PERSONAL DETAILS

Currently working as Assistant Professor in Department of Electronics and Communication Engineering, Indian Institute of Information Technology, Ranchi, India

Phone: +91-9414780222

E-Mail: sksharma@iiitranchi.ac.in, shashkant@gmail.com

Webpage: https://sites.google.com/site/shashikantiiit/

EDUCATION

Degree	Institute	Specialization	Year of Passing
Ph.D	Malaviya National Institute of Technology (NIT), Jaipur, Rajasthan India	Nanoelectronics	2017
M.Tech	ABV-Indian Institute of Information Technology and Management (ABV-IIITM), Gwalior, M.P., India	VLSI Design	2012
B.E. with Hons.	M.L.V. Govt. Textile and Engineering College, Bhilwara, Rajasthan, India	Electronics and Communication Engineering	2009

WORK EXPRIENCE

Assistant Professor Dec. 2018 – Present

Indian Institute of Information Technology, Ranchi

Assistant Professor July, 2016 – Dec.2018

Manipal University, Jaipur

Visiting Scholar June, 2016

University of Vienna, Austria

RESEARCH AREAS

- 1. Nanoscale Devices/Circuits/System Co-Design.
- 2. Modeling, Fabrication and Characterization of Nanoelectronic Devices.
- 3. Semiconductor Devices for Optoelectronic and Sensing Applications.

RESEARCH WORK SUMMARY

Journals (SCI/Scopus Indexed)	Other Journals	International Conferences	Books/Book Chapters	Total Publications
24	2	14	4	44
Projects	Ph.D (Awarded)	Ph.D (Ongoing)	Citations	H-Index
1	03	02	623	12

SKILLS

Fabrication: Spin/Vacuum Coating, E-Beam Deposition, RF/DC Sputtering. Characterization: XRD, AFM, SEM, TEM, Ellipometry, PL, UV-Visible, SPA

Tools: SILVACO, TANNER, H-Spice.

Languages: VHDL, Verilog

ADMINISTRATIVE RESPONSIBILITIES

Member: Senate, Chairperson: Institute Purchase Committee, Member: Institute Website Committee.

Associate Dean: Faculty Affairs and Campus Administration (01/02/2023 to 20/08/2024), Member: Board of Governors (10/8/2021 to 9/8/2024), Member: Building Works Committee (December 9, 2019 to September 3, 2024), Faculty In-Charge: Academics (22/8/2019 to 8/5/2022), Faculty In-Charge: Student Affairs (26/12/2018 to 25/9/2019), Faculty In-Charge: Faculty Affairs (26/12/2018 to 31/1/2023), Faculty In-Charge: Establishment, Faculty In-Charge: Sensors & IoT Lab, Chairperson, PG and UG Programme Evaluation Committee, UG Admission In-charge 2021,2022, 2023, 2024, Chairman, M.Tech ECE Selection Committee (2020 Batch), Member UG Admission Committee (2019 and 2020 Batch), Chairperson, Hindi Pakhwada Committee 2020 and 2021, Member: Research Advisory Committee, Member: Patent Filing Committee, Member: Infrastructure Committee, Coordinator: NIRF 2025, Chairperson: CPDA Committee, Member: Placement Advisory Committee.

RESEARCH PROJECTS

 "Design and Development of Nanostructured ZnO Film Based Piezoelectric Devices for Energy Harvesting Applications" Sponsored by Department of Science and Technology (Indo-Austrian (DST-BMWF) Joint Research Program), No. INT/AUA/BMWF/P-24/2015. Duration: 2 Years (Amount Sanctioned: INR 436000). (Completed)

Ph.D SUPERVISION

- 1. **Mr. Prasenjit Mahato (2022 Ongoing):** Tunnel Field Effect Transistor Based Devices for Low Power Electronics and Sensing Applications. (Supervisor)
- 2. **Mr. Abhishek Raj (Submitted in 2024):** Investigations on Junctionless FETs for Low Power and Sensing Applications with Machine Learning Approach. (Supervisor)
- 3. **Mr. Sukanta Kumar Swain (Awarded in 2024):** Investigations on Tunnel FET Based Devices for Electronics and Sensing Applications. (Supervisor)
- 4. **Dr. Neeraj Jain (Awarded in 2022):** Investigation on Metal Oxide Thin Film Based Heterojunctions for Electronic and Sensing Applications. (at Manipal University Jaipur). (Co-Supervisor with Dr. Renu Kumawat)
- 5. **Dr. C. P. Gupta (Awarded in 2020):** Investigations on ZnO Nanostructure Based Heterojunctions for Photonics, Gas Sensing and Memory Applications. (at Manipal University Jaipur) (Co-Supervisor with Prof. Sandeep Sancheti & Dr. Shilpi Birla)

M.TECH and B.TECH DISSERTATIONS GUIDED

No. of M.Tech Dissertations Guided: 02

No. of B.Tech Dissertations Guided: 20

PUBLICATIONS

Books

- 1. Sangeeta Singh, Shashi Kant Sharma, Durgesh Nandan, "Beyond Si-Based CMOS Devices: Materials to Architecture", Springer, Singapore, 2024, pp. 1-326. (ISBN No: 978-981-97-4623-1)
- 2. Shashikant Sharma, Manisha Pattanaik and Balwinder Raj, "Leakage Current and Ground Bounce Noise Aware MTCMOS Technique" LAP LAMBERT Academic Publisher, Germany, 2013, ISBN: 978-3-659- 47459-0.

Book Chapters:

- Sukanta Kumar Swain, Abhshek Raj, Shashi kant Sharma," Negative Capacitance Field-Effect Transistor (NCFET): Strong Beyond CMOS Device", In Sangeeta Singh, Shashi Kant Sharma, Durgesh Nandan (eds) Beyond Si-Based CMOS Devices: Materials to Architecture. Springer Tracts in Electrical and Electronics Engineering, Springer, Singapore. (Dol: 10.1007/978-981-97-4623-1_8)
- Neeraj Jain, Renu Kumawat, Shashi Kant Sharma, "Resistive Random Access Memory: Materials, Filament Mechanism, Performance Parameters and Application", In: Dwivedi, S., Singh, S., Tiwari, M., Shrivastava, A. (eds) Flexible Electronics for Electric Vehicles. Lecture Notes in Electrical Engineering, Vol 863. Springer, Singapore. (DOI): 10.1007/978-981-19-0588-9_3.

SCI Indexed Journals:

- 1. Abhishek Raj and Shashi Kant Sharma, "Palladium Electrode Based SOI Stack Gate Oxide Junctionless FET for High-Performance Hydrogen Gas Sensing," Microelectronics Journal (Elsevier), Vo. 151, pp. 106312, 2024. (SCI Indexed, Impact Factor=2.2, DoI: 10.1016/j.mejo.2024.106312)
- 2. Abhishek Raj, Shashi Kant Sharma, "Device parameter prediction for GAA junctionless nanowire FET using ANN approach", Microelectronics Journal (Elsevier), Vol. 147, pp. 106192, 2024. (SCI Indexed, I.F.=2.2, Dol: 10.1016/j.mejo.2024.106192)
- 3. Abhishek Raj, Siddharth Kumar, Shashi Kant Sharma, "Machine learning based prediction of I–V and transconductance curves for 3D multichannel junctionless FinFET", Indian Journal of Physics (Springer), pp. 1-9, 2024. (SCI Indexed, I.F.=2.0, Dol: 10.1007/s12648-024-03179-3)
- 4. Abhishek Raj, Shashi Kant Sharma, "Exploring the Potential of Dielectric Modulated SOI Junctionless FinFETs for Label-Free Biosensing", Journal of Electronic Materials (Springer), pp. 1-7, 2023. (SCI Indexed, I.F.=2.1, DoI: 10.1007/s11664-023-10844-6).
- 5. Sukanta Kumar Swain, Sangita Kumari Swain, Shashi Kant Sharma, "Mg2Si Heterostructure Based SOI TFET with Steep Subthreshold Swing and High Current Drivability " Journal of Computational Electronics (Springer), pp. 1-9, 2023 (SCI Indexed) (DoI: 10.1007/s10825-023-02051-7)
- 6. Abhishek Raj, Kunal Singh, Shashi Kant Sharma, "Performance Analysis of Short Channel Effects Immune JLFET with Enhanced Drive Current", International Journal of Numerical Modelling: Electronic Networks, Devices and Fields (Wiley), pp. e3109, 2023. (SCI Indexed, Impact Factor: 1.4, DOI: 10.1002/jnm.3109,)
- 7. Neeraj Jain, Shashi Kant Sharma, Renu Kumawat, "a-ITZO Based Thin Film Transistor for Ammonia Gas Sensing: a Simulation Study", Engineering Research Express (IOP science), Vol. 4, No. 4, pp. 045032 2022. (Scopus Indexed, DOI: 10.1088/2631-8695/aca6d1)
- 8. Sukanta Kumar Swain, Sangeeta Singh, Shashi Kant Sharma, "Performance Analysis of Dielectrically Modulated InSb/Si TFET Based Label Free Biosensor", Microelectronics Journal (Elsevier), Vol. 129, pp. 105607, 2022. (SCI Indexed, Impact Factor: 1.9, DOI: 10.1016/j.mejo.2022.105607)
- 9. Neeraj Jain, Shashi Kant Sharma, Renu Kumawat, Praveen K Jain, Dayanand Kumar, Rishi Vyas, "Resistive switching, endurance and retention properties of ZnO/HfO2 bilayer heterostructure memory device", Micro and Nanostructures (Elsevier), pp. 207366, 2022 (SCI Indexed, Impact Factor: 2.6, DOI: 10.1016/j.micrna.2022.207366)
- 10. Sukanta Kumar Swain, Sangeeta Singh, Shashi Kant Sharma, "Effect of temperature on analog/RF and linearity performance of InSb/Si heterojunction SOI TFET " Micro and Nanostructures (Elsevier), Vol. 167,
 - pp. 207245, 2022 (SCI Indexed, Impact Factor: 2.6, DOI: 10.1016/j.micrna.2022.207245)
- 11. Neeraj Jain, Kunal Singh, Shashi Kant Sharma, Renu Kumawat, "Analog/RF Performance Analysis of a ITZO Thin Film Transistor", Silicon (Springer), pp. 1-19, 2022. (SCI Indexed, Impact Factor: 2.6, Dol: https://doi.org/10.1007/s12633-021-01601-7).
- 12. Sukanta Kumar Swain, Nisht Malviya, Sangeeta Singh, Shashi Kant Sharma, "InSb/Si Heterojunction-Based Tunnelling Field-Effect Transistor with Enhanced Drive Current and Steep Switching", Journal of Electronic Materials (Springer), pp. 1-8, 2022. (SCI Indexed, Impact Factor: 1.9, DoI: https://doi.org/10.1007/s11664-021-09325-5)

- 13. Chandra Prakash Gupta, Amit Kumar Singh, Praveen K Jain, Shashi Kant Sharma, Shilpi Birla and Sandeep Sancheti, "Electrical Transport Properties of Thermally Stable n-ZnO/AlN/p-Si Diode Grown using RF Sputtering", Materials Science in Semiconductor Processing (Elsevier), Vol. 128, pp.105734 (1-4), 2021. (SCI Indexed, Impact Factor: 3.085, Dol: https://doi.org/10.1016/j.mssp.2021.105734)
- 14. Chandra Prakash Gupta, Praveen K Jain, Umesh Chand, Shashi Kant Sharma, Shilpi Birla, Sandeep Sancheti, "Effect of Top Electrode Materials on Switching Characteristics and Endurance Properties of Zinc Oxide Based RRAM Device", Journal of Nano-and Electronic Physics, Vol. 12, No. 1, pp. 1007 (1-5), 2020. (Scopus Indexed, DOI: 10.21272/jnep.12(1).01007)
- 15. Chandra Prakash Gupta, Shashi Kant Sharma, Basanta Bhowmik, K. T. Sampath, C. Periasamy and Sandeep Sancheti, "Development of Highly Sensitive and Selective Ethanol Sensors Based on RF Sputtered ZnO Nanoplates" Journal of Electronic Materials (Springer), Vol.48, pp. 3686-3691, 2019. (SCI Indexed, Impact Factor: 1.56, DOI: 10.1007/s11664-019-07127-4).
- 16. Shashikant Sharma, Basanta Bhowmick, Vipin Pal and C. Periasamy, "Electrical and Low Temperature Methanol Sensing Characteristics of RF Sputtered n-ZnO/p-Si Heterojunction Diodes" IEEE Sensors Journal, Vol. 17, No. 22, pp. 7332 7339, 2017. (SCI Indexed, Imapct Factor: 2.51, 10.1109/JSEN.2017.2754542).
- 17. Shashikant Sharma, Bernhard C. Bayer, Viera Skakalova, Ghanshyam Singh and C. Periasamy, "Structural, Electrical and UV Detection Properties of ZnO/Si Heterojunction Diodes" IEEE Transaction on Electron Devices, Vol. 63, pp. 5, 2016. (SCI Indexed, Imapct Factor: 2.20, DOI: 10.1109/TED.2016.2540721)
- Shashikant Sharma , Tarun Varma , K. Asokan , C. Periasamy, Dharmendar Boolchandani ,"Annealing Temperature Dependent Structural and Optical Properties of RF Sputtered ZnO Thin Films " , Journal of Nanoscience and Nanotechnology (American Scientific Publishers), Vol. 17, No. 1, pp. 301-305, 2017. (SCI Indexed, Impact Factor: 1.33, DOI: 10.1166/jnn.2017.12379)
- 19. Shashikant Sharma, A. Sumathi and C. Periasamy ,"Photodetection Properties of ZnO/Si Heterojunction Diode: A Simulation Study" , IETE Technical Review, Vol. 34, No. 1, pp. 83-90, 2017. (SCI Indexed, Impact Factor: 1.30, DOI: 10.1080/02564602.2016.1145558)
- 20. Shashikant Sharma, C. Periasamy and P. Chakrabarti, "Thickness Dependent Study of RF Sputtered ZnO Thin Films for Optoelectronic Device Applications", Electronic Materials Letters (Springer), Vol. 11, No. 6, pp. 1093-1101, 2015. (Impact Factor: 2.0, DOI: 10.1007/s11664-019-07127-4).
- 21. Tarun Varma, Shashikant Sharma, C. Periasamy and D. Boolchandani," Performance Analysis of Pt/ZnO Schottky Photodiode Using ATLAS", Journal of Nanoelectronics & Optoelectronics (Americal Scientific Publishers), Vol. 10, No. 6, pp. 761-765, 2015. (Impact Factor: 1.0, DOI: 10.1166/jno.2015.1836).
- 22. Shashikant Sharma and C. Periasamy," Effect of Sputtering Power on Structural and Optical Properties of ZnO Thin Films Grown by RF Sputtering Technique, Journal of Nanoelectronics & Optoelectronics (Americal Scientific Publishers), Vol.10, No. 2, pp. 205-210 2015. (Impact Factor: 1.0, DOI: 10.1166/jno.2015.1732)
- 23. Shashikant Sharma, Sumit Vyas, C. Periasamy and P. Chakrabarti, "Structural and Optical Characterization of ZnO Thin Films for Optoelectronic Device Applications by RF Sputtering Technique", Superlattices and Microstructures (Elsevier), Vol 75, pp. 378-389,2014.(Impact Factor: 2.09, DOI: 10.1016/j.spmi.2014.07.032)
- 24. Shashikant Sharma and C Periasamy ,"A Study on the Electrical Characteristic of n-ZnO/p-Si Heterojunction Diode Prepared by Vacuum Coating Technique", Superlattices and Microstructures (Elsevier), Vol 73, pp. 12-21, 2014. (Impact Factor: 2.09, DOI:10.1016/j.spmi.2014.05.011) .

Other Journals:

- 25. Shashikant Sharma and C. Periasamy ,"Study of ZnO Thin Films Deposited at Different Argon Gas Flow Rates Using RF Sputtering", Advanced Science, Engineering and Medicine, Vol. 7, No. 10, pp. 855-858, 2015. (DOI:10.1166/jno.2015.1732)
- 26. Shashikant Sharma and C. Periasamy," Simulation Study and Performance Analysis of n-ZnO/p-Si Heterojunction Photodetector", Journal of Electron Devices, Vol. 19, pp. 1633-1636, 2014.

International Conferences:

- 27. Abhishek Raj, Sukanta Kumar Swain, Rishu Kumar and Shashi Kant Sharma, "Palladium Electrode Based Vertical Junctionless FET for High-Performance Hydrogen Gas Sensing," Intelligent Computing Techniques for Smart Energy Systems: Proceedings of ICTSES, 2023. (Accepted)
- 28. Sukanta Kumar Swain, Abhishek Raj, Rishu Kumar and Shashi Kant Sharma, "Temperature Reliability Analysis of Ge Source Based Heterogate Tunnel FET," Intelligent Computing Techniques for Smart Energy Systems: Proceedings of ICTSES, 2023. (Accepted)
- 29. Rishu Kumar, Abhishek Raj, Sukanta Kumar Swain and Shashi Kant Sharma, "Impact of Drain Doping on the Performance of L-Shaped TFET," Intelligent Computing Techniques for Smart Energy Systems: Proceedings of ICTSES, 2023. (Accepted)
- 30. Prasenjit Mahato, Kavindra Kumar Kavi, Sukanta Kumar Swain, Abhishek Raj, Shashi Kant Sharma, "Impact of Dielectric Pocket on the Performance Enhancement of Hetero Gate Oxide TFETs", Intelligent Computing Techniques for Smart Energy Systems: Proceedings of ICTSES, 2023. (Accepted)
- 31. Rishu Kumar, Sukanta Kumar Swain, Abhishek Kumar, Shashi Kant Sharma, "Investigation of ZnO/Graphene/Si Based UV Photodetectors for Civil and Military Applications", International Conference on Communication, Circuits, and Systems (IC3S) at KIIT Bhubneshwar, pp. 1-5, May 26-28, 2023. (Dol: 10.1109/IC3S57698.2023.10169202)
- 32. Neeraj Jain, Shashi Kant Sharma, Renu Kumawat, Abhinandan Jain, Sunil Lakhawat, "Influence of high-k dielectric material on the electrical performance of a-IGZO Thin Film Transistor " Materials Today: Proceedings (Elsevier), 2022. (DOI: 10.1016/j.matpr.2022.07.013)
- 33. Neeraj Jain, Renu Kumawat, Shashi Kant Sharma, "Effect of Substrate Temperature on the Microstructural and Optical Properties of RF Sputtered Grown ZnO Thin Films", Internation Conference on Advancement of Nanoelectronics and Communication Technologies 2020 published by Materials Today Proceedings (Jan. 17-18, 2020), Vol. 30, No. 1, pp. 93-99, SKIT Jaipur, India, 2020. (DOI:https://doi.org/10.1016/j.matpr.2020.04.667).
- 34. Chandra Prakash Gupta, Praveen K. Jain, Umesh Chand, Shashi Kant Sharma, Shilpi Birla, Sandeep Sancheti, "Effect of Annealing Temperature on Switching Characteristics of Zinc Oxide based RRAM Device", Innovative Trends and Advances in Engineering and Technology (ICITAET 2019), SGIRAC Shegaon, Maharashtra, India, Dec. 28-28, 2019. (DOI: 10.1109/ICITAET47105.2019.9170219)
- 35. Shashikant Sharma, C. Periasamy and P. Chakrabarti," Numerical Study and Analysis of n-ZnO/p-Si Heterojunction Based UV-Visible Photodetector", IEEE International Conference on Control, Computing, Communication and Materials (ICCCCM-2013), pp. 1-5, UIT, Allahabad, India, August 3-4, 2013.
- 36. Shashikant Sharma, C. Periasamy, Manisha Pattanaik and Balwinder Raj," Activation Noise Aware Ultra Low Power Diode Based Multi-Threshold CMOS Technique for Static CMOS Adders" IEEE International Conference on Emerging Research Areas (AICERA-2013)" pp. 1-6, Amal Jyoti College of Engineering, Kanjirappally, Kerala, India, June 4-6, 2013.(DOI: 10.1109/ICITAET47105.2019.9170219)

- 37. Shashikant Sharma, Manisha Pattanaik and Balwinder Raj" Signal Stepping Based Multimode Multi-Threshold CMOS Technique for Ground Bounce Noise Reduction in Static CMOS Adders" IEEE International Symposium on Electronic System Design (ISED-2012, A), pp. 272-275, IIEST Shibpur, Kolkata, India, Dec 19-22, 2012. (DOI: 10.1109/ISED.2012.14)
- 38. Manisha Pattanaik, Balwinder Raj, Shashikant Sharma and Anjan Kumar," Diode Based Trimode Multi-Threshold CMOS Technique for Ground Bounce Noise Reduction in Static CMOS Adders ", International Conference on Electronics, Networks and Computer (ICENC 2011) Published by Advanced Materials Research, Vol. 548, pp. 885-889, 2012. (Scopus Indexed, DOI: 10.4028/www.scientific.net/AMR.548.885).
- 39. Shashikant Sharma, Anjan Kumar, Manisha Pattanaik, and Balwinder Raj, "Forward Body Biased Multimode Multi-Threshold CMOS Technique for Ground Bounce Noise Reduction in Static CMOS Adders," International Conference on Electronics Computer Technology (Apr 6-8, 2012) Published by International Journal of Information and Electronics Engineering, vol. 3, no. 6, pp. 567-572, 2013. (DOI: 10.7763/IJIEE.2013.V3.380)
- 40. Shashikant Sharma, Anjan Kumar, Manisha Pattanaik and Balwinder Raj "Leakage Current and Ground Bounce Noise Aware Nano MTCMOS Adder Circuits" Proceedings of National Symposium on Recent Advances in Nano Science Engineering and Technology, ABV-IIITM Gwalior, India.

OUTREACH ACTIVITIES

International Conferences Organized:

1. Organized "3rd International Conference on Intelligent Computing Techniques for Smart Energy Systems (ICTSES 2023)" during December 14-15, 2023 in association with Manipal University Jaipur, MNIT Jaipur and NIT Uttarakhand.

FDPs Organized:

1. Conducted ATAL Academy Sponsored 5 Days Faculty Development Programme on Topic "Nanoelectronics Devices: Materials to Applications " during December 6-10, 2021 at IIIT Ranchi.

Invited Talks:

- Invited talk in AICTE Training and Learning (ATAL) Academy Sponsored One-week Faculty Development Program on "Navigating Recent Trends and Challenges in Semiconductor Devices" at SKIT Jaipur during December 16-21, 2024
- 2. Invited Talk in SERB Sponsored Karyashala on "Exploring Semiconductor Devices: A Practical Approach to VLSI " at NIT Raipur during July 10-16, 2024.
- 3. Keynote Session in "3rd International Conference on Recent Advancements in Computer Science & Communication Technology" at Arya Institute of Engineering Technology & Management, Jaipur on April 26, 2024.
- 4. Invited Talk in Atal FDP on "Recent Development in Nano-electronics Devices: Challenges and Opportunities" at SKIT Jaipur during December 11-16, 2023.
- 5. Invited Talk in IEEE Photonics Society and IEEE Communication Society Student Chapter, MNIT Jaipur on July 7, 2023.
- 6. Invited Talk in FDP on "Recent trends of communication: Photonics Technology" at VIT Vellore during August 1-5, 2022.
- 7. Invited Talk in FDP on "Enterprise Healthcare Systems & Solutions" at IIIT Gwalor during January 15-19, 2022.
- 8. Conducted ATAL Academy Sponsored 5 Days Faculty Development Programme on Topic "Nanoelectronics Devices: Materials to Applications " during December 6-10, 2021 at IIIT Ranchi.

- 9. Keynote Session in "3rd International Conference on Recent Advancements in Computer Science & Communication Technology" at Arya Institute of Engineering Technology & Management, Jaipur on April 26, 2024.
- 10. Invited Talk in Atal FDP on "Recent Development in Nano-electronics Devices: Challenges and Opportunities" at SKIT Jaipur during December 11-16, 2023.
- 11. Invited Talk in IEEE Photonics Society and IEEE Communication Society Student Chapter, MNIT Jaipur on July 7, 2023.
- 12. Invited Talk in FDP on "Recent trends of communication: Photonics Technology" at VIT Vellore during August 1-5, 2022.
- 13. Invited Talk in FDP on "Enterprise Healthcare Systems & Solutions" at IIIT Gwalor during January 15-19, 2022.
- 14. Invited Talk in ATAL Academy Sponsored FDP on Nanoelectronics Devices: Materials to Applications " at IIIT Ranchi during December 6-10, 2021 at IIIT Ranchi.
- 15. Invited Talk in ATAL Academy Sponsored FDP on "Photonics Technology: A New Era of Communication" at IIIT Ranchi during September 21-25, 2021.
- 16. Invited Talk in AICTE Sponsored Short Term Training Programme on "Emerging Issues on VLSI Design" during September 6-10, 2021 organized by ITM University Gwalior.
- 17. Invited Talk in FDP on "Next-Generation Trends For Nanotechnology in CMOS, Photonics, and Neuromorphic Computation" at NIT Patna during Januray 25-30, 2021.
- 18. Invited Talk in ATAL Academy Sponsored FDP on "Photonics Technology: The Next Information Revolution" at IIIT Ranchi during November 3-7, 2020.
- 19. Invited Talk in Jabalpur Engineering College during August 25, 2020.
- 20. Invited Talk in FDP "Recent trends in Electronics fields" at LNJPIT Chapra, Bihar, India during June 15-20, 2020
- 21. Invites Talk in the Workshop "Recent Advances in Materials for Sensor Design and Microwave Application" at NIT Jamshedpur during July 8-13, 2019.
- 22. Invited talk in AICTE-ISTE sponsored Faculty Induction Program at SKIT Jaipur during July 2-7, 2018.

Other Activities:

- 1. Served as Technical Chair for "3rd International Conference on Intelligent Computing Techniques for Smart Energy Systems (ICTSES 2023)" during December 14-15, 2023
- 2. Session Chair in International Conference ICAMCM 2021 organized by JECRC Jaipur during February 19-20, 2021.
- 3. Technical Programme Committee Member ICPS-2021
- 4. Session Chair in International Conference on Computer, Communications and Electronics (Comptelix-2017) during July 1-2, 2017 at Manipal University Jaipur.
- 5. Served as Reviewer in ICPCCAI-2020 during August 14-16, 2020
- 6. Reviewer, IEEE Transactions on Electon Devices; Reviewer, Superlattices and Microstructures; Reviewer, Journal of Electronic Materials; Reviewer, Journal of Nanoelectronics and Optoelectronics; Reviewer, IEEE Transactions on NanoBioscience; Reviewer, IEEE Transactions on Electron Devices.

DECLARATION

I hereby declare that the above particulars are true to the best of my knowledge and belief.