5TH IEEE India Council International Subsections Conference (INDISCON 2024)
August 22-24, 2024
Program Schedule
Conference Venue: Hotel Shivalikview, Sector 17, Chandigarh

Day 1:   22.08.2024 (Thursday)

TIME	ACTIVITY		
09.00 AM (Onwards)	Conference Registration		
09.30 AM - 10.00 AM	Plenary Talk-1 Arvind, IISER, Mohali		
10.00 AM - 10.30 AM	Plenary Talk-2 Surendra Pal, ISRO, Bangalore		
10.30 AM – 11.00 AM	Plenary Talk-3 Shantanu Bhattacharya, CSIO, Chandigarh		
11.00 AM - 11.30 AM	Tea Break		
11.30 AM - 01.00 PM	Technical Session-1A Sensors and Actuators-I Keynote Talk (Aimin Song, University of Manchester, UK) Invited Talk (Suvankar Chakraverty, INST Mohali) Oral Presentations (4) (Paper ID: 927, 193, 2040, 1864)	Technical Session-2A Soft Computing Techniques in Power System Keynote Talk (B.K Panigrahi, IIT Delhi) Oral Presentations (4) (Paper ID: 421, 623, 992, 1042)	Technical Session-3A Advancements in AI and ML Applications-I Invited Talk (Rashpal Kaur, TBRL DRDO) Oral Presentations (4) (Paper ID: 386, 1055, 1274, 1786, 1616)
01.00 PM - 02.00 PM	Lunch		
02.00 PM - 03.30 PM	Technical Session-1B MOS Devices and Applications Keynote Talk (Sudeb Dasgupta, IIT Roorkee) Oral Presentations (4) (Paper ID: 328, 1946, 1060, 2011)	Technical Session-2B Power System Protection and Control Invited Talks (Ranjana Sodhi, IIT Ropar) (Vahid Vahidinasab, Nottigham Trent University) Oral Presentations (4) (Paper ID: 426, 1374, 1850, 1907)	Technical Session-3B Advanced AI Techniques in Modern Networks Keynote Talk (H K Sardana, IIIT Raichur) Oral Presentations (4) (Paper ID: 843, 1810, 1984, 1753)
03.30 PM - 03.45 PM	Tea Break		
03.45 PM - 05.15 PM	Technical Session-1C Antenna and Wave Propogation-I Invited Talk (Gourav Prateek Sharma, KTH Sweden) Oral Presentations (5) (Paper ID: 365, 818, 702, 1901, 1048)	Technical Session-2C Education Technology-I Invited Talk (Maitree Dutta, NITTTR Chandigarh) Oral Presentations (4) (Paper ID: 112, 935, 1010, 1159)	Technical Session-3C Communication Systems-I Keynote Talk (Li Qian, University of Toronto) Oral Presentations (4) (Paper ID: 1831, 246, 2064, 1877)
05.15 PM - 06.15 PM	Poster Session - I (18) (136, 1908, 1006, 1784, 1703, 1584, 2024, 470, 827, 1161, 857, 1012, 693, 1136, 967, 1536, 1845, 2013)		Technical Session-4A Oral Presentations (7) (Paper ID: 661, 775 , 1678, 1847, 2008, 1844)

Day 2: 23.08.2024 (Friday)

Time	Technical Session-1D	Technical Session-2D	Technical Session-3D
08.45 AM - 10.15 AM	Technical Session-1D **Wireless Sensor Networks** **Invited Talk** **(D. K Lobiyal, JNU Delhi)** **Oral Presentations (4)** **(Paper ID: 455, 760, 2129, 1937)**	Technical Session-2D **Power Electronics and Drives** **Keynote Talk** **(Rajesh Kumar, MNIT Jaipur)** **Oral Presentations (4)** **(Paper ID: 881, 886, 922, 2088)**	Technical Session-3D **Advanced Techniques in Cybersecurity** **Invited Talk** **(Gurjeet Walia, DRDO)** **Oral Presentations (4)** **(Paper ID: 2080, 639, 1978, 1843, 1828)**
10.15 AM - 11.30 AM	**INAUGURAL SESSION**		
11.30 AM – 11.45 AM	**Tea Break**		
11.45 AM - 12.15 PM	**Plenary Talk-4** **R.B. Grover, Homi Bhabha National Institute, Mumbai**		
12.15 PM – 12.45 PM	**Plenary Talk-5** **Sandeep Sancheti, Research Relations and Academic Ambassador, Elsevier, India**		
12.45 PM - 02.15 PM	Technical Session-1E **5G Network** **Keynote Talk** **(Debabrata Das, IIIT Bangalore)** **Oral Presentations (4)** **(Paper ID: 1629, 1808, 2066, 1734)**	Technical Session-2E **Advancements in Signal Processing** **Invited Talk** **(Bhavesh Kumar Bhalja, IIT Roorkee)** **Oral Presentations (4)** **(Paper ID: 691, 728, 1732, 1834)**	Technical Session-3E **Innovations in Data Analysis and Protection** **Invited Talk** **(Nitin Auluck, IIT Ropar)** **Oral Presentations (5)** **(Paper ID: 300, 2023, 1992, 1041, 1127)**
02.15 PM - 03.00 PM	**Lunch**		
03.00 PM - 04.30 PM	Technical Session-1F **Antenna and Wave Propagation-II** **Invited Talk** **(G. Shrikanth Reddy, IIT Mandi)** **Oral Presentations (5)** **(Paper ID: 352, 631, 960, 1092, 1145)**	Technical Session-2F **Education Technologies-II** **Invited Talk** **(Ritula Thakur, NITTTR Chandigarh)** **(B. Das, IIT Roorkee)** **Oral Presentations (4)** **(Paper ID: 1608, 1898, 2001, 1246)**	Technical Session-3F **Women in Engineering** **Invited Talk** **(Prerna Gaur, NSUT New Delhi)** **Oral Presentations (4)** **(Paper ID: 1046, 1802, 1846, 1899)**
04.30 PM - 04.45 PM	**Tea Break**		
04.45 PM - 06.00 PM	Technical Session-1G **VLSI and Embedded Systems** **Keynote Talks** **(Saptarshi Das, Penn State University, USA)** *(Gian Carlo Cardarilli, Tor Vergata University of Rome, Italy)* **Oral Presentations (4)** **(Paper ID: 873, 1839, 1886, 1737)**	Technical Session-2G **Power Electronics System Control** **Invited Talks** **(Ashwani Kumar, NIT Kurukshetra)** **(C.C. Reddy, IIT Ropar)** **Oral Presentations (4)** **(Paper ID: 1568, 2142, 1967, 1942)**	Technical Session-3G **AI Techniques for Healthcare** **Invited Talk** **(Banumathy, PGIMER Chandigarh)** **Oral Presentations (4)** **(Paper ID: 1824, 1835, 1912, 1925)**
06.00 PM - 07.00 PM	**Poster Session - II (22)** **(289, 1190, 1851, 2020, 2058; 376, 377, 427, 860, 1135, 1344, 1836, 1882, 2045, 2119, 1396, 1209, 1257, 1979, 2022)**		

Day 3: 24.08.2024 (Saturday)

Time			
09.00 AM - 10.30 AM	Technical Session-1H Sensors and Actuators-II Invited Talk (Shahrir R Kasjoo, Universiti Malaysia Perlis) Oral Presentations (4) (Paper ID: 841, 1593, 2021, 2100)	Technical Session-2H Special Session: Emerging Grid Codes and Cost of Integration of Renewables in Grid Invited Talks (Ravi Segal, Energix) (Rajbir Walia, PSTCL) (Sukhwinder Abrol, CREST Chandigarh) (Ajay Maurya, BIS) (Sanjay Sharma, JKPDD) (K.S. Mann, MAC Power, UK)	Technical Session-3H Advancements in AI and ML Applications-II Invited Talk (Satish Kumar, CSIO Chandigarh) Oral Presentations (5) (Paper ID: 1981, 2097, 2095, 2106)
10.30 AM - 11.00 AM	Tea Break		
11.00 AM - 11.30 AM	Plenary Talk-6 Sukumar Mishra, IIT Dhanbad		
11.30 AM - 12.00 PM	Plenary Talk-7 Goutam Chattopadhyay, JPL, NASA		
12.00 PM - 01.30 PM	Technical Session-1I Special Session: MHz to THz Frequency Systems Invited Talks (Shiban K. Koul, IIT Delhi) (Chinmoy Saha, IIST Thiruvananthapuram) (Ramesh K. Gupta, Ligado Networks, USA) (Jaleel Akhtar, IIT Kanpur)	Technical Session-2I Intelligent Control Techniques Invited Talk (Arun K. Verma, IIT Jammu) Oral Presentations (4) (Paper ID: 2029, 2069, 1487, 1651)	Technical Session-3I Special Session: AI in Industry Invited Talks (Sudhir Dhamija, DGRE Chandigah) (Anil Yadav, Samsung Research Noida) (Pallavi, Wipro Limited) (Vikram, Antier Pvt. Ltd)
01.30 PM - 02.30 PM	Lunch		
02.30 PM - 04.00 PM	Technical Session-1J IOT Networks Keynote Talk (Bob Gill, British Columbia Institute of Technology, Canada) Oral Presentations (4) (Paper ID: 1017, 1771, 1985, 1998)	Technical Session-2J Communication Systems-II Invited Talks (Seshan Srirangarajan, IIT Delhi) Oral Presentations (4) (Paper ID: 1563, 2090, 1933, 1144)	Technical Session-3J Quantum Computing and Applications Invited Talk (Jawar Singh, IIT Patna) Oral Presentations (4) (Paper ID: 1794, 1939, 1956, 1807)
4.00 PM - 05.00 PM	Valedictory & Prize Distribution		

INDISCON 2024

August 22 – 24, 2024, Chandigarh, India

Detailed Technical Program

VENUE

Hotel Shivalikview
Sector-17, Chandigarh

Day 1: 22.08.2024 (Thursday)		
Room	**Session Numbers**	
Anjuman Hall (Ground Floor)	Plenary Session-I	09:30 AM – 11:00 AM
	1A. Sensors and Actuators-I	11:30 AM – 01:00 PM
	2B. Power System Protection and Control	02:00 PM – 03:30 PM
	3C. Communication Systems- I	03:45 PM – 05:15 PM
	4A. Technical Session	05:15 PM – 06:15 PM
Adab Arj (Ground Floor)	2A. Soft Computing Techniques in Power System	11:30 PM – 01:00 PM
	1B. MOS Devices and Applications	02:00 PM – 03:30 PM
	1C. Antenna and Wave Propagation-I	03:45 PM – 05:15 PM
	Poster Session - I	05:15 PM – 06:15 PM
Board Room (3rd Floor)	3A. Advancements in AI and ML	11:30 AM – 01:00 PM
	3B. Advanced AI Techniques in Modern Networks	02:00 PM – 03:30 PM
	2C. Education Technologies – I	03:45 PM – 05:15 PM

Day 2: 23.08.2024 (Friday)		
Room	**Session Numbers**	
Anjuman Hall (Ground Floor)	1D. Wireless Sensor Networks	08:45 AM – 10:15 AM
	Inauguration Session	10:15 AM – 11:30 AM
	Plenary Session-II	11:45 AM – 12:45 PM
	1E. 5G Network	12:45 PM – 02:15 PM
	1F. Antenna and Wave Propagation-II	03:00 PM – 04:30 PM
	1G. VLSI and Embedded Systems	04:45 PM – 06:00 PM
Adab Arj (Ground Floor)	2D. Power Electronics and Drives	08:45 AM – 10:15 AM
	2E. Advancements in Signal Processing	12:45 PM – 02:15 PM
	2F. Education Technologies-II	03:00 PM – 04:30 PM
	2G. Power Electronics System Control	04:45 PM – 06:00 PM
	Poster Session-II	06:00 PM – 07:00 PM
Board Room (3rd Floor)	3D. Advanced Techniques in Cybersecurity	08:45 AM – 10:15 AM
	3E. Innovations in Data Analysis and Protection	12:45 PM – 02:15 PM
	3F. Women in Engineering	03:00 PM – 04:30 PM
	3G. AI Techniques for Healthcare	04:45 PM – 06:00 PM

Day 3: 24.08.2024 (Saturday)		
Room	**Session Numbers**	
Anjuman Hall (Ground Floor)	1H. Sensors and Actuators-II	09:00 AM – 10:30 AM
	Plenary Session- III	11:00 AM – 12:00 PM
	1I. Special Session on MHz to THz Frequency Systems	12:00 PM – 01:30 PM
	1J. IOT Networks	02:30 PM – 04:00 PM
	Valedictory & Prize Distribution	04:00 PM – 05:00 PM
Adab Arj (Ground Floor)	2H. Special Session: Emerging Grid Codes and Cost of Integration of Renewables in Grid	09:00 AM – 10:30 AM
	2I. Intelligent Control Techniques	12:00 PM – 01:30 PM
	2J. Communication Systems- II	02:30 PM – 04:00 PM
Board Room (3rd Floor)	3H. Advancements in AI and ML Applications-II	09:00 AM – 10:30 AM
	3I. Special Session: AI in Industry	12:00 PM – 01:30 PM
	3J. Quantum Computing and Applications	02:30 PM– 04:00 PM

Plenary Talks

Day 1 Plenary Talks: 22/08/2024   **09:30 AM - 11:00 AM**

Session Chair/Co-Chair: Ramesh Gupta (Ligado Networks, USA)/R. S. Walia (PEC, Chandigarh)

Plenary 1
Title: From Quantum Physics to Quantum Technologies: A Journey of a Century
Arvind, IISER Mohali
Plenary 2
Title: Disruptive Technology Perspective
Surendra Pal, ISRO, Bangalore
Plenary 3
Title: Printable Supercapacitors
Shantanu Bhattacharya, CSIO Chandigarh

Day 2 Plenary Talks: 23/08/2024   **11:45 AM - 12:45 PM**

Session Chair/Co-Chair: Arun Grover (Former VC, PU Chandigarh)/Sandeep Kumar (PEC Chandigarh)

Plenary 4
Title: Development-Led Transition to a Net Zero Energy Mix in India
R.B. Grover, Homi Bhabha National Institute, Mumbai
Plenary 5
Title: Driving Relevant and Impactful Research
Sandeep Sancheti, Research Relations and Academic Ambassador, Elsevier, India

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Day 3 Plenary Talks: 24/08/2024   **11:00 AM - 12:00 PM**

Session Chair/Co-Chair: Shiban K. Koul (IIT Delhi)/Simranjit Singh (PEC, Chandigarh)

Plenary 6
Title: Issues in Grid Integration of Rooftop Solar PV
Sukumar Mishra, IIT Dhanbad
Plenary 7
Title: Microwave to Terahertz Technologies to Explore the Universe
Goutam Chattopadhyay, JPL, NASA

Oral Presentations

1A. Sensors and Actuators-I

Session Date and Time: 22/08/2024   **11:30 AM – 01:00 PM**
Session Chair/Co-Chair: : Prof. Neena Gupta (PEC Chandigarh)/Arashpreet Kaur (PEC Chandigarh)

Keynote Talk: Devices Based on Semimetalic Graphene and Semiconducting Graphene Nanoribbons, *Aimin Song, University of Manchester, UK*

Keynote Talk: Spin Polarization and Topological Hall effect: Oxide Interface and Thin Films, *Suvankar Chakraverty, INST Mohali*

Paper ID: 927
An Effect of Asymmetrical Structure on the Performance of Dielectric–Modulated AlGaN/GaN/InGaN/GaN MOSHEMTs for Label-Free Biosensing Applications
Girish Shankar Mishra, **M Arun Kumar**, Mohankumar N, Sankalp Kumar Singh, Varier Mahesh

Paper ID: 193
Antioxidants and Photosensitizer Co-loaded Nanoparticles Boost Photodynamic Therapy in Triple Negative Breast Cancer
Hima Sree Buddhiraju, Dheeraj Dehariya, Aravind Kumar Rengan

Paper ID: 2040
Mimicking Human Skin Touch using Microfluidic Single Microchannel Sensor
Deepika Gupta, Sachin Sharma, Dr. Nandanwar, Deepak Sachan, Jagadeesh Kadiyam, G Shrikanth Reddy, Narendra Kumar Dhar

Paper ID: 1864
Fabrication and Characterization of Spinel-CdMn2O4 nanostructure as an electrode material for Supercapacitors
Raman Duddi, Shivani Shivani, Shobhna Dhiman, Arun Kumar Singh, Navpreet Kamboj, Sanjeev Kumar

1B. MOS Devices and Applications

Session Date and Time: 22/08/2024   **2:00 PM – 03:30 PM**
Session Chair/Co-Chair: S. S. Gill (NITTTR, Chandigarh)/Jasbir Kaur (PEC Chandigarh)

Keynote Talk: Reliability Challenges in Gate-All-Around Nanosheet/Forksheet FETs, *Sudeb Dasgupta, IIT Roorkee*

Paper ID: 1946
Impact of Polymer Dielectrics on Mobility of Cylindrical-OTFTs for Wearable Textile Applications
Prasanthi Lingala, Durga Prakash

Paper ID: 1060
Experimental Investigation of the Effect of Titanium And Zirconium Nanoparticles on Single-Phase Transformers
Deepak M, **J. Manokaran**, Dineshkumar P, C. Santhakumar, M. Karthick, C. Bharatiraja

Paper ID: 2011
Conduction Mechanism in Standard Schottky Barrier Thin Film Transistors and Source Gated Transistors for Different Active Layer Thicknesses and at High Drain Electric Fields
Shaksi Soni, Arjun Datta, Jatinder Pal, Gourab Das, Jaskirat Kaur, Sanjeev Kumar, Arun Kumar Singh, Deepak Kumar Sharma

Paper ID: 328
Comparative Analysis of SRAM Cells with CMOS and CNTFET Technology
Abhishek Kumar, **Vipin Kumar Sharma**

1C. Antenna and Wave Propogation-I
Session Date and Time: 22/08/2024   **3:45 PM – 05:15 PM** **Session Chair/Co-Chair: Umesh Tiwari (CSIR-CSIO Chandigarh)/Surendra Kumar Gupta (PEC Chandigarh)**
Invited Talk: Dependable Time-critical Communications in 6G: Challenges and Future Directions, *Gourav Prateek Sharma, KTH Sweden*
Paper ID: 1901 **A Simple Decoupling Mechanism in MIMO Dielectric Resonator Antenna Using Metallic Strips** **Akshit Kadiyan,** Supriya Garg, Gourab Das, Jaskirat Kaur, Arashpreet Sohi, Deepak Kumar Sharma, Simranjit Singh, Arun Kumar Singh
Paper ID: 365 **Enhancing Resilience of WPT Systems to Lateral Misalignment using Near-Field Coil Antennas** Ananth Bharadwaj Madduluri, C. C. Reddy, **Ashwani Sharma**
Paper ID: 818 **Wideband Frequency Selective Surface Absorber for Radar Cross-Section Reduction** Shrey Anant Sandiman, Laxmikant Dewagan, **Nipun Kumar Mishra**
Paper ID: 702 **Security Outage Performance of an FSO/RF System Employing NOMA** **Aanchal Gupta,** Divya Dhawan, Neena Gupta
Paper ID: 1048 **Dual-Polarized Broadband Antenna Design for Base Station Applications** **Sambhudutta Nanda**

1D. Wireless Sensor Networks
Session Date and Time: 23/08/2024   **08:45 AM – 10:15 AM** **Session Chair/Co-Chair: Shailendra Singh (PEC Chandigarh)/Mayank Gupta (PEC Chandigarh)**
Invited Talk: AI Limits and Beyond, *D. K Lobiyal, JNU Delhi*
Paper ID: 455 **Nodes Deployment Techniques for Target Coverage and Connectivity Problems in Underwater Wireless Sensor Networks based on JAYA algorithm** **Kadoke Marco**
Paper ID: 760 **Study the Effect of Hybrid Energy Harvesting Wireless Body Sensor Nodes using Multi-dimensional Approach in Simulation** Hardeep Singh Dhillon, Paras Chawla, Kuldip Kumar, **Sandeep Bhatia**
Paper ID: 2129 **IOT based Indoor Environment Monitoring and Controlling with Plant care** **Pamireddy Hitesh,** Venkata Reddy, S Munavvar Hussain, Samhitha Reddy, Vinay Rasamalla
Paper ID: 1937 **An Ultrathin Compact Octa-band Terahertz Metamaterial Absorber with Polarization- Sensitive Characteristics** **Supriya Garg**, Sahil Garg, Bhavya Sharma, Gourab Das, Prince Jain, Sanjeev Kumar, Gaurav Mani Khanal, Arun Kumar Singh

1E. 5G Network

Session Date and Time: 23/08/2024   **12:45 PM – 02:15 PM**
Session Chair/Co-Chair: Sudeb Das Gupta (IIT Roorkee)/Rajandeep Singh (GNDU Amritsar)

Keynote Talk: Atmanirbhar 5G-Advanced Open-Radio Access Network Base Station Technologies, *Debabrata Das, IIIT Bangalore*

Paper ID: 1629
Integration, Testing and Performance Analysis of ETSI-MEC with Different OAI 5G architectures
Pimmy Gandotra, **Shashwat Sanadhya**, Brejesh Lall

Paper ID: 1808
Complexities of Secure Communication in D2D-Enabled 5G Networks: A Review
Srinivasarao Yarlagadda, Ajay Bhardwaj

Paper ID: 2066
Design of WDM Millimeter Wave over DP-16QAM using Heterodyne for 5G Fronthaul
Harpreet Kaur

Paper ID: 1734
Compact 8-port Eighth Mode Circular SIW (EMSIW) MIMO Antenna Substrate
Gunjan Srivastava, **Akhilesh Mohan**

1F. Antenna and Wave Propagation-II

Session Date and Time: 23/08/2024   **3:00 PM – 04:30 PM**
Session Chair/Co-Chair: Naresh Kumar (UIET Chandigarh)/Balwinder Singh Dhaliwal (NITTTR Chandigarh)

Invited Talk: Development of EM wave Absorbers using Frequency Selective Surfaces, *G. Shrikanth Reddy, IIT Mandi*

Paper ID: 960
A Compact Shielded QMSIW Quadruplexing Antenna for X-band Applications
Gunjan Srivastava, **Akhilesh Mohan**

Paper ID: 1092
Ultra-Wideband Pattern Reconfigurable Antenna for Base station Applications
Shalini Bhickta, Naveen Jaglan, Amit Kumar

Paper ID: 1145
Outage Analysis of a NOMA-based FSO/RF communication system
Aanchal Gupta

Paper ID: 352
A Compact QMSIW Self-Diplexing Antenna
Gunjan, **Shalini Singh**

Paper ID: 631
Dual Polarized Differential SIW Antenna for In-Band Full Duplex Applications
Gunjan Srivastava, Akhilesh Mohan

1G. VLSI and Embedded Systems

Session Date and Time: 23/08/2024   **04:45 PM – 06:00 PM**
Session Chair/Co-Chair: Jawar Singh (IIT Patna)/Ramandeep Kaur (Punjabi University, Patiala)

Keynote Talk: Monolithic 3D Integration of Multifunctional and Heterogeneous 2D Devices, *Saptarshi Das, Penn State University, USA*

Keynote Talk: (TBD)*, Gian Carlo Cardarilli, Tor Vergata University of Rome, Italy*

Paper ID: 873
Split-Rail Charge Recovery Logic: An Analytical Review
Sukhreet Kaur, Rita Mahajan

Paper ID: 1839
CPU 101: Design of a Simple Microprocessor from First Principles
Aditi Sharma, Devyam Seal, **Venkatnarayan Hariharan**

Paper ID: 1886
Comparative Analysis of different Operational Transconductance Amplifiers
Kareena Yadav, Pawan Srivastava, Balwinder Singh, Parveen Kumar

Paper ID: 1737
MoS2 Transistor with Polymethyl methacrylate (PMMA) Gate Oxide for Low-Power Applications
Shivangi Srivastava, Sajal Agarwal

1H. Sensors and Actuators-II

Session Date and Time: 24/08/2024   **09:00 AM – 10:30 AM**
Session Chair/Co-Chair: Sanjeev Kumar (PEC Chandigarh)/Pooja Devi (CSIR-CSIO Chandigarh)

Invited Talk: Planar Electronic Nanodevices and Their Applications, *Shahrir R Kasjoo, Universiti Malaysia Perlis*

Paper ID: 841
Defect Mediated Sc2CO2 MXene Monolayer for Sensing Small Gas Molecules: A First Principle Study
Julaiba Tahsina Mazumder, **Ravindra Kumar Jha**

Paper ID: 1593
Rapid Response Biodegradable Alcohol Sensor using 2D MoS2/0 D N-GQDs
Rucha R Lambate, Kavita A Mukate, Kalyanee Patil, kshaya Pisal, Tejashree Bhave

Paper ID: 2021
Dual mode Photothermal/Photodynamic transduction studies using Multifunctional nanosystem for Biomedical Applications
Aravind Kumar Rengan, **Mohammad Sadik Ali,** Sreekanth Patnam

Paper ID: 2100
Analysis of Carrier-dependent Fluorescence of Curcumin
Nitisha Beniwal, Anamika Verma, Nagalaxmi Dokkari Yadav, Aravind Kumar Rengan

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1I. Special Session on MHz to THz Frequency Systems

Session Date and Time: 24/08/2024   **12:00 PM – 01:30 PM**
Session Chair/Co-Chair: Goutam Chattopadhyay (JPL NASA)/Gourab Das (PEC Chandigarh)

Keynote/Invited Talks

Medical Applications of MHz to sub-THz Waves
Shiban K. Koul, IIT Delhi

Advanced Antennas for Ground and Satellite Applications: Overview and Recent Developments
Chinmoy Saha, Indian Institute of Space Science and Technology, Thiruvananthapuram

MHz to sub- THz Emerging 5G/6G Telecom Networks: A Technology Perspective
Ramesh K Gupta, Legado Networks, United States of America

Metamaterials Inspired RF Sensors and Imaging Methodologies for Biomedical and Humanitarian Applications
Jaleel Akhtar, IIT, Kanpur

1J. IOT Networks

Session Date and Time: 24/08/2024   **02:30 PM – 04:00 PM**
Session Chair/Co-Chair: Baban Kumar Bansod (CSIR-CSIO Chandigarh)/Birinderjit Singh (Chandigarh University)

Keynote Talk: AI and IoT - Applications and Perils, *Bob Gill, British Columbia Institute of Technology, Canada*

Paper ID: 1017
Integrating Social Platforms with IoT: Security Challenges, Applications, and Trust Issues
Abhishek Shukla, Rahul Gupta

Paper ID: 1771
Integrating Social Platforms with IoT: Security Challenges, Applications, and Trust Issues
Bhabendu Kumar Mohanta, **Mohan Kumar Kumar Dehury**, Desetti Tulasi, Sunayana Das

Paper ID: 1985
Energy-Aware Priority-Based Task Scheduling for Edge Devices in Internet of Things
Vijaykumar Babu Naik Pawar, S. Mini

Paper ID: 1998
Enhanced Streetlight Management: Using IoT and ESP32 for Automated Fault Detection
Prabodh P Jagtap

2A. Soft Computing Techniques in Power System

Session Date and Time: 22/08/2024   **11:30 PM – 01:00 PM**
Session Chair/Co-Chair: Damanjit Kaur (UIET, PU Chandigarh)/T. S. Saggu (PEC Chandigarh)

Keynote Talk: Application of Soft Computing Tools for Power Systems Planning, Operation and Control, *B.K Panigrahi, IIT Delhi*

Paper ID: 421
Flamingo Search Algorithm for Solving the Cost-Effective Multi-Objective Optimal Reactive Power Dispatch Problem
Tanmay Das, **Ranjit Roy** and Kamal Krishna Mandal

Paper ID: 623
Hyper Parameter Optimization and Solar Power Forecasting using Convolution Neural Networks
Kamal Kishore Mehta and Kalpana Meena

Paper ID: 992
Empowering Energy Systems: Exploring the Intersection of Artificial Intelligence and Predictive Maintenance
Karthika Natarajan, Vankayalapati Radhika, Chandana Gouri Tekkali

Paper ID: 1042
PI Controller Design using Neural Tuning Method for DFIG Grid Integration
Rupali Rajesh Hete, Dr Tarun Shrivastava and Ritesh Dash

2B. Power System Protection and Control

Session Date and Time: 22/08/2024   **02:00 PM - 03:30 PM**
Session Chair/Co-Chair: Y. P. Verma (UIET, PU Chandigarh)/Sandeep Kaur (PEC Chandigarh)

Invited Talk: Looking into the Future of EV-Integrated Energy Systems: Vehicle-for-Everything (V4X), *Vahid Vahidinasab, Nottingham Trent University*

Invited Talk: Advanced Measurement and Instrumentation for Sustainable Energy System Challenges, *Ranjana Sodhi, IIT Ropar*

Paper ID: 426   **Observations on Electrical Parameters of Vacuum Arcs during Short Circuit Current Interruption**   Sreeram Vengayil
Paper ID: 1374   **Artificial Intelligent Relays for Protection of Mutually Coupled Parallel Transmission Lines**   **Sanchita Kumari,** Sanjeev Kumar Aggarwal, Amrita Sinha
Paper ID: 1850   **A Framework to Detect Human Emotion using Deep Learning Techniques**   Aravinth J and **Poorva Tiwari**
Paper ID: 1907   **Graphical User Interface Aided Intelligent Diagnosis of Stator Faults in Induction Motors**   Jitendra Kumar Dewangan, **Harsh Patel,** Aparna Sinha and Debanjan Das

2C. Education Technologies – I
Session Date and Time: 22/08/2024 03:45 PM - 05:15 PM   **Session Chair/Co-Chair: Anju Singla (PEC Chandigarh)/Nidhi Tanwar (PEC Chandigarh)**
Invited Talk: ICT/AI Tools for Teaching Learning and Research, *Maitreyee Dutta, NITTTR, Chandigarh*
Paper ID: 112   **An Intervention Program to Capture the Attention Span and Working Memory Using Psychopy and Opensesame – A Comparative Study**   Kavitha Sooda, Indiramma M, **Preetam S**, Pujith B.S., Rohit Agarwal, Rohit K and Sunayana S
Paper ID: 935   **Optimizing Educational Outcome Prediction: Leveraging Chi-Square Method for Effective Feature Selection**   **Kajal Mahawar** and Punam Rattan
Paper ID: 1010   **A Culture- centered Designing of Web-based Language Acquisition Module for the Hearing Impaired**   **Varghese Kandathil** and Anie Mathew
Paper ID: 1159   **TRAVELX**   **Mittapally Neehar,** G Sai Vardhan, Fatima Unnisa, S Madhulitha and Sai Nikhila Reddy

2D. Power Electronics and Drives
Session Date and Time: 23/08/2024 8:45 AM - 10:15 AM   **Session Chair/Co-Chair: Tilak Thakur (PEC Chandigarh)/Puneet Kaur (UIET, PU Chandigarh)**
Keynote Talk: Reinforcement Learning Algorithm Design for Power Management in EV, *Prof. Rajesh Kumar, MNIT Jaipur*
Paper ID: 881   **Separately Excited DC Motor Speed Estimation**   **Uzma T Shaikh** and Radhika Mundargi
Paper ID: 886   **Predictive Error Switching Strategy for Multilevel Matrix Converter**   Solai Manohar S, **Senthil Kumaran M**, Murugesan K and Darwin Jose Raju
Paper ID: 922   **Design In-Wheel Switched Reluctance Motor to Endurance Mileage for Electric Vehicle Applications**   Deepak M, **Manokaran J**

Paper ID: 2088	

CFD and Thermal Analysis of Electric Vehicle Battery Pack
Dhruv Goyal, **Rattanleen Kaur,** Arnav Sood, Lkshita Sain, Sulata Bhandari and Ajay Kumar

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2E. Advancements in Signal Processing

Session Date and Time: 23/08/2024	**12:45 PM - 02:15 PM**

Session Chair/Co-Chair: Ashwini Kumar (NIT Kurukshetra)/Vivek Pahwa (UIET, PU Chandigarh)

Invited Talk: Cyber Security Aspect in Electrical Power Network, *Bhavesh Kumar Bhalja, IIT Roorkee*

Paper ID: 691
Enhanced Accuracy for Indoor Position Estimation using Smart Phone Sensors Data via Sensor Fusion and MLP
Shiva Sharma, Naresh Kumar and Manjit Kaur

Paper ID: 728
Power Transformer Failure Analysis in Maharashtra State: A Case Study
Anurag Khergade and Manish G. Wath

Paper ID: 1732
Study on Model Reference Adaptive Control Scheme to Accommodate Flight Disturbances in Micro Aerial Robots
Anand Ronald Kumutham

Paper ID: 1834
Integral Backstepping Controller for Post Prandial Glucose Management in Artificial Pancreas for Type I Diabetes
Shubhrajyoti Moitra

2F. Education Technologies-II

Session Date and Time: 23/08/2024	**03:00 PM - 04:30 PM**

Session Chair/Co-Chair: Vasundhara Singh (PEC Chandigarh)/Sheetal Lalotra (PEC Chandigarh)

Invited Talk: Role of Learner Centric MOOCS in Engineering Education, *Ritula Thakur, NITTTR, Chandigarh*

Invited Talk: Challenges of Integration of Renewals Energy Resources to the Grid, *Prof. B. Das*, IIT Roorkee

Paper ID: 1608
Blockchain-Based Trademark Verification System
Saket Kiran Nagdive, Priya M Shelke and Shubham Bhagat

Paper ID: 1898
An Improved Approach for the Prediction of Parkinson Disease
Ritika Rattan, Pardeep Garg and Pankaj Dhiman

Paper ID: 2001
Rethinking Higher Educational Practices in the Age of Artificial Intelligence
Gitanjaly Chhabra, Noosha Mehdian **and Prihana Vasishta**

Paper ID: 1246
Abstraction of Usecase from Activity diagram
Srinivas CK, **Pani Rama Prasad**, Venkata S Edara and RN Kulkarni

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2G. Power Electronics System Control

Session Date and Time: 23/08/2024	**04:45 PM - 06:00 PM**

Session Chair/Co-Chair: Bhavesh Kumar Bhalja (IIT Roorkee)/Puneet Chawla (PEC Chandigarh)

Invited Talk: Phase Change Materials in Renewable Energy Systems, *Ashwani Kumar, NIT Kurukshetra*

Invited Talk: Emerging Grid Codes and Cost of Integration of Renewables in Grid, *C.C Reddy, IIT Ropar*

Paper ID: 1568
Advanced Control of Power Converters for Enhanced Performance and Stability of Solar Photovoltaic Systems: A Review
Ankit Srivastava, Dashrath Nishad, Prashant Pandey, Rinki Maurya, Surya Prakash, Ashutosh Singh

Paper ID: 2142
Management of Electric Energy through Demand-Side Resources
Saurabh Ratra and Ajay Kumar

Paper ID: 1967
Experimental Challenges in MTPA Control of Indigenous IPMSM and its Solutions
Prakhar Jain and **Himanshu Misra**

Paper ID: 1942
On Board Analysis and Evaluation of Battery EIS Data For Second Life Application
Archit Khurana, Sneha Dattatrey and Gaurav Chatterjee

2H. Special Session: Emerging Grid Codes and Cost of Integration of Renewables in Grid

Session Date and Time: 24/08/2024	**09:00 AM - 10:30 AM**
Session Chair/Co-Chair: Rintu Khanna (PEC Chandigarh)/Manohar Singh (PEC Chandigarh)	

Keynote/Invited Talks

Ravi Segal, Energix

Rajbir Walia, PSTCL

Sukhwinder Abrol, CREST

Sanjay Sharma, JKPDD

Vishal Tomar, BIS

KS Mann, MAC Power, UK

2I. Intelligent Control Techniques

Session Date and Time: 24/08/2024	**12:00 PM - 01:30 PM**
Session Chair/Co-Chair: Balwinder Singh Surjan (PEC Chandigarh) & Saurabh Ratra (PAU, Ludhiana)	

Invited Talk: Alternative Transportation "The Future Ahead", *Arun K. Verma, IIT Jammu*

Paper ID: 2029
Exploring Spectral and Non-linear Characteristics of Neural Dynamics during Cognitive Loading
Sambit Saha, Nilotpal Das and Monisha Chakraborty

Paper ID: 2069
Singular Value Decomposition-Based Reduced Order Framework of Frequency Weighted Continuous-time Systems
Vineet Sharma and **Deepak Kumar**

Paper ID: 1487
Cyber Security in Power Networks – At the Crossover Domain Intersection
Hillol Biswas

Paper ID: 1651
A Proposed PWM Technique to Reduce Circulating Current in Two Parallel Interleaved Two-Level VSIs
Monalika and **Kapil Shukla**

2J. Communication Systems- II

Session Date and Time: 24/08/2024　　　　　　　　　　　　　　　　**2:30 PM – 04:00 PM** **Session Chair/Co-Chair: Chimoy Saha (IIST Trivandrum)/Divya Dhawan (PEC Chandigarh)**
Invited Talk: Millimeter Wave Radar Signal Processing*, Seshan Srirangarajan, IIT Delhi*
Paper ID: 1563 **Milk Quality Analysis Based on Fat and SNF Content for Enhanced Dairy Product Suitability** **Deblina Das,** Neha Bagga, Manraj Singh
Paper ID: 2090 **AGILE-DRONE: Autonomous GPS-Enabled Delivery with Integrated Android Interface and Radio Telemetry** **Shweta Derrick Malekar,** Ramprasad Kanailal Ghosh, Prathamesh Upadhye
Paper ID: 1933 **Railway Ticket Scanner using Optical Character Recognition (OCR) and QR Code Generation for Waiting List Ticket allotment** **Anand Vijay Sutar**, Kantilal Rane, Sahil Sanjay Jadhav, Tejas Shankar Kamble, Aniket Kisan Karale, Yash Mahesh Katkar
Paper ID: 1144 **Performance Analysis of Adaptive Underlay/Overlay Full-Duplex Cooperative Communication in Cognitive Radio Network** **Jayanta Kumar Bag**

3A. Advancements in AI and ML Applications -I

Session Date and Time: 22/08/2024　　　　　　　　　　　　　　　　**11:30 AM - 1:00 PM** **Session Chair/Co-Chair: Mukesh Kumar (UIET, PU Chandigarh)/Poonam Saini (PEC Chandigarh)**
Invited Talk: Deep learning for recommender systems*, Rashpal Kaur, TBRL DRDO*
Paper ID: 386 **Ear Recognition Advancements and Trends: A Scientmetric and Systematic Review** **Parul Chutani,** Nitin Sharma
Paper ID: 1055 **Optimizing Data Efficient Image Transformers using K-fold Cross Validation for Passive Digital Image Splicing Forensics** **Chithra Raj**, Maitreyee Dutta, Jagriti Saini
Paper ID: 1274 **A Diligent Fine-tuned MobileNetV2 Model for Pistachio Seeds Classification** **Shagun Sharma**, Kalpna Guleria
Paper ID: 1786 **Enhancing Financial Market Analysis Bitcoin vs Gold through Machine Learning Algorithms: A Study on Risk Assessment and Portfolio Management** **Richa Golash**
Paper ID: 1616 **Evaluation of Computation Overhead of Paillier Encryption in Vertical Federated Learning** **Abhinand P, Tomsy Paul, Santhosh Kumar Gopalan**

3B. Advanced AI Techniques in Modern Networks

Session Date and Time: 22/08/2024　　　　　　　　　　　　　　　　**02:00 PM – 03:30 PM** **Session Chair/Co-Chair: Rama Krishna Challa (NITTTR Chandigarh)/Alka Jinal (PEC Chandigarh)**

Keynote: AI & Interdisciplinary Research, *H K Sardana, IIIT Raichur*
Paper ID: 1810 **Software Defined Network Based Error Correction Mechanism in Quantum Key Distribution** **Rasha Shajahan,** Kurunandan Jain, Aneesh Kumar K B, Prabhakar Krishnan
Paper ID: 1984 **Harnessing the Swarm Trio: PSO, ACO, and TSO for Efficient Cloud Task Scheduling** **Isha Sharma,** Ruchika Gupta, Pardeep Singh
Paper ID: 1753 **Workload Prediction Model to Enhance the Performance of Cloud Data Centers Using Machine Learning** Sujay Bansal, **Mohit Kumar**, Guneet Kaur Walia
Paper ID: 843 **Probabilistic Free Riding Attack in Federated Learning** **Anee Sharma,** Ningrinla Marchang

3C. Communication Systems- I
Session Date and Time: 22/08/2024　　　　　　　　　　　　　　**3:45 PM – 05:15 PM** **Session Chair/Co-Chair: A. Q. Ansari (JMI New Delhi)/Balwinder Raj (PEC Chandigarh)**
Keynote Talk: Sub-MHz Spectral Dip in a Resonator-free Nonlinear Medium with Elliptical Birefringence*, Li Qian, University of Toronto, Canada*
Paper ID: 1831 **An Effective PLSR Based Model for Soil Moisture Monitoring: An Application for Smart Gardening** **Parthasarathi Nayak**, Monalisa Swain
Paper ID: 246 **Reinforcement Learning-based Optimized UAV Selection for UAV-to-UAV Communication** Divyanshu Bhardwaj, Angel Kanjiya, Nilesh Kumar Jadav, Sudeep Tanwar, **Deepak Garg**
Paper ID: 2064 **Dual-band MIMO array for 5G wireless networks** **Poonam Koundal**
Paper ID: 1877 **Universal Software Defined Radio: Advancing Electromagnetic Spectrum Operations for Enhanced Interoperability** **Mohit Judge**

3D. Advanced Techniques in Cybersecurity
Session Date and Time: 23/08/2024　　　　　　　　　　　　　　**8:45 AM - 10:15 AM** **Session Chair/Co-Chair: Savita Gupta (UIET, PU Chandigarh)/Shilpa (PEC Chandigarh)**
Invited Talk: Biometric Systems: Challenges and Research Directions, *Gurjeet Walia, SAG DRDO, Delhi*
Paper ID: 2080 **Android Malware Detection Using Graphical Technique** **Monish Kumar Sahu,** Rahul Gupta
Paper ID: 639 **Mitigating IoT Security Risks Enhanced Ransomware Attack Classification** Vaibhav Kumar, Kuldeep Singh Jadon, **Nitin Gupta**

Paper ID: 1978
Deep Learning Based Approach for Detection of Resource Depletion Attacks in 5G Networks
Sri Shiva M V Shourya Sharma, **Tilak Malepati**, Sriram Sankaran

Paper ID: 1843
Comparative Analysis of Transformer-Based Models in Malware Detection: Evaluating BERT, DistilBERT, ELECTRA, and RoBERTa
Abden Antony Fernandez, Adithya Arangi, Vimina E R

Paper ID: 1828
FRE-Net: Fuzzy Rank Ensemble Network for Enhanced Breast Cancer Detection with Attention-Boosting Technique
Barsha Abhisheka, Soumen Das

3E. Innovations in Data Analysis and Protection

Session Date and Time: 23/08/2024	**12:45 PM - 2:15 PM**
Session Chair/Co-Chair: Sarbjeet Singh (UIET, PU Chandigarh)/Rupali Verma (PEC Chandigarh)	

Invited Talk: Edge Computing: A Paradigm for Processing Latency Sensitive Applications, *Nitin Auluck, IIT Ropar*

Paper ID: 300
Combating Fake News Utilizing Content-Based Word Embedding and Language Features
Mayank Kumar Jain, Dinesh Gopalani, Yogesh Kumar Meena

Paper ID: 2023
Revolutionizing Sentiment Analysis: Accelerated Data Science Approaches for Reddit Submissions
Shiya Mer, **Shatakshi Saxena,** Arun Singh Pundir

Paper ID: 1992
Enhancing Privacy and Utility in Big Data Publishing through Attribute Selection Optimization
Vaishali Chauhan, Ruchika Gupta

Paper ID: 1041
Two Step Federated Learning Approach in Brain Stroke Identification and Classification via Fine-tuning EfficientNetB0 Network at Edge nodes
Sapthak Mohajon Turjya, **Raj Singh,** Pritam Sarkar, Suchismita Rout, Sujata Swain, Anjan Bandyopadhyay

Paper ID: 1127
A Review on Blockchain-Based Paradigm for the Management of Digital Assets in Healthcare
Kajal Jain, Sanjeev Rana

3F. Women in Engineering

Session Date and Time: 23/08/2024	**3:00 PM – 04:30 PM**
Session Chair/Co-Chair: Lini Mathew (NITTTR Chandigarh)/Aparna Akula (CSIR-CSIO Chandigarh)	

Invited Talk: Optimization of Solar PV array for Maximum Output Power under Different Partial Shading Conditions for e-mobility, *Prerna Gaur, NSUT, New Delhi*

Paper ID: 1802
Analysing Mobility Patterns: A Comparative Study of SUMO RandomTrips and Duarouter
Deepika M S

Paper ID: 1846
A WebApp Framework for the Prediction of e-GFR Value and CKD Stage using Regression-based Machine Learning Algorithms
Gayathri Hegde, Priyanka Marellavar, Sunil Kumar G, P Deepa Shenoy, Venugopal K R, Arvind Canchi

Paper ID: 1899
An Eco-friendly Web Platform for Transactions
Ramanpreet Kaur, **Jaskirat kaur,** Gurmeet Kaur, Ritika Bhatia, Simarpreet Kaur, Piyush Kumar

Paper ID: 1046
Enhancing Long-Distance Optical Communication: The Superiority of L-Band over C-Band in Soliton-Based WDM Systems
Paramjit Kaur, Divya Dhawan, Neena Gupta

3G. AI Techniques for Healthcare

Session Date and Time: 23/08/2024   **4:45 PM - 6:00 PM**
Session Chair/Co-Chair: Naveen Aggarwal (UIET,PU Chandigarh)/Sudesh Rani (PEC Chandigarh)

Invited Talk: Advanced Voice Analysis in Disordered Populations: Methods and Applications, *Banumathy, PGIMER Chandigarh*

Paper ID: 1824
Optimized PM 2.5 Forecasting Using PSO - BiLSTM Model for Air Quality Prediction and Health Risk Assessment
Gaurav Pandey, Rajneesh Sharma, Tushar Mr. Shikhola

Paper ID: 1835
Development of Intelligent Healthcare Monitoring System using Machine Learning Model
Tanima Bhowmik, Debajyoti Mitra, **Pratyusha Chatterjee**, Shreyan Kundu, Nirban Roy

Paper ID: 1912
MedHAI: Improved Framework for Medical Diagnosis using Human Experts
Gunika, A L Sangal

Paper ID: 1925
Ensemble of CNN based Deep Learning Model for the Recognition of Skin Cancer Images
Sandhya Sharma, Shaminder Kaur, Navneet Kaur

3H. Advancements in AI and ML Applications-II

Session Date and Time: 24/08/2024   **9:00 AM - 10:30 AM**
Session Chair/Co-Chair: Sanjeev Sofat (PEC Chandigarh)/Manish Kumar (PEC Chandigarh)

Invited Talk: Earthquake Early Warning System- Computational Techniques, Challenges and Opportunities, *Satish Kumar, CSIR-CSIO Chandigarh*

Paper ID: 1981
Advanced Machine Leaning Prediction of Cognition Functions
Shobhika Madhu, Prashant Kumar, Sushil Chandra

Paper ID: 2097
A Comparative Study of YOLO-V5 Variants Performance for Object Detection in Thermal Infrared Images
Manjeet Singh, Aparna Akula

Paper ID: 2095
Portfolio Optimization using Deep Reinforcement Learning
Adrika Tamuly, **Gariman Bhutani**, Sukriti Sukriti

Paper ID: 2106
Blockchain-Enabled Distributed Payment Card Tokenization System
Debendranath Das, Atosi Das

3I. Special Session: AI in Industry

Session Date and Time: 24/08/2024	12:00 PM - 01:30 PM

Keynote/Invited Talks

Session Chair/Co-Chair: Padmavati (PEC Chandigarh)/Amandeep Kaur (PEC Chandigarh)

Recent Trends in Artificial Intelligence Sudhir Dhamija, DGRE Chandigarh

Advancements in Information Security Anil Yadav, Samsung, Noida

Leveraging Generative AI for creating marketing emails Pallavi, Wipro Limited

Engineering in the era of AI Vikram, Antier Pvt. Ltd

3J. Quantum Computing and Applications

Session Date and Time: 24/08/2024	2:30 PM – 4:00 PM
Session Chair/Co-Chair: Ananth Venkatesan (IISER Mohali)/ Kanu Goel (PEC Chandigarh)	

Invited Talk: Neuromorphic Computing for Low Power Applications, *Jawar Singh, IIT Patna*

Paper ID: 1794 **Quantum Deep Reinforcement Approach for Virtual Resource Allocation** Sreenivasa Chakravarthi Sangapu, **Ajairaj V,** Sountharrajan S

Paper ID: 1939 **Exploring 3-Qubit Quantum Entanglement: An Empirical Analysis with the Qiskit Framework** **Manisha Prajapat,** Kamal Kishor Choure, Gausia Qazi, Simranjit Singh, Ghanshyam Singh

Paper ID: 1956 **FPGA-based Toeplitz Strong Extractor for Quantum Random Number Generators** **Shubham Chouhan,** Anurag K S V, Raghavan G, Kanaka Raju P.

Paper ID: 1807 **Quantum Secure Key Management & Delivery Protocol in the QKD framework** **Manjiri S Harmalkar,** Kurunandan Jain, Aneesh Kumar K B, Prabhakar Krishnan

4A. Technical Session

Session Date and Time: 22/08/2024	5:15 PM - 07:00 PM
Session Chair/Co-Chair: Varun Gupta (CCET, Chandigarh) /Avinash Maurya (PEC, Chandigarh)	

Paper ID: 1847 **Common Myths and Misconceptions Regarding Communication Systems** **Subhendu Batabyal,** Praful Mankar

Paper ID: 775 **Accessing the Performance of K-Medoid, K-Means and FCM Clustering Techniques for Wireless Sensor Networks** **Thiyagarajan N,** Shanmugasundaram N

Paper ID: 2008

Variable Step-size LMS Type Adaptive Algorithm for Power Quality Enhancement using DSTATCOM

Saurav Kumar, Sudhansu Kumar Mishra, and Sarode Shiva Kumar

Paper ID: 661

Unleashing the Potential of Data Science Driven Society 5.0: Applications and Implications

Supriya Mishra, **Kumar Saurabh**

Paper ID: 1678

Empowering Mobility: A Smart Wheelchair Integrated with Health Monitoring System

Someshwar Ware, Yogita Kolge, Eshin Somkuwar and Marwana Sayed

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Paper ID: 1844

Wireless Control of 4 D.O.F. Robotic Arm using EMG Muscle Sensors

Dinesh Patil, Shilpa Sondkar, Meet Nathwani, Shivanand Nemane ,Mohit Patil

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Poster Session - I Date and Time: 22/08/2024	**05:15 PM - 06:15 PM**

Paper ID: 1908

Malicious Program Detection using Distinct Textural Features and Fine-tuned InceptionV3 Model

Sanjeev Kumar, Yudhishthira Sapru, Navdeep Singh Chahal

Paper ID: 1006

Techno-economic Assessment of MW Scale AC and DC Microgrids

Ravi Segal and Priyanka Kushwaha

Paper ID: 1784

Investigation of DC & RF/Analog Performance of AlGaN/AlN/GaN MOSHEMT for Different Back Barrier

Atya Narayan Mishra, Abdul Naim Khan, **Kanjalochan Jena**

Paper ID: 1703

Efficient RTL to GDS II Flow for Finite State Machine Integration: A Physical Design Approach

Amit Shohal, Jasbir Kaur

Paper ID: 1584

Simulation and Fabrication of PDMS-based Microfluidic Device Sub-system to Carry out Water Disinfection using Ag Nanoparticles

Kavita A Mukate, Haritha KP, Rucha R Lambate, Sunil Chandel , Tejashree Bhave

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Paper ID: 2024

YOLOv8 Based Detection of Fall Armyworm in Field Crops

Prit N Mhala

Paper ID: 470

Heating and Cooling of The Power MOSFET for The Static Converter

Tapas Halder

Paper ID: 827

Economic Load Dispatch in Microgrid Using Whale Optimization Algorithm

Himanshu Raj and Supriya Jaiswal

Paper ID: 1161

A Quick Overview of Recent Developments in Image Restoration using Machine learning

Neelam Kumari, Isha Kansal and Preeti Sharma

Paper ID: 857

 Finite-time Frequency Control of an Islanded Microgrid System

Jyotika Agarwal, **Aniket Karan Chaudhary**, Dipayan Guha, Richa Negi and Roshni Mait

Paper ID: 1012 **IoT-Assisted Gesture-to-Audio Conversion System for Enhancing Accessibility in Speech-Impaired Users** **Meena kashyap**
Paper ID: 693 **Analysis of Electric Vehicle Battery Charging-Time Involving its Second-Order RC Equivalent Model** **Hemwati Nandan,** Sanjay Gairola and Manoj Kumar Panda
Paper ID: 1136 **Predicting Common Body Measurements to Check on Unhealthiness using Machine Learning Algorithms and Interpretation using Explainable AI** **Trupathi Rao,** Ashwini K Ashwini
Paper ID: 967 **Optimal Red Edge Band Selection for Crop and Vegetation Classification Using Separability And Spectral Analysis File Outline Optimal Red Edge Band Selection for Crop And Vegetation Classification using Separability And Spectral Analysis** **Jitendra** and Triloki Pant
Paper ID: 2013 **Having a Smartphone and Being Enrolled in a Higher Education Institution does not make Students Digitally Literate!** **Gayathri Pothancheri,** AkshayRaj K P and Shashi Kant Shankar
Paper ID: 1845 **A Multimodal Biometric Based on Audio and Visio Trait: A Review** **Amit Verma,** Shagoofi Anjum, Anand Sharma, Monika Gupta, Mohammad Ishrat
Paper ID: 1536 **Digital Emotions using Sentiment Analysis for Predictive Insights on Customer Recommendations** **Harish Kundra**
Paper ID: 136 **Analysing Perception of Credibility of a Message in Online Social Network using SmartPLS** Akshata S Bhayyar, Kiran P

Poster Session – II Date and Time: 23/08/2024	**6:00 PM – 07:00 PM**

Paper ID: 2020 **Cyclone Intensity Estimation Using INSAT-3D IR Imagery** Aruljothi A, Vasanthi D, Sivasakthi Thanigainathan, **Keerthivasan H**
Paper ID: 289 **Employing Machine Learning based Majority Voting Classifier for Explicit Content Detection in Music** Prathmesh Ramakant Ghatol, **Yash Shah**, Rucha Gavaskar, Monika Mangla, and Richa Sharma
Paper ID: 376 **Speech Emotion Recognition System based on Auto Encoder** **Rohit katyal,** Neeshu Sharma
Paper ID: 377 **LearnSync: Navigating Learning Opportunities** Anushka A Pote, **Ashish Manoj**, Ruke, Suvarna Patil, Reena Shrikant Sahane
Paper ID: 427 **Sentiment Classification Using Deep Learning for Mental Health Discussions on Social Media** Hirak Mazumdar, **Raghul S,** Vivek Reddy Yasa, JS Mohammed Hafeez
Paper ID: 1135 **Prediction of Concrete Compressive Strength using various Regression models and XAI** **Ashwini K Ashwini**

Paper ID: 1344
Obesity and CVD risk Analysis using Machine Learning Classification Algorithms and   Explainable AI
Ashwini K Ashwini

Paper ID: 1882
Privacy-Preserved Stress Detection from Wearables using Federated Learning
Lekha C Warrier, Ragesh G K, Ramsamarth Bb, Kishan Gurumurthy

Paper ID: 2045
Unveiling Earthquake Dynamics: A Comprehensive Data Analytics and LSTM-Based Prediction Model for Enhanced Seismic Forecasting
Shatakshi Saxena, **Arun Singh Pundir**, Shiya Mer

Paper ID: 2119
Enhancing Visibility: A Novel Approach for Dehazing Aerial Images with MixDehazeNet
Shatakshi Saxena, Arun Singh Pundir, **Shiya Mer**

Paper ID: 1836
Exploring Creative Fusion: Stable Diffusion and Large Language Models for Innovative Content Generation
Nischith T N, Asha Rani Borah, Vandana C P, Saksham Gupta, Bharath B

Paper ID: 1190
Big Data Analytics in Cloud Computing Environments: Issues and Future Research Trends
Muskan Shaikh, Malaram Kumhar, Jitendra B Bhatia, Sudeep Tanwar, Madhuri Bhavsar

Paper ID: 1396
Lightweight Generative Adversarial Network (LGAN) Architectures for Resource-Constrained Hardware Applications
Abhishek Yadav, **Baruri Sai Avinash,** Binod Kumar

Paper ID: 1209
A Comprehensive Cybersecurity Resilience Framework Augmenting Smart Grid Stability
Aditya Rastogi, Anubhav Agrawal, Ranbir Singh, Ananya Aggarwal

Paper ID: 1257
Exploring Robust DDoS Detection: A Machine Learning Analysis with the CICDDoS2019 Dataset
Susama Bagchi, Kamal Saluja, Vikas Solanki, Muhammad Numan Ali Khan, **Esha Dhamija,** Sanjoy Kumar Debnath

Paper ID: 1979
FDTD Design and Modelling of Ag/Au Nanoparticles for Field Enhancement
Manish Jangid

Paper ID: 2022
Star-Shaped Patch Antenna for THz Applications
Mandeep Singh, Simranjit Singh

Paper ID: 2058
Efficient Management of Tasks in Road Traffic for Infrastructure Wellness through the Utilization of Piezoelectric Transducers
Aditya K Shaw, **Sudipta Talukder,** Anudipan Pal, Anindya Sen

Paper ID: 1851
Analyzing Adaptive Filters for the Separation of Fetal Electrocardiogram in Non-Invasive Monitoring: A Comparative Approach
Aravinth J and **Sunish S**

Paper ID: 860
Synergistic Integration of Power System Protection and Electrical Machine Operation Paradigms: A Comprehensive Framework Study
Raghul S J, Vanaja I, Rajini V, Tamilselvi s and Dinesh Babu Nagalingam