

Day 1: Thursday, Nov 25, 2021	
10:00 - 10:30 A.M.	Inauguration
10:30 - 11:30A.M.	Keynote Talk 1: Prof. Satish Kumar Sharma
11:30 -11:40 P.M.	Break
11:40-12:30 P.M.	Technical Session 1
Session-C1.1: Wireless Communication Systems - I	
Session Chair: Prof. Bhaskar Gupta	
Session Rapporteur: Dr. Samriti Kalia , Session Incharge: Dr. Vineet Khandelwal	
C1.1.1570753396	Performance Analysis of 20 Gbps-60 GHz OFDM-RoFSO Transmission with ODSB and OSSB Modulation Using Hybrid Mode
	Ankur Sood and Rahul Kaushik
C1.1.1570759121	Performance Evaluation of Fibonacci Polynomial Based Power Allocation Algorithm for NOMA in VLC System
	Deepti Chahar, Manan Jani and Parul Garg
C1.1.1570761935	Performance Analysis of Polar Codes in 5G New Radio
	M. Meenalakshmi, Saurabh Chaturvedi and Vivek k. Dwivedi
C1.1.1570748079	Smart Footsteps Power Generation System
	Shivani Mahesh Pandit, Neha Salunke, Trinity Chettiar and Prachi Raut
Session-S1.1: Signal Processing for System Analysis-I	
Session Chair: Prof. Alka Tripathi	
Session Rapporteur: Dr. Rahul Kaushik, Session Incharge: Dr. Megha Agarwal	
S1.1.1570749229	Separation of Overlapping Chirp Signals Using STFRFT
	Rahul Pachauri
S1.1.1570754016	Single OTRA-Based Multifunctional Filter Configurations
	Garima Mann, Pragati Kumar and D. R. Bhaskar
S1.1.1570755444	Third Order Low Frequency Sinusoidal Oscillators Employing CFOAs and Grounded Capacitors

	Third Order Low Frequency Sinusoidal Oscillators Employing CFOAs and Grounded Capacitors
	Ajishek Raj, Pragati Kumar and D. R. Bhaskar
S1.1.1570756930	Moving Horizon Estimation Based Stochastic Filtering of RC Circuit
	Rahul Bansal, Ranu Sharma and Bajrang Bansal
Session-V1.1: VLSI Circuits and Systems- I	
Session Chair: Prof. Ramesh Chand Mittal	
Session Rapporteur: Dr. Ajay Kumar, Session Incharge: Ms. Monika Singh	
V1.1.1570762168	Design of All Optical Universal Gates Using 2-D Photonic Crystals
	Abyash Gautam and Anil Kumar Shukla
V1.1.1570758391	A Simulation Based study and Optimization of CdTe/ZnO/ITO Based Device for Self-Powered Photodetector Perspective
	Varun Goel, Yogesh Kumar and Hemant Kumar
V1.1.1570755557	Light dependency of intended source UTBB FDSOI Based photodetector
	Nitu Rao, Vimal Mishra
V1.1.1570754160	A Comprehensive Assessment of Current Trends in Negative Bias Temperature Instability (NBTI) Deterioration
	Karan Singh and Shruti Kalra
12:30-1:30 P.M.	Keynote Talk 2: Mr. Deepak Mathur
1:30 - 2:15 P.M.	LUNCH BREAK
2:15-3:15 P.M.	Keynote Talk 3: Prof. Kumar Vaibhav Srivastava
3:15 - 3:30 P.M.	Break
3:30-4:30 P.M.	Technical Session 2
Session-C1.2: Antenna Design	
Session Chair: Dr. N. S. Beniwal	
Session Rapporteur: Dr. Pankaj Kumar Yadav, Session Incharge: Mr. Vishal N Saxena	
C1.2.1570731698	Stub-loaded Dual-Band Planar Antenna for 28/38 GHz 5G Applications
	Shobit Agarwal, Umair Rafique and Vasu Jain
C1.2.1570753542	A Wideband Antinodal Vivaldi Antenna

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	Amruta S. Dixit and Sumit Kumar
C1.2.1570756862	Dual Band Microstrip Patch Antenna and its Gain Enhancement for X Band and Ku Band Application Using Metamaterial
	Debadrita Saha, Ajay Kumar Choudhary and Tamasi Moyra
C1.2.1570768986	Thinned Planar Antenna Array Synthesis: A Multiobjective Improved Binary Cat Swarm Optimization Approach
	Sahiti Vankayalapati, Lakhsman Pappula, KTPS Kumar and Prakash Kumar Panda
Session-S1.2: Signal Processing for System Analysis-II	
Session Chair: Prof. Vinod Kumar Yadav	
Session Rapporteur: Dr. Akansha Bansal, Session Incharge: Dr. Madhu Jain	
S1.2.1570752282	Comparative Analysis of Compressive Sensing Methods for Speech Enhancement in Hearing Aid Applications
	Hrishikesh B Vanjari and Mahesh Kolte
S1.2.1570759319	Emotion Recognition Using Rational Dilation Wavelet Transform For Speech Signal
	Ravi and Sachin Taran
S1.2.1570759902	Spoken Language Identification System for Kashmiri and Related Languages Using Mel-Spectrograms and Deep Learning Approach
	Irshad Ahmad Thukroo and Rumaan Bashir
S1.2.1570755529	Mathematical and Engineering Solutions Facing COVID-19 Pandemic: A Review
	Zaineb Alhakeem and Heba Hakim
S1.2.1570763895	Design and Implementation of FHSS (Frequency Hopping Spread Spectrum) Synthesizer
	Nagendra Kumar Vishwakarma and Rakesh Kumar Singh
Session-V1.2: VLSI Circuits and Systems - II	
Session Chair: Dr. Satish Chandra	
Session Rapporteur: Ms. Jyoti Vyas, Session Incharge: Mr. B. Suresh	
V1.2.1570750260	Performance Analysis of Novel Heterojunction ESDG-TFET for Analogue/RF Applications

	Priyanka Kwatra, Kaushal Nigam and Sajai Vir Singh
V1.2.1570760551	Effect of Gate Oxide Material Variability on The Analog Performance of T-Gate GaN-MOS-HEMT with Graded Buffer
	Megha Sharma, Bhavya Kumar and Rishu Chaujar
V1.2.1570751326	III-V / Si Heterojunction Based Dual Material Stack Gate Oxide TFETs for Low Power Applications
	Dharmender, Kaushal Nigam and Satyendra Kumar
V1.2.1570752123	Influence of Nano Ranged Stack Gate on Junctionless Tunnel Field Effect Transistor
	Bandi Venkata Chandan and Penjerla Srinivasa Subbarao
V1.2.1570753796	Performance Analysis of Stack Gate Oxide Underlap TFET Utilising Metal Strip Mechanism
	Priyanka Verma, Satyendra Kumar and Kaushal Nigam
Day 2: Friday, Nov 26, 2021	
09:30-10:30 A.M.	Keynote Talk 4 : Prof. Satish Kumar Singh
10:30-11:20 A.M.	Technical Session 3
Session-C2.3: Wireless Communication Systems-II	
Session Chair: Prof. Sunil Kumar Khah	
Session Rapporteur: Mr. Ankur Bhardwaj, Session Incharge: Dr. Vivek Dwivedi	
C2.3.1570747567	Beam Steering and Tracking for 5G Mobile Communication Network in mmWave Frequency Band
	Nallapalem Srinivas, Yasaswini Vellisetty and Prem Chand Jain
C2.3.1570757796	Structure and Performance Comparison of Ultra-wideband Bandpass Filter: Review Article
	Ravi Prakash Verma and Bhagirath Sahu
C2.3.1570762170	Design of Low Cost Substrate Integrated E-plane Waveguide Filter for C-band Applications
	Arnab Chakraborty and Shweta Srivastava
C2.3.1570760356	Photonic Crystal Cavity Optimization Using AI

	Diptimayee Dash, Jasmine Saini and Amit Kumar Goyal
Session-S2.3: Digital Image Processing	
Session Chair: Prof. Vikas Saxena	
Session Rapporteur: Mr. Mandeep Narula, Session Incharge: Mr. Ritesh Kumar Sharma	
S2.3.1570760018	Implementation of Dual Tree Complex Wavelet Transform with Mean Energy Features to Detect Alzheimer's Disease
	Neha Garg and Mahipal Chaudhary
S2.3.1570752263	Enhanced Ultrasound Speckle Reduction Technique Using SLIC Segmentation and Method Noise Compensation
	Bhawna Gupta and Vineet Khandelwal
S2.3.1570756450	Underwater Image Enhancement Using Bi-Histogram Equalization with Fuzzy Plateau Limit
	Shaad Fazal and Daniyal Khan
S2.3.1570755107	Multispectral Remote Sensing Image Classification Using Modern Machine Intelligence Approach
	Mohan Singh and Kapil Dev Tyagi
Session-V2.3: VLSI and Embedded System	
Session Chair: Prof. Vandana Niranjana	
Session Rapporteur: Ms. Monika Singh, Session Incharge: Ms. Jyoti Vyas	
V2.3.1570756861	Design and Implementation of Area-Power Efficient Generic Modular Adder Using Flagged Prefix Addition Approach
	Tukur Gupta and Shamim Akhter
V2.3.1570760568	High Efficiency Broadband Mixed Mode Power Amplifier for Patient Monitoring
	Vaishnavi Surve, Sandeep Kumar and Pradeep Gorre
V2.3.1570758157	Analysis and simulation of multi-stepped and multi-folded piezoelectric energy harvester
	Shradha Saxena, Rakesh Dwivedi and Vijay Khare
V2.3.1570762453	Single OTA Based Dual Mode First-Order All-Pass Analog Network
	Shiv Narain Gupta, Bhartendu Chaturvedi and Jitendra Mohan
11:20-11:30 A.M.	Break
11:30-12:30 P.M.	Keynote Talk 5: Prof. Parthasarathi Chakrabarti

12:30 - 1:15 P. M.	LUNCH BREAK	
1:15 - 2:15 P.M.	Keynote Talk 6: Prof. Ram Bilas Pachori	
2:15 -3:15 P.M.	Technical Session 4	
	Session-WIE2.1: Women in Engineering	
	Session Chair: Prof. Nidhi Goel	
	Session Rapporteur: Ms. Smriti Bhatnagar, Session Incharge: Dr. Rachna Singh	
	WIE2.1.1570750700	Performance Analysis of Different GAN Models: DC-GAN and LS-GAN
		Richa Gupta and Vanshika Gupta
	WIE2.1.1570755576	Deep Convolutional Neural Network with ResNet-50 Learning algorithm for Copy-Move Forgery Detection
		Vaishali Sharma and Neetu Singh
	WIE2.1.1570755709	Face Recognition Using Local Multiple Zig-Zag Structure Pattern
		Ankita Wadhwa and Megha Agarwal
	WIE2.1.1570758079	Conditional Generative Adversarial Network for Devanagari Handwritten Character Generation
		Mamta Bisht and Richa Gupta
	WIE2.1.1570750938	Design and Analysis of MIMO FSO System and WDM FSO System for Leh (Ladakh), India under Worst Weather Conditions
		Rekha Rani and Gurjit Kaur
	Session-YP2.1: Young Professionals	
	Session Chair: Dr. Basant Kumar	
	Session Rapporteur: Dr. Madhu Jain, Session Incharge: Dr. Akansha Bansal	
	YP2.1.1570760130	H-Plane Bow-Tie SIW Horn Antenna for K Band Applications
		Abhay Kumar and Shweta Srivastava
	YP2.1.1570748583	A Compact Dual-Band Monopole Antenna Loaded with CRLH Unit Cell Exploiting Meandered Line Geometry
		Raghvendra Kumar Singh, Shreya Pourush and Ashish Gupta
	YP2.1.1570754538	Performance Analysis of Dual Link RF and RF - FSO Transmission System

	Vishal Narain Saxena
YP2.1.1570760422	Multi Feedback LFSR Based Watermarking Of FSM
	Ankur Bhardwaj and Shamim Akhter
Session-SIGHT2.1: Special Interest Group on Humanitarian Technology (SIGHT)	
Session Chair: Dr. Krishna Singh	
Session Rapporteur: Dr. Vineet Khandelwal, Session Incharge: Dr. Rahul Kaushik	
SIGHT2.1.1570758688	Prototype Development for IOT Based Contactless Heart-rate and Body Temperature Monitoring System
	Atul Kumar Dwivedi, Abhishri Dwivedi, Sonali Singh and Abhijeet Tiwari
SIGHT2.1.1570753005	An Autonomous Electronic Zoological Feeder
	Shivam Tripathi, Aditya Dudhane and Shruti Kalra
SIGHT2.1.1570759419	Prediction of Heart Disease Risk Using Machine Learning with Correlation-Based Feature Selection and Optimization Techniques
	Karna Vishnu Vardhana Reddy, Irraivan Elamvazuthi, Azrina Abd Aziz, Sivajothi Paramasivam, Hui Na Chua and Pranavanand Satyamurthy
SIGHT2.1.1570760325	Cervical Cancer Risk Prediction Using XGboost Classifier
	Manika Jha, Richa Gupta and Rajiv Saxena
3:15 - 3:30 P.M.	Break
3:30 - 4:30 P.M.	Technical Session 5
Session-C2.4: Wireless Communication Systems - III	
Session Chair: Dr. Charu Gandhi	
Session Rapporteur: Mr. Ritesh Kumar Sharma, Session Incharge: Mr. Ankur Bhardwaj	
C2.4.1570748790	Performance Evaluation of Dual Drive Dual Parallel Mach Zehnder Modulator Based Radio Over Fiber link for Wireless Networks
	Necty Tyagi and Parvin Kumar
C2.4.1570759817	Detection of Tunneling in DNS over HTTPS
	Hrithik Jha, Iishi Patel, Gang Li, Aswani Kumar Cherukuri and Sumaiya Thaseen
C2.4.1570760095	Learn By Share (LBS) -An Effective Handoff Algorithm for IEEE 802.11

	Manish Puraswani and Ravi Sindal
C2.4.1570759403	Energy Optimization via Optimal Placement of Cluster Heads in Wireless Sensor Networks with Obstacles
	Zahraa Hammodi, Ahmed Al Hilli and Mohanad Al-Ibadi
C2.4.1570753853	An Optimization Technique for Wireless Communication Based on Mesh Topology
	Zahraa Abdullah Khait and Saad Talib Hasson
Session-S2.4: Machine Learning - I	
Session Chair: Prof. Sandeep Kumar Singh	
Session Rapporteur: Dr. Megha Agarwal, Session Incharge: Mr. B Suresh	
S2.4.1570754959	Multi-Layer Heterogeneous Ensemble Model for Human Activity Recognition
	Ganesha H S, Rinki Gupta and Sindhu Hak Gupta
S2.4.1570759731	Enhancing the Food Image Classification Accuracy Using Ensemble of CNNs and HelperNet
	Anuj Deshmukh, Gaurav Punjabi and Sandeep Joshi
S2.4.1570755794	Xplore Word Embedding Using CBOW Model and Skip-Gram Model
	Kailash Choudhary and Ruby Beniwal
S2.4.1570760282	Comparison of Agricultural Drones and Challenges in Implementation
	Manish Sharma and Hema N.
Session-V2.4: IoT	
Session Chair: Dr. Shruti Jain	
Session Rapporteur: Dr. Ajay Kumar, Session Incharge: Ms. Shradha Saxena	
V2.4.1570757664	Static Performance Assessment of Junctionless Accumulation Mode Gate Stack Gate All Around (JAM-GS-GAA) FinFET Under Severe Temperature
	Bhavya Kumar, Megha Sharma and Rishu Chaujar
V2.4.1570753962	Tunnel Field Effect Transistor Based Biosensors: A Review approach
	Km. Sucheta Singh, Satyendra Kumar and Kaushal Nigam
V2.4.1570753410	Newly Realized Grounded Capacitance Multiplier Using Single CFDITA

	Dheeraj Singh, Deva Nand and Atul Kumar
V2.4.1570735816	Design of Buffer Circuit for Global Interconnects Using Adiabatic Dynamic Logic
	Himani Bhardwaj, Shruti Jain and Harsh Sohal
V2.4.1570755686	A Numerical Study of Analog Parameter of Negative Capacitance Field Effect Transistor with Spacer
	Yash Pathak, Bansi Malhotra and Rishu Chaujar
Day 3: Saturday, Nov 27, 2021	
09:30-10:30 A.M.	Keynote Talk 7: Prof. Ram M. Narayanan
10:30-11:30 A.M.	Keynote Talk 8: Prof. Banmali S. Rawat
11:30-11:40 A.M.	Break
11:40-12:30 P.M.	Technical Session 6
Session-C3.5: Wireless Communication Systems - IV	
Session Chair: Prof. Amrish Kumar Aggarwal	
Session Rapporteur: Ms. Smriti Bhatnagar, Session Incharge: Dr. Samriti Kalia	
C3.5.1570750100	A UHF RFID Reader Antenna Design for Retail Self-Billing Application
	Deepak Kumar, Naveen Jaglan and Samir Dev Gupta
C3.5.1570750160	IoT Based Communication System for Autonomous Electric Vehicles
	Vishwajit Rahatal, Pratik More, Minesh Salunke, Sahil Makeswar and Radhika D. Joshi
C3.5.1570758077	Network Lifetime Improvement for WSN Using Machine Learning
	Monika Malik, Alok Joshi and Gayatri Sakya
C3.5.1570758257	GSM Based Smart Energy Meter with Theft Detection and Load Control
	Anubhuti Anand, Yashee Chaudhary, Ajay Yadav and Rahul Mukherjee
Session-S3.5: Machine Learning -II	
Session Chair: Prof. Arun Sharma	
Session Rapporteur: Mr. Mandeep Narula, Session Incharge: Dr. Pankaj Kumar Yadav	
S3.5.1570760358	Fractional Order Butterworth Filter Design Using Bit Level Cat Swarm Optimization Technique

S3.5.157070038	Fractional Order Butterworth Filter Design Using Bit Level Cat Swarm Optimization Technique
	Poornima Pateriya, Narendra Singh Beniwal and Atul Kumar Dwivedi
S3.5.1570764698	Rainfall Prediction: Analysis of Machine Learning Algorithms and Ensemble Techniques
	Abhinav Sharma, Akshay Khanna, Muskaan Bhargava, and Rutwik Pendse
S3.5.1570742718	ImageFake: An Ensemble Convolution Models Driven Approach for Image Based Fake News Detection
	Anshika Choudhary and Anuja Arora
S3.5.1570748334	IsSwap: Deep Fake Detection
	Aakriti Aggarwal, Siddhant Wadhwa, Pallav Gupta, Nishit Anand, and Rashmi Kushwah
Session-V3.5: VLSI Circuits and Systems - III	
Session Chair: Prof. R. K. Dwivedi	
Session Rapporteur: Mr. Vishal N Saxena, Session Incharge: Dr. Vivek Dwivedi	
V3.5.1570758901	Electrostatic Analysis of Ferroelectric and High dielectric layer assisted MOSFET
	Rashi Mann, Rishu Chaujar
V3.5.1570758904	Analysis of Different Case Studies Based on Industry 4.0
	Perna Srivastava, Gaurav Verma and Varun Kumar Kakar
V3.5.1570758737	IoT Based Smart Indoor Environment Monitoring and Controlling System
	Rakhi Bhardwaj, Shiv Narain Gupta, Seema Kumari and Ujala Prajapati
V3.5.1570758051	Impact of Different Technology Node on the Delay and Power Dissipation of 6T SRAM Cell
	Saurabh Kumar, R. K. Chauhan, Manish Kumar and Mangal Deep Gupta
12:30-1:00 P.M.	Valedictory Session
1:00-2:00 P.M.	LUNCH

