

Shrutidhara Sarma

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Nationality: Indian **Date of Birth:** 08-02-1989

Research Bio

I aim to develop innovative and robust sensor systems utilizing nanocomposites and instrumentation, with a focus on applications in wearable health monitoring devices, assistive systems and aerospace technologies.

Research Interests

Smart respiration system, flexible/stretchable sensors, resource-efficient sensing, airframe sensing skin design, structure-property relations in electrospun nanofibers, portable device technologies, carbon nanomaterials (CNT/Gr), laminated nanocomposites.

Education

- 2012-17 **Ph.D. in Mechanical Engineering**, *Indian Institute of Technology Guwahati*, India.
- Jointly with Aristotle University of Thessaloniki (AUTH), Greece as an **Erasmus Mundus Fellow**. Course-work CGPA: 9.32/10
 - Dissertation: Thin film heat transfer gauges for short duration transient measurements. Advisors: Dr. N. Sahoo and Dr. Aynur Ünal
- 2008-12 **B.Tech. in Mechanical Engineering**, *Tezpur University*, India.
- **Institute Gold Medalist**. Ranked 1 in Department of Mechanical Engineering (CPI: 9.25/10)
 - Major Project: Simulation of a Hybrid Solid Oxide Fuel Cell–Gas Turbine System

Experience

- 2026– **Associate Professor**, Dept. of Mechanical Engineering, Indian Institute of Technology Jodhpur.
- 2019-25 **Assistant Professor**, Dept. of Mechanical Engineering, Indian Institute of Technology Jodhpur.
- Establishing Flexible sEnsoRs from Nanocomposites (FERN) Lab
- 2018-19 **Assistant Professor**, Dept. of Mechanical Engineering, National Institute of Technology Delhi.
- 2017-18 **Postdoctoral Fellow**, Kunsan National University, South Korea.
- Project: Design of Novel Airfoils for Slow Speed Wind Turbines. Advisor: Dr. J.H. Lee
- 2015-16 **Erasmus Mundus Fellow**, Aristotle University of Thessaloniki (AUTH), Greece.
- Project: Developing Multi-layered Nanocomposite based Thin Film Sensors. Advisor: Dr. P. Patsalas
- 2010 **Summer Research Fellow**, Indian Academy of Sciences, India.
- Project: Wind Power Developments in India with Reference to World Scenario. Advisor: Prof. D P Kothari and Dr. R. Natarajan

Awards and Mentions

- Selected Member of **The National Academy of Sciences, India (NASI) 2025** in Engg. Sciences & Tech.
- Women in Sensors & Wiley Best Paper Award 2025** by IEEE FLEPS at Singapore.
- INAE Young Associate 2024** in Mechanical Engineering by Indian National Academy of Engineering.
- ISEES Young Scientist Award 2023** by International Society for Energy, Environment and Sustainability.
- IEI Sheela Baya National Award 2023** for outstanding contribution & technological advancement in ME.
- SERB International Research Experience (SIRE) fellowship** for 2023-24 at Technion, Israel.
- WISER (Women in Science and Engineering Research) Fellowship** for 2023-26.
- PECFAR (Paired Early Career Fellowship in Applied Research Fellowship)** for 2023 (I declined).
- Erasmus Mundus Fellowship** for 2015-2016 by European Commission.
- Jenesys 2.0 Fellowship** by JICE to represent India in Japan in 2014.
- Gold medal** in B.Tech in Mechanical Engineering by Tezpur University in 2012.
- Class X All Assam State Board Topper** (17th Position) 2005.

Grants and Fellowships

Funding Agency	Project Title	PI/Co-PI	Amount	Award Year
ANRF Core Research Grant	Multifunctional sensing skins for curved aircraft surfaces (MultiSENSE)	PI	Rs 43 Lakhs	2024-27
ANRF POWER Grant	Flexible sensoR Array for health Monitoring of Morphing structurEs (FRAMME)	PI	Rs 48 Lakhs	2023-26
SERB International Research Experience (SIRE)	Mechanically resilient and ultra-sensitive flexible strain sensors for soft machines	Fellow	Fully funded	2023-24
WISER Indo-German Science and Technology Centre (IGSTC)	Towards development of ultrasensitive strain measurement system using laminated nanocomposites (TESSLA)	PI	Rs 39 Lakhs	2023-26 (ongoing)
PECFAR Indo-German Travel Grant (IGSTC)	Developing high performance linear temperature sensor from nanocomposites	PI	Rs 5 Lakhs	2023 (recommended for award, I declined)
Startup Research Grant (SRG), Science and Engineering Research Board (SERB), India	Highly conductive nanocomposite fibers for flexible temperature sensors (FlexTem)	PI	Rs 28 Lakhs	2020-22 (successfully completed)
SEED Grant, IIT Jodhpur	Development of High performance flexible pressure sensors from nanocomposites using hierarchical microstructures	PI	Rs 25 Lakhs	2021-24 (successfully completed)
Marie Skłodowska-Curie Actions (MSCA) Summer School, Cardiff University	Real Time Temperature Monitoring using Flexible Temperature Sensors (Flexmon)	Fellow	Fully-funded	May 2018 (complete)
Erasmus Mundus Action-II Interweave Grant (European Commission)	Developing Multi-layered Nanocomposite based Thin Film Sensor	Fellow	Fully-funded (€ 18,000)	2015-16 (complete)

Projects under submission

- "ASTRA – Autonomous Sensing with Thermoelectric Energy for Physiological and Environmental Response in Astronauts". Under review at ISRO - RESPOND 2024, 48 lakhs INR
- "Neo-Patch: A Skin-like Wearable System for Personalized Energy Expenditure Monitoring and Lethargy Detection in Neonates". Submitted to ICMR-Small Extramural Grants 2026, 1 crore INR.

Patents Granted/Filed

1. **Sarma, S.**, Verma, G., (2025) "An Advanced Portable and Flexible Array-Based Real-Time Strain Measurement System" IND 570704, 07.08.2024.
2. **Sarma, S.**, Gupta, N., Verma, G., (2025) "PBM: Peel-off sensor for detecting Breathing Movement at birth". Patent application No: 202511104163, Filed 29.10.2025.

Journal Publications

1. Melka K E, **Sarma S** (2025) "FlexSwipe: Flexible Multi-element Touch Sensing System and Temporal Shape Analysis for Complex Swipe Recognition". *Measurement* 258, 119158, <https://doi.org/10.1016/j.measurement.2025.119158> (IF: 5.6)
2. Verma G, Koch E, Dietzel A, **Sarma S** (2025) "Neonatal Respiration Monitoring System with Synchronized Oxygen Supply and Machine Learning based Breathing Classification". *Advanced Intelligent Systems*, 1-13, 2500456: <https://doi.org/10.1002/aisy.202500456> (IF: 6.8)
3. Thapa P, Bachhar N, **Sarma S** (2025) "Substrate-dependent thermal sensing using silver nanoparticles synthesized via laser ablation in solution". *Scientific Reports* 15, 23614, <https://doi.org/10.1038/s41598-025-02431-y> (IF: 3.9)
4. Vats N, Phadkule S S, **Sarma S** et. al. (2025) Enhanced magnetic properties through tailoring of morphology of electrospun strontium hexaferrite nanofibers. *Scientific Reports* 15, 23314. <https://doi.org/10.1038/s41598-025-04493-4> (IF: 3.9)
5. Phadkule S S, Haick H, **Sarma S** (2025) "Skin temperature as a marker of human health in the Northwest Indian scenario". *Sensors and Actuators A: Physical*, 391, 116640, <https://doi.org/10.1016/j.sna.2025.116640> (IF: 4.9)
6. Verma G, **Sarma S**, Koch E, Dietzel A, (2025) "Flexible Touch and Gesture Recognition System for Curved Surfaces with Machine Learning for Assistive Applications". *Sensors and Actuators Reports*, 9, 100284, <https://doi.org/10.1016/j.snr.2025.100284> (IF=7.6)
7. Thapa P, Raj D, **Sarma S**, (2025) "Rapid Fabrication of Hierarchically Microstructured High-Performance Flexible Resistive Pressure Sensors with Laser Engraving". *IEEE Sensors*, 25 (6): 9432-9440, doi: 10.1109/JSEN.2025.3532390 (If=4.5).
8. **Sarma S**, Gaur C, Benarrat R, Haus J N, Koch E, Dietzel A (2025) "Prediction of bead formation in PVDF fiber across different solvent systems using Interpretable Machine Learning". *Polymers*, 317, 127972, doi: <https://doi.org/10.1016/j.polymer.2024.127972> (IF=4.1).
9. Golwala K, **Sarma S**, Garg Y, Agarwal A (2024) "A polyester- stainless steel based smart wristband sensor for skin temperature monitoring". *The Journal of The Textile Institute*. <https://doi.org/10.1080/00405000.2024.2392905> (IF=1.5)
10. **Sarma S**, Srivastava R (2024) "Strain cartography of bilayer graphene-PDMS nanocomposites using Raman spectroscopy". *Polymer Composites*, 1-10; <https://doi.org/10.1002/pc.28420> (IF=5.2)
11. Yadav Y, Thapa P, **Sarma S**, (2023) Characterization of a polyvinylidene fluoride (PVDF) nanofiber film coated with carbon nanotubes (CNTs) on a polyimide substrate by integrated experimental measurements and computational analysis. *Instrumentation Science & Technology*. <https://doi.org/10.1080/10739149.2023.2278604> (IF=1.6)
12. **Sarma S**, Rao V R, (2023) Emerging Synthesis and Characterization Techniques for Hybrid Polymer Nanocomposites. *Nanotechnology*, 35: 012002. DOI 10.1088/1361-6528/acfef8 (IF= 3.658)
13. Phadkule S S, **Sarma S**, (2023) Progress in Nanocomposite based Flexible Temperature Sensors: A Review. *Measurement: Sensors*, 27:100692; <https://doi.org/10.1016/j.measen.2023.100692>
14. Phadkule S S, Singh S V, **Sarma S** (2023) Influence of experimental conditions on conductivity of electrospun nanocomposite fibers. *Materials Today: Proceedings*, 76 (2): 310-315; <https://doi.org/10.1016/j.matpr.2022.11.244> (IF=1.5)
15. Phadkule S S, **Sarma S**, (2022) High-performance flexible temperature sensor from hybrid nanocomposite for continuous human body temperature monitoring. *Polymer Composites*, 44 (2): 1381-91; <https://doi.org/10.1002/pc.27178> (IF= 5.2)
16. Singh S V, **Sarma S**, (2022) Taylor cone height as a tool to understand properties of electrospun PVDF nanofiber. *Journal of Electrostatics*, 120:103770. <https://doi.org/10.1016/j.elstat.2022.103770> (IF=2)

17. **Sarma S**, Verma A K, Phadkule S S, and Saharia M (2022) "Towards an Interpretable Machine Learning model for electrospun polyvinylidene fluoride (PVDF) fiber properties". *Computational Materials Science*, 213: 111661 <https://doi.org/10.1016/j.commatsci.2022.111661>. (IF= 3.6)
18. **Sarma S**, Singh S, Garg A (2021) Laminated Ag and Ag/CNT nanocomposite films as sensing element for efficient thin film temperature sensors, *Measurement*, 172: 108876. <https://doi.org/10.1016/j.measurement.2020.108876>. (IF=5.6)
19. **Sarma S**, Patsalas P (2020) Graphene nanostructures on electrodeposited Cu by chemical vapor deposition. *International Journal of Mechanical and Production Engineering (IJMPE)* 8 (4): 26-29
20. **Sarma S**, Fekas I, Filintoglou K, Sahoo N, Patsalas P (2019) Layer by layer deposition of alternate CNT and Ni films for efficient multilayer thin film temperature gauges. *Journal of Physics D: Applied Physics* 52, 095104. <https://doi.org/10.1088/1361-6463/aaf692>. (IF= 3.2)
21. **Sarma S**, Gao L, Niu X, Garg A, Sandoval J (2019) Thermal performance of thin film heat gauges of gold, silver and nanocomposite. *Appl. Therm Engg.* 147: 545-550. doi: <https://doi.org/10.1016/j.applthermaleng.2018.10.079>. (IF= 6.5)
22. **Sarma S**, Sahoo N, Unal A (2018) Prediction of experimental surface heat flux of thin film gauges using ANFIS. *Journal of the Institution of Engineers: Series C*. doi: <https://doi.org/10.1007/s40032-018-0458-2>
23. **Sarma S**, Lee JH (2018) Developing efficient thin film temperature sensors utilizing layered carbon nanotube films. *Sensors* 18(10), 3182; <https://doi.org/10.3390/s18103182>. (IF=3.6)
24. Ahadi A, **Sarma S**, Moon JS, Kang S, Lee JH (2018) A robust optimization for designing a charging station based on solar and wind energy for electric vehicles of a smart home in small villages, *Energies* 11(7), 1728; <https://doi.org/10.3390/en11071728>. (IF= 3)
25. Garg A, **Sarma S**, Panda BN, Zhang J, Gao L (2016) Study of effect of nanofluid concentration on response characteristics of machining process for cleaner production. *Journal of Cleaner Production* 135: 476-489. <http://dx.doi.org/10.1016/j.jclepro.2016.06.122>. (IF= 9.3)
26. **Sarma S**, Unal A, Sahoo N (2015) Thin film gauges using carbon nanotubes as composite layers. *ASME Journal of Engineering Materials and Technology* 138: 041014-1-8. <https://doi.org/10.1115/1.4033909>
27. **Sarma S**, Sahoo N, Unal A (2015) Calibration of a silver Thin Film Gauge for short duration convective step heat load. *SADHANA* 41 (7): 787-794. <https://doi.org/10.1007/s12046-016-0513-8>
28. Gogoi TK, **Sarma S**, Borthakur S (2013) Simulation of a hybrid solid oxide fuel cell-gas turbine, *International Journal of Emerging Technology and Advanced Engineering* 3(3): 250-258.
29. **Sarma S**, Natarajan R, Kothari DP (2010) A critical analysis of Government of India policy towards wind power developments with reference to world scenario, *Journal on Future Engineering and Technology* 6(1): 1-5.

International/National Conferences

1. Thapa P, **Sarma S** (2026) Soft Flexible Laser-Engraved Sensor for Characterizing Sloshing-Induced Dynamic Responses, LOPEC 2026, Large-area, Organic & Printed Electronics Convention Munich, Germany, 24-26 February.
2. Verma G, **Sarma S**, Koch E, Dietzel A (2025) Assistive Living and Wireless Emergency Alert System for Mobility impaired Users. FLEPS 2025, IEEE International Conference on Flexible Printable Sensors and Systems, Singapore (**Best Paper Awarded**).
3. Pathak M, **Sarma S** (2025) High-Sensitivity Flexible Piezoresistive Sensors: Experimental Insights from Static and Dynamic Testing. 20th International Conference on Vibration Engineering and Technology of Machinery VETOMAC 2025, IIT Guwahati, India.
4. Verma G, Raj D, Praneeth C, **Sarma S**, Koch E, Dietzel A (2025) Development of respiration monitoring system for infants using ultrasensitive strain sensor patch. APSCON 2025, IEEE Applied Sensing Conference, Hyderabad, India.
5. Verma G, Sarmah T T, **Sarma S**, Koch E, Dietzel A (2024) Designing a Printed Strain Sensor Array with minimal Cross-Sensitivity and Orientation Independence. APSCON 2024, IEEE Applied Sensing Conference, Goa, India.
6. Golwala K, **Sarma S**, Agarwal A, Garg Y (2023) A woven wristband for spatiotemporal body temperature sensing for healthcare applications. APSCON 2023, IEEE Applied Sensing Conference, Bengaluru, India, 23-25

January.

7. Singh S V, **Sarma S** (2022) Influence of experimental conditions on conductivity of electrospun nanocomposite fibers. International Conference on Nanotechnology for Sustainable Living and Environment (ICON-NSLE), BITS Pilani, India, 14-16th April.
8. Thapa P, **Sarma S** (2022) Analysis of Laser Ablation Synthesis in Solutions (LASiS) of silver nanoparticles (AgNPs) in DI Water and their dependence in laser repetition rate. Empowering S&T with Women- A Step towards a New Era, IIT Jodhpur, India, 19th- 20th April.
9. **Sarma S**, Patsalas P (2020) Graphene nanostructures on electrodeposited Cu by chemical vapor deposition. International Conference on Recent Innovations in Engineering and Technology (ICRIET), Kuala Lumpur, Malaysia, 18th – 19th January.
10. **Sarma S** (2019) Dependence of resistivity on thickness of vacuum deposited copper thin films. 1st National Conference on Advances in Mechanical Engineering, NIT Delhi, India, 16th March.
11. Thakur S, Kumar H, **Sarma S** (2019) Flow simulation of atmospheric re-entry vehicle at varying mach number and angle of attack. International Conference on Emerging Trends in Electro-Mechanical Technologies and Management, New Delhi, India, 26th-27th July.
12. **Sarma S**, Lee JH (2018) The influence of new airfoil-shaped blades on a 5 mw wind turbine performance. Korea New & Renewable Energy Society 2018 Spring Conference, Seoul, South Korea, 19-20 April.
13. **Sarma S**, Lee JH (2017) Aerodynamic force analysis on novel airfoils shaped wind turbine blades under steady wind. KWEA: Korea Wind Energy Society 2017 Fall Conference, Jeju Island, South Korea, 30 October-1 November.
14. **Sarma S**, Lee JH (2017) Understanding dynamic torque behavior of novel airfoils designed for smaller wind turbine blades. The 6th Korea-Japan Joint Workshop on Fans and Compressors, Seongnam-si, Gyeonggi-do, South Korea, 6th November.
15. **Sarma S**, Lee JH (2017) Dynamic force analysis using bem theory on airfoils shaped wind turbine blades. The 7th Asia Pacific Forum on Renewable Energy AFORE, Busan, South Korea, 15 -18 November.
16. **Sarma S**, Sahoo N (2014) Computational study of a thin film heat transfer gauge for transient measurements. FMFP-5th International and 41st National Conference on Fluid Mechanics and Fluid Power, IIT Kanpur-INDIA, 12-14 December
17. **Sarma S**, Agarwal S, Sahoo N (2014) Numerical and experimental study for measurement of exhaust gas temperature and heat flux using thermal sensors in an internal combustion engine. ICTACEM-6th International Conference on Theoretical, Applied, Computational and Experimental Mechanics, IIT Kharagpur- INDIA, 29-31 December.
18. **Sarma S**, Sahoo N (2013) Thin film temperature sensors for transient measurement. Proceedings of the 22nd National and 11th International ISHMT-ASME Heat and Mass Transfer Conference, IIT Kharagpur-INDIA, 28-31 December.

Publications [In Review/In process]

1. Pathak M, Gupta N, **Sarma S** (2025) "Integration of Flexible and Stretchable Sensors for Low-Wire, High-Sensitivity Structural Monitoring in Aerospace Components". Under review at Sensors & Actuators A: Physical (IF: 4.9)
2. Gupta H, Verma S, **Sarma S** (2025) "Understanding influence of ambient Temperature and Humidity on the performance of multi-element Stretchable Strain Sensors". Submitted to Scientific Reports.
3. Thapa P, **Sarma S** (2026) "Non-intrusive Dynamic Pressure Monitoring of Sloshing Liquid using a Hierarchically Microstructured Flexible Sensor". Under review at Langmuir.

Membership of Professional Bodies

NASI Member- Engineering Sciences and Technology Category, Selected in 2025

IEEE Member - Member ID: 100834123

Materials Research Society - Regular Member, Member ID: 11138025

IEI Member ID: 250101125420

Invited Talks and Outreach Activities

- Dec 2025 Chairperson, DST INSPIRE JRF–SRF Upgradation Assessment Committee
- Nov 2025 Chaired an SCDT-FlexE Centre Webinar by IIT Kanpur
- Mar 2024 Invited Talk: Mechanical Sciences Young Investigators' Meet (MSYIM), IIT Kanpur, India
- Mar 2024 Invited Talk: International Conference on Innovation and Challenges in ME, Vijayawada, India
- Dec 2023 Invited Alumni Talk at Tezpur University, India
- Oct 2023 Invited Speaker for International Workshop on Membrane Technologies for Desalination, Energy and Water Sustainability (MemDEW) organized by IIT Roorkee, India under G20 summit
- Oct 2023 Invited Keynote Speaker for 2nd International Conference on Aspects of Materials and Mechanical Engineering (ICMME- 2023) organized by GLA University Mathura, India and Universidade Federal do Rio Grande do Sul, Brazil under G20 Summit
- Sep 2022 Invited expert lecture on energy-saving devices, and smart structures under ISTE student Chapter, organized by Amity University, Delhi, India
- Jun 2022 Invited speaker for INAE's flagship event 16th National Frontiers of Engineering Symposium (NatFoE) organized by Jadavpur University, Kolkata, India
- Jan 2022 Invited speaker for FDP on Shape Memory Alloy Modelling, its Applications to Wearable Devices and Smart Structures organized by The LNM Institute of Information Technology Jaipur, India
- Nov 2021 Invited speaker for Graduate Induction Program organized by Tezpur University, Assam, India
- Mar 2021 Session Chair for 1st International Conference for Women in Multifaceted Research (ICWMR)
- Feb 2021 Invited speaker for Teacher' s Training Program on Recent Advances and Applications of Machine Learning and IoT in Mechanical Engg. organized by Sagar Institute of Sc. & Tech., Bhopal, India
- Dec 2020 Invited speaker for AICTE sponsored FDP on Recent Developments of Nano-Composites and Smart Materials in Aerospace Industry organized by MLR Institute of Technology, Hyderabad, India
- 2019-20 Member, Preliminary Evaluation Committee, Indo-Shastri Canadian Institute
- Nov 2017 Session Chair for The 7th Asia Pacific Forum on Renewable Energy AFORE, Busan, South Korea

Teaching Experience

1. Nanosensors MEL7420 (IITJ: 2020-2025) - (New Course Developed)
2. Experimental Techniques in Thermofluids MEL7070 (IITJ: 2019-2023)
3. Heat Transfer MEL3010 (IITJ: 2021-2025)
4. Heat Transfer Lab MEP3010 (IITJ: 2023-2025)
5. Engineering Visualization Lab MEP1010 (IITJ: 2020-2025)
6. Engineering Realization Lab MEP1012 (IITJ: 2021-2022)
7. Design Credits MEN2020/ MEN1012 (IITJ: 2021-2024)
8. Social Connect OSN 1010 (IITJ: 2019, 2020, 2023)
9. Engineering Graphics ME102, NITD
10. Computer Aided Product Design MEL622, NITD
11. Computational Fluid Dynamics MEL583, NITD
12. Computer Aided Engineering Lab MEP561, NITD

Thesis Supervision

Ongoing - 5 PhDs, 2 M.Techs, 1 B.Tech

Graduated - 1 PhD (defended 03.11.2025), 1 PhD (thesis submitted), 6 M.Techs, 7 B.Techs

Ph.D. Scholar	Title	Year
Saket	Nanocomposite-based flexible temperature sensors: synthesis, characterization, and applications in health monitoring	2025 (G)
Parul	Hierarchically microstructured flexible pressure sensor: from nanocomposite-based fabrication to application in liquid sloshing monitoring	2026 (thesis submitted)
Gitansh	Neopatch: A soft, wearable system for continuous, non-invasive monitoring of infant vital signs	2023-
Ebisa	Self powered electronic skin for assistive technology	2024-
Sumit	Screen printed multifunctional sensing skin for curved aircraft surfaces	2024-
Manan	Flexible sensor array for health monitoring of airframe components	2025-
M.Tech. Scholar	Title	Year
Jibin (MedTech)	Indigenous eye patch for dry eyes	2025-27
Kishan	Nanoparticle based TIG welding of austenitic stainless steel	2025-26
Tushar	Fabrication and calibration of screen printed strain sensors	2023-24 (G)
Taniya	Optimizing hierarchical microstructure pattern by laser marking	2022-23 (G)
Ritu	Characterization studies for in-house synthesized nanocomposites	2022-23 (G)
Shivam K	Impact of Taylor cone height on nanofiber formation through electrospinning	2021-22 (G)
Abhay	Analysis of droplet formation of nanocomposite ink in DOD inkjet	2020-21 (G)
Shivam	Flow simulation of atmospheric re-entry vehicle at varying Mach and AOA	2018-19 (G)
B.Tech. Scholar	Title	Year
Sheetal	Flexible thermoelectric generator for powering sensors	2025
Chaitanya	Prediction of bead formation in electrospun PVDF fibers	2025 (G)
Divyanshu&Praneeth	Design of smart ventilation system	2025 (G)
Chaitanya	Prediction of bead formation in electrospun PVDF fibers	2025 (G)
Kunj	Textile based sensors	2024 (G)
Akarshit	ML based modeling of electrospun fibers with ML	2023 (G)
Raveen & Suresh	Dynamic calibration of temperature sensors	2020 (G)
Summer Intern	Title	Year
Hansraj	Characterization of flexible sensors under varying humidity and temperature	2025
Yogeshwar	Simulation of nanocomposite fiber based strain sensor	2022
JRF	Title	Year
Tulsi	Flexible thermoelectric generation device	2025

Administrative Experience

- 2025-27 Chief Warden, Hostel B4, IIT Jodhpur
- 2025-26 Faculty Advisor (MTech TFE 2025 batch), IIT Jodhpur
- 2025-26 Convener, Department Society Committee, IIT Jodhpur
- 2025-26 Convener, Department Class Committee, IIT Jodhpur
- 2025-26 Member, Department PG Committee, IIT Jodhpur
- 2025-26 Member, Department PG Admission Committee, IIT Jodhpur
- 2025-26 Member, Industry and Outreach Committee, IIT Jodhpur
- 2025-26 MedTech representative, Institute International Relations Committee
- 2019-P Faculty Advisor (UG 2019 batch) Dept. of Mechanical Engineering, IIT Jodhpur
- 2024-25 Member, Department UG Committee, IIT Jodhpur, India

2024-25 Member, Institute International Relations Committee, IIT Jodhpur
2020-24 Member, PhD admission, Interdisciplinary Research Platform, IIT Jodhpur
2022-23 Member, Centre of Excellence for Arts and Digital Immersion, IIT Jodhpur
2020-23 Member, Dept. Webpage Committee, Mechanical Engineering, IIT Jodhpur
2020-22 Member, Committee for Celebration of Commemorative Days, IIT Jodhpur
2019-20 Faculty Advisor (Cultural and Literary Society) Student Gymkhana, IIT Jodhpur
2019-20 Member, Career Counselling Committee, IIT Jodhpur
2019-20 Nodal Officer, JEE Female Helpdesk JEE Admissions, IIT Jodhpur
2019-20 Member, Ek Bharat Shreshtha Bharat (EBSB) IIT Jodhpur
2018-19 Faculty Co-Advisor Cultural Board, NIT Delhi, India

Extracurricular Activities and Awards

1. Awarded gold medal in All India Tabla Competition and awarded with Kalabid title in 2003
2. Certified "B" grade artist from All India Radio Guwahati in Folksong/ Instrumental category.
3. Certified degree holder in Vocal (Classical), Tabla (Percussion), Fine Arts (Painting) and Hindi language.
4. Awarded bronze medal in 15th State Teakwon-Do Championship in 1998
5. Participated and won several medals in Zonal and National Youth Festivals during undergraduates
6. Supervised and organized several cultural and literary fest in IIT Jodhpur and NIT Delhi, India.
7. Passed Basic and Advanced French language course in 2011-2012

Personal Interests

Vocal, Playing Instruments (Tabla, Guitar, Tzoura), Educational outreach.