



SERB-DST Sponsored
2024 IEEE International Conference on
Nanoelectronics, Nanophotonics, Nanomaterials, Nanobioscience
& Nanotechnology (5NANO 2024)

- *platform for researchers*

VISAT Engineering College, Ernakulam, Kerala, India
 25th & 26th April 2024

Sponsor



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Host





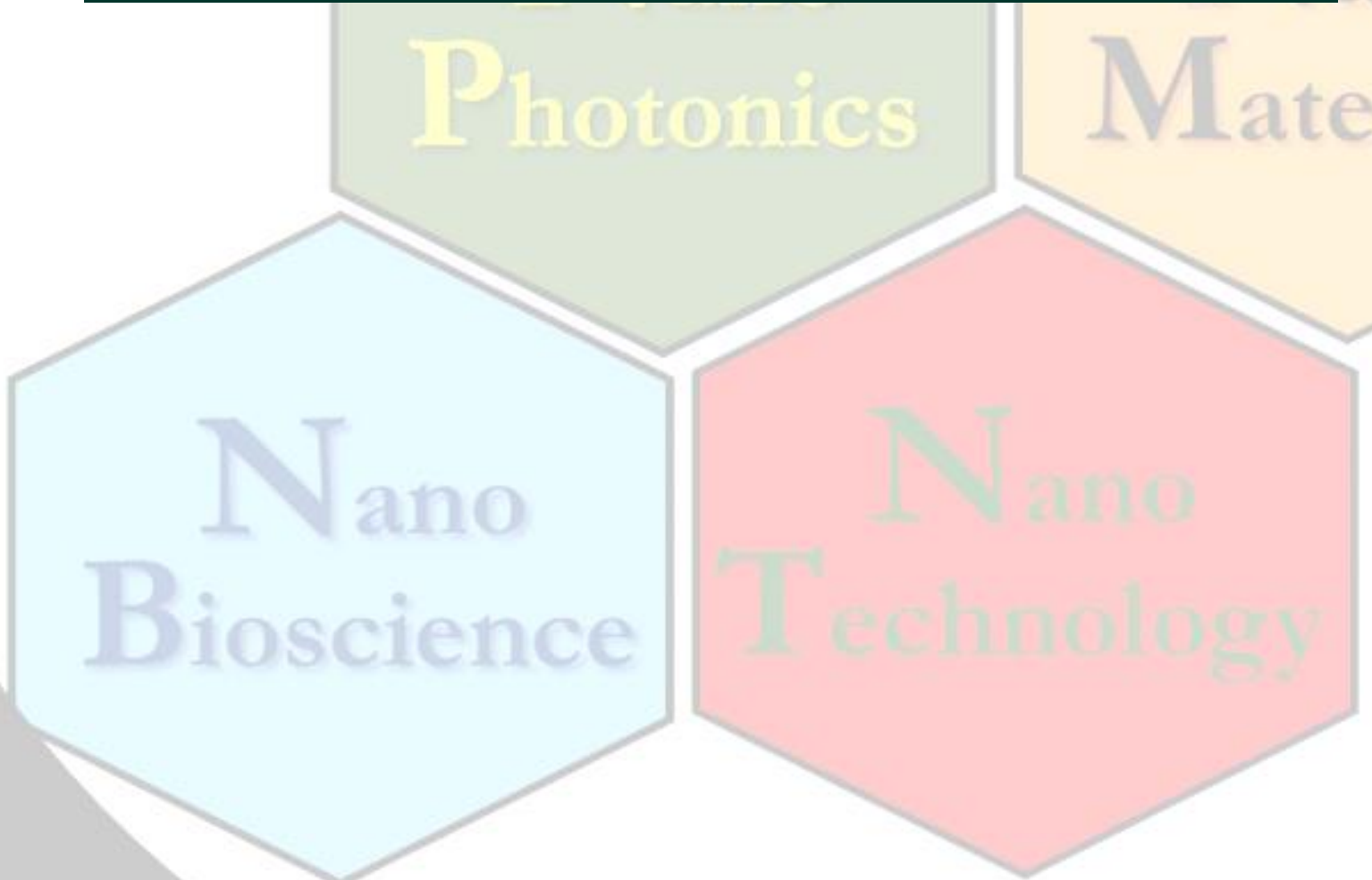
Schedule at a Glance

Day 1: 25th April 2024 (Thursday) at Seminar Hall (BRAHMOS), VISAT Engineering College

Time	Program	Panel/Speaker
08.30 AM - 09.30 AM	Registration	
09.30 AM - 10.15 AM	Inaugural Ceremony	
	<u>Chief Guest:</u>  Dr. Manpreet Singh Manna, Vice Chancellor, Chandigarh University, Mohali, Punjab Former Director, AICTE Ministry of Education, Govt. of India.	
	<u>Guest of Honour:</u>  Dr. Partha Sharathi Mallick Pro Vice-Chancellor, Vellore Institute of Technology, Vellore, Tamilnadu, India.	


<p>10.15 AM - 11.00 AM</p>	<p>Key note address – I</p> <div data-bbox="500 191 662 394">  </div> <p>Prof. Bikash Nakarmi, Nanjing University of Aeronautics and Astronautics, China</p> <p>Topic: Enhancing Output Performance of Microwave Photonics RADAR through Neural Networks</p>	
<p>11.00 AM - 11.15 AM</p>	<p>High Tea</p>	
<p>11.15 AM - 12.00 PM</p>	<p>Keynote address – II</p> <div data-bbox="505 779 667 982">  </div> <p>Dr. Partha Sharathi Mallick Pro Vice Chancellor, Vellore Institute of Technology, Vellore, Tamilnadu, India</p> <p>Topic: Role of Carbon Nanotube Interconnects for crosstalk reduction in Integrated Circuits</p>	
<p>12.00 PM - 12.30 PM</p>	<p>Key note address – III</p> <div data-bbox="509 1062 672 1266">  </div> <p>Dr Mandeep Singh National Institute of Technology(NIT), Surathkal, India</p> <p>Topic: Nanophotonic Devices: Challenges and Opportunities</p>	
<p>12.30 PM - 01.30 PM</p>	<p>Networking Lunch</p>	

<p>01.30 PM - 04.00 PM</p>	<p>Parallel Sessions</p>	
<p>04.00 PM - 06.00 PM</p>	<p>Post Conference Tour Begins Travel to Vagamon</p>	
<p>Night stay @ Vagamon</p>		



Parallel Sessions Schedule

Venue : 1 BRAHMOS
 Time : 01:30 PM to 04:00 PM
 Session Chairs : Dr Mandeep Singh
 Proctor : Prof Anjana G

Timing 01.30 PM - 02.00 PM	Keynote address – IV Topic: European Open PDK Initiative Key Note Speaker: Dr Wladyslaw Grabinski GMC Consulting Switzerland		
Sl. No	Paper ID	Author & Paper Details	
1.	5	Authors: Deeksha Rani, Subhendu Sarkar Institute: Indian Institute of Technology, Ropar, India Topic : Magnetic field-driven accumulation of ellipsoidal ferro-colloids in drying droplets	
2.	50	Authors: Arpit Mendhe, Himanshu Sekhar Panda Institute: Defence Institute of Advanced Technology, Pune, India Topic : (NiCo)PO ₄ /NiCo(OH) ₂ ·NH ₄ Composite Electrode: Enhancement in rate capability and specific capacitance	
3.	12	Authors: Jinesh Mathew Institute: GITAM School of Sciences, Bangalore, Karnataka, India Topic : Enhancing Temperature Sensitivity of Fiber Bragg Gratings Using Metallic Jacket	
4.	52	Authors: Srujan Sapkal, Himanshu Sekhar Panda Institute: Defence Institute of Advanced Technology, Pune, India Topic : Modified Hydrothermal Synthesis of Fine Sb-doped sodium potassium niobate particles and their dielectric properties	
5.	13	Authors: Sushil Kumar Jena Institute: L&T Electrical and Automation, Schneider Electric India Private Limited Mumbai, India Topic : Tribological Performance of Nanostructure Composite in Electrochemical Silver Plating on Electrical Industry	
6.	18	Authors: Reshma V P, Ragi R, Subash T D Institute: VISAT Engineering College, Ernakulam, Kerala Topic : A Comparative Investigation of Various Perovskite Active Layers for Achieving Enhanced Solar Cell Efficiency: A Numerical Simulation Approach	

<i>Sl. No</i>	<i>Paper ID</i>	<i>Author & Paper Details</i>
7.	176	Author : Ateeb Hamdan, Veena Raj, Pg Emeroylariffi on Abas, Dawn Sivan Institute : Universiti Brunei Darussalam, Brunei, Darussalam Topic : Nanomaterials for Green & Clean Energy, A Bibliometric Review
8.	219	Author : Ateeb Hamdan, Veena Raj, Malik Mohamed Umar, Subhadeep Chakrabarti Institute : National Space Science & Technology Center, United Arab Emirates University (UAEU) Topic : Photovoltaic penetration in Indian; An estimation using Bibliometric research
9.	103	Author : M.Valliammai, J.Mohanraj, Balasubramanian Esakki, Lung – Jieh Yang, Chua-Chin Wang, Gowri. A, Mohamed Rizwan T, A.Bakiya Institute : National Sun Yat-Sen University Kaohsiung, Taiwan Topic : MoS2 Nanocoated Side Polished fiber sensor for Early Prognosis Cardiovascular Disease by Sensing D-Dimer Biomarker
10.	223	Author : Sunil Venkanna Pogu, Dokkari Nagalaxmi Yadav, Himasree Budhiraju, Chandralekha Putta, Jagapathi Rao Maddila, Aravind Kumar Rengan Institute : Indian Institute of Technology (IIT), Hyderabad, India Topic : Ultrasound-mediated synthesis of silver-coated liposomes for antimicrobial applications
11.	243	Author : Spurthy Bathula, Manaswini Madarapu, Umesh Bere, Abhinav Katari, Sandip Bhattacharya Institute : SR University, Warangal, Telangana, India Topic : Beyond Limits: Where Technology Meets Flexibility in Nanometric Dimension

Note: One Best Paper Award will be recommended by the session chair and declared during the valedictory function

Nano
Bioscience

Nano
Technology

Parallel Sessions Schedule

Venue : 2 PRITHVI
 Time : 01:30 PM to 04:00 PM
 Session Chairs : Dr Ajayan
 Proctor : Prof Reshma

<u>Timings</u> 01.30 PM - 02.00 PM	<u>Key note address – V</u> Topic: The role of Nanotechnology in Semiconductor Industry Key Note Speaker: Dr Naznin Akter Editor-in-Chief IEEE Photonics Society Newsroom Module Development Engineer, INTEL, USA	
Sl. No	Paper ID	Author & Paper Details
1.	6	Authors : Jaspreet Singh, Subhendu Sarkar Institute : Indian Institute of Technology, Ropar, India Topic : Role of thickness on the roughness and porosity of Nanoporous gold film
2.	126	Authors: MD. Badhessa, M. Sathwika, A.Vasavi, R. Sai Vishwanth, Nagavelly Tarun Teja, J. Ajayan Institute : SR University, Warangal, Telangana, India Topic : A SPICE Simulation Study of Stacked Inverters and Transistors Type D Flip-Flop Designs with 16-nm CMOS Technology
3.	251	Authors : Poorvasha Shanmuganathan, Aravindan R Institute : Cognitive Design Technology Pvt Ltd Bangalore, India Topic : Exploring Electrical Performances of InN/GaN Double Gate Tunnel FET Using Silvaco TCAD: Advancements and Insights
4.	240	Authors : Anjana G, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala, India Topic : Enhancing Efficiency in Lead-Based Perovskite Solar Cells Through Nanostructured Multi-Layered Architecture: Computational Analysis and Performance Optimization
5.	217	Authors: Rupali Srivastava, Vikas Sonkar, Shashidhar Thatikonda, Aravind Kumar RenganS Institute : Indian Institute of Technology (IIT) Hyderabad, India Topic : Investigating the toxic effect of heavy metal on Zebrafish embryos for synthesis of Metal Nanoparticle
6.	224	Authors: Vivina Puthur, Nimymol Jose, Sandra P Saju, Ashwin K S, Pooja Das M, Dhanya Gangadharan Institute : Sahrdaya College of Engineering and Technology, Thrissur, Kerala, India Topic : Screen Printed Electrodes modified with Multi- Walled Carbon Nano Tubes for the detection of Clindamycin Hydrochloride

Sl. No	Paper ID	Author & Paper Details
7.	7	Authors: Vidhya V P, Anusha P, Aswathi R. Nair, Venu Anand Institute : National Institute of Technology, Calicut, Kerala, India Topic : Study on the performance parameters of staggered and coplanar Zinc Oxide Thin Film Transistors
8.	209	Authors: Anilkumar R, Jayasankar C, Vignesh C R, Deeptidas Krishna, Aanandan CK Institute : Cochin University of Science & Technology (CUSAT), Kerala, India Topic : Enhancing the Microwave Absorption Characteristics of TiO ₂ /CNT/Polyaniline Nanocomposites
9.	188	Authors : T R Sangeeta, Deny J Institute : Kalasalingam Academy of Research and Education, Krishnankoil, Tamilnadu, India Topic : Quercus Leaf Shaped Nano Antenna for Optical Wireless Communication
10.	216	Authors : Chaya B M, C Dhanush, Tharun R, Swathi K Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Effects of Nanostructures on Micro-LED for Improved Performance
11.	267	Authors: Eugene Peter, T D Subash Institute : Talent Development Centre, Indian Institute of Science (IISc), Bangalore, Karnataka, India Topic : Advanced Nanomaterials for the performance improvement in Electric Vehicles – A review
12.	287	Authors: Birinderjit Singh Kalyan Institute : Chandigarh University , Mohali, India Topic : Design of Fault-Tolerant Quantum Cellular Automata circuit-Based D flip-Flop

Note: One Best Paper Award will be recommended by the session chair and declared during the valedictory function

Nano
Bioscience

Nano
Technology

Parallel Sessions Schedule

Venue : 3 PRAHAAR
 Time : 01:30 PM to 04:00 PM
 Session Chair : Dr. Titus, Nitika Kapoor
 Proctor : Prof. Hima

<u>Timings</u> 01.30 PM - 02.00 PM	Key note address – VI Topic: Role of Laser and Nanotechnology in Biomedicine Applications Key Note Speaker: Dr Walid Tawfik Cairo University, Egypt	
Sl. No	Paper ID	Author & Paper Details
1.	248	Authors: Kavya I H, Aishwarya K, Sumanth Gowda C N, Edwin Nishanth, Nagayya S Hiremath, Venkatesha M Institute: Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Mathematical Modeling and Simulation of Silicon Ring Modulator (SRM) based Photonic Sampler
2.	206	Authors: Prabha K, Chaya B M, Rohini Deshpande, B Chanthan Kumar, Shashank C T, Naveen N, Gagan R Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Enhanced Far Field Intensity in PhOLED with Nano Gratings at Cathode Layer
3.	210	Authors: Chaya B M, Tejashree S, Sohan S, Narasimha K Dixit, Manvit Shantakumar, Gagan M D Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Modelling and Analysis of Metamaterial Sensor-based on Dual Split Ring Resonator
4.	203	Authors: Divya T M, Venkatesha Muniswamy, Anushree D K, Rachana N, Monica M, Shashikumar D Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Design, Simulation & Optimizing Patch Antenna Performance with Circular Defected Ground Structures
5.	201	Authors: Shashank C, Prajwal N, Darshan R V, Nagayya S Hiremath, Suryanarayana N K, Venkatesha Muniswamy Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Analysis of Propagation Length and the effect of Metal Nanostrip on Silicon Nitride based Hybrid Plasmonic Waveguide
6.	249	Authors: Naeema Nazar, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Shaping Light A Survey of Recent Breakthroughs in Nanophotonics

<i>Sl. No</i>	<i>Paper ID</i>	<i>Author & Paper Details</i>
7.	265	Authors: Rahul K R, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Optimization of Perovskite Solar Cells with Sno2 as buffer layer
8.	239	Authors: Pavithra G S, Suchitra D, Sandeep Ashok Hullur, Rohit K L, Sinchana S Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Simulation and Analysis of Nano Discs in Perovskite Layered Solar Cell for Enhanced Performance
9.	222	Authors: Advait P R, Venkatesha Muniswamy, Ranjan T, Prajwal SSai Vidya Institute of Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Efficient Transistor-Level Design for High-Speed Low-Power SRAM in Computing Applications
10.	214	Authors: Seena R, Shiny Paul, Sudheer V R Institute : Cochin University of Science & Technology (CUSAT), Kerala, India. Topic : Surface Plasmon Resonance-Based Fiber-Optic Sensor for Skin Cancer Detection
11.	259	Authors: Sheeja Bhaskar, Sheena Bhaskar, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Modelling Nano scale systems using graph theory: a paradigm for Nano networks

Note: One Best Paper Award will be recommended by the session chair and declared during the valedictory function

Parallel Sessions Schedule

Venue : 4 AGNI
 Time : 01:30 PM to 04:00 PM
 Session Chair : Dr Sreejith
 Proctor : Prof Naeema Nazar

01.30 PM - 02.00 PM	Key note address – VII Topic: Study of Micro-LEDs Arrays for Interconnection of AI Chips and GPUs Applications Key Note Speaker: Dr Ray Hua Horng National Yang Ming Chiao Tung University Taiwan		
Sl.No	Paper ID	Author & Paper Details	
1.	100	Authors: Nibha M Desai, Vedvyas Dwivedi, Chandni Upadhyaya, Mayur Mehta Institute : Indus University, Ahmedabad, India Topic : Design Perspectives of BioNanosensors for Endocrine Hormones	
2.	233	Authors: Namuni Sneha, Chetan Kumar Institute : SASTRA Deemed to be University, Thanjavur, Tamil Nadu, India Topic : Flexible & Transparent Breath Sensor and Conducting Electrodes Based on Highly Interconnected Au Nanoparticle Network	
3.	37	Authors: Ramkumar K, V N Ramakrishna, N Vinodhkumar Institute : Vellore Institute of Technology, Vellore, Tamilnadu, India Topic : Analytical Modeling of Stacked Gate Oxide and Triple Metal Gate Vertical Tunnel Field-Effect Transistor	
4.	207	Authors: Sandeep Kumar Yadav, Abhijit Lincon, Soumen Das Institute : Indian Institute of Technology (IIT), Kharagpur, West Bengal, India Topic : Label free recognition of cholesterol efflux and single-cell assessment in atherosclerosis lesion in macrophages	

<i>Sl.No</i>	<i>Paper</i>	<i>Author & Paper Details</i>
5.	211	Authors: Chindamani, K .Nandakiran, R. Tharun, A V K Pranav Institute : Sri Ramakrishna Engineering College, Coimbatore, Tamilnadu Topic : Performance Analysis of Hybrid AL-ZNO Buffer Layer Enhanced CIGS Solar Cells
6.	232	Authors: Darshan R V, Mouna N Raj, Indhushree K N, Inchara Manjunath Naik, Hinduja P, Venkatesha Muniswamy Institute : Sai Vidya Institute of Technology, Bengaluru, Karnataka, India Topic : Design and simulation of Graphene based Superlens for Subwavelength Imaging
7.	134	Authors: Flavia P.N.Inbanathan, T.P.Amrutha, A.Mohan, S.Rajesh, Dhivyasri.G, M.Manikandan Institute : Presidency University, Bengaluru, Karnataka, India Russ College of Engineering, Ohio University, USA Topic : Physical Vapor Deposition of GaAs MOS Capacitor with Polyethylene Glycol as Gate Dielectric
8.	135	Authors: Flavia P.N.Inbanatha, Ashly Ann Abraham, S.Rajesh, A.Mohan, M.Manikandan, Dhivyasri.G Institute : Presidency University, Bengaluru, Karnataka, India Russ College of Engineering, Ohio University, USA Topic : Physical Vapour Deposition and Characterization of Gallium Arsenide MISFET with Polyethylene Glycol Dielectric and Sputtered Cu Gate
9.	11	Authors: Deep Prakash Pandey, Shivesh Kumar, Mrinal Sen Institute : Indian Institute of Technology, Dhanbad, Jharkhand, India Topic : CMOS -Compatible Electro-Optic Modulator for Integrated Photonics
10.	127	Authors: Kuja Uday Sri, Nagavelly Tarun Teja, Kondapaka Karthikeya, J. Ajayan Institute : SR University, Warangal, Telangana, India Topic : Analytical Study of DAC Adders in Terms of Power and Delay Under Wide Operating Temperatures and Various Power Supplies
11.	266	Authors: Sneha C, Hima K, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Nanostructured Solar Cells for Enhanced Energy Conversion: A Review
12.	242	Authors: MD. Badhesha, Motla Sathwika, Haripuri Hiranmayee, M. Karthik Purnachander, M. Vinay Kumar, J. Ajayan Institute : SR University, Warangal, Telangana, India Topic : Reliability Investigation of High Performance Nanoscale Dual Edge Triggered (DET) TSPC-D-Flip Flops for Future Low Power Electronics

Note: One Best Paper Award will be recommended by the session chair and declared during the valedictory function

Parallel Sessions Schedule

Venue : 5 SAGARIKA
 Time : 01:30 PM to 04:00 PM
 Session Chair : Dr Manikandan
 Proctor : Prof Jayalakshmi


01.30 PM - 02.00 PM	Key note address – VIII		
<p>Topic: Photonic Devices for Photonic Integrated Circuits</p> <p>Key Note Speaker: Dr Mayur Kumar Chhipa ISBAT University, Uganda</p>			
Sl. No	Paper ID	Author & Paper Details	
1.	28	<p>Authors: Chejarla Raghunathababu, E. Logashanmugam Institute : Sathyabama Institute of Science and Technology, Chennai, Tamilnadu, India Topic :Optimizing Rectangular Microstrip Antenna Performance With Nanofiller Integration</p>	
2.	48	<p>Authors: Sheetal Thakur, Vinod Parmar Institute : CSIR-Central Scientific Instruments Organisation, Chandigarh, India Topic :Hybrid Plasmonic Nanostructures for Surface Enhanced Raman Spectroscopy Substrate</p>	
3.	220	<p>Authors: Md. Tabil Ahammed, Mushfiqur Rahman Masuk, Md. Faruque Hossain Institute : Khulna University of Engineering & Technology, Bangladesh Topic :Deep Learning Assisted Design of Photonic Crystal Fiber-based Plasmonic Refractive Index Sensor</p>	
4.	237	<p>Authors: N. Senthilkumar, B. Deepanraj, Abdul Aziz Afzal, Muhammad Azhar Ali Khan Institute : Prince Mohammad Bin Fahd University ,Al-Khobar, Saudi Arabia Topic :Comparing the Cutting Forces and Chip Temperature in Turning Aluminium Nanocomposite by Experimental and Simulation Approach</p>	
5.	8	<p>Authors: N. Senthilkumar, B. Deepanraj, L. Syam Sundar, S. Santhanakrishnan Institute : Saveetha Institute of Medical and Technical Sciences, Chennai, India Topic :Thermal Studies on Nanocellulose and Banana Fiber-Reinforced Polymer Composite</p>	
6.	205	<p>Authors: R. Phani Vidyadhar, Uttarala Suhas, Pulimamidi Heamanth, Santhosh boosani Institute : Vardhaman college of engineering Hyderabad, Telangana, India Topic :Optimizing Efficiency: A Comparative Assessment of Nanometer CMOS Full-Adders</p>	

Sl. No	Paper ID	Author & Paper Details
7.	221	Authors: Kanishk Gupta, Chetanya Jangra, Harshit Harshit, Yashna Sharma Institute : Delhi Technological University, Daulatpur, Delhi, India Topic : Tunable Plasmon Resonance in Dual-Arm Plasmonic Bowtie Nanostructures
8.	204	Authors: Rakesh Kr Singh, Dinesh Kr, S N Guha, Nishant Kr, Monalisa, Abhay Kr Aman, Prabhat Kumar, Divya Kanchibhotla Institute : Aryabhata Centre for Nanoscience and Nanotechnology, Aryabhata Knowledge University, Patna, India Topic : Studies on Physical properties of Superfine Nanoscale powder of Neem, Giloy and Neem-Giloy for its applications in health and pharmaceutical industries
9.	258	Authors: Aiswarya Mohan P, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Assessing the Impact of Green and Chemically Synthesized Silver Nanoparticle on Photocatalytic Degradation of Methyl Orange
10.	225	Authors: Jeepa K J, T D Subash, K S Joseph Wilson, Aswin Aji Institute : Mangalam College of Engineering, Kottayam, Kerala Topic : Theoretical analysis of CZTGS/CZTS Tandem Solar Cell using SCAPS- 1D
11.	125	Authors: Lavanya Repaka, J. Ajayan, Sandip Bhattacharya, B. Mounika, A.Akshaykranth, Sivaraj. M Institute : SR University, Warangal, Telangana, India Topic : AlGa _N /Ga _N HEMT Nano-Biosensors for pH sensing : An Overview
12.	183	Authors: M. Chindamani, M. Dharani, S. Esther Institute : Sri Ramakrishna Engineering College, Coimbatore, Tamilnadu Topic : Simulation and efficiency of a CdTe/CdS based solar cell using Al-ZnO as buffer layer
13.	234	Authors: Padmavathi. M, G. Dhivyasri, Manikandan M, Lavanya. K, Ashwini Gowda H B, Ninu Rachel Philip Institute : Presidency University, Bengaluru, Karnataka, India Topic : A Comparative Analysis of Carbon Nano Tube Field Effect Transistor-based Low Power SRAM Design
14.	401	Authors: Nayer Qenawi, Asmaa M Abd El-Aziz, Walid Tawfik, T D Suabsh, Souad A Elfeky Institute : National Institute of Laser Enhanced Sciences (NILES), Cairo University, Giza, Egypt Topic : Synthesis and Characterization of Graphene-Based Nanocomposite for Cancer treatment
15.	124	Authors: Lavanya Repaka, J. Ajayan, Sandip Bhattacharya, B. Mounika, A.Akshaykranth, Sivaraj. M Institute : SR University, Warangal, Telangana, India Topic : An Overview of AlGa _N /Ga _N HEMT Nano-Biosensors for Glucose/Ultrasonic Ion Detection

Note: One Best Paper Award will be recommended by the session chair and declared during the valedictory function

Parallel Sessions Schedule






Venue : 6 SHAURYA
 Time : 01:30 PM to 04:00 PM
 Session Chair : Dr Eugene Peter
 Proctor : Prof Rahul

<p>Timings</p> <p>01.30 PM - 02.00 PM</p>	<p>Key note address – IX</p> <p>Topic: Quantum cascade photonic devices</p> <p>KeyNote Speaker:</p> <p>Frédéric Grillot Télécom Paris (France) & the University of New-Mexico (USA)</p>	
Sl. No	Paper ID	Author & Paper Details
1.	47	<p>Authors: P. Kalaivani, G. Mathubala, C. Anandaraj P. Kalaiselvi Institute : Bharath Institute of Higher Education and Research, Chennai, Tamilnadu, India Topic : Properties of green-synthesised bismuth ferrite nanoparticles made from Annona squamosa L. leaf extract</p>
2.	99	<p>Authors: P. Kalaivani, G. Mathubala, C. Anandaraj, P. Kalaiselvi Institute : Bharath Institute of Higher Education and Research, Chennai, Tamilnadu, India Topic : The green combustion method is used to synthesize the BFO-GO nanocomposite</p>
3.	254	<p>Authors: R. Albert William Raj, K. Joseph Wilson Institute : Arul Anandar College, Madurai, Tamilnadu, India Topic : Design and Simulation of Dual-Band Microstrip Patch Antenna for S-Band and C-Band Applications</p>
4	25	<p>Authors: T.J. Nagalakshmi Institute : Saveetha School of Engineering, Chennai, Tamilnadu, India Topic : Rectangular Shape Nano Scaled Microstrip Patch Antenna Design and Analysis for Ka Band using RT Duroid Substrate</p>
5.	43	<p>Authors: Ankita Sunder, M Smrutimaye, Tarunika D, Shwetha M Institute : Manipal Institute of Technology, Bengaluru, India Topic : Enhanced Sensitivity in Thyroid Detection via Nano-photonic Simulation of Micro Ring Resonator</p>
6.	49	<p>Authors: D. Nathiya, J. Wilson, K. Gurunathan Institute : Alagappa University, Karaikudi, Tamil Nadu, India Topic : Effects of stack dielectric layers and scaled channel lengthon the electrical properties of an extended gate field effect transistor</p>






<i>Sl. No</i>	<i>Paper ID</i>	Author & Paper Details
7.	10	Authors: Nivetha Martin, N.Ramila Gandhi, P.Pandiammal, P.Karthiga Rani, J.D.Sundari, N.Angel Institute : Arul Anandar College, Karumathur, Tamilnadu, India. Topic : Neural Networks in Predicting Nano Toxicity
8.	245	Authors: Jayalakshmi K J, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Characterization and Optimization of Perovskite-Based Solar Cells with TiO ₂ as buffer layer
9.	241	Authors: Akhil Beshy, Sithara Azeez, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Nanostructured Design and Optimization of Lead-Based Perovskite Solar Cells Incorporating PTAA/CH ₃ NH ₃ PbI ₃ /TiO ₂ /SnO ₂ :F Layers: Insights from SCAPS-1D Simulations
10.	235	Authors: Hima K, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Multilayer Efficient Perovskite Solar Cell With ZnO As Buffer Layer
11.	257	Authors: Sheena Bhaskar, Sheeja Bhaskar, Subash T D Institute : VISAT Engineering College, Ernakulam, Kerala Topic : Hydrogels Created from Nanoparticles with Extensive Networks: Analyzing Structure and Properties through Graph Theory
12.	208	Author : Padmavathi. M, G. Dhivyasri, Aruna Dore, Lavanya. K, Mansawini R, Manikandan M Institute : Dayananda Sagar College of Engineering, Bengaluru, Karnataka, India Topic : A Comparative Study of 2D SRAM FinFETs using TiN and polysilicon as a gate material
13.	29	Authors: Manaswini R, Manjunath T C, Pavithra G, Dhivyasri G, Manikandan M, Aruna Dore Institute : Presidency University, Bengaluru, Karnataka, India Topic : A Perspective on Emerging Negative Capacitance Field Effect Transistor for Future Technology Nodes
14.	402	Authors: N Aplipbayeva, IA Ukaegbbu, H.N. Parajuli, T D Subash, Bikas Nakarmi Institute : Nanjing University of Aeronautics and Astronautics, China Topic : An approach on implementing optical ALU in Silicon Photonics Platform
15.	45	Author : Vinod Parmar, Sudipta Sarkar Pal, Ritesh Kumar Institute : CSIR-Central Scientific Instruments Organisation, Chandigarh, India Topic : Design and Simulation of Micro-ring Resonator based Add-Drop Filter on Silicon Platform

Note: One Best Paper Award will be recommended by the session chair and declared during the valedictory function

**Day 1: 25th April 2024 (Thursday) at Vagamon, Kerala
Post Conference Tour**

Time	Program	
05:00 PM	Bus starts from College to Vagamon	
07:00 PM	Check-in @ Hotel, Vagamon	
07:15 PM	Welcome Drinks	
08:00 PM	Camp Fire	
09:00 PM	Buffet Dinner	

Day 2: 26th April 2024 (Friday) at Vagamon, Kerala
Post Conference Tour

08:00 AM	Breakfast	
After Breakfast Participants can collect their certificates from the Reception		
09:00 AM	Valedictory Function	
09:30 AM	Check-out from Hotel	
10:00 AM Onwards	Site Seeing	
05.00 PM	Reaching Hotels (Muvattupuzha)	

Kerala God's Own Country Welcomes You!



Looking forward to see you all in

IEEE 5NANO 2024!

25th & 26th April 2024 @ VISAT Campus

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