.1016/C2021-0-00336-9
74	Manzoor W.;Dutta A.K.;Pahwa G.;Manzoor N.;Hu C.;Singh Chauhan Y. IEEE Transactions on Electron Devices, 71(8). 4510-4516. doi: 10.1109/TED.2024.3419783
75	Singh N.;Mohapatra A.;Singh S.N. Electric Power Systems Research, 236. doi: 10.1016/j.epsr.2024.110966
76	Singh S.P.;Tiwari P.;Singh S.N.;Singh P.P. Energy Storage, 6 (5). doi: 10.1002/est2.70004
77	Jafri M.;Srivastava S.;Jagannatham A.K. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3440874
78	Maan K.;Vishwakarma R.;Saikia M.;Srivastava K.V. IEEE Antennas and Wireless Propagation Letters. doi: 10.1109/LAWP.2024.3436861
79	Goel A.;Hegde R.M. Digital Signal Processing: A Review Journal, 154. doi: 10.1016/j.dsp.2024.104701
80	Maurya S.K.;Mohapatra A.;Sharma A. IEEE Transactions on Industry Applications. doi: 10.1109/TIA.2024.3432859
81	Dey S.;Gonuguntla V.;Budhiraja R. IEEE Transactions on Green Communications and Networking. doi: 10.1109/TGCN.2024.3432874
82	Sani M.M.;Chowdhury R.;Chaudhary R.K. International Journal of Communication Systems. doi: 10.1002/dac.5947
83	Kumar A.;Das S.P.;Tiwari S. Physics of Fluids, 36 (8). doi: 10.1063/5.0219642
84	Singh P.P.;Shankar R.;Singh S.N. Chaos, Solitons and Fractals, 187. doi: 10.1016/j.chaos.2024.115444
85	Ram V.S.;Gannavarpu R. Optik, 313. doi: 10.1016/j.ijleo.2024.171999



S.No.	Details of Publications
86	Mishra A.;Jaiswal R.;Vaibhav Srivastava K.;Singh Chauhan Y.;Verma A. IEEE Antennas and Wireless Propagation Letters. doi: 10.1109/LAWP.2024.3446452
87	Chatterjee S.;Dey S.;Budhiraja R. IEEE Wireless Communications Letters. doi: 10.1109/LWC.2024.3450497
88	Sheikh M.A.;Rajoriya A.;Singh P.;Budhiraja R. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3446575
89	Kumar R.;Bhardwaj U.;Das S.P. Thermal Science and Engineering Progress, 55. doi: 10.1016/j.tsep.2024.102890
90	Chauhan Y.S. 2024 IEEE Students Conference on Engineering and Systems: Interdisciplinary Technologies for Sustainable Future, SCES 2024. doi: 10.1109/SCES61914.2024.10652573
91	Dutta S.;Arora V. IEEE/ACM Transactions on Audio Speech and Language Processing. doi: 10.1109/TASLP.2024.3446232
92	Pandey A.K.;Gangwar R.K.;Chaudhary R.K. IEEE Internet of Things Journal. doi: 10.1109/JIOT.2024.3464590
93	Raj A.;Gangwar R.K.;Chaudhary R.K. IEEE Transactions on Nanotechnology. doi: 10.1109/TNANO.2024.3462802
94	Pandey D.;Gannavarpu R. Optics Continuum, 3 (9), 1765–1779. doi: 10.1364/OPTCON.531598
95	Bandhu H.;Ashok P.;Verma A. Optical Materials, 157. doi: 10.1016/j.optmat.2024.116181
96	Nandi D.;Dabhi C.K.;Rajasekharan D.;Karumuri N.;Turuvekere S.;Choppalli S.;Pratiyush A.S.;Hu C.;Chauhan Y.S. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3461670
97	Sharma S.;Sahay S.;Dey R. IEEE Transactions on Electron Devices, 71 (11). 6520–6526. doi: 10.1109/TED.2024.3465452
98	Singh S.K.;Ngo T.S.;Wu T.L.;Chauhan Y.S. Applied Physics Letters, 125 (15). doi: 10.1063/5.0223576
99	Tripathi P.;Verma A.K.;Sinha A.S.K.;Singh S. ChemistrySelect, 9 (40). doi: 10.1002/slct.202403155
100	Patel S.D.;Swaroop B.S.;Sahay S. ACS Applied Bio Materials. doi: 10.1021/acsabm.4c00989
101	Nandi D.;Dabhi C.K.;Rajasekharan D.;Karumuri N.;Turuvekere S.;Swaminathan B.;Srihari S.;Dutta A.;Hu C.;Chauhan Y.S. IEEE Journal of the Electron Devices Society. doi: 10.1109/JEDS.2024.3484295
102	Vishwakarma R.;Aakash ;Yadav J.;Verma A.;Srivastava K.V. IEEE Microwave and Wireless Technology Letters, 34 (12). 1367–1370. doi: 10.1109/LMWT.2024.3472058
103	Rajoriya A.;Singh N.;Budhiraja R.;Chaturvedi A.K. IEEE Transactions on Signal Processing. doi: 10.1109/TSP.2024.3484949
104	Singh S.K.;Wu T.L.;Chauhan Y.S. IEEE Journal of the Electron Devices Society. doi: 10.1109/JEDS.2024.3486230
105	Bhattacharya S.;Chaudhary K.;Aakash N.;Ramkumar J.;Srivastava K.V. Journal of Materials Chemistry C. doi: 10.1039/d4tc02547d
106	Khasnobish A.;Mazumder A.;Bharadwaj K.V.;Chakravarty T.;Akhtar M.J. IEEE Sensors Letters. doi: 10.1109/LSSENS.2024.3486778
107	Kumari A.;Das S.P.;Govind G.;Akhtar M.J. IEEE Microwave and Wireless Technology Letters, 34 (12). 1403–1406. doi: 10.1109/LMWT.2024.3469780



S.No.	Details of Publications
108	Agrawal A.;Sharma T.;Verma N.K. IEEE Transactions on Artificial Intelligence. doi: 10.1109/TAI.2024.3477425
109	Paul S.K.;Mohapatra A.;Chandra Das D. IET Energy Systems Integration. doi: 10.1049/esi2.12172
110	Jarndal A.;Ansari M.H.;Dautov K.;Almajali E.;Chauhan Y.S.;Majzoub S.;Mahmoud S.A.;Bonny T. Advanced Theory and Simulations. doi: 10.1002/adts.202400645
111	Singh A.;Demuynck K.;Arora V. IEEE/ACM Transactions on Audio Speech and Language Processing. doi: 10.1109/TASLP.2024.3486227
112	Rafiq M.;Chauhan Y.S.;Sahay S. IEEE Access. doi: 10.1109/ACCESS.2024.3486667
113	Patel V.;Soni A.;Sharma A.;Chakrabarti S.;Meghwani A.;Srivastava S.C.;Srivastava A.;Sreenath J.G. IEEE Access. doi: 10.1109/ACCESS.2024.3486667
114	Manzoor W.;Dutta A.K.;Chauhan Y.S. IEEE Journal of the Electron Devices Society. doi: 10.1109/JEDS.2024.3503777
115	Mehrotra A.;Srivastava S.;Reddy S.;Jagannatham A.K.;Hanzo L. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3502682
116	Dangi R.;Pampori A.;Pal P.;Nazir M.S.;Kushwaha P.;Chauhan Y.S. IEEE Transactions on Electron Devices. doi: 10.1109/TED.2024.3487959
117	Sateesh ;Chakarwar K.;Sahay S. IEEE Open Journal of Nanotechnology. doi: 10.1109/OJNANO.2024.3501293
118	Aggarwal K.;Lahgere A. IEEE Open Journal of Nanotechnology. doi: 10.1109/OJNANO.2024.3494714
119	Kumar A.;Das S.P.;Tiwari S. Physics of Fluids, 36 (11). doi: 10.1063/5.0238228
120	Rai S.;Sharma E.;Jagannatham A.K.;Hanzo L. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3506920
121	Ranjan A.;Behera M.K.;Saikia L.C. IETE Journal of Research, 70 (3). 3030–3051. doi: 10.1080/03772063.2023.2178532
122	Behera M.K.;Saikia L.C. IEEE Transactions on Industry Applications, 60 (2). 3588–3602. doi: 10.1109/TIA.2023.3335904
123	Choudhary K.P.;Das S.P.;Tiwari S. Physics of Fluids, 36 (12). doi: 10.1063/5.0233796
124	Singh J.;Naveen B.;Srivastava S.;Jagannatham A.K.;Hanzo L. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3511704
125	Nazir M.S.;Dwivedi P.;Pampori A.;Hsieh Y.Y.;Chou M.L.;Chauhan Y.S. IEEE Microwave and Wireless Technology Letters. doi: 10.1109/LMWT.2024.3507045
126	Aquib M.;Verma N.K.;Akhtar M.J. IEEE Transactions on Affective Computing. doi: 10.1109/TAFFC.2024.3508536



S.No.	Details of Publications
127	Chandra N.;Krishnamurthy P.K. IEEE Transactions on Quantum Engineering. doi: 10.1109/TQE.2024.3507155
128	Chakrabarti S. Foundations and Trends in Electric Energy Systems, 8 (2). 124-168. doi: 10.1561/31000000042
129	Jafri M.;Kumar S.;Srivastava S.;Jagannatham A.K. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3519535
130	Parihar S.S.;Pahwa G.;Mohammad B.;Chauhan Y.S.;Amrouch H. IEEE Transactions on Quantum Engineering. doi: 10.1109/TQE.2024.3512367
131	Yadav J.;Vishwakarma R.;Saikia M.;Srivastava K.V.;Ramkumar J. IEEE Transactions on Electromagnetic Compatibility, 66 (6). 1717-1724. doi: 10.1109/TEMC.2024.3440060
132	Tripathi P.;Verma A.K.;Sinha A.S.K.;Singh S. Energy and Fuels. doi: 10.1021/acs.energyfuels.4c04519
133	Munagala R.;Amudala D.N.;Chatterjee S.;Budhiraja R. IEEE Transactions on Communications. doi: 10.1109/TCOMM.2024.3516512



ONGOING PROJECTS IN 2024

S.No.	Principal Investigator	Co Principal Investigator	Project Title
1	Ankush Sharma	Vinay Kumar Tiwari	Construction Of New Building Of Bsip, Lucknow
2	Gururaj Mirle Vishwanath	Ankush Sharma	Resilience And Cybersecurity Enhancement For An Optimized Distribution System Using Blockchain
3	Md. Jaleel Akhtar		Design Of Microwave Imaging Systems For Dielectric Bodies Including Human Phantoms
4	Ashwin Kumar Ramakrishnan Sivaku		Consultancy For Adc Design
5	Shubham Sahay	Yogesh Singh Chauhan	Neuromorphic Computing And Neuro-Optimizer Platforms Utilizing High-Yield Passive Rram Crossbar Arrays
6	Ankush Sharma	Prabodh Bajpai	Assessment Of Abnormal Voltage Fluctuations In The Panki Chandari Section Of India Railway
7	Rajshekhar Gannavarpu		Non-Invasive Technique For Rapid Sub-Micron Surface Profile And Deformation Metrology
8	Soumya Ranjan Sahoo	Abhilash Patel	Design And Development Of A Tether System For Drone Application
9	Abhilash Patel	Soumya Ranjan Sahoo	Design Of Synthetic Genetic Circuits: Robustness Towards Change In The Growth Rate
10	Yogesh Singh Chauhan	Avinash Lahgere	Design And Technology Co-Optimization Of Stacked Nanosheet Rf For 6G Applications
11	Yogesh Singh Chauhan	Shubham Sahay	In-Memory Computing Utilizing Ferroelectric Transistors
12	Anubha Goel	Gururaj Mirle Vishwanath, Aakash Chand Rai	Promoting Residential Energy Efficiency Through An Appliance-Level Electricity Monitoring System
13	Prakash Chandra Mondal	Shubham Sahay	Development Of Energy-Efficient Nanoscale Molecular Memristors
14	Shikhar Misra	Amit Verma, Rik Dey, Rituraj, Laltu Chandra	Smart Metamaterials For Dynamic Radiative Cooling
15	Tushar Balasaheb Sandhan		Gpr And Ai Based Underground Utility Inspection For Smart Cities
16	Ketan Rajawat		Tpqa Nns Integration Of Cctv Surveillance Cameras With Ocr
17	Koteswar Rao Jerripothula		Design And Development Of Face Detection And Recognition Solution



ONGOING PROJECTS IN 2024

S.No.	Principal Investigator	Co Principal Investigator	Project Title
18	Yogesh Singh Chauhan		Gan Model For Rf Power Amplifier
19	Ankush Sharma		Tcs Fellowship Awarded To Ritik Rajput
20	Rohit Budhiraja		C-Dot Star Program Phd Scholarship
21	A R Harish		Performance Optimization Of Installed Antennas For Airbrone Application
22	Ketan Rajawat		Qualcomm Faculty Award (Xr,Research,Optimization And Slam)
23	Aditya K. Jagannatham		Delay Aligment Modulation(Dam) For Ultra-High Data Rates In Next Generation Mmwave And Terahertz Mimo Systems
24	Ketan Rajawat		Gujrat Council Of Science And Technology(Gujcost)
25	Ebin Cherian Mathew		Hardware In Loop Simulation Of Solar Plant With Power Plant Controller
26	Abhilash Patel	Soumya Ranjan Sahoo, Rakesh Kumar Majhi	Development And Characterization Of Regulatory Biomoleculer Circuits For Plasmid
27	Nikunj Arunkumar Bhagat		A Closed-Loop Bmi-Fes System For Grasping
28	Utsab Kundu		Inspire Faculty Fellowship
29	Rajesh Mahanand Hegde		Integrating Vision Transformation With Edge
30	Gururaj Mirle Vishwanath		Third-Party Inspection Of Solar Street Lights And Solar High Mast Lights
31	Ketan Rajawat	Tushar Balasaheb Sandhan	Development Of Height Of Burst(Hob) Estimation System For Airburst Ammunition
32	Ketan Rajawat	Tushar Balasaheb Sandhan	Hob Support And Coordination
33	Tushar Balasaheb Sandhan	Ketan Rajawat	Hob System Design And Integration
34	Rajeev Jindal	Swathi Battula, Prabodh Bajpai, Sruti Srinivasa Ragavan, Manoj Kumar Tiwari	Net Zero Iit Kanpur
35	Tushar Balasaheb Sandhan	B Bhattacharya	Star-Agri:Spectro-Temporal Analysis For Regional Indian Agricultural Crops For High-Yield Potential
36	Raghvendra Kumar Chaudhary	Kumar Vaibhav Srivastava	Antenna Using Metamaterials For X-And Ku- Band Applications



ONGOING PROJECTS IN 2024

S.No.	Principal Investigator	Co Principal Investigator	Project Title
37	Amit Verma		Development Of Optically Transparent Dynamic Emissivity Regulators For Spacecraft Temperature Control
38	Ashwin Kumar Ramakrishnan Sivaku		Design Of A 1Ksps Delta Sigma Analog-To-Digital Converter With Greater Than 18 Bits Resolution
39	Naren Naik		Rte-Modelled Fully-3D Satellite-Based Atmospheric Microphysical Tomography For Cloud Aerosol-Trace Gas Estimation
40	Yogesh Singh Chauhan		Characterization And Modeling Of High Voltage N/P Ldmos Fets For 180Nm Scl Process
41	Md. Jaleel Akhtar		Lna And Receiver Design For Cryo-Cooled And Room Temperature Radar Systems
42	Tushar Balasaheb Sandhan		Development Of Ai In Healthcare Solutions Using Research Manpower
43	A R Harish, Rituraj ., Saikat Ghosh, Sapam Ranjita Chanu, Shilpi Gupta, Amit Verma	Shilpi Gupta, Saikat Ghosh	Field-Deployable Quantum-Enhanced Sensors On Integrated Hybrid Platform
44	Rajshekhar Gannavarpu	Anand Kumar Jha	Design And Development Of Quantum Entanglement-Enhanced Imaging Systems
45	Rajesh Mahanand Hegde		Adaptive Beamforming For Multi-Channel And Multi-Source Speech Separation
46	Abheejeet Mohapatra	Ankush Sharma	Relay Setting Validation(132/33 Kv Rss,750Vdc Tss Ass Detailed Study Of Protection System Of MpmrcI
47	Ketan Rajawat		Development Of Uav Solutions For Agricultural Use
48	Ebin Cherian Mathew	Saikat Chakrabarti, Abheejeet Mohapatra	Development Of Equipment Model Library To Facilitate Operational Engineering And Research Studies Of Re Rich Power System
49	Raghvendra Kumar Chaudhary		High-Resolution Neural Interface SoC with MetaStructure-Enhanced Wireless Power Transmission
50	Raghvendra Kumar Chaudhary		Design And Development Of Metamaterial Based Textile Multi-Band Antennas For Biomedical Applications
51	Raghvendra Kumar Chaudhary		Design And Development Of Metasurface Lens For High Gain And Low Correlated Mimo Antennas For Mmwave 5g Applications
52	Raghvendra Kumar Chaudhary		Development Of Millimeter-Wave Mimo Cognitive Radio Systems Using Metasurface And Substrate Integrated Waveguide For Future Wireless Communication



SHORT-TERM COURSES, EVENTS, WORKSHOPS, AND CONFERENCES

01 Short Term Course/Online Short Term Course

Prof. Ketan Rajawat



- Advanced Course on Multi UAV Communications Technology
03.01.2024 - 09.01.2024
- Artificial Intelligence Short-term 40 Training
14.10.2024 - 23.10.2024

05 Short Term Course/Workshop

Prof. Ankush Sharma



- Training Program on Smart Distribution System and Storage
06.05.2024 - 10.05.2024
- 7- Days Hands on Training Program on IoT
20.06.2024 - 26.06.2024

02 Short Term Course/Online Short Term Course

Prof. Aditya K Jagannatham



- IITK Kanpur Certificate Program on PYTHON for Artificial Intelligence, Machine Learning, and Deep Learning
02.03.2024 - 22.03.2024
- PYTHON+MATLAB Training School on 5G/6G Wireless Technologies
01.06.2024 - 28.06.2024
- IIT Kanpur Certificate Program on PYTHON+ MATLAB/OCTAVEBased Simulation and Design of 5G/ 6G Wireless Technologies
01.09.2024 - 27.09.2024
- IIT Kanpur Certificate Program on PYTHON+ MATLAB/OCTAVEBased Simulation and Design of 5G/ 6G Wireless Technologies
25.09.2024 - 30.01.2025
- IIT Kanpur Certificate Program on PYTHON for Artificial Intelligence, Machine Learning and Deep Learning
01.12.2024 - 27.12.2024

06 Conference

Prof. Yogesh Singh Chauhan



- IEEE Electron Devices Technology and Manufacturing (IEEE EDTM) 2024, Bengaluru
03.03.2024 - 06.03.2024

07 Short Term Course

Prof. Soumya Ranjan Sahoo



- Introduction to Dynamics and Control of Unmanned Aerial Vehicles
03.06.2024 - 08.06.2024

03 Short Term Course

Prof. Rohit Budhiraja



- Design and Development of 5G/5G + Standards and Indigenous 5G Network
18.06.2024 - 20.06.2024

08 Short Term Course

Prof. Naren Naik



- Foundations of Kalman filtering for target tracking
02.09.2024 - 06.09.2024

04 Short Term Course

Prof. Adrish Banerjee



- Direct to Mobile Broadcasting Summit
16.01.2024 - 16.01.2024

09 Workshop

Prof. Gururaj Mirle Vishwanath



- Transition of Indian Metros: Automated, Intelligent and Sustainable solution for Energy Savings
03.07.2024 - 05.07.2024
- PERA 2024
29.11.2024 - 01.12.2024



SHORT-TERM COURSES, EVENTS, WORKSHOPS, AND CONFERENCES

10 Symposium

Prof. Raghvendra Kumar Chaudhary,
Prof. A.R. Harish



- Symposium on Antenna and Microwave (SAM) 2024: 5G Antennas from Fundamental to Implementation
19.04.2024 – 21.04.2024

12 Workshop

Prof. Ebin Cherian Mathew



- Understanding the Challenges of Inverter-Based Resources Through Hardware -in-the-loop Simulation
21.10.2024 – 22.10.2024

11 Internship

Prof. Tushar Sandhan



- Implementation of stable diffusion for image background generation
01.07.2024 – 15.10.2024



DISTINGUISHED ALUMNI AWARDS



Dr. Rajeev Ranjan (BT/EE/1990)
Distinguished Services Award 2024



Dr. Pulkit Agrawal (BT/EE/2011)
Young Alumnus Award 2024



Dr. Rajeev Ranjan (BT/EE/1990)
Distinguished Services Award 2024



Mr. Ranjan Chopra (BT/EE/1983)
Distinguished Alumnus Award 2024



Dr. Saurabh Kumar Tiwary (BT/EE/2001)
Distinguished Alumnus Award 2024



FACULTY AWARDS



Prof. Amit Verma

Prof. T.R. Vishwanathan Young Faculty Fellowship in Teaching Excellence for a period of three years.



Prof. Ketan Rajawat

Arakare Vasudev Faculty Research Fellowship



Prof. Shubham Sahay

Prof. T.R. Vishwanathan Young Faculty Fellowship in Teaching Excellence for a period of three years.



Prof. M Jaleel Akhtar

Elected as a Fellow of the Indian National Academy of Engineering (INAE)



Prof. Tushar Sandhan

IEI Young Engineers Award 2023-24 in the Electronics & Telecommunication Engineering Division.



Prof. S.C. Srivastava

Life Fellowship of IEEE USA



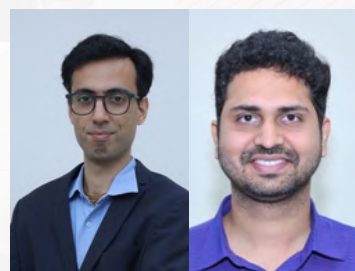
Prof. Shubham Sahay

2023 IEEE Electron Devices Society Early Career Award



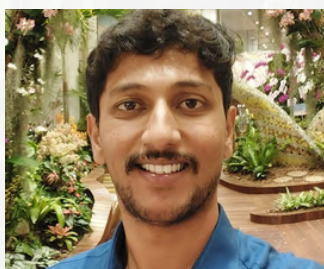
Prof. Abhilash Patel

Early Career Fellowship by the DBT Wellcome Trust India Alliance



**Prof. Vipul Arora,
Prof. Shubham Sahay**

PK Kelkar Faculty Fellowship



Prof. R S Ashwin Kumar

Best paper award (2nd place) (ISCAS) 2024 Singapore



Prof. Tushar Sandhan

Young Associate of the Indian National Academy of Engineering (INAE)



Prof. Nishchal K. Verma

Smt. Lata and K.G. Karandikar Faculty Chair Professor



FACULTY AWARDS



Prof. Ajit K Chaturvedi
Institute Fellow 2024



Prof. Piyush Kant
NPSC Young Engineer Award 2024



Prof. Animesh Biswas
Prof. G. K. Dubey Memorial Lifetime Achievement Award 2024 by the IEEE Uttar Pradesh Section



Prof. Nishchal K. Verma
Outstanding Associate Editor of 2023-2024" for IEEE Transactions on Neural Networks and Learning Systems



Prof. Gannavarpu Rajshekhar
Indian Society for Non-Destructive Testing (ISNT) National NDT Award 2024 for Excellence in Contribution to R&D



Prof. Twinkle Tripathy
Best Woman Professional Award in the Early Career category of the Shri Pralhad P. Chhabria Awards 2024



STUDENTS AWARDS



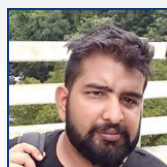
Keerthika Kadagala (B.Tech/EE)
Best Paper Award (UPCON-2024)



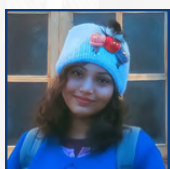
Subhajit Chakraborty (PhD/EE)
Best Poster Award (OWLS 17)



Manish Kumar Gupta (MSR/EE)
Grid India Power Systems Awards
(GIPSA) 2024



Praveen (PhD/EE)
Shri Dorilal Agarwal National
Scholarship 2024



Sylvie Rana (PhD/EE)
Best Paper Award &
IEEE SPACE Best Paper Award



Sunil Kumar Maurya (PhD/EE)
GRID-INDIA Power System (GIPSA)
2024 Award



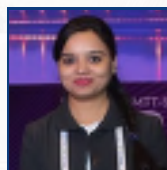
Atul Kumar Soni (PhD/EE)
Grid India Power Systems Awards
(GIPSA) 2024



Keerthika Kadagala (B.Tech/EE)
Best Project Award for Engineering
(SURGE-2024)



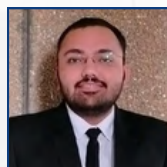
Vivek Chaudhary (PhD/EE)
Best Paper Award at PIICON 2024



Ankita Kumari (PhD/EE)
3-Minute Thesis Award at MAPCON-
2024



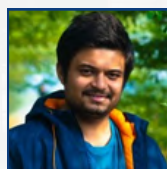
Abhisha Garg (PhD/EE)
Outstanding WiE Professional Volunteer
Awards 2024 by IEEE India Council



Yojan Sharma (M.Tech/EE)
Best Paper Presentation Award & IES
SYPA Paper Award at IECON 2024



Avanish Pandey (PhD/EE)
IES SYPA Paper Award at IECON 2024



Kingshuk Chatterjee (PhD/EE)
Best Presentation Award at (ICMENS
2024)



Ritik Rajput (PhD/EE)
Best paper award at (ICPEA)



Satish Srivastava (PhD/EE)
Best Paper Award at (MAPCON-2023)



STUDENTS AWARDS



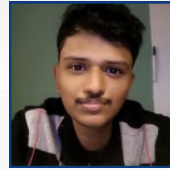
Baisakhi Bandyopadhyay (PhD/EE)
Best Paper Award at (MAPCON-2023)



Abhisha Garg (PhD/EE)
Best poster prize at (SPCOM-2024)



Namita Kumari (PhD/EE)
Best Paper Award at (ICPEA)



Akash Kumar (M.Tech/EE)
Best Poster Award at (SPCOM-2024)



Suraj Srivastava (PhD/EE)
Best Poster Award at (SPCOM-2024)



Priyanka Maity (PhD/EE)
QIF India 2024



Naman Mehrotra (BTech/EE)
IET India Scholarship Award



Shraddha Tripathi (PhD/EE)
IEEE SPS Scholarship

GALLERY



Prof. Edward Chang from National Chiao Tung University (NYCU), Taiwan delivered an IEEE EDS Distinguished Lecture on "GaN HEMT Technology and its application in RF and Power"



Prof. Sandip Tiwari delivered a talk on exploring science, engineering, and interdisciplinarity.



Celebrated a remarkable Research Day, showcasing the incredible talent and dedication of our PhD scholars. Our PhD Scholars showcased 40 outstanding poster presentations, each representing years of hard work and innovation.



One day (WiM) workshop titled "Women Empowerment through Engineering Educations: Opportunities & Challenges"



Prof. Tal Shima from Technion, Israel, delivered a talk on 'Designing Guidance Strategies' and interacted with faculty and students.



NEWSLETTER DEPARTMENT OF ELECTRICAL ENGINEERING

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