

17 DEC TUESDAY

08:30 AM **Registration**

09:40 AM **Keynote Sessions**

11:30 AM Technical Sessions

02:00 PM User Presentations

05:00 PM **Demo / New Office Visit**

06:30 PM Entertainment & Dinner



Hyatt Centric, Hebbal, Bengaluru



17th MORNING SCHEDULE



Registration 08:30 AM

Management Message:

09:15 - 09:40 AM Room : Hall 1



Mr Jean BélangerFounder, President & CTO
OPAL-RT Technologies



Mr Girish NanjundaiahManaging Director
OPAL-RT Technologies India

Keynote Sessions

The Energy Transport Information Nexus

09:40 - 10:00 AM



Dr Siddhartha MukhopadhyayProfessor
Indian Institute of Technology, Kharagpur

Cyber-Resilient Smart Grid Systems: Impact of Electric Vehicle Charging, Standards and Protocols

10:00 - 10:20 AM



Dr Rajeev SinghProfessor
Indian Institute of Technology (BHU)

Securing Critical Energy Infrastructure - A Cyber-Physical System (CPS) Perspective

10:20 - 10:40 AM



Dr Faruk Kazi Professor VJTI, Mumbai

Power Hardware in the Loop (PHIL) Simulations of Converter Interfaced Renewable Generation

10:40 - 11:00 AM



Dr Sarasij DasAssociate Professor
Indian Institute of Science (IISc)

High Tea / Demo Visit 11:00 - 11:30 AM

Technical Sessions

Securing the Smart Grid: Leveraging Simulation and Visibility for Cyber-Resilient Power Systems

11:30 - 12:00 PM



Mr Sunny Nair Advanced Solution Engineer Keysight Technologies

Simulation Tools & Test Benches: Advancing Research & Fostering Education

12:00 - 12:30 PM



Mr François BerthelotBU Manager, Eastern North America
OPAL-RT Technologies

State-of-the-Art Labs & Research Platforms Academic R&D Consultancy

12:30 - 01:00 PM



Mr Ashot Minasyan Chief Technology Officer Bitlismen



Mr Gevorg Parsyan Systems Engineer Bitlismen

RT24 ELECTRIFYING THE WORLD BEYOND REAL TIME

17th AFTERNOON SCHEDULE

User Presentations 02:00 - 04:40 PM

Importance of WADC in Renewable Rich Power System: A Real-time Case Study Using OPAL -RT

Dr SK Parida, Associate Professor, Department of Electrical Engineering, IIT Patna

Coherency Identification and Prediction of Out of Step Condition in Power System

Dr S.T. Nagarajan, Professor, Department of Electrical Engineering, Delhi Technological University

Coordinated Power Management in DC Microgrid using OPAL-RT

Dr Vijaya Bhaskar, Associate Professor, IIT (ISM) Dhanbad

Real-Time Simulation of Microgrids with the Integration of Solar Photovoltaic (PV) and Battery Energy Storage System (BESS).

Dr PESN Raju, Assistant Professor, School of Energy Science and Engineering, IIT- Guwahati

Multilevel Converter Development: simulation to Power Hardware Testing with OPAL-RT

Dr. Abhijit Kshirsagar - Assistant Professor, Mr. Abhishek (PhD), Department of Electrical Engineering, IIT Dharwad

Pulse Genration for Multilevel Inverter through OPAL-RT

Dr.J. Venkataramanaiah, Assistant Professor, Department of Electrical Engineering, SVNIT - Surat

Grid connected Multiport system using OPAL-RT

Dr. A. Hema Chander, Assistant Professor, Department of Electrical Engineering, NIT Puducherry

Advanced Control Strategies For Load Frequency Regulation In Renewable Energy

Dr Rajeswari R, Professor, Department of Electrical Engineering, GCT - Coimbatore

Hardware Prototype Implementation of Battery Charging System with DAB Converter along with Closed Loop Control

Dr Anbuselvi, Associate Professor, Department of Electrical Engineering, Anna University

Neural Network based Adaptive Control of DC-DC Power Converters

Dr Tousif Khan, Associate Professor, Electrical and Electronics Engineering, SRM AP

Research in VIT Chennai Using OPAL-RT

Dr. Nilanjan Tiwari, Associate Professor, School of Electrical Engineering, VIT Chennai

Power Hardware in the loop emulation of Permanent Magnet Synchronous machines

Dr. Arun Rahul S, Assistant Professor, Department of Electrical Engineering, IIT Palakkad

Wide-area Voltage Stability Assessment Using Loading Margin Sensitivity for Increasing Linear Load Levels and Wind Power Penetration.

Dr Raju Chintakindi, Associate Dean, Research & Industry Institute Interaction, Vaagdevi College of Engineering

An Overview of Power-Hardware-in-Loop based Experimental Validation Using OPAL-RT

Mr Aaqib Manzoor & Mr. Pratosh Patankar, Phd Student, IIT Bombay

Centralized Energy Management Scheme for Grid Connected AC/DC Microgrid

Chandrakant Bhatar, Research Scholar, VNIT

A Single Sensor-based Speed Sensorless Adaptive Step Size MPPT Control of a PMSG-based VSWECS

Mr.Balaji Mendi ,Alumni, NIT Rourkela



18 DEC

WEDNESDAY

08:30 AM Registration

10:00 AM **Keynote Sessions**

11:40 PM Technical Sessions

02:30 PM User Presentations

05:00 PM **Demo / New Office Visit**

06:30 PM Entertainment & Dinner



Hyatt Centric, Hebbal, Bengaluru



ECTRIFYING THE WORLD

18th MORNING SCHEDULE

Registration 08:30 AM

Management Message:

09:30 - 10:00 AM Room : Hall 1



Mr Jean BélangerFounder, President & CTO
OPAL-RT Technologies



Mr Girish NanjundaiahManaging Director
OPAL-RT Technologies India

Keynote Sessions

Digital Twin for the Indian Power System

10:00 - 10:20 AM



Mr Reji Kumar PillaiPresident
India Smart Grid Forum (ISGF)

HILS using OPAL-RT: A 15-Year Review of Advancements, Advantages, and Applications

10:20 - 10:40 AM



Scientist-'F' DHILS, RCI-DRDO

Rajesh Shankar Karvande

EV OS - Journey into the SDV universe

10:40 - 11:00 AM



Dr Himadri Bhushan Das Chief Solution Architect Electra EV

High Tea / Demo Visit 11:00 - 11:20 AM

Accelerating India's Energy Transition: Policy Strategies for Renewable Integration and Grid Decarbonization

11:20 - 11:40 AM



Mr Arun Kumar Choudhary
Scientist
Ministry of New and Renewable Energy

Technical Sessions

Latest Innovations for Power Electronics & eMobility (Traction, BMS and OBC) HIL Testing

11:40 - 12:10 PM



Mr François BerthelotBU Manager, Eastern North America
OPAL-RT Technologies

Securing the Smart Grid: Leveraging Simulation and Visibility for Cyber-Resilient Power Systems

12:10 - 12:40 PM



Mr Sunny Nair Advanced Solution Engineer Keysight Technologies

Customized Test Benches: The Key to Customer-Centric Solutions with OPAL-RT

12:40 - 01:10 PM



Mr Sameer SinghTechnical Head
OPAL-RT Technologies india

Networking Lunch / Demos

01:10 - 02:10 PM

RT24

18th AFTERNOON SCHEDULE

Keynote Sessions

Using OPAL-RT HIL Benches in ARAI 02:10 - 02:30 PM



Ms Ujwala Karle Deputy Director ARAI

User Presentations 02:30 - 04:00 PM

Bridging Theory and Practice: Real-Time Testing of Electric Motor and Generator Controllers

Mr. Muthukumar MurthySystems Engineering Manager
Honeywell Technology Solutions

Revolutionizing EV Batteries: The Power of Software-Defined BMS

Dr Mukesh SinghProfessor
Thapar Institute of Engineering and Technology

Genset controller software functional testing on OPAL-RT bench for multiple topologies

Ms. Pragati Raut & Mr. Subodh Kadu Test System Engineers Cummins India Pvt. Ltd.

Using OPAL-RT for building Digital Twins

Dr Amitava GuptaProfessor (Power Engg.) & Director (SNSA)
Jadavpur University

Technical Sessions

A Platform-Based Approach for DC Fast-Charging Systems Test Solutions

02:30 - 03:00 PM

Mr Karthik SP Section Manager -JKAI National Instruments (NI) Turnkey Training Platforms for Power generation & Distribution

03:30-04:30 PM



Mr Ashot Minasyan Chief Technology Officer Bitlismen



Mr Gevorg Parsyan Systems Engineer Bitlismen

Power Distribution with Bitlismen



DEMONSTRATION DETAILS

DEMOS
Real-Time Simulation of Hybrid CMDE and BMS for Automotive
Future of Transportation : eVTOL Flight Simulation and Control Testing
Electric Vehicle HIL Testing of Power Train and On Board Charger
Real-Time Flight Dynamics Simulation with Avionics Bus Integration
Cybersecurity readiness of the GHOST microgrid with HYPERSIM
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Povolutionizing IPP Integration with Smart Invertor Control Toolbox
Revolutionizing IBR Integration with Smart Inverter Control Toolbox
LUL Testing of DDC (Devery Dignt Controller) using ODAL DT
HIL Testing of PPC (Power Plant Controller) using OPAL-RT
Power-Hardware in Loop demonstration with OPAL-RT and Bitlismen
Solar Power Generation with Bitlismen
Wind Power Generation with Bitlismen
Power Transmission with Bitlismen