

# CALCON 2020

## Session Details

<b>Keynote 1: Silver Bloom I</b> (Day 1, 11.00 am - 12.00 pm) – <b>ECE Track</b>
<b>Speaker:</b> Prof. Souvik Mahapatra, IIT Bombay
<b>Lecture Title:</b> “Introduction to CMOS Transistor Scaling & Reliability”
<b>Session Chair:</b> Prof. P. K. Basu, Formerly of Dept. of Radio Physics & Electronics, University of Calcutta, Kolkata

<b>Keynote 2: Silver Bloom II</b> (Day 1, 11.00 am - 12.00 pm) – <b>EE Track</b>
<b>Speaker:</b> Prof. Chandan Chakraborty, IIT Kharagpur
<b>Lecture Title:</b> “Renewable Energy Integration: Challenges & Opportunities”
<b>Session Chair:</b> Prof. Samarjit Sengupta, Center for Green Energy & Sensor Systems, IEST, Shibpur, Howrah

<b>Keynote 3: Umami</b> (Day 1, 11.00 am - 12.00 pm) – <b>CSE Track</b>
<b>Speaker:</b> Prof. Sanghamitra Bandyopadhyay, ISI Kolkata
<b>Lecture Title:</b> “Computer Science Methods to Solve Problems in Biology: Basics & Advancements”
<b>Session Chair:</b> Prof. Mita Nasipuri, Dept. of Computer Science & Engg., Jadavpur University, Kolkata

<b>ECE Session 1: Silver Bloom I (Day 1, 12.00 pm - 1.30 pm) - Signal Processing Algorithms</b>		
<b>Session Chair: Prof. Deb Ranjan Sarkar, VECC, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
17	Improved Stopband Rejection in Compact Coupled-Line Bandpass Filter by Transmission Zero Reallocation	Tarun Das and Sayan Chatterjee
27	An Experimental Approach Towards Adaptive Beam-Shaping using SMI Algorithm in Indoor Fading Environment	Sk Imtiaj, Sandipan Bhattacharya, Ayon Seal and Iti Saha Misra
35	Robust Variable Power Fractional LMP Based Channel Estimation For MIMO Fading Wireless Systems	Madhusmita Sahoo and Harish Kumar Sahoo
55	A Compact Very Narrow Band Coaxial Cavity Resonator Filter at X-band with SMA Connector Feed	Dhruba Das, Bijit Biswas, Arun Kumar Gande and Sibabrata Mondal
127	Kaiser Window Based Side Lobe Level Suppression in 3D Beamforming for Massive MIMO Structure	Tanmoy Kundu, Arijeet Ghosh, Iti Saha Misra and Salil Kumar Sanyal
158	An Axis Based Mean Filter for Removing High-Intensity Salt and Pepper Noise	Anindita Kundu, Sumanta Banerjee, Chittabarni Sarkar and Souptik Barman
200	Location sensing of wheel based movable object with low cost sensors in GPS denied environment	Sanjib Mitra and Santu Sarkar

<b>EE Session 1: Silver Bloom II (Day 1, 12.00 pm - 1.30 pm) - Power Systems</b>		
<b>Session Chair: Prof. Kesab Bhattacharya, Dept. of Electrical Engg., Jadavpur University, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
31	A new Quantum-class topper optimization based fractional order proportional integral power system stabilizer design to damp out low frequency oscillations in power systems	Debasis Acharya, Dushmanta Kumar Das and Abhishek Srivastava
40	Multi-dimensional ANN application for State classification of Power System	Shubhranshu Tiwary, Jagadish Pal and Chandan Kumar Chanda
106	Performance Improvement of Three Phase Unbalance Distribution System Using DG and DSTATCOM	Nazma Hayat, Sriparna Roy Ghatak, Samita Rani Pani and Smaranika Mishra
162	Genetic Algorithm-based Optimal Placement of STATCOM in Pre-islanding and Post-islanding Condition	Dhruba Kumar and Partha Sarathee Bhowmik
165	SMS Based Load Flow Monitoring and Analysis for Theft Location Detection in Rural Distribution Systems	Prashant Choudhary and Jitendra Nath Bera
180	Finding of the Probable Size and Location of Distributed Generation in Unbalanced Distribution System with Demand Uncertainty	Chandan Jana, Mousumi Janabala and Swapan Goswami
186	Holomorphic Embedding Load Flow Modelling of DSTATCOM for Active Distribution Networks	Ujjal Sur, Amitava Biswas, Jitendra Nath Bera and Gautam Sarkar

<b>Comp Session 1: Umami (Day 1, 12.00 pm - 1.10 pm)</b>		
<b>Session Chair: Prof. Nandini Mukherjee, Dept. of Computer Science &amp; Engg., Jadavpur University, Kolkata</b>		
<b>1A: Algorithms</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>28</b>	A Study on Reversible Rules of Probabilistic Cellular Automata	Anupam Pattanayak and Subhasish Dhal
<b>44</b>	Object Mapping from Disparity Map by Fast Clustering	Aritra Mukherjee, Soumik Sarkar and Sanjoy Kumar Saha
<b>50</b>	Citation convergence of academic conference papers	Agniv Adhikari and Abhik Mukherjee
<b>95</b>	A Robust PPG Onset and Systolic Peak Detection Algorithm Based On Hilbert Transform	Abhishek Chakraborty, Deboleena Sadhukhan and Madhuchhanda Mitra
<b>1B: Cloud Computing &amp; IOT</b>		
<b>61</b>	A Digital Forensic Process Model for Cloud Computing	Sanghamitra De, Mridul Sankar Barik and Indrajit Banerjee
<b>97</b>	A New Global Routing Optimization Algorithm based on Pigeon Inspired Optimization	Subhrapatim Nath, Rabiraj Bandyopadhyay, Saptarshi Biswas, Jamuna Kanta Sing and Subir Kumar Sarkar

<b>ECE Session 2: Silver Bloom I (Day 1, 2.30 pm - 4.00 pm) - Electron Device</b>		
<b>Session Chair: Prof. Debashis De, MAKAUT</b>		
<b>120</b>	Effect of Doped AlGaIn Width Variation on Analog Performance of Dual Gate Underlap MOS-HEMT	Anindita Mondal, Sneha Ghosh, Akash Roy, Mousiki Kar and Atanu Kundu
<b>155</b>	Fin Width dependent Threshold Voltage Modeling in AlGaIn/GaN Fin shaped nano channel HEMT	Ashutosh Chakrabarty, Raghunandan Swain and Ajit Kumar Panda
<b>178</b>	A Comparative Analysis of Analog Performance of an U-DG AlGaIn/GaN MOS-HEMT Device with Hafnium based high-k dielectric as the gate oxide and an U-DG AlGaIn/GaN Schottky-HEMT Device	Hrit Mukherjee, Rajanya Dasgupta, Mousiki Kar and Atanu Kundu
<b>183</b>	Influence of GaN layer width to AlGaIn layer width Ratio on Analog Performance Enhancement of an Underlap DG AlGaIn/GaN based MOS-HEMT Device	Upayan Chatterjee, Ananya Pal, Mousiki Kar and Atanu Kundu
<b>185</b>	Studies on Security Threats in Waste Mobile Phone Recycling Supply Chain in India	Biswajit Debnath, Ankita Das, Sanchari Das and Abhijit Das

<b>EE Session 2: Silver Bloom II (Day 1, 2.30 pm - 4.00 pm) - Instrumentation &amp; Control</b>		
<b>Session Chair: Prof. Rajarshi Gupta, Dept. of Applied Physics, University of Calcutta, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
121	Indoor Optical Intercom System: Application of Visible Light Communication system for audio transmission using PDM	Basudeb Das, Tapas Maity and Saswati Mazumdar
123	Fully Active Suspension Design using Super Twisting Sliding Mode Control based on Disturbance Observer and Ensemble Kalman Filter	Leimapokpam Vidyaratn Meetei and Dushmanta Kumar Das
125	Optimization Algorithm Based PID Controller Design for a Magnetic Levitation System	Soham Dey, Jayati Dey and Subrata Banerjee
129	Particle Swarm Optimization based PID-Controller Design for Volume Control of Artificial Ventilation System	Ajila T Yimchunger, Debasis Acharya and Dushmanta Kumar Das
132	Optimized Thermocouple Temperature Sensor using 555 Timer and ANN Based Linearization	Debarpan Bhattacharya, P. P. Chandra, Biswajit Bhattacharya and Sugata Munshi
136	Single-Phase Average Power Measurement Using Instantaneous Power Theory in a Fixed Point Processor	Dipankar Chatterjee and Suvarun Dalapati
195	A Fault-Detecting and Motion-Sensing Wireless Light Controller for LED Lighting System	Vishwanath Gupta, Biswarup Basak and Biswanath Roy

<b>Comp Session 2: Umami (Day 1, 2.30 pm - 3.35 pm) - Pattern Recognition</b>		
<b>Session Chair: Prof. Debotosh Bhattacharjee, Dept. of Computer Science &amp; Engg., Jadavpur University, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
38	Mutually Informed Correlation Coefficient (MICC) – a new Filter based Feature Selection method	Ritam Guha, Kushal Kanti Ghosh, Showmik Bhowmik and Ram Sarkar
47	Circuit component detection in offline hand-drawn electrical/electronic circuit diagram	Archan Bhattacharya, Soham Roy, Navonil Sarkar, Samir Malakar and Ram Sarkar
84	Applying Fourier Inspired Windows for Concept Drift Detection in Data Stream	Sumit Misra, Dipan Biswas, Sanjoy Kumar Saha and Chandan Mazumdar
114	Rice Leaf Disease Classification using CNN with Transfer Learning	Shreya Ghosal and Kamal Sarkar
142	Breast Lesion Segmentation in Ultrasound Images Using Deep Convolutional Neural Networks	Dipannita Ghosh, Amish Kumar, Palash Ghosal, Tamal Chowdhury, Anup Sadhu and Debashis Nandi
151	HRV Performance Analysis in Photoplethysmography and Electrocardiography	Subhajit Bhowmick, Palash Kumar Kundu and Dharma Das Mandal

<b>ECE Session 3: Silver Bloom I (Day 1, 4.00 pm - 5.30 pm) - Antenna</b>		
<b>Session Chair: Prof. Pradip Kumar Saha, Formerly of Dept. of Radio Physics &amp; Electronics, University of Calcutta, Kolkata</b>		
<b>52</b>	Dual-Band Minkowski Fractal Patch Antenna With Polarization Diversity	Arka Bhattacharyya, Amartya Banerjee, Sayan Chatterjee and Bhaskar Gupta
<b>56</b>	Investigations on the Radiation Characteristics of a CPW-Fed Yagi-Inspired Strip Monopole Antenna	Sohini Banerjee, Amartya Banerjee, Sayan Chatterjee and Malay Gangopadhyay
<b>111</b>	A Multi-functional Diversity Antenna with High Wideband Isolation	Jeet Banerjee, Suvajit Mallick and Rowdra Ghatak
<b>112</b>	Response of Equatorial Ionization in Indian Longitudes to HSSW Driven Geomagnetic Storm	Dibyendu Sur, Jasmine Firdaus, Trisha Paul, Raktima Dutta and Chaitali Bhattacharyya
<b>144</b>	An Orthogonally Oriented Multiband MIMO Antenna for WLAN, C-Band and X-Band Wireless Applications	Jeet Banerjee, Sumit Bhattacharya, Arjyaman Choudhury, Anushka Biswas, Rupam Paul, Anirban Dutta and Rowdra Ghatak
<b>164</b>	A Comparative study between Rectangular, Circular and Annular Ring Shaped Microstrip Antennas	Jayanta Bhattacharya and Sudipta Maity
<b>187</b>	Design of Reconfigurable Planar Yagi-Uda Antenna for Dual Frequency Wireless Communication	Subham Kundu and Kaushik Patra

<b>EE Session 3: Silver Bloom II (Day 1, 4.00 pm - 5.30 pm) - Power Electronics</b>		
<b>Session Chair: Prof. Biswarup Basak, Dept. of Electrical Engg., IEST, Shibpur, Howrah</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>91</b>	Loss Comparison of Various Unidirectional Rectifiers for Medium Voltage Applications	Sayani Chatterjee, Debranjana Mukherjee and Debaprasad Kastha
<b>101</b>	An Efficient G2V and V2G Converter Systems for EV Application	Avishek Munsu, Piyali Pal and Sumana Chowdhuri
<b>128</b>	An Improved Buck-Boost Converter Suitable for PV Application	Niraj Rana, Jayati Dey and Subrata Banerjee
<b>169</b>	Effect of Shifting Gate Pulse on Output Voltage Ripple in Coupled SIDO Boost Converter	Nupur and Shabari Nath
<b>204</b>	A Transformerless Grid Interactive Converter Topology for PV Based Micro Generator	Anirban Chatterjee, Sindhunil Bhaumik, Anisha Naskar, Susanta Ray, Debashis Chatterjee and Nikhil Mondal
<b>209</b>	Maximum Power Point Tracking of SPV Array for Phase Shifted PWM DC-DC Converter	Archak Sadhukhan, Pritam Gayen and Shib Sankar Saha
<b>210</b>	Three-phase Sine Wave Inverter using Natural Harmonic Compensation	Sukanya Dasgupta and Sujit K Biswas

<b>Comp Session 3: Umami (Day 1, 3.35 pm - 4.40 pm)</b>		
<b>Session Chair: Prof. Diganta Saha, Dept. of Computer Science &amp; Engg., Jadavpur University, Kolkata</b>		
<b>3A: Pattern Recognition</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>72</b>	Human Activity Recognition based on Summarized Semi-detailed Frame Information and Contextual Features	Dibyadip Chatterjee, Charu Arora, Saurajit Chakraborty and Sanjoy Saha
<b>156</b>	Identification of Cell-types based on the Pathway of Markers using Single-cell data	Ashmita Dey and Ujjwal Maulik
<b>193</b>	Extreme Learning Machine based Classification Of Tibetan Characters using CG based HOG features	Aritra Dey, Shyamali Mitra and Nibaran Das
<b>197</b>	Exploring the fractal nature in dynamics of crimes during recent Lok Sabha elections in West Bengal	Sayan Seal, Prasun Chail, Souvik Roy and Abhik Mukherjee
<b>3B: Natural Language Processing</b>		
<b>15</b>	Normalization of Numeronyms using NLP Techniques	Avishek Garain, Sainik Kumar Mahata and Subhabrata Dutta
<b>188</b>	Analyzing Large News Corpus Using Text Mining Techniques for Recognizing High Crime Prone Areas	Sumanta Mukherjee and Kamal Sarkar

<b>ECE Session 4: Umami (Day 1, 4.40 pm - 5.30 pm) - System Design</b>		
<b>Session Chair: Dr. Tapas Chakravarty, TCS, Kolkata</b>		
<b>24</b>	Realization of Adaptive Beamformer for Angle of Arrival Estimation using FPGA and Xilinx System Generator	Subhashree Samal, Harish Kumar Sahoo and Madhusmita Sahoo
<b>75</b>	Prototype Design of An IoT Enabled Cost Efficient Portable Heart-Health Data Acquisition System	Arnab Maity and Iti Saha Misra
<b>87</b>	An Energy Efficient 32 Bit Approximate Dadda Multiplier	Saurav Chanda, Koushik Guha, Santu Patra, Loukrakpam Merin Singh, Krishna Lal Baishnab and Prashanta Kumar Paul
<b>113</b>	Controlled Speed Limiting System for Congestion Mitigation for Smart City Design	Sreya Ghosh and Iti Saha Misra
<b>160</b>	Boundary Detection in Dynamic Wireless Sensor Networks using Convex Hull Techniques	Tapas Kumar Mishra, Jayadeep Sadhu and Arun Kumar

<b>ECE Session 5: Silver Bloom I (Day 2, 10.00 am - 11.20 am) - Wireless Networks</b>		
<b>Session Chair: Prof. Animesh Maitra, Dept. of Radio Physics &amp; Electronics, University of Calcutta, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>19</b>	Role of Different Spatial Point Processes on Network Densification towards 5G Development: A Coverage and Rate Analysis	Arijeet Ghosh, Tanmoy Kundu, Iti Saha Misra and Salil Kumar Sanyal
<b>39</b>	Content Driven Proportionate Channel Allocation Scheme for Scalable Video over Cognitive Radio Network	Sudipta Dey and Iti Saha Misra
<b>73</b>	Role of Reverberation Chamber in Wireless Testing and Measurement with emphasis on Investigating Biological Effects	Ardhendu Kundu, Kaushik Patra, Bhaskar Gupta and Amirul I. Mallick
<b>86</b>	QoS Analysis with Coverage, Speed and Resources on Small Cells Cellular Networks	Ayon Seal, Sandipan Bhattacharya and Iti Saha Misra
<b>135</b>	Outage Analysis in Dual Hop Relay Network with an Adaptive Energy Harvesting Scheme	Soumen Mondal, Sanjay Dharroy and Sumit Kundu
<b>150</b>	Improved Sparsity Aware Collaborative Spectrum Estimation for Small Cell Networks	Bijit Kumar Das and Arpan Mukherjee
<b>152</b>	Analysis of a Dynamic Queuing Model for Secondary Users in Cognitive Radio Networks	Souptik Barman, Ayan Biswas and Anindita Kundu

<b>EE Session 4: Silver Bloom II (Day 2, 10.00 am - 11.20 am) - Hybrid Grid &amp; Electric Vehicle</b>		
<b>Session Chair: Prof. Debashis Chatterjee, Dept. of Electrical Engg., Jadavpur University, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>8</b>	Adaptive symbiotic organism search algorithm optimized 3DOF-PID controller for load frequency control of hybrid power system	Dipayan Guha, Provas Roy and Subrata Banerjee
<b>23</b>	An Experimental Study on Energy Management of Grid-Connected Hybrid PV-Battery-Fuel Cell System	Akshaya K Pati and N C Sahoo
<b>138</b>	Comparative Analysis of Different Types of Power Transactions in Smart Grid	G Srinivasulu, N C Sahoo and P Balakrishna
<b>143</b>	A Supervisory State of Charge and State of Power Management Control Strategy among Hybrid Energy Storage Systems through Thermal Exchange Optimization Technique	Subhashree Choudhury, Nikhil Khandelwal, Ankit Kumar, Anshika Shukla, Anshu Jha, Monalisa Mohanty and Tarapasanna Dash
<b>196</b>	Charging Scheduling of Electric Vehicles (EV) in Probabilistic Scenario considering Grid-to-Vehicle (G2V) and Vehicle-to-Grid (V2G)	Sourav Das, Parimal Acharjee and Aniruddha Bhattacharya
<b>201</b>	PV assisted Fuzzy based EV charge scheduling for demand side energy management: a case study	Soumya Ghorai, Deepanjan Majumdar, Tushar Jash and Susanta Ray

<b>Comp Session 4: Umami (Day 2, 10.00 am – 11.20 am) - Image Processing</b>		
<b>Session Chair: Prof. Subhadip Basu, Dept. of Computer Science &amp; Engg., Jadavpur University, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>26</b>	Segmentation of Pap Smear images for Cervical Cancer detection	Hmrishav Bandyopadhyay and Mita Nasipuri
<b>70</b>	Removal of Salt and Pepper noise: a Game Theoretic Approach	Krishnendu Mukhopadhyay, Rajarshi Bose, Anwit Mondal, Suman Kumar Bera, Showmik Bhowmik and Ram Sarkar
<b>130</b>	Two Stage Semantic Segmentation by SEEDS and Fork Net	Aritra Mukherjee, Prithwish Jana, Sayak Chakraborty and Sanjoy Kumar Saha
<b>177</b>	Motion Based Video Skimming	Imran Alam, Devesh Jalan, Priti Shaw and Partha Pratim Mohanta
<b>182</b>	Rectification of Camera Captured Document Images using Component Analysis	Debanshu Banerjee, Pratik Bhowal, Suman Kumar Bera and Ram Sarkar
<b>207</b>	Supapixel and Density Based Region Segmentation Algorithm for Lung Nodule Detection	Amitava Halder, Saptarshi Chatterjee and Debangshu Dey

<b>ECE Session 6: Silver Bloom I (Day 2, 11.45 am - 1.00 pm) - Microwave Devices &amp; Systems</b>		
<b>Session Chair: Prof. Manojit Mitra, Dept. of Electronics &amp; Tele Communication Engg., IEST, Shibpur, Howrah</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>57</b>	High-k Dielectrics on 20nm FDSOI FinFET: Study on Analog and RF Performance	G Nikhil, Pratyush Mohanty, Rajesh Saha and Soumyaranjan Routray
<b>96</b>	A Multilayered Transition between SIW and ESIW	Souma Guha Mallick, Bijit Biswas, Sayan Chatterjee, G. Arun Kumar and Dipak Ranjan Poddar
<b>115</b>	Reduction of Frequency Chirp in Fabry-Perot Semiconductor Laser Under Low Level Optical Injection	Meenakshi Chakraborty and Taraprasad Chattopadhyay
<b>141</b>	Development of an FPGA based Indoor Free Space Optical (FSO) Communication System using 808 nm Infrared (IR) LASER Source	Tishya Sarma Sarkar, Bappaditya Sinha, Shibabrata Mukherjee, Indranuj Joardar and Saswati Mazumdar
<b>163</b>	Impact of Source and Drain Underlap on Analog Performance of Double-Gate AlGaIn/GaN MOS-HEMT	Shubham Kumar, Minnat Ali, Raushan Kumar, Rajrup Mitra, Atanu Kundu and Mousiki Kar
<b>199</b>	Modes and Coupling in Six-Core hole-walled Optical Fiber	Sonali Basak, Santu Sarkar and Nikhil Ranjan Das



<b>EE Session 5: Silver Bloom II (Day 2, 11.45 am - 1.00 pm) - Renewable Energy &amp; Microgrid</b>		
<b>Session Chair: Prof. Chandan Kumar Chanda, Dept. of Electrical Engg., IEST, Shibpur, Howrah</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>62</b>	Performance Improvement of LFC using GOA based Fuzzy PD-PI Cascade Controller for Power System Coordinate with Renewable sources	Debasis Tripathy, Nalin Behari Dev Choudhury, Sadasiva Behera and Binod Kumar Sahu
<b>140</b>	Performance Enhancement of PV Array under Partial Shading Condition by Modified BL Configuration.	Chidurala Saiprakash, Alivarani Mohapatra, Byamkesh Nayak and Sriparna Roy Ghatak
<b>148</b>	A Critical Analysis for Microgrid Formation based on Hourly Load Growth and Available Renewable Energy	Nayan Manna, Ayandeep Ganguly and Arindam Kumar Sil
<b>174</b>	Transient Disturbances and Islanding Detection in Micro Grid using Discrete Wavelet Transform	Sannistha Banerjee and Partha Sarathee Bhowmik
<b>194</b>	A Renewable Energy Based Hybrid Autonomous Grid	Arpan Banerji, Reetwik Bhadra, Ayan Banerji, Ambarnath Banerji and Sujit K Biswas
<b>206</b>	Dynamic and Transient State Analysis of Islanded Microgrid	Sindhura Gupta, Susovan Mukhopadhyay, Ambarnath Banerji and Sujit K. Biswas

<b>EE Session 6: Umami (Day 2, 11.45 am - 1.00 pm) - Electric Machines &amp; Drives</b>		
<b>Session Chair: Prof. Sumana Chowdhuri, Dept. of Applied Physics, University of Calcutta, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>108</b>	Design, Simulation & Thermal Analysis of an Interior Permanent Magnet Synchronous Motor for A Fork-lift Truck Application	Sayani Chatterjee, Ashesh Mandal, Suvarun Dalapati, Pabitra Halder and Kaushik Mukherjee
<b>109</b>	Estimation of Alternator Rotor Angle by using Synchronized Voltage and Current Phasors	Mukesh Kumar and Affijulla Shaik
<b>126</b>	Control of Bifurcation in a PWM Controlled dc Series Motor Drive	Susmita Adhikary, Debashis Chatterjee and Krishnendu Chakrabarty
<b>153</b>	Design and analysis of In-Wheel Motor for an Electric vehicle	Sandeep Kumar Chawrasia, Chandan Kumar Chanda and Sumit Banerjee
<b>202</b>	Revisiting small signal analysis techniques on a two area four machine power system network	Soumya Ghorai and Susanta Ray
<b>205</b>	A Review on Diagnostic Techniques of Bearing Fault and its modeling in Induction Motor	Arnab Das and Susanta Ray

<b>WIE Special Session: Silver Bloom (Day 2, 1.00 pm - 1.40 pm)</b>
<b>Speaker: Dr. Suparna Dhar, NSHM Knowledge Campus, Kolkata</b>
<b>Lecture Title: "Employing Data Analytics to Monitor Organization's Social Media Activity"</b>
<b>Session Chair: Prof. Iti Saha Misra, Dept. of Electronics &amp; Tele Communication Engg. Jadavpur University, Kolkata</b>

<b>Student Panel Discussions: Umami (Day 2, 1.00 pm - 1.40 pm)</b>
<b>Topic: "Is India Ready for NexGen Technology?"</b>
<b>Session Chair: Mr. Sanket Sarkar</b>

<b>Industry Session: Silver Bloom (Day 2, 2.30 pm - 4.00 pm)</b>
<b>Speaker: Sanjeeb Sengupta, Check Point Software Technologies Ltd.</b>
<b>Lecture Title: "Cyber Security and its Proliferation into Industrial Control Systems"</b>
<b>Speaker: Indrajit Sanyal, Business Unit Digital Services, Ericsson</b>
<b>Lecture Title: "5G &amp; other Technology Options – from Customer Perspective"</b>
<b>Speaker: Pankaj Chawla, Palo Alto Networks</b>
<b>Lecture Title: "Take Back Control of DNS Traffic"</b>
<b>Session Chair: Mr. Sanjay Das, IT &amp; Electronics, Govt. of West Bengal, Kolkata</b>

<b>Poster Session: Umami (Day 2, 2.30 pm – 4.00 pm)</b>		
<b>Session Chair: Prof. Suparna KarChowdhury, Dept. of Electrical Engg., Jadavpur University, Kolkata</b>		
<b>Paper ID</b>	<b>Paper Title</b>	<b>Authors</b>
<b>42</b>	Modeling of an Efficient Sensing Strategy for Real Time Video Communication over Cognitive Radio Network	Sudipta Dey and Iti Saha Misra
<b>63</b>	Impact of Dielectric Pocket on the Performance of Double Gate TFET	Radhe Gobinda Debnath and Srimanta Baishya
<b>76</b>	PTT Based Portable Cuffless Systolic Blood Pressure Estimation	Ananda Chatterjee, Saurabh Pal and Madhuchhanda Mitra
<b>82</b>	A Study on the Noise Performance of an Si based IMPATT Device for different Junction Temperature	Rajarshi Dhar, S. J. Mukhopadhyay and Monojit Mitra
<b>94</b>	Harmony Search based Adaptive Sliding Mode Control for Inverted Pendulum	Rajeev Ranjan Pathak and Anindita Sengupta
<b>98</b>	Performance Comparison Between 2×1 and 2×2 Corporate Feed Antenna Array in X-band	Sk Imtiaj and Sandipan Bhattacharya
<b>117</b>	Specific Absorption Rate Estimation for a Typical Hibiscus Flower Model as per ICNIRP Electromagnetic Guidelines	Nibedita Mukherjee, Ardhendu Kundu, Bhaskar Gupta and Monojit Mitra
<b>175</b>	WANN and ANN based Urban Load Forecasting for Peak Load Management	Ayandeep Ganguly, Kuheli Goswami and Arindam Kumar Sil