



IEEE Kerala Section

**International Conference on Signal Processing, Informatics, Communication and Energy Systems
(IEEESPICES2022)**

10th, 11th and 12th March 2022

Organized by

IEEE Kerala Section and Mar Baselios College of Engineering and Technology, Nalanchira, Trivandrum

Programme Schedule

| Thursday 10th March 2022 | |
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| 10.00 AM -12.00 PM | <p>Tutorial Session (1): <i>Dr. V. R. Jisha</i> <i>Professor, Dept. of Electrical Engineering, College of Engineering, Trivandrum</i> <i>Title: Optimal Control of Robots</i></p> <p><i>Google Meet joining info</i> <i>Video call link: https://meet.google.com/ucy-aavd-dxe</i> <i>Or dial: (US) +1 727-877-8468 PIN: 352 886 604#</i></p> |
| 2.30 PM-4.30 PM | <p>Tutorial Session (2): <i>Dr. Bhim Singh</i> <i>Professor, Dept. of Electrical Engineering, IIT Delhi</i> <i>Title: Solar PV Systems</i></p> <p><i>Google Meet joining info</i> <i>Video call link: https://meet.google.com/ucy-aavd-dxe</i> <i>Or dial: (US) +1 727-877-8468 PIN: 352 886 604#</i></p> |
| 5.00 PM- 6.00 PM | <p>Tutorial Session (3): <i>Dr. Darsana P. Joysula</i> <i>Professor, Dept. of Computer Science, Bowie state University, USA</i> <i>Title: Towards self-learning, self-correcting, explainable systems</i></p> <p><i>Google Meet joining info</i></p> |

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| | <p><i>Video call link: https://meet.google.com/ucy-aavd-dxe</i> <i>Or dial: (US) +1 727-877-8468 PIN: 352 886 604 #</i></p> |
| Friday 11th March 2022 | |
| 9.00 AM -10.00 AM | <p>Inauguration</p> <p><i>Google Meet joining info</i> <i>Video call link: https://meet.google.com/ipv-xztp-aam</i> <i>Or dial: (US) +1 413-685-2783 PIN: 204 895 222 #</i></p> |
| 10.30 AM -11.30 AM | <p>Key note (1): <i>Dr. Anurag Kumar</i> <i>Honorary Professor, Indian Institute of Science, Bangalore</i> <i>Title: Cyber Physical Systems for Industry 4.0</i></p> <p><i>Google Meet joining info</i> <i>Video call link: https://meet.google.com/nfw-wspb-swn</i> <i>Or dial: (US) +1 540-603-1183 PIN: 531 235 463 #</i></p> |
| 11.30 AM - 12.30 PM | <p>Key note (2): <i>Dr. Sivaji Chakravorti</i> <i>Vice-President, Indian National Academy of Engineering (INAE)</i> <i>Title: Estimation of Instantaneous Frequency of a Signal</i></p> <p><i>Google Meet joining info</i> <i>Video call link: https://meet.google.com/nfw-wspb-swn</i> <i>Or dial: (US) +1 540-603-1183 PIN: 531 235 463 #</i></p> |
| 2.00 PM-3.00 PM | <p>Key note (3): <i>Dr. Maode Ma</i> <i>Research Professor, College of Engineering, Qatar University</i> <i>Title: Security Issues in Named Data Networks</i></p> <p><i>Google Meet joining info</i> <i>Video call link: https://meet.google.com/nfw-wspb-swn</i> <i>Or dial: (US) +1 540-603-1183 PIN: 531 235 463 #</i></p> |
| 3.00 PM- 4.30 PM | <p>Invited Talk (1): <i>Dr. Anoop C S</i> <i>Title: Sigma-Delta based Digitizing Interface Circuits for Resistive Sensors with Focus on Industrially Relevant Measurement Scenarios</i></p> |

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|---|--|--|---|--|---|---|
| | <p><i>Google Meet joining info</i> <i>Video call link; https://meet.google.com/zib-ytjz-gtp</i> <i>Or dial: (US) +1 661-622-3271 PIN: 246 192 076#</i></p> | | | | | |
| | <p>Technical Session I - Oral Paper Presentations</p> | | | | | |
| | <p>Venue-I Track 1- Signal Processing Session (1A)</p> | <p>Venue-II Track 2- Communication and Networks Session (1B)</p> | <p>Venue-III Track 3- Advanced Computing Session (1C)</p> | <p>Venue-IV Track 4- Artificial Intelligence and Data Science (1D)</p> | <p>Venue-V Track 5- Power and Energy Systems (1E)</p> | <p>Venue – VI Track 6 & 7 – Instrumentati on and Control/ Robotics and Automation (1F) & Invited Talk</p> |
| <p>5.00 PM - 6.00 PM</p> | <p>Key note (4): <i>Dr. Akshay Kumar Rathore</i> <i>Associate Professor, Graduate Program Director and Chair of Graduate Awards, Electrical and Computer Engineering, Concordia University, Canada</i> <i>Title: Low Device Switching Frequency Control of Multilevel Inverters for the Medium Voltage High Power Industrial Drives</i></p> <p><i>Google Meet joining info</i> <i>Video call link; https://meet.google.com/nfw-wspb-swn</i> <i>Or dial: (US) +1 540-603-1183 PIN: 531 235 463 #</i></p> | | | | | |
| <p>Saturday 12th March 2022</p> | | | | | | |
| <p>10.00 AM - 11.00 AM</p> | <p>Key note (5): <i>Dr. Sharul Kamal Bin Abdul Rahim</i> <i>Professor, Universiti Teknologi, Malaysia</i> <i>Title: Antenna and Switch Beamforming Network for 5G/B5G Communication Systems</i></p> <p><i>Google Meet joining info</i> <i>Video call link; https://meet.google.com/nfw-wspb-swn</i> <i>Or dial: (US) +1 540-603-1183 PIN: 531 235 463 #</i></p> | | | | | |
| <p>11.15 AM- 12.45 PM</p> | <p>Invited Talk (2): <i>Mr. Vishnu Venugopal</i></p> | | | | | |

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|---|---|---|--|--|---|--|
| | <p><i>Title: How Smart Cities are improving quality of life and ease of living in Urban Area by use of ICT technology</i></p> <p><i>Google Meet joining info</i> <i>Video call link; https://meet.google.com/kgm-sway-xgn</i> <i>Or dial: (US) +1 614-943-3046 PIN: 220 435 546#</i></p> | | | | | |
| | Technical Session II - Oral Paper Presentations | | | | | |
| | Venue-I Track 1- Signal Processing Session (2A) | Venue-II Track 2- Communicatio n and Networks Session (2B) | Venue-III Track 3- Advanced Computing Session (2C) | Venue-IV Track 4- Artificial Intelligence and Data Science (2D) | Venue-V Track 5- Power and Energy Systems (2E) | Venue – VI Track 8 –Smart Cities & Invited Talk (2F) |
| 2.00 PM- 3.30 PM | Technical Session III - Oral Paper Presentations | | | | | |
| | Venue-I Track 1- Signal Processing Session (3A) | Venue-II Track 2- Communicatio n and Networks Session (3B) | Venue-III Track 5- Power and Energy Systems (3C) | Venue-IV Track 4- Artificial Intelligence and Data Science (3D) | Venue-V Track 5- Power and Energy Systems (3E) | |
| Valedictory Function (4 – 4.30 PM) | | | | | | |
| <p><i>Google Meet joining info</i> <i>Video call link; https://meet.google.com/ipv-xztp-aam</i> <i>Or dial: (US) +1 413-685-2783 PIN: 204 895 222#</i></p> | | | | | | |

Session details

Track 1- Signal Processing

Session 1A

Venue: I

Date: 11/03/2022, 3.00 – 4.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/ayb-yscn-muw>

Or dial: (US) +1 240-560-3660 PIN: 660 100 913#

| SI No | Paper ID | Paper Title | Authors |
|-------|----------|---|--------------------|
| 1 | 40 | Aquila Optimizer based Deep Neural Network for Automatic Diabetic Retinopathy detection and classification | V. Desika Vinayaki |
| 2 | 48 | A Heuristic Approximation Algorithm to Design Power and Area Efficient FIR Filters in the Canonic Signed Digit Space | Bindiya T S |
| 3 | 118 | Measurement of chaos and quantum decoherence in H&E stained images of oral epithelium for early detection Oral Submucous Fibrosis | Aparajita Karmakar |
| 4 | 59 | Cross Spectral Image Registration for Fever Detection | Joseph Mathew |

Session 2A

Venue: I

Date: 12/03/2022, 11.15 AM- 12.45 PM

Google Meet joining info

Video call link: <https://meet.google.com/ayb-yscn-muw>

Or dial: (US) +1 240-560-3660 PIN: 660 100 913#

| Sl.No. | Paper ID | Paper Title | Authors |
|--------|----------|--|-------------------|
| 1 | 66 | Design of Quadrature mirror filter using Grasshopper Optimization Algorithm. | Aritra Ghosh |
| 2 | 67 | A Survey on Various Combination of Breast Cancer Biomarkers | Sheethal Aji Mani |

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|---|-----|---|--------------------|
| 3 | 54 | Design of Computationally Efficient IFIR based Filter Structure for Digital Channelizer | Rinu C Varghese |
| 4 | 132 | Analysis of Mental Task Ability in Students based on Electroencephalography Signals | Ananda Babu T |
| 5 | 139 | LSTM based Synthesis of 12-lead ECG Signal from a Reduced Lead Set | Ato Kapfo |
| 6 | 150 | Emotion Classification using Physiological Signals: A Recent Survey | Amita Umesh Dessai |

Session 3A

Venue: I

Date: 12/03/2022, 2.00 – 3.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/ayb-yscn-muw>

Or dial: (US) +1 240-560-3660 PIN: 660 100 913#

| Sl.No. | Paper ID | Paper Title | Authors |
|--------|----------|---|---------------------|
| 1 | 168 | New Mixed Model Order Reduction Approach for Linear System | Yogesh Vijay Hote |
| 2 | 192 | A holistic approach towards detection, tracking, and recognition of face | Kuldeep Singh Yadav |
| 3 | 203 | Alzheimer's Disease Classification from Cross-sectional Brain MRI using Deep Learning | Sreelakshmi S. |
| 4 | 279 | Residual Network Based Single Object Tracking | Shiv Kumar |
| 5 | 65 | Design Of Band-Pass Fir Filter Using Modified Social Group Optimization Algorithm And Its Implementation On FPGA. | Tania Paul Das |
| 6 | 262 | Transfer learning for Speech Based Emotion Recognition | Meenu S Nair |

Track 2 – Communication and Networks

Session 1B

Venue: II

Date: 11/03/2022, 3.00 PM – 4.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/fgf-nqjo-cim>

Or dial: (US) +1 218-503-2258 PIN: 629 132 439#

| SI No | Paper ID | Paper Title | Authors |
|-------|----------|---|------------------------|
| 1 | 11 | BER-SNR Evaluation Using Phase Shift Keying With OSTBC In MIMO Environment | Milind Thomas Themalil |
| 2 | 13 | Area Efficient Implementation Of Short Length QC-LDPC Codes For Ultra Reliable Low Latency Communication (URLLC)Application | Lakshmi J L |
| 3 | 30 | Design Of A Dual Processor Based Single Board Gnss Receiver Embedded Navigation Computer For Low Cost Launch Vehicles | Vinoj V S |
| 4 | 33 | Design Considerations For Selecting GNSS Antenna Mounting Location In Launch Vehicles | Anand Shankar Ot |
| 5 | 35 | Design Methodology Of Solid State C-Band Transponder For Radar Calibration | Muhammed Suhail S |
| 6 | 46 | A Set Of Novel Stress Tests For High Dynamic Navic/Gps Receiver Software With Rf Signal Input, Observations And Mitigation Strategies | Biju V S |

Session 2B

Venue: II

Date: 12/03/2022, 11.15 – 12.45 PM

Google Meet joining info

Video call link: <https://meet.google.com/fgf-nqjo-cim>

Or dial: (US) +1 218-503-2258 PIN: 629 132 439#

| SI No | Paper ID | Paper Title | Authors |
|-------|----------|--|-----------------|
| 1 | 47 | Development Of A New Portable Test Station For Remote Testing Of Inertial Navigation Systems For Launch Vehicles | Deepa Sara John |

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|---|----|--|-------------------|
| 2 | 56 | Design And Performance Analysis Of Various 32-Bit Hybrid Adders Using Verilog | Renjith R |
| 3 | 61 | Performance Evaluation Of DFTBased Channel Estimation For Spatial Modulated FBMC-OQAM Systems On Multipath Fading Channels | Anetha Mary Soman |
| 4 | 89 | SNO2 Thin Film Coated Fiber Optic VC Sensor Based On Intensity Modulation Technique | Zachariah C. Alex |

Session 3B

Venue: II

Date: 12/03/2022, 2.00 – 3.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/fgf-nqjo-cim>

Or dial: (US) +1 218-503-2258 PIN: 629 132 439#

| SI No | Paper ID | Paper Title | Authors |
|-------|----------|--|--------------------|
| 1 | 108 | Design And Numerical Analysis Of A Compact Microstrip Antenna Sensor For Wireless Body Area Networks | Sreelekshmi.S |
| 2 | 167 | High Power Microwave Rectifier With Less Sensitive To Input Power And Phase Variation | Vivek Kumar |
| 3 | 257 | Gate Matching Algorithm For Early False Path Detection In Statistical Static Timing Analysis | Sachin K Bhat Agni |
| 4 | 259 | Hot Carrier Effect On Base Resistance Of Sige Heterojunction Bipolar Transistor | Ann Mary Alex |
| 5 | 261 | Performance Analysis Of Code Hopping Multiple Access Using Orthogonal Complementary Codes Under Rician Fading Channels | Aswathy K.A |
| 6 | 278 | Dual Stepped Line Impedance Antenna For 8 Ghz Communication | Ankita Bagri |

Track 3 – Advanced Computing Session

Session 1C

Venue: III

Date: 11/03/2022, 3.00 PM – 4.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/ouc-ooxs-rgb>

Or dial: (US) +1 469-305-0125 PIN: 829 371 802#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|--|-----------------|
| 1 | 38 | WaterHCI Part 1: Open Water Monitoring with Realtime Augmented Reality | Samir Khaki |
| 2 | 53 | Graph Based Document Model And Its Application In Keyphrase Extraction | Sincy V Thambi |
| 3 | 110 | A Blockchain-Based Platform For Smart Contracts And Intellectual Property Protection For The Additive Manufacturing Industry | Abhiram Haridas |
| 4 | 129 | A Cellular Iot Based Sensor System For Atmospheric Studies Using Uavs | Rajesh Kavadi |
| 5 | 136 | A Comparative Analysis Of Localization Techniques In Wireless Sensor Network | Akshay A |
| 6 | 140 | Decentralized Crowdfunding Platform Using Smart Contracts | Inderajith K |

Session 2C

Venue: III

Date: 12/03/2022, 11.15 AM – 12.45 PM

Google Meet joining info

Video call link: <https://meet.google.com/fuy-wptb-whc>

Or dial: (US) +1 916-400-0147 PIN: 965 184 865#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|---|----------------|
| 1 | 141 | An Efficient Approach For Spammer Detection On Twitter And Their Behavior Analysis. | Anaswara K |

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|---|-----|---|----------------------------|
| 2 | 188 | Revocable And Scalable Access To Personal Health Records In A Cloud Computing Environment | F. Sammy |
| 3 | 218 | An Overview On Handling Anti Forensic Issues In Android Devices Using Forensic Automator Tool | H. Hemanth Bharath Bhushan |
| 4 | 247 | A Secured Key Management Scheme For Mobile Ad Hoc Networks With Modified Montgomery Modular Arithmetic | Janani V S |
| 5 | 253 | Analyzing Tone Of The Annual Report - An Indian Context | Prakash Kalingrao Aithal |
| 6 | 269 | A Real-Time IOT And Cloud System For Carbon Dioxide Monitoring In Dhaka City'S Buildings With Rooftop Garden And Without Rooftop Garden | MD. Hasan Imam Bijoy |

Track 4 – Artificial Intelligence and Data Science

Session 1D

Venue: IV

Date: 11/03/2022, 3.00 PM – 4.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/ner-vqyg-uhg>

Or dial: (US) +1 617-675-4444 PIN: 938 774 371 3483#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|---|----------------------|
| 1 | 18 | Vehicle Accident Detection And Prevention Using Iot And Deep Learning | Lakshmy S |
| 2 | 50 | Supervised Fan Beam Computed Tomography Image Synthesis Using 3D CycleGAN | Jiffy Joseph |
| 3 | 57 | Comparison Of Different Machine Learning Algorithms For Cardiac Auscultation | Ashin Prakash |
| 4 | 81 | A Study Of Change Impact Analysis Techniques Based On Requirement Defects During The Software Development Process | Anjali C |
| 5 | 83 | A Survey Of Metadata Retrieval Through Sentiment Analysis | M. Thanga Subha Devi |
| 6 | 92 | Implementation Of Testing Accreditation Analytical Framework For Higher Education System | Sushitha S |
| 7 | 103 | Design And Development Of A Simulation Environment For Iot Devices | Srivatsan V |

Session 2D

Venue: IV

Date: 12/03/2022, 11.15 AM – 12.45 PM

Google Meet joining info

Video call link: <https://meet.google.com/ryf-geih-wvh>

Or dial: (US) +1 617-675-4444 PIN: 894 993 425 8348#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|---|---------------------|
| 1 | 113 | Social Media Monitoring Using Elk Stack | Aparna Sankar N S |
| 2 | 126 | An Efficient Analysis Of E-Commerce Site Using Big Data Assisted Modified Learning Strategy Based On Novel Customer Recommendations | Ho Chi Minh Perumal |
| 3 | 142 | Star Identification In Night Sky Images Using Mobile Phone Camera | Dhruv Salvadi |
| 4 | 147 | A Comparative Study Of State-Of-The-Art Image Splicing Localization Methods Using Fully Convolutional Networks | Vidya K.R. |
| 5 | 181 | Shallow Segnet With Bilinear Interpolation And Weighted Cross-Entropy Loss For Semantic Segmentation Of Brain Tissue | Pranav Goyal |
| 6 | 190 | Water HCI Part 2: Open water sensing, meta-sensing, and observing with drones and augmented reality | Samir Khaki |
| 7 | 194 | Automated Alert Generation Ensuring Women Safety Using Heartbeat Detection | Anusha Jhampri |

Session 3D

Venue: IV

Date: 12/03/2022, 2.00 PM – 3.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/pgd-ruwv-suw>

Or dial: (US) +1 617-675-4444 PIN: 719 762 198 9902#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|--|------------------|
| 1 | 207 | Fraud Detection And Analysis For Insurance Claim Using Machine Learning | Abhijeet Urunkar |
| 2 | 219 | On Some Issues In Kalman Filter Based Trilateration Algorithms For Indoor Localization Problem. | Hena Kausar |
| 3 | 225 | Patch-Based All Convolutional Neural Network Model For Classification Of Benign And Malignant Mammograms | Pournami P.N. |
| 4 | 229 | Achieving Market Segmentation From B2B Insurance Client Data Using Rfm & K-Means Algorithm | Srijith J Kumar |
| 5 | 239 | Maximizing Strategy In Customer Segmentation Using Different Clustering Techniques | Pavithra M |

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|---|-----|--|-------------|
| 6 | 240 | Performance Comparison Of Classifiers Of MR Brain Tumor Images On Various Datasets | Divya Mohan |
| 7 | 276 | Effective Software Effort Estimation Using Heterogenous Stacked Ensemble | Somya Goyal |

Track 5 – Power and Energy Systems

Session 1E

Venue: V

Date: 11/03/2022, 3.00 PM – 4.30 PM

Google Meet joining info:

Video call link: <https://meet.google.com/oyx-mqoq-qfu>

Or dial: (US) +1 318-565-6638 PIN: 782 044 757#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|---|----------------------|
| 1 | 208 | Sensor-less Vector Control of Surface PM Synchronous Motor Using Reduced - Order Cubature Kalman Filter Based Estimator | Arabindo Chandra |
| 2 | 10 | Performance study of Capacitor Clamped Multilevel Inverter fed Induction Motor Drive for Electric Vehicle Application | Praveen O |
| 3 | 23 | Modelling and Performance Estimation of All Inorganic Double Perovskite Solar Cells | Deepthi Jayan K |
| 4 | 49 | SPV Panel Hotspot Thermal Profile Modeling and Characterization with Active Cooling Employing CAD Simulation | Polaka Divya Reddy |
| 5 | 52 | Open-Circuit Switch Fault-Tolerant Half-Bridge LLC Resonant Converters for Satellite Applications | Abraham Mathews |
| 6 | 73 | Regenerative Braking of Switched Reluctance Motor for Electric Vehicle Application | Aaliya Farzana. P. A |
| 7 | 74 | Steering Angle Estimation for an Autonomous Car | Abhiram A |
| 8 | 125 | Parametric Analysis on Charge Scheduling And Pricing Of Electric Vehicles | Lakshmi M Nair |

Session 2E

Venue: V

Date: 12/03/2022, 11.15 – 12.45 PM

Google Meet joining info:

Video call link: <https://meet.google.com/oyx-mqoq-qfu>

Or dial: (US) +1 318-565-6638 PIN: 782 044 757#

| SI No | Paper ID | Paper Title | Authors |
|-------|----------|--|---------------------|
| 1 | 82 | Torque Ripple Reduction And Speed Control Of PMSM Using Fuzzy Logic For Propulsion Application | Lekshmi P Nair |
| 2 | 109 | Voltage Profile Improvement of A Multi Microgrid Interconnection Scheme Using Synchronverters | Charivil Sojy Rajan |
| 3 | 127 | Performance Assessment of A Hybrid Islanding Detection Scheme For PV Based Distributed Generators Combining Total Harmonic Distortion And Bidirectional Reactive Power Injection | Praveen Raj R S |
| 4 | 130 | IPMSM Drive With Interleaved Bidirectional Converter For Electric Vehicle Application | Chandni Asok |
| 5 | 137 | Investigation Of Choice Of State Space For Reinforcement Learning Based Battery Scheduling In Microgrid | Vaishak Rajeev |
| 6 | 169 | Fractional Order Modelling And Controller Design For Non-Ideal Dc-Dc Buck Converter | Yogesh Vijay Hote |
| 7 | 173 | Exhibiting The Effect of Time Delays On Load Frequency Control Of Multi Area Interconnected Hybrid Power System | P Harideep |

Session 3E

Venue: V

Date: 12/03/2022, 2.00 – 3.30 PM

Google Meet joining info:

Video call link: <https://meet.google.com/oyx-mqoq-qfu>

Or dial: (US) +1 318-565-6638 PIN: 782 044 757#

| SI No | Paper ID | Paper Title | Authors |
|-------|----------|--|---------------|
| 1 | 183 | Cost Analysis of a Smart Home Energy Management System-A Case Study | Divya N A |
| 2 | 201 | Review of Battery Charging Methods for Electric Vehicle | Sandhya P |
| 3 | 4 | Current Control with Hysteresis Controller and Sliding mode Controller in SRM | Stella Kurian |
| 4 | 211 | FEM analysis and experiments of a Double-sided Axial Flux Switched Reluctance Motor for two alternative phase winding terminal connections | Sabarni Pal |
| 5 | 227 | A solution to power balancing in high renewable penetration power system: Use of Abandoned Generating Units | Athul Jose P |

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|---|-----|--|------------|
| 6 | 231 | Radial force reduction of Switched Reluctance Motor for EV application | Rani S |
| 7 | 235 | A Single- Phase Hybrid Seventeen Level Multilevel Inverter Topology. | Sahana B K |

Session 3C

Venue: III

Date: 12/03/2022, 2.00 – 3.30 PM

Google Meet joining info:

Video call link: <https://meet.google.com/kbq-inaj-zae>

Or dial: (US) +1 318-565-6638 PIN: 782 044 757#

| SI No | Paper ID | Paper Title | Authors |
|-------|----------|--|-------------------|
| 1 | 243 | Design, Fabrication, Analysis and Testing of a Planar Inductor on a High Frequency Buck Converter using SiC Device | Arnab Dey |
| 2 | 249 | Techno-Economic Feasibility Analysis of LVDC System to Retrofit an Existing AC System: Case Study | Rani Chacko |
| 3 | 251 | Detailed FEM-based Analysis of Vibration in a 3-phase Switched Reluctance Motor and its Experimental Validation | Samrat Das |
| 4 | 252 | Investigations on Performance Parameters of Hybrid Perovskite Solar Cells | Kiran Susan Pavu |
| 5 | 263 | A Novel State Space Model of an Interleaved Boost Converter operating over a wide range of duty ratio | Nikhil Sasidharan |
| 6 | 268 | Parameter Independent Backstepping Controller for Bidirectional Buck-Boost Converter in DC Grid Battery Interface with CPL | Nikhil Sasidharan |
| 7 | 64 | Comparison of GSEIM with Simulink with respect to simulation speed | Akhil Nandan |

Track 6 & 7 – Instrumentation and Control/ Robotics and Automation

Session 1F

Venue: VI

Date: 11/03/2022, 3.00 – 4.30 PM

Google Meet joining info

Video call link: <https://meet.google.com/zib-ytjz-gtp>

Or dial: (US) +1 661-622-3271 PIN: 246 192 076#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|--|--------------------|
| 1 | 98 | Design Of An Optimized Controller For Docking System For Space Application | Navya S Warriar |
| 2 | 144 | Modelling Of Power Flow Dynamics For Congestion Control | Pratyasa Bhui |
| 3 | 242 | A Disturbance Observer Based Control For Quadrotor Aircraft Subject To Wind Gusts | Sini S |
| 4 | 70 | Performance Analysis Of Path Tracking Controllers For Robotaxi Manoeuvres | Anurag Reghu |
| 5 | 223 | Gain Scheduled LQR Control Of A Two Wheeled Mobile Robot With Heavy Payloads | Anu Gopinath |
| 6 | 224 | Decentralized Control Of Slow Moving Mobile Manipulator | Shyju Susan Mathew |
| 7 | 71 | Passive Control Of Annealing In Polymerase Chain Reaction Using Phase Changing Materials | B Indulakshmi |

Track 8 – Smart Cities

Session 2F

Venue: VI

Date: 12/03/2022, 11.15 AM – 12.45 PM

Google Meet joining info

Video call link: <https://meet.google.com/kgm-sway-xgn>

Or dial: (US) +1 614-943-3046 PIN: 220 435 546#

| SI No | Paper ID | Paper Title | Authors |
|--------------|-----------------|--|--------------------|
| 1 | 134 | Smart Bridges Based On Bridge Information Modelling | Saju S |
| 2 | 245 | Virtual Smart Canteen System | Tanay Bagayatkar |
| 3 | 348 | Space Syntax Analysis Of Total Connectivity Through The Evolution Of Bag Bazar Street, Kolkata (1746-2020) | Shilpi Chakraborty |