

2023 Joint APEMC & INCEMIC

Venue: Sheraton Grand

Bangalore, India

May 23rd 2023 (Tuesday)

Registration opens : 8:30		
09:00-10:30	<p>Inauguration Conference Chief Guest Speech: S Ranganathan , Executive Vice President, L&T, Mumbai Keynote Address : Janet O’Neil, Marketing Communications, ETS-Lindgren, USA SEMCE(I) Awards Inauguration of Exhibition Venue: Grand Ballroom</p>	
10:35 – 11:00	Tea Break	
11:00 - 11:30	<p>PLENARY TALK 1 Venue: Grand Ballroom Title: What’s new with EMC Tests for Vehicles Speaker: Garth D’Abreu</p>	
11:30 - 13:00	<p>Session M1: EMC in Space & Aeronautics Venue: Grand Ballroom Chair: Marwin Cutinho</p>	<p>Session M2: Automotive EMC Venue: Jupiter Chair: Prof Giordano Spadacini</p>
	<p>P98 - Achieving EMC in Spacecraft with Stringent EMC requirements Pallavi Y, Raghavaiah Vaddi, Murthy P V N, Renuka R, Jeyanthi Rajesh and Ramananda V Nadagouda</p>	<p>INVITED TALK 1 Electrification – What the future holds for an EMC Engineer? Vignesh Rajamani</p>
	<p>P97 - Prediction of Radiated ESD fields in a typical Navigation Spacecraft Mini R L, Raghavaiah Vaddi, Sowjanya P, Murthy P V N, Renuka R, Jeyanthi Rajesh and Ramananda V Nadagouda</p>	<p>P63 - EMC Chambers for E-Vehicles: Implementation Options for E-Motor and E-Axle Test Systems Garth D'Abreu D Abreu and Karuna Jirly</p>
	<p>P96 - Noise measurements at different Satellite Interfaces due to Solar Array Switching Strings Sowjanya P, Himanshu Garg, Ashok Kumar Varla, Raghavaiah Vaddi, Binu D, Pallavi Y, Mini R L, Renuka R, Jeyanthi Rajesh and Ramananda V Nadagouda</p>	<p>P38 - Vehicle radiation prediction model based on ICTPSO-BP method Xie Yaofeng, Zhang Rong and Wang Zhuang</p>
	<p>P69 - Spacecraft charging analysis for Chandrayaan-2 Mission Himanshu Garg, Vaddi Raghavaiah, Sowjanya P, P.V.N. Murthy, Renuka R, Jeyanthi Rajesh and Ramanagouda V Nadagouda</p>	<p>P28 - Predicting Radiated Emissions from an Electrical Drive System Giorgi Tsintsadze, Haran Manoharan, Daniel Commerou, Brian Booth, Marin Kerry and Daryl Beetner</p>
13:00-14:00	LUNCH BREAK	
14:00-14:30	<p>PLENARY TALK 2 Venue: Grand Ballroom Topic: Challenges & Outlook on Electromagnetic Integrity for Advanced IC & Heterogeneous Integration Speaker: Er-ping Li</p>	
14:30-16:40	<p>Session M3: EMC Measurements & Environment Venue: Grand Ballroom Chair: B N Prakash</p>	<p>Session M4: Computational Electromagnetics & Modeling for EMC Venue :Jupiter Chair: Justin Sagayaraj</p>
	<p>P14 - Investigation of Influence on Radiated Emission Measurement by Unbalanced VHF-LISN Shinichi Okuyama, Nobuo Kuwabara, Kunihiro Osabe, Toshiki Shimasaki and Hidenori Muramatsu</p>	<p>INVITED TALK 2 A New Pairing-free Approach for Two-dimensional Direction of Arrival (DOA) Estimation in MIMO Systems Lijun Jiang</p>

		[online]
	P71 - Electrical Constant Measurement of Soft Materials Put Between Two Circular TE01 Mode Waveguide Open Ends Yu Iwagaki and Atsuhiko Nishikata	P26 - Mode-decomposition-based Equivalent Via (MEV) Model and MEV Model Application Range Analysis Chaofeng Li, Kevin Cai, Manish Kizhakkeveetil Mathew, Mehdi Mousavi, Bidyut Sen and DongHyun Kim
	P62 - EMC Anechoic Chamber Modeling and Design for Optimized Performance Zhong Chen Chen and Karuna Jirly	P15 - EMC Simulation Case Studies - Portable Transmitter Test Failure Analysis Kalivaraprasad Reddy and Lin Biao Wang
	P11 - Four-Port SOLR Calibration Algorithm for Symmetric GSSG Probes Jiefeng Zhou, Ling Zhang, Da Li, Junhui Chen and Er-Ping Li	P83 - Electromagnetic Characterization and Mapping of Electrical Properties for Geo Materials at Radio Frequencies Garvit Mishra, Dr. Anudeep Bellary, Rakesh Kichouliya, Shiva Shasta Rai and Dr. Devendra Chandra Pande
	P23 - Reliable Electromagnetic Compatibility Near-Field Probing Bench Testing of Electronic Parts Francis Bongo, Michael Daan, Gerrymie Tampus and Joseph Karl Salva [online]	P57 - Analysis and Modeling Framework of Common Mode Noise in a Three-phase Motor System Manish Kizhakkeveetil MathElectromagneticew, Xin Yan, Yuandong Guo, Tanner Fokkens, Li Shen, Daryl Beetner and DongHyun Kim
	P51 - Experimental Verification of Characteristic Mode Analysis (CMA) using Reverberation Chamber Haran Manoharan, Xu Wang, Matthew Wu, Jagan Rajagopalan and Chulsoon Hwang	P54 - Analysis of Capacitor non-idealities on PDN performance Poonam Kshirsagar, Kaushik Patra, Sayantan Dhar and Bibhu Nayak
16:40-16:50	TEA BREAK	
16:50-18:00	Session M5: Ship and Railway EMC Venue: Grand Ballroom Chair: Altaf	Session M6: Wireless Communication EMC Venue :Jupiter Chair: Arthi Krishnamurthy
	P49 - EMC Design for a Ship Borne Real Time Embedded System Abhinandan Sarkar, Shiva Rai, Jayabrata Chakrabarty and Sheikalthaf M	INVITED TALK 3 Measurements and Modeling of 5G FR2 (>24GHz) Systems: Challenges, Observations, and Explanations even management can understand John Ladbury
	P67 - Electromagnetic Environment in a Stationary Ship Dipankar Dan, Jyoti Prakash, Mahesh Chandra Arya and Satyajit Chakrabarti	P3 - Position-Based Optimization of the Electromagnetic Channel Effective Rank for MIMO Systems Jinyan Ma, Ruifeng Li, Da Li, Ling Zhang and Erping Li
		P43 - Dual Stop Band and Narrow Pass band FSS Structure for Shielding Sub-6 GHz 5G Band Signals and Reduce EMI to Radio Altimeter Rakesh Roshan, Rahul Gupta and Dr. M. Jaleel Akhtar

May 24th 2023 (Wednesday)

Registration opens : 8:30		
9:00-9:30	PLENARY TALK 3 Venue: Grand Ballroom Topic: Intense electromagnetic waves generation, transmission and coupling Speaker: Archana Sharma	
09:30-11:10	Session T1: IC & Semiconductor EMC Venue: Grand Ballroom Chair: Suba Rao , BEL	Session T2: EMC and Antennas Venue: Jupiter Chair: Nidhi Sood , TBRL
	INVITED TALK 4 EMC tests of transceiver ICs Atsushi Tomishima	INVITED TALK 5 Mode Filtered Site VSWR for Above 18 GHz EMC Site Evaluation Using Compressed Sensing Zhong Chen
	P8 - Research on Simulation of Conductive Immunity of IO Control Module of Digital Control Circuit Based on ARM Xiao Yang, Zhou Zhongyuan, Sheng Mingjie, Zhou Qi, Ren Jinjing and Zhao Wei [online]	P77 - Off-Band Harmonics Mitigation Techniques to Reduce Radiated EMI for a Dipole Antenna Rajesh K. Singh, Sathishkannan P. and K. P. Ray
	P16 - A Method to Measure the Electromagnetic Emission Induced by Electromagnetic Interference of Integrated Circuits Daniel Kircher, Nikolaus Czepl, Dominik Zupan and Bernd Deutschmann	P10 - Beam-steering Array Design for Adaptive Antenna Applications using E-Shape Slot Antenna Vidya Kodgirwar, Kalyani Joshi and Shankar Deosarkar
	P17 - Procedure for the Selection of Decoupling Capacitors Bernd Deutschmann, Nikolaus Juch and Gunter Winkler	
11:10-11:30	TEA BREAK	
11:30-13:00	Session T3: IC & Semiconductor EMC Venue: Grand Ballroom Chair: C H Srinivas, LRDE	Session T4: EMC and Antennas Venue: Jupiter Chair: Sandeep Satav, RCI
	INVITED TALK 6 The buzz around EMC of Integrated Circuits and the quadrivium Abhishek Ramanujan	INVITED TALK 7 Recent Advances in Robotic Antenna Measurements Dennis Lewis
	P25 - Prediction of Conducted Emissions from Various DC-DC Converters by Using Noise-Source Equivalent-Circuit Model Yoshitaka Toyota, Yanyu Jin, Shuqi Zhang and Kengo Iokibe	P59 - Half TEM horn Antenna for Compact Pulsed Transformer based UWB System Sandeep Kumar Singh, Romesh Chandra, Sabyasachi Mitra, Senthil Kalyanasundaram, Rajendra K. Rajawat, Samir Sahoo, Rishi Verma, Pankaj Deb, Amitava Roy and Archana Sharma
	P48 - Analytical Modeling of Time Interval Error in CMOS Inverters in presence of Supply and Ground Variations Vinod Kumar Verma and Jai Narayan Tripathi	P60 - Modern 5G Millimeter Wave Antenna Array Evaluation in Near- and Far-Field Environments Jari Vikstedt Vikstedt and Karuna Jirly
	P73 - Investigating the Use of Frequency-Modulated Disturbance Injection in Electromagnetic Immunity Testing of Integrated Circuits Daniel Kircher, Fabio Rosenmayr and Bernd Deutschmann	
13:00-14:00	LUNCH BREAK	

14:00-14:30	PLENARY TALK 4 Venue: Grand Ballroom Title: Assessment of the vulnerability of Critical Infrastructures against Intentional EMI Speaker: François Volery, Montena, Switzerland	
14:30-16:10	Session T5: Automotive EMC Venue :Grand Ballroom Chair:: Cdr. Sanjay, ETS, India	Session T6: Computational Electromagnetics & Modeling for EMC Venue: Jupiter Chair: Zhong Chen, USA
	INVITED TALK 8 EMC Simulation for Power Converters and Electric Drives Jan Hansen	INVITED TALK 9 Modeling techniques for EMC Naoto Ishibashi
	P47 - Analysis and Improvement Techniques of EMI Behavior for Power Conversion System of EV DC Chargers Han-Nien Lin, Tzu-Hao Ho, Yu-Ming Wei, Qain-Yu Ye, Cheng-Hao Huang, Wei-Yen Chang, Ming-Yu Hsu, Ren-Hui Liao, Yun-Shan Cai, Yuan-Fu Ku, Hung-Yeh Chang and Liang-Yang Lin	INVITED TALK 10 Applications of Simulation in EMI and EMC – Maximizing Value Using Machine Learning and Digital Twin Techniques Brian Woods
	P99 - Evaluation of Simulation-based Digital FrontLoading for Conducted Emission Challenges Anjay Prasad, Jay Pandya, Aishwarya Gavai, Sirajudheen V, Anoop Adhyapak, Mahesh Bisht, Anto Davis and Manoranjan Sahoo	P19 - A Method of Limit Decomposition on Electric Field Radiation Emission for Electronic System Hao Chen, Yaoyao Li, Shaoxiong Cai and Youwei Meng
	P56 - Wide-band Kriging based Optimization for EMC of a Half Bridge Buck Converter Suguna Sree Nukala, Akash Akash, Dipanjan Gope and Jan Hansen	P27 - Sensitivity Based Reduction of Equivalent Electrical Circuits in Power Electronics Application Bibhu Prasad Nayak Nayak, Sayantan Dhar, Andreas Klaedtke and Julian Buschbaum
16:10-16:30	TEA BREAK	
16:30-17:50	Session T7: EMI/EMC Protection & Shielding Venue: Grand Ballroom Chair: Archana Sharma, BARC	Session T8: Signal Integrity & Power Integrity Venue: Jupiter Chair: S L N Murthy
	P78 - An Ultra-Wideband SSL-FSS with Band Reject and Flexible Characteristics for Radome Applications Jayanandan T and Zachariah C Alex	P84 - Crosstalk Reduction in Coupled Microstrip Lines using TT-shaped DMS Approach Lalit Kumar Baghel, Suman Kumar, Seyit Ahmet Sis and Jingoek Kim
	P80 -Conducted noise reduction using trigger modulation in copper vapour laser Dheeraj Kumar Singh, Rajasree Vijayan, Jaya Mukherjee and Vinod Singh Rawat	P89 - Enhanced Signal and Power Integrity using Novel Planar EBG design Manisha Ravindra Bansode and Surendra S. Rathod
	P88 - Multiband Microwave Metamaterial Absorber for EMI Reduction Sathishkannan P., Rajesh K. Singh and K. P. Ray	P92 - Impact of Discontinuity in the Ground on the Signal Integrity of 100G PAM4 Ethernet Hansel Desmond Dsilva, Sasikala J, Pratik Khurana, Diksha Singh, Ragul Manogaran, Sivasankar S, Amit Kumar and Nikesh Shah
	P91 - Spoof Surface Plasmon Polariton Transmission Lines for EMI Reduction Somia Sharma, Rajesh Kumar Singh, Ananjan Basu and S K Koul	P93 - EMI Analysis of via stub resonance in a Multi-layer PCB design Siva Krishna Singamsetty, Namratha Prakash, Akash V M and Venkatesha L
18:00-21:00	Cultural Program, Cocktails and Banquet	

May 25th 2023 (Thursday)

Registration opens : 8:30		
9:00-9:30	PLENARY TALK 5 Venue: Grand Ballroom Topic: EMC & Wireless Regulation and Test Methods - An India Scenario (MTCTE-TEC, BIS) Speaker: R Lenin Raja	
09:30-11:00	Session W1: EMC in Military Venue: Grand Ballroom Chair: Brig. Samir Verma, ACE, Mhow	Session W2: ESD and Transient-methods in EMC Venue: Jupiter Chair: Brian Woods, Altair
	INVITED TALK 11 Military Aerospace EMI/EMC Testing Mark Mifsud	INVITED TALK 12 Key parameters and requirements for Electrostatic Discharge test system performance verification according to IEC 61000-4-2 Adrian Maţoi
	P5 - Radiated emission characterization of LED CFL and Incandescent Bulbs Sachin Kumar and Meena Kumar	P2 - ESD Tolerance Improvement of Power Module using Clamp Diodes Built into Control IC Toshiya Tadakuma, Yuji Ogawa, Michael Rogers, Junichi Murakami, Priyesh Sah and Motonobu Joko
	P61 - Susceptibility study of EM polarization on UAV Pankaj Deb, Premananda Dey, Rohit Shukla, Rishi Verma and Archana Sharma	P31 - Electrical Fast Transient (EFT) Radiation Mode Coupling and its impact on the EUT Senthil Kumar Ravi Shanathi, Sambasivam Soundararaju and Manivanan Rajendran
	P81 - Comparative Study of CS114 Test as per MIL-STD 461D to G Requirements, and Experimental Result Comparison for Different Test Conditions Chandan Kumar and Meena R. Kumar	P33 - Application of TVS Models for SEED Simulation of a Variety of TVS Devices Li Shen, Yang Xu, Steffen Holland, Sergej Bub, David Pommerenke and Daryl Beetner
11:00-11:10	TEA BREAK	
11:10-12:30	Session W3: High Power Electromagnetics Venue: Grand Ballroom Chair: Dr. S K Datta, MTRDC, DRDO	Session W4: EMC Management & Standards Venue: Jupiter Chair: Cdr. Lawrence, Indian Navy
	P24 - Effect of Aperture Polarization on Lightning Electromagnetic Field Enhancement inside Building Structures at Near and Far Striking Distance Anjitha V and Sunitha K	INVITED TALK 13 Electromagnetic Compatibility in Microsatellites V. Senthil Kumar
	P37 - Experimental and Numerical Validation of an indoor EMP Simulator David Martinez, Fernando Albarracin, Ali Yaqoob, Aysha Alneyadi and Islem Yahi	P45 - Unified EMC Assurance Case to Assure Safe and Effective Medical Devices with regard to Electromagnetic Disturbances Vikas Ghatge
	P66 - Design and Development of 150kV Solid State Pulse Modulator Bhushan M Barapatre, Gopal Das and B Maurya	P64 - Advanced Statistical Methodology to Analyse EMI/EMC Test Data for Inter-laboratory Comparison Chokkareddy Thammaiah, Murali Krishna Kalvakunta and Sumandra Ghosh Choudhury
	P86 - EMC and protection of 1 MW klystron RF system for proton accelerator Dr. Manjiri Pande, Sandip Shrotriya, Shyam Sundar Jena, Shiju A and Nirranjan Patel	P94 - Revised EMI/EMC Test Standard for ISRO Spacecraft subsystems Raghavaiah Vaddi, Murthy P V N, Renuka R, Jeyanthi Rajesh and Ramananda V Nadagouda
12:30-13:30	LUNCH BREAK	
13:30-15:10	Session W5: EMI/EMC Protection & Shielding Venue: Grand Ballroom Chair: Adrian Maţoi	Session W6: Signal Integrity & Power Integrity Venue: Jupiter Chair: Bernd Deutschmann
	P30 - Research on Influence of HV-AN Shielding Box to Radiated Emission According to CISPR 25	P18 - A Study of Signal integrity on Hybrid Land Grid Array Socket Connector Yu Bi, Shitao Liu and Bi Yi

	Haiming Liu, Rong Zhang, Quan Cheng, Li Jiang, Weimin Wang and Yifu Ding P35 - A Resistive Pattern Based Microwave Absorber Satya Prasad Mishra and Sudipta Maity	P13- BP-NGD Signal Integrity Application for RLC-Cable Parasitic Dispersion Reduction Taochen Gu, Fayu Wan, Blaise Ravelo, Preeti Thakur, Atul Thakur, Fayrouz Haddad, Mathieu Guerin and Wenceslas Rahajandraibe [online]
	P36 - Air Vent with Non-uniform Cross Section for Improved EMI Shielding and Air Flow Jianquan Lou, Alpesh Bhobe, Jerry Pianin and Joel Goergen	P52 - Analysis of Voltage Regulator Module (VRM) Noise Coupling to High-Speed Signals with VRM Via Designs Junho Joo, Manish K. Mathew, Soumya Singh, Seema Pk, Arun Chada, Bhyrav Mutnury, Chulsoon Hwang and DongHyun Kim
	P50 - Simulation Modeling for Radiated Emission of USB cable Enabling Shielding Impact Investigations Yu Song, Tao Liang, Ziqian Yin, Zhihao Xi, Shuang Tian and Yanzhao Xie [online]	P65 - Demystifying the Influence of Channel Components on Signal Integrity (SI) Margin Sanjay Kumar, Mallikarjun Vasa, Sathvika Bandi, Vijender Kumar, Naga Hara Sathya Sree Tammisetti, Sukumar Muthusamy, Bhyrav Mutnury, Arun Vignesh Palanichamy and James Chen
	P70 - Indium Tin Oxide based Optically Transparent Wide Band Flexible Circuit Analog Absorber for Optical Window Applications Inbavalli V P, Sureshkumar T R and Zachariah C Alex	P72 - DDR5 Electrical Challenges in High-Speed Server Design Douglas Winterberg, Bhyrav Mutnury, Vijender Kumar and Tom Chen
15:10-15:30	TEA BREAK	
15:30-16:30	Session W7: Design for EMC Venue: Grand Ballroom Chair: Jens Medler P74 - Design strategies for Signal Integrity, Power Integrity and EMI EMC issues in Computing boards and Systems Sivanantham S and Manikant Chss P87 - Mitigation of EMI in High-Speed PCB designs with Differential Signals Dynamic Phase control Siva Krishna Singamsetty, Suresh Krishnasamy, Namratha Prakash and Kishore Kumar P95 - EMI Control of GDDR6 Design with Drive strength control and On-Die Termination Methods Siva Krishna Singamsetty, Namratha Prakash, Akash V M and Kishore Kumar Sekar	Special Poster Session - BARC Venue: TBD Chair: D. C. Pande
16:30-17:30	Panel Discussion: EMC in Aerospace Systems Moderator : Puneet Mishra, ISAC, ISRO	
17:30-18:00	Closing Remarks and Awards	