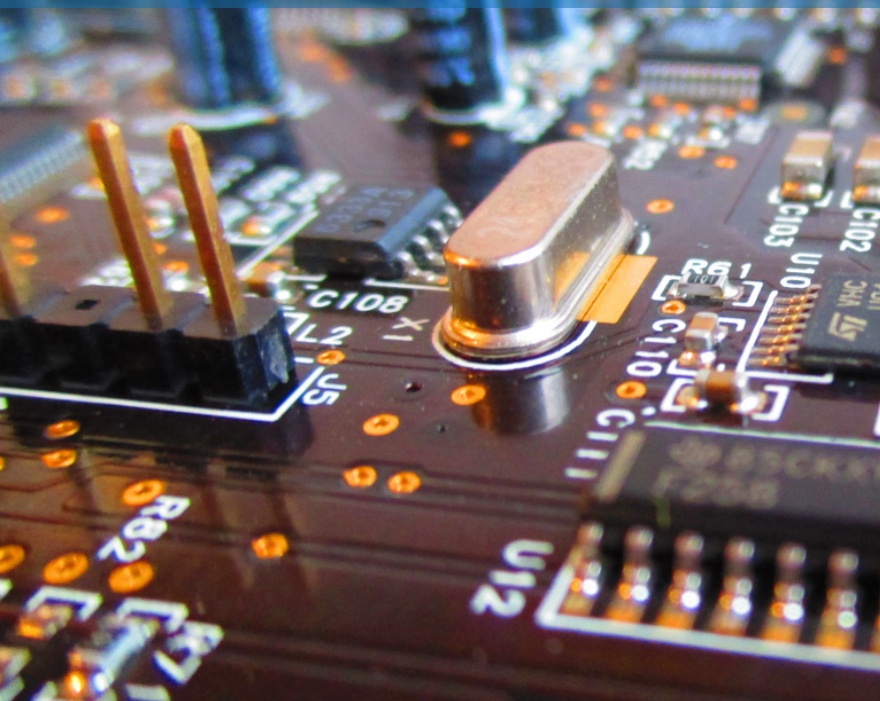


SENSE

NEWSLETTER



HIGHLIGHTS

- Vision & Mission
- Dean's Message
- Welcome to SENSE Family
- Student achievements
- Faculty Achievements
- Events Organised
- Alumni Engagements
- PG Alumni Meet
- SENSE Publications
- Extracurricular Activities
- Editorial Committee

VISION

To be a leader in imparting in-depth and futuristic knowledge of electronics engineering that would cater to the needs of industry, research and society.



MISSION

- To create and maintain an environment of excellence in teaching, learning and applied research in the field of electronics, communication engineering and allied disciplines which pioneer sustainable growth.
- To instill in graduates the necessary professionalism, ethics, knowledge and skills which would enable them to be lifelong learners who are able to solve current and future problems and improve the quality of human life.

D E A N ' S

MESSAGE



VIT[®]
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Message from SENSE Dean Office

Coming into 2022, the biggest task ahead of us was to achieve pre-pandemic normalcy. As a school, SENSE slowly called back all the faculty to the campus. To ensure safety, everyone was made to wear masks, have their temperature checked and show proof of being vaccinated twice. Sanitizers have been placed at multiple locations on all floors of Technology Tower and are refilled on a regular basis. Having the faculty come back and occasionally conduct online classes from campus helped a lot in making the transition from online to offline education smoother. Students too were called back batch wise and by the beginning of May, the SENSE family was finally together under the same roof.

It is with immense pleasure that I present to you the 8th Issue of E-Newsletter by the School of Electronics Engineering (SENSE) for the first half of 2022. It highlights the well deserved honors and recognitions awarded to faculty and students alike of the SENSE family during the period of January to June of 2022.

I would like to thank all members of the SENSE family for their support and efforts that have made this newsletter possible. As we move towards the new challenges that lie ahead, we welcome and wish to extend our gratitude and collaborative support. Thank you for your continued support and we look forward to being able to truly execute the mission and vision of the institute.

Dr. SIVANANTHAM S

Professor and Dean

School of Electronics Engineering,
Vellore Institute of Technology, Vellore

Email: dean.sense@vit.ac.in

WELCOME TO SENSE FAMILY

New Faculty of SENSE School

We take immense pleasure in welcoming you all to the SENSE team at VIT, Vellore. Here SENSE faculty are doing very interesting and useful research works beneficial for the society. We feel your involvement and co-operation in the research works will add additional feather to the SENSE crown. Hearty welcome to all!



Prof. Chittaranjan Nayak

Ph. D from NIT Agartala
Department of
Communication Engineering



Prof. Ananthakrishna Chintanpalli

Ph. D from Purdue University
Department of
Communication Engineering



Prof. Anju Thomas

Ph. D from NIT Trichy
Department of Sensors and
Biomedical Technology



Prof. Sidharth Gautam

Ph D from IIT Delhi
Department of
Embedded Technology



Prof. Jaffino G

Ph D from Tyagrajan Engineering college
Department of Sensors and
Biomedical Technology

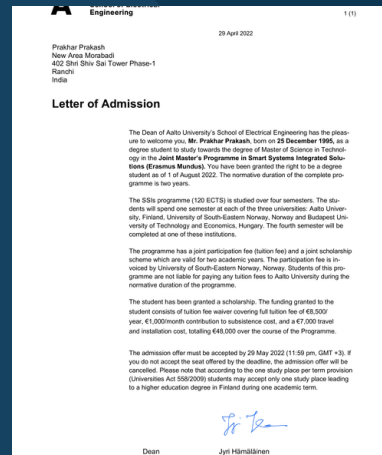


Prof. Vishal Gupta

Ph D from University, Tor Vergata, Italy
Department of
Micro & Nano Electronics

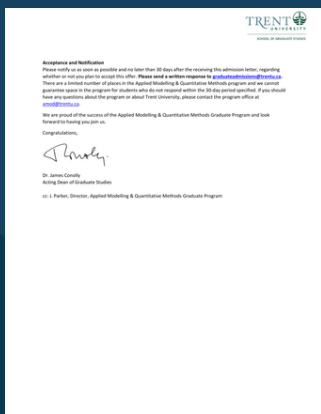
STUDENT ACHIEVEMENTS

Higher Studies

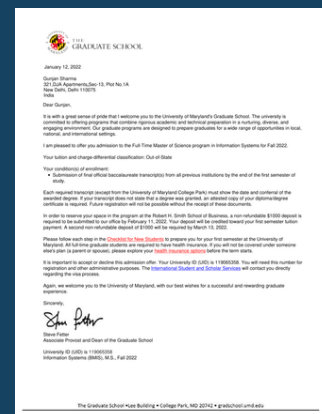


- Apala Chakrabarti (18BML0036) has received an admission offer from Chalmers University of Technology, Sweden

- Prakhar Prakash (16BIS0017) has been admitted to Aalto University, Finland



- Sukarn Pahuja (18BML0048) has been admitted to Trent University, Canada and is pursuing an M.Sc Degree in Big Data Analytics



- Gunjan Sharma (16BIS00036) has been admitted to University of Maryland, College Park, Maryland

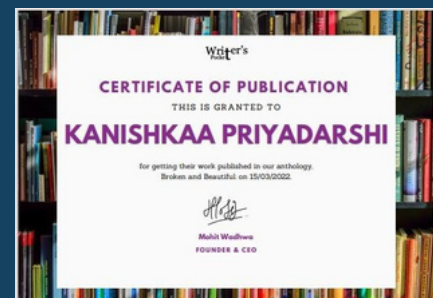
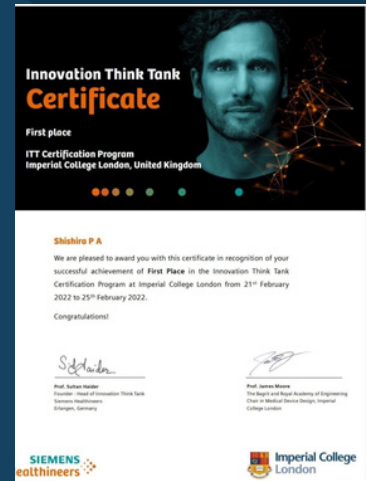
We congratulate all of them. The above was possible not only due to the hard work and efforts of our students but due to the cooperation of our faculty as well.

STUDENT

ACHIEVEMENTS

Technology Challenges Won

- **SHISHIRA PA (20MBE0015)** won First place and was awarded a Certificate of Recognition for achievement in the Innovation Tank Certification Program at Imperial College London From 21.02.2022 to 25.02.2022.
- **KANISHKAA PRIYADARSHI (21BEC0423)** was awarded the certificate for publishing the Anthology titled “Broken and Beautiful” on 15.03.2022 in collaboration with Writer’s Pocket
- **AKSHAT (18BEC618), VANDA MANSUR (18BEC0625), and YASHRAJ MOTWANI (18BEC0762)**, students of the School of Electronics Engineering, under the guidance of Dr. Sujatha R won the 2nd prize in the Preliminary round YESIST’12 2022 IC Trck, organized by IEEE North Karnataka Sub-Section hosted at K.L.E. Institute of Technology, Hubballi-27 on 28.05.2022.
- **ADITYA KAKKAR (19BEC0461) and SUKANT JHA (19BIT0359) and SIVA SAI, ABHINAV CHAKKA** from DTU and IIT participated in Frosthack 2022 and won coupons from Hoverrobotix worth Rs.18000. They qualified for the first round and then the next round will be conducted in Dubai.



S T U D E N T

ACHIEVEMENTS

Conference Publications

- Khushi Singh presented a paper titled "Design and Implementation of IoT Enabled Low Cost SPO2 and Heart Rate Monitoring System" in DELCON 2022 (IEEE) at Netaji Subhas University fo Technology, New Delhi, India, 11.02.2022-13.02.2022.
- Khushi Singh presented a paper titled "Design and Development of DSP Enabled Low Cost ECG Machine" in 1st International Conference on Electrical, Electronics, Informtion and Communication Technologies (ICEEICT 2022) IEEE at K Ramakrishnan College of Engineering, Trichy, India, 16.02.2022-18.02.22.
- Anjana BS presented a paper titled "Smart Reconfigurable Intelligent Surface with a Discrete Phase Shifter for Next Generation Networks" in International Conference on Wireless Communications, Signal Processing and Networking (WiSPNET 2022) IEEE at Sri Sivasubramaniya Nadar College of Engineering, Chennai, India, 24.03.2022-26.03.2022.



STUDENT

ACHIEVEMENTS

Conference Publications

- Aradhana Ghosh presented a paper titled "ATM Services on EMU 8086 for the Technologically Impaired People" in 12th International Conference on Computer Communication and Informatics 2022 (IEEE) at Sri Shakthi Institute of Engineering and Technology, Coimbatore, India, 25.01.2022-27.01.2022.
- Anjana BS presented a paper titled "Reconfigurable Intelligent Surface as an Access Point: Probability of Error Analysis for Discrete Phase Shifters" in the 2nd International Conference on Computational Electronics for Wireless Communication (ICCEWC 2022) Springer at National Institute of Technology, Surathkal, India, 09.06.2022-10.06.2022.
- Namrata Singhal presented a paper titled "An Approach for Restaurant Management System during CoVID-19" in 12th International Conference on Computer Communication and Informatics 2022 (IEEE) at Sri Shakthi Institute of Engineering and Technology, Coimbatore, India, 25.01.2022-27.01.2022



ACHIEVEMENTS

Guest Lectures Delivered

- **Dr. KONGUVEL E**
 - Delivered an invited talk on “Role of VLSI in the IoT Era” on 02.06.2022 at Lata Mathavan Engineering College, Madurai, India
- **Dr. RAJESH KUMAR V**
 - Delivered a talk on “Special Antennas” on 30.05.2022 at Sona College of Technology, Salem, India
 - Delivered a talk on “National Technology Day-Antennas for 5G Communications” on 11.05.2022 at MPNMJ Engineering College, Erode, india
- **Dr. ARUN KUMAR CHANDRASEKHAR**
 - Delivered a talk on “Introduction to Sensors” on 28.05.2022 at Priyadarshini Engineering College, Vamiyambadi, India
 - Delivered a talk on “Semiconductor Grade Plastics, their properties and Applications” on 24.03.2022 at CIPET: SARP-APDDRL, Bangalore, India
 - Delivered a talk on “Polymers for Energy Harvesting and Self Powered Applications”, 30.03.2022 at CIPET:SARP-LARPM, Bhubaneswar, India
 - Delivered a talk on “Triboelectric Nanogenerator for Powering Portable Devices and its Smart Self Powered Applications” on 09.02.2022 at Amir Kabir University of Technology, Tehran, Iran
 - Delivered a talk on “Fabrication of Triboelectric Nanogenerator for Wearable and Portable Applications” on 21.02.2022 at CIPET, Bhubaneswar, India
- **Dr. HEMPRASAD YAHSWANT PATIL**
 - Delivered a talk on “Applications of Deep Learning for Image Classification” on 20.05.2022 at IETE Chennai Centre, SVCE, Sripermbadur, India
 - Delivered a talk on “ Tips for Writing and Publishing a Scientific Paper” on 08.01.2022 at Pimpri Chinchwad College of Engineering and Research, Pune, India
- **Dr. RENUGA DEVI S**
 - Delivered a talk on “NAAC-Evaluation Guidelines and Self Study Report(SSR) Preparation” on 16.05.2022 at KSR College of Engineering, Thiruchengode, India
- **Dr. RAJESH N**
 - Delivered a talk on “Tapered Slot Antenna-Recent Trends and Developments” on 13.05.2022 at Jeppiar Institute of Technology, Chennai, India

ACHIEVEMENTS

Guest Lectures Delivered

- **Dr. SASIKUMAR P**
 - Delivered a talk on “R&D and Innovation” on 05.05.2022 at Mahendra Engineering College, Namakkal, India
 - Webinar on “IoT and its Applications for Beginners” on 05.03.2022 at KPR Institute of Technology, Coimbatore, India
- **Dr. KISHORE LAKSHMI NARAYANAN**
 - Delivered a talk on “Biosignals the Future of Consumer Technology” on 25.04.2022 at O.P Jindal Global University, Delhi, India
- **Dr. MANIMARAN P**
 - Delivered a talk on “Embedded Systems in the Internet of Things” on 08.04.2022 at Prathyusha Engineering college, Chennai, India
- **Dr. SRI ADIBHATLA SRIDEVI**
 - Delivered a talk on “Low Power Memory Architectures” on 04.04.2022 at NIT Warangal, India
- **Dr. RAVIS**
 - Delivered a talk on “Applications of Cognitive Radio Networks in VLSI Systems” on 04.04.2022 at Kings Engineering College, Chennai, India
- **Dr. VALARMATHI J**
 - Delivered a talk on “Basic Algorithms for Target Tracking and Sensor Data Fusion” on 25.03.2022 at MS Ramaiah Institute of Technology, Bangalore, India
- **Dr. KARTHIKEYAN B**
 - Delivered a talk on “Embedded Systems and IoT – An Intro” on 24.03.2022 at CVR College of Engineering, Hyderabad, India
 - Delivered a talk on “Tracking Prisoners and Pin Pointing Prison Hotspots-The Technology of RFID” on 10.03.2022 at Academia of Prisons and Correctional Administration, Vellore, India
- **Dr. RAJALAKSHMI S**
 - Delivered a talk on “Future Prospects of Fiber Optics” on 15.03.2022 at Panimalar Institute of Technology, Chennai, India
- **Dr. BHASKAR MOHAN MURARI**
 - Delivered a talk on “Modern Approach towards Troubleshooting, Service and Maintenance of Medical Devices” on 12.03.2022 at Medtronic, Chennai, India

FACULTY

ACHIEVEMENTS

Guest Lectures Delivered

- **Dr. SHANKAR T**
 - Delivered a talk on “Issues and Challenges in Wireless Sensor Networks” on 11.03.2022 at Panimalar Institute of Technology, Chennai, India
 - Delivered a talk on “Issues and Challenges in Mobile Adhoc Networks” on 06.01.2022 at Vemu Institute of Technology, Chittoor, India
- **Dr. SURESH KUMAR T R**
 - Delivered a talk on “Electromagnetic Interface(EMI) and Electromagnetic Compatibility (EMC) on 03.03.2022 at Annamalai University, Chidambaram, India
- **Dr. VINOTH BABU K**
 - Delivered a talk on “Python Libraries for Machine Learning and Data Science” on 23.02.2022 at KGiSL Institute of Technology, Coimbatore, India
 - Delivered a talk on “Machine Learning Applications for 5G/6G Wireless Communications” on 23.02.2022 at KGiSL Institute of Technology, Coimbatore, India
- **Dr. JEEVA J B**
 - Delivered a talk on “Role of Optical Sensors in Healthcare” on 18.02.2022 at SRM Institute of Science and Technology, Chennai, India
- **Dr. RAJKISHOR KUMAR**
 - Delivered a talk on “Bio Telemetry Using 6G Wireless Communication System” on 18.01.2022 at Chandigarh Engineering College, Mohali, India
- **Dr. SUMATHI G**
 - Delivered a talk on “Machine Learning for Electronic Design Automation” on 06.01.2022 at Shah and Anchor Kutchhi Engineering College, Mumbai, India
- **Dr. SUJATHA R**
 - Delivered a talk on “Intelligent Industrial IoT using LoRa WAN Technology” on 26.05.2022 at Saveetha Institute of Medical and Technical Sciences, Chennai, India
- **Dr. DEBASHISH DASH**
 - Delivered a talk on “Recent Trends on Nano-Technology” on 14.04.2022 at Nigam Institute of Engineering and Technology, Orissa, India

FACULTY

ACHIEVEMENTS

Honours & Awards

- Dr. Arvind Kumar served as Lead Guest Editor-Special Issue on “Substrate Integrated Waveguide(SIW) Based Circuits and Systems” by International Journal of Antennas and Propagation by Hindawi Publications on 20.05.2022
- Dr. Rajkishor Kumar is appointed as an “Academic Editor for International Journal of Antennas and Propagation” by Hindawi Publications on 15.05.2022
- Dr. Sivasankaran K was awarded with “Outstanding Supervisor Award” by Innovate FPGA on 10.05.2022
- Dr. Prakasam P was awarded with “Outstanding Associate Editor 2021” by IEEE Access Journal on 06.04.2022
- Dr. Saranya K C was awarded with “Young Woman Achiever Award” by Indian Council for Child Welfare on 05.03.2022.
- Dr. Rajkishor Kumar is recognized as an Associate Editor by IEEE Access on 02.02.2022.

Sponsored Projects

- Dr. Suresh Kumar T R and Dr. Zachariah C Alex were sanctioned with Rs. 36, 44,772/- for their project titled “Design and Development of Frequency Selective Surface-based Wearable Electromagnetic Shield” by DST on 12.01.2022.

Consultancy Projects

- Dr. Hemprasad Yashwant Patel was offered with a consultancy project titled "Design and Development of Algorithms for Collision Warning Systems in ADAS/AV/AD Automotive Applications. by Tessolve Semiconductors, Bangalore on 17.06.2022"

EVENTS

ORGANISED

The SENSE faculty have organized several events during the first half of 2022 as follows:

- Dr. Konguel E, Dr. Saraswati Priyadarshai A and Dr. Hariharan I organizedan FDP on “Internet of Everything” from 16.05.2022 to 20.05.2022.
- Dr. Debashish Dash organized an FDP on ‘Thriving in New Vuca World” on 23.04.2022
- Dr. Debashish Dash organized an FDP on “Future Advancement in Electric Vehicles and Electric Vehicle Supply Equipments: A research Perspective” on 09.04.2022
- Dr. Debashish Dash and Dr. Mohan Kumar P organized an FDP on “Glimpse on Modern Day Computing: IoT, AI, ML and its Applications” from 27.01.2022 to 31.01.2022
- Dr. George Jacob and Dr. Nirmala Grace organized a Short Term Course on” Computational Methods for Materials from 09.05.2022 to 25.05.2022
- Dr. Kishor Lakshmi Narayan and Dr. Arun Kumar Chandrasekhar organized a Workshop on “Hands on Training Session on Bio-Signals” on 24.03.2022
- Dr. Sujatha R and Dr. Sumathi G organized a Workshop on “IoT Programming LoRa and Arduino Shield” from 28.02.2022 to 01.03.2022



EVENTS

ORGANISED

VIT MoU Signing with IEEE Electromagnetic Compatibility Society (EMCS)

Vellore Institute of Technology (VIT), Vellore, Tamilnadu, India has signed Memorandum of Understanding (MoU) with IEEE Electromagnetic Compatibility Society (EMCS) on 22.02.2022. The MoU will help the learners in various EMC / EMI topics deployed in the IEEE EMC Blended Learning Program (BLP) by providing hands-on training using VIT EMC/Wireless Test Chamber facility. MoU was signed by Dr. K. Sathiyarayanan, Registrar, VIT and Dr. Vignesh Rajamani, IEEE EMCS President in the presence of Dr. Narayanan S, Pro-Vice Chancellor, VIT, Dr. Zachariah C Alex, Professor, School of Electronics Engineering (SENSE), VIT, Mr. Srikanth Chandrasekaran, Sr. Director (Standards & Technology), IEEE India, Mr. Pramod Kumar, IEEE India, and Dr. Ananth Krishna - iAMPS & Hz Technology Solutions Pvt Ltd.



Dr Zachariah C Alex, VIT briefing about the MoU



Delegates at the VIT 'Wireless & EMC chamber facility'

Honorary work by our SENSE Alumnus

- **Dr. M. Arthi** completed her Ph.D. from Vellore Institute of Technology in 2017 and has more than 25 Scopus publications. She is an Associate Professor and Head (CSE - AI & ML) at Sreenivasa Institute of Technology and Management Studies, Chittoor, Andhra Pradesh. She has authored Communication Engineering and Digital Communications, published by Magnus Publications. On 5th Jan, 2022, she conducted a session on Python Turtle Graphics Programming via MS Teams for our students in which she taught them the basic concepts of the python turtle library and programming with it.
- **Dr. G. Vishnu Vardhan** completed his M.Tech in 2015 and Ph.D. in 2021 from Vellore Institute of Technology. He is an Assistant Professor in the Department of Electronics and Communication Engineering at Aditya Engineering College, Surampalam, Andhra Pradesh. He has received the Senior Research Fellowship from the Council of Scientific and Industrial Research in 2019. On 1st Jun, 2022, he conducted a session on Next Generation Wireless Technologies. This session was for our PG students, research scholars and faculty members. It covered various topics, namely 5G/6G requirements, MIMO/Massive MIMO, Spatial Modulation and its variants, Reconfigurable Intelligent Surfaces, SM assisted RIS, use cases and future research directions.



POSTGRADUATE ALUMNI MEET



The School of Electronics Engineering organised "PG ALUMNI MEET" on May 22nd, 2022 at Velvete Hotel, Bengaluru. Around 115 Alumni of PG Programmes like M.Tech Communication, M.Tech Biomedical, M.Tech Sensor Systems, M.Tech Nanotechnology, M.Tech Embedded system & M.Tech VLSI Design working in Bengaluru have participated in the meet. The objective of the technical meet was to get input from alumni on how to improve the curriculum, invite the alumni for alumni guest lectures, invite the alumni to conduct summer and winter training programmes and improve the placement of the students. Prof. S. Sivanantham, Dean (SENSE) welcomed the alumni participants. Prof. K Sivasankaran, explained about the objective of the PG alumni meet. Many alumni shared their experience during their studies at VIT. Prof P. Sasikumar delivered the vote of thanks, followed by photo session.

The total number of publications of SENSE in various research journals from January to June 2022 was 115. Some of the top publications (with IF > 2.5) are enlisted below

1. R. S., Thaseen I. S., M. V., M. D., M. A., R. M., Mahendran A., Alnumav W., Chatterjee P. "An efficient hardware architecture based on an ensemble of deep learning models for COVID-19 prediction." *Sustainable Cities and Society*. (IF = 7.587)
2. Bharath K. P., Rajesh Kumar M. "New replay attack detection using iterative adaptive inverse filtering and high frequency band." *Expert Systems and Applications*. (IF = 6.954)
3. Bhowmick A., Dhar Roy S., Kundu S. "Throughput Maximization of a UAV Assisted CR Network with NOMA-Based Communication and Energy-Harvesting." *IEEE Transactions on Vehicular Technology*. (IF = 5.978)
4. Senthilraja S., Gangadevi R., Köten H., Marimuthu R., Awad M. M. "Performance analysis of a novel hydrogen production system incorporated with hybrid solar collector and phase change material." *International Journal of Hydrogen Energy*. (IF = 5.816)
5. Parvathi Sangeetha B., Kumar N., Ambalgi A. P., Abdul Haleem S. L., Thilagam K., Vijayakumar P. "IOT based smart irrigation management system for environmental sustainability in India." *Sustainable Energy Technologies and Assessments*. (IF = 5.353)
6. Sundararajan M., Bonita B., Ubaidullah M., Shaikh S. M. F., Revathi S., Thiripurasundari D., Dhiwahar A. T., Pandit B., Dash C. S., Shahazad M. "Enhanced visible light photocatalytic degradation of rhodamine B using Ni_{1-x}CaxFe₂O₄ (0 ≤ x ≤ 0.5) nanoparticles: Performance, kinetics and mechanism." *Materials Research Bulletin*. (IF = 4.641)
7. S. C., T. S., A. R. "Investigation on nanocore-centred nonlinear PCF for high nonlinearity and low dispersion." *Ceramics International*. (IF = 4.527)
8. Rahul M. T., Chacko S. K., Vinodan K., Raneesh B., Philip K. A., Bhadrappriya B. C., Bose B. A., Kalarikkal N., Rouxel D., Viswanathan P., Chandrasekhar A. "Multiferroic and energy harvesting characteristics of P(VDF-TrFE)-CuFe₂O₄ flexible films." *Polymer*. (IF = 4.430)
9. Raj S. S., Davis D., Viswanathan P., Chandrasekhar A., Vinod T. P. "Compositionally Homogeneous Soft Wrinkles on Elastomeric Substrates: Novel Fabrication Method, Water Collection from Fog and Triboelectric Charge Generation." *Macromolecular Materials and Engineering*. (IF = 4.367)
10. Rahul M. T., Chacko S. K., Rajneesh B., Philip K. A., Kalarikkal N., Rouxel D., Munirathinam P., Chandrasekhar A. "Hydrated metal salt and Y₃Fe₅O₁₂Na_{0.5}K_{0.5}NbO₃ incorporated P(VDF-HFP) films: a promising combination of materials with multiferroic and energy harvesting properties." *Journal of Materials Science*. (IF = 4.220)

S E N S E

PUBLICATIONS

11. Karunanithy K., Velusamy B. "Edge device based efficient data collection in smart health monitoring system using wireless body area network." *Biomedical Signal Processing and Control*. (IF = 3.88)
12. Kothandaraman M., Law Z., Ezra M. A. G., Pua C. H., Rajasekaran U. "Water Pipeline Leak Measurement Using Wavelet Packet-based Adaptive ICA." *Water Resources Management*. (IF = 3.517)
13. Dubey R., Guruviah V. "Machine learning approach for categorical biomass higher heating value prediction based on proximate analysis." *Energy Sources, Part A: Recovery, Utilization and Environmental Effects*. (IF = 3.447)
14. Kalangadan N., Mary A. S., Jyothi R. H., Punniyakoti S., Sundaresan S., Alagarsamy R. K., Rajaram K. "Characterization and antimicrobial evaluation of green synthesized silver nanoparticle thin films with reusable applications." *Materials Letters*. (IF = 3.423)
15. Prasanth A., Meher S. R., Alex Z. C. "Metal oxide thin films coated evanescent wave based fiber optic VOC sensor." *Sensors and Actuators*. (IF = 3.407)
16. Vidya B., P. S. "Wearable multi-sensor data fusion approach for human activity recognition using machine learning algorithms." *Sensors and Actuators*. (IF = 3.407)
17. Karunanithy K., Velusamy B. "An efficient data collection using wireless sensor networks and internet of things to monitor the wild animals in the reserved area." *Peer-to-Peer Networking and Applications*. (IF = 3.307)
18. Babu A. N., Vishnu J., Nandakumar S., Velmurugan T. "Resource allocation and optimization in D2D communication with PDRAPC framework." *Peer-to-Peer Networking and Applications*. (IF = 3.307)
19. Ranjan H., Dwivedi A. K., Prakasam P. "An optimized architecture and algorithm for resource allocation in D2D aided fog computing." *Peer-to-Peer Networking and Applications*. (IF = 3.307)
20. Kumar A., Chaturvedi D., Rosaline S. I. "Design of Antenna - Multiplexer for Seamless On-Body Internet of Medical Things (IoMT) Connectivity." *IEEE Transactions on Circuits and Systems II: Express Briefs*. (IF = 3.292)
21. Agarwal L., Sambasiva Rao K., Srivastava A., Tripathi S. "Ytterbium doped ZnO nano laminated planar waveguide for ring resonator applications." *Journal of Physics D: Applied Physics*. (IF = 3.207)
22. Shaw M., Choukiker Y. K. "Omnidirectional conformal microstrip array antenna with electronically beam switching capabilities for 5G applications." *AEU - International Journal of Electronics and Communications*. (IF = 3.183)

S E N S E

PUBLICATIONS

23. Dubey R., Guruviah V. "A data-driven approach for evaluation of electrolyte informatics on electrochemical performance of carbon-based electrode materials." *Ionics*. (IF = 2.817)
24. Tripathi P. M., Kumar A., Komarigiri R., Kumar M. "Watermarking of ECG signals compressed using Fourier decomposition method." *Multimedia Tools and Applications*. (IF = 2.757)
25. Arthi G., Thanikaisellvan V., Amirtharajan R. "4D Hyperchaotic map and DNA encoding combined image encryption for secure communication." *Multimedia Tools and Applications*. (IF = 2.757)
26. Srivastava A., Raghu S., Thyagarajan A. K., Vaidyaraman J., Kothandaraman M., Sudheendra P., Goel A. "Alpha matting for portraits using encoder-decoder models." *Multimedia Tools and Applications*. (IF = 2.757)
27. Mohapatra A., Thota N., Prakasam P. "Fake news detection and classification using hybrid BiLSTM and self-attention model." *Multimedia Tools and Applications*. (IF = 2.757)
28. Gupta B., Prakasam P., Velurugan T. "Integrated BERT embeddings, BiLSTM-BiGRU and 1-D CNN model for binary sentiment classification analysis of movie reviews." *Multimedia Tools and Applications*. (IF = 2.757)
29. Iyer A., Das S. S., Teotia R., Maheshwari S., Sharma R. R. "CNN and LSTM based ensemble learning for human emotion recognition using EEG recordings." *Multimedia Tools and Applications*. (IF = 2.757)
30. Bharath K. P., Kumar M. R. "Replay spoof detection for speaker verification system using magnitude-phase-instantaneous frequency and energy features." *Multimedia Tools and Applications*. (IF = 2.757)
31. Paul L. S. J., Gracias C., Desai A., Thanikaiselvan V., Suba Shanthini S., Rengarajan A. "A novel color image encryption scheme using dynamic DNA coding, chaotic maps and SHA-2." *Multimedia Tools and Applications*. (IF = 2.757)
32. Matheen M. A., Sundar S. "Histogram and entropy oriented image coding for clustered wireless multimedia sensor networks (WMSNS)." *Multimedia Tools and Applications*. (IF = 2.757)
33. Kavitha K. V. N., Ashok S., Imoize A. L. Ojo S., Selvan K. S., Ahanger T. A., Alhassan M. "On the Use of Wavelet Domain and Machine Learning for the Analysis of Epileptic Seizure Detection from EEG Signals." *Journal of Healthcare Engineering*. (IF = 2.682)
34. Reena Monica P. "Seven Strategies to Suppress the Ambipolar Behavior in CNTFETs: a Review." *Silicon*. (IF = 2.670)
35. Anusuya P., Kumar P., Esakki P., Agarwal L. "Recent Study on Schottky Tunnel Field Effect Transistor for Biosensing Applications." *Silicon*. (IF = 2.670)

S E N S E

PUBLICATIONS

36. Kumar R., Devi B. A., Sireesha V., Reddy A. K., Hariharan I., Konguvel E., Vignesh N. A. "Analysis and Design of Novel Doping Free Silicon Nanotube TFET with High-density Meshing using ML for Sub Nanometre Technology Nodes." *Silicon*. (IF = 2.670)
37. Kumar G. A. A. U., Jindal S. K., P. K. S. "Capacitance Response of Concave Well Substrate MEMS Double Touch Mode Capacitive Pressure Sensor: Robust Design, Theoretical Modeling, Numerical Simulation and Performance Comparison." *Silicon*. (IF = 2.670)
38. Kanithan S., Vignesh N. A., Jana S., Prasad C. G., Konguvel E., Vimalnath S. "Negative Capacitance Ferroelectric FET Based on Short Channel Effect for Low Power Applications." *Silicon*. (IF = 2.670)
39. Ramkumar K., Ramakrishnan V. N. "Performance Analysis of Germanium-Silicon Vertical Tunnel Field-Effect Transistors (Ge-Si-VTFETs) for Analog/RF Applications." *Silicon*. (IF = 2.670)
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42. Sivapatham S., Kar A., Christensen M. G. "Gammatone Filter Bank-Deep Neural Network-based Monaural speech." *Applied Acoustics*. (IF = 2.639)
43. Namitha A. S. "Simultaneous minimization of side-band power and PAPR in OFDM based cognitive radio without additional bandwidth requirement for sending SI." *Transactions on Emerging Telecommunication Technologies*. (IF = 2.638)
44. Prakash A. J., Prakasam P. "An intelligent fruits classification in precision agriculture using bilinear pooling convolutional neural networks." *Visual Computer*. (IF = 2.601)
45. Paramanandham N., Koppad D., Anbalagan S. "Vision Based Crack Detection in Concrete Structures Using Cutting-Edge Deep Learning Techniques." *Traitement du Signal*. (IF = 2.589)
46. Mahalaxmi U. S. B. K., Sahay K. B., Sabitha R., Haleem S. L. A., Kaur P., Vijaykumar P. "Using electroencephalogram classification in a convolutional neural network, infer privacy on healthcare internet of things 5.0." *Expert Systems*. (IF = 2.587)
47. Chaturvedi D., Althuwayb A. A., Kumar A. "Bandwidth enhancement of a planar SIW cavity-backed slot antenna using slot and metallic-shortring." *Applied Physics: A Materials Science and Processing*. (IF = 2.584)

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Publications that contributed towards h-index

- **Jasmin M., Vigneswaran T., Beulah Hemalatha S.** "Design of power-aware on-chip embedded memory based FSM encoding in FPGA." International Journal of Applied Engineering Research. No. of citations: 233.
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- **Vigneshwar S., Sudhakumari C. C., Senthilkumaran B., Prakash H.** "Recent advances in biosensor technology for potential applications - an overview." Frontiers in Bioengineering and Biotechnology. No. of citations: 254.
- **Yadav J., Rani A., Singh V., Murari B. M.** "Prospects and limitations of non-invasive blood glucose monitoring using near-infrared spectroscopy." Biomedical Signal Processing and Control. No. of citations: 204.
- **Bavirisetti D. P., Dhuli R.** "Two-scale image fusion of visible and infrared images using saliency detection." Infrared Physics and Technology. No. of citations: 178.
- **Jasmin M., Vigneswaran T.** "Fuzzy controller for error control of on-Chip communication." ICAMMAET 2017. No. of citations: 149.
- **Dubey R., Guruviah V.** "Review of carbon-based electrode materials for supercapacitor energy storage." Ionics. No. of citations: 163.
- **Reka S. S., Dragicevic T.** "Future effectual role of energy delivery: A comprehensive review of Internet of Things and smart grid." Renewable and Sustainable Energy Reviews. No. of citations: 149.

EXTRACURRICULAR ACTIVITIES

Winners of the Sports Activities conducted

- **VIT PREMIER LEAGUE 2021-2022**
 - **CARROM:**
 - Dr. Christopher Clement J and Dr. Ravi Kumar C V (SENSE) were the winners.
 - **TENNIS:**
 - Dr. Sasikumar S. (SAS), Dr. Velmurgan V and Dr. Sasikumar P (SENSE) and Dr. Thiyagachanthan N V (Phy Edu) were the winners
 - **BASKETBALL:**
 - In mens Category Suhas Vetri. A (18BEC0927) and Sudhir (18BEC2021) were announced as winners.
 - **BADMINTION:**
 - Dr. Sumathi G (SENSE) was declared as the Runners- Up
 - **BASKETBALL AND VOLLEYBALL:**
 - Mrs. Bagyalakshmi N S and Mrs. Meena J (SENSE) were Runners-Up.
 - **THROWBALL:**
 - In Throwball Mrs. Bagyalakshmi N S, Mrs. Meena J and Mrs. Sangeetha C A (SENSE) were awarded with a position of Runners-Up.
- **FRESHERS TOURNAMENT 2022**
 - **BASKETBALL:**
 - Shreya Venkatesh (21BEC0184) was the Runners -Up
 - **CHESS:**
 - Shah Princi Amit (21BEC2001) won the First Place in chess
 - **TABLE TENNIS:**
 - Anish Kumar Dutta (21BEC0994) was the Runner -Up.
 - **VOLLEYBALL:**
 - Rathish A (21BEC2235) was the winner and Deptonu Bose (21BEC2099) was the Runner-Up during this tournament.
 - Mrs. Meena (Staff , SENSE)

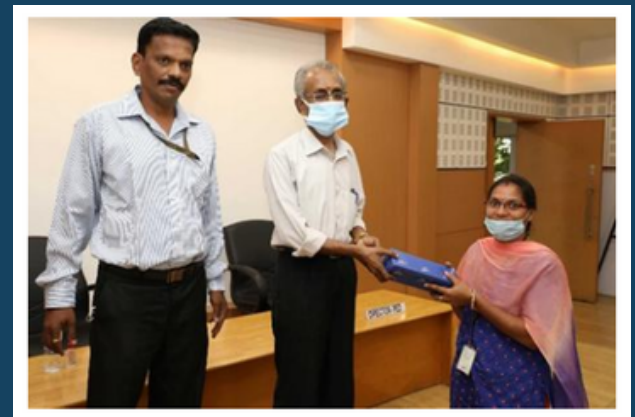
EXTRACURRICULAR ACTIVITIES

Winners of the Sports Activities conducted

- International Women's Day:
 - Aiming the target
 - Mrs. Meena J. won third place in this event.
 - Dumbbells holding
 - Dr. Sumathi G won second place in this event.
 - Distance water filling
 - Mrs. Meena J. and Mrs. Bagyalakshmi N. S. won second place in this event.



Mrs. Baghyalakshmi (Staff, SENSE)



Mrs. Meena (Staff, SENSE)



Women's day celebration: (Prize winner – Ms. Meena)

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