

स्मार्ट ग्रिड, स्मार्ट मीटर, संचार प्रौद्योगिकी
और साइबर सुरक्षा पर राष्ट्रीय सम्मेलन
और

विद्युत क्षेत्र में साइबर सुरक्षा पहल पर एक दिवसीय कार्यशाला

National Conference on

**SMART GRID, SMART METER, COMMUNICATION
TECHNOLOGIES AND CYBER SECURITY
&**

One day workshop on

CYBER SECURITY INITIATIVES IN THE POWER SECTOR

Conference: 14-15 February, 2024

Workshop: 16 February, 2024

स्थान: सीपीआरआई, बेंगलुरु (केवल भौतिक मोड) Venue: CPRI, Bengaluru (Physical Mode only)



Organised by



Technical Co-sponsor



केन्द्रीय विद्युत अनुसंधान संस्थान

CENTRAL POWER RESEARCH INSTITUTE

(विद्युत मंत्रालय भारत सरकार / Ministry of Power, Government of India)

प्रो. सर सी वी रामन रोड, पो बा सं. 8066, सदाशिवनगर डाक घर

Prof. Sir C V Raman Road, P B No. 8066, Sadashivanagar Post Office

बेंगलुरु / Bengaluru – 560 080

www.cpri.res.in

CPRI PROFILE

Central Power Research Institute was set up in 1960 by the Government of India to function as a National organization for applied research in power sector and to serve as an independent body for the testing and certification of power sector related equipments. It is a premier research and testing institute in the field of power sector meeting the expectations of industries and the nation. CPRI laboratories have modern testing equipment to meet the testing requirement as per National and International standards. It has been offering its services for over six decades to the power sector in its quest for innovation, new product development, import substitution, quality assurance etc. CPRI is accredited by many International bodies and test reports issued by CPRI are accepted worldwide.

Also CPRI is imparting training and capacity building to the personnel of utilities, industries, manufacturers & academic institutions. CPRI has a vast experience and expertise in the areas of material characterization, simulation, diagnostic, calibration, system analysis and several other areas. The Head Office and the main set-up of the institute is at Bangalore and other units are at Bhopal, Hyderabad, Nagpur, Noida, Guwahati, Kolkata and Nashik. This conference is supported by all divisions and units of CPRI.

ABOUT THE ORGANIZING DIVISIONS

This conference is jointly organised by Metering Utility Automation Division and by Smart Grid Research Laboratory supported by all the divisions of CPRI, Bangalore and other CPRI units. CPRI has established Energy Meter testing facilities which caters to Type test, Acceptance test, Tamper test and additional tests as per tender specification of utilities, etc. Also, DLMS/COSEM Protocol testing for Static Energy Meters/Smart Meters as per National and International standards. The labs are accredited as per ISO/IEC 17025:2017 standards by NABL. The division also has NABL accredited calibration facility for both at Lab and at Site. Meter test facilities are available at Bangalore, Bhopal, Noida and Hyderabad units.

The Smart Grid Research laboratory offers testing services of Communication Protocol for Intelligent Electronic Devices (IEDs) / Gateways/etc. as per IEC 61850. The test facility is accredited by UCA IUG as Level 'A' laboratory with Independent Test Lab with certified ISO / IEC 17025: 2017 Quality Systems. The division has also facility for testing of RTUs / FRTUs for communication protocol and security conformance as per IEC 60870-5-101 / 104 with IEC 60870-5-7 security implementation and IEC 62351 for cyber security. The division also has facility for taking up AMI system testing which is being utilized by various AMI Service providers and funding agencies. The division also provides consultancy services for implementation of Smart Grid and AMI / smart meter implementation, Distribution Automation, SCADA System, Substation automation systems, Cyber security and Communication Systems for various utilities, industries and other organizations.

ABOUT THE CONFERENCE

The power utilities are taking up automation projects and AMI system projects under various schemes including RDSS and other schemes for making the power system network more smart and controllable. There are various technological and security aspects that are required to be taken care while implementing such projects. Effective communication network is the key for success of any automation and AMI project while Cyber Security plays an important aspect that is to be taken care from the design stage.

This face-to-face conference is organized to discuss following topics for the benefit of all stake holders including Power Generation, Transmission and Distribution utilities with the aim of sharing the emerging trends and technologies available in the market. This will also give a platform to share the knowledge and experience in the field implementations and the lessons learnt during the implementations and their best practices.

INVITATION FOR TECHNICAL PAPERS

It is requested to all researchers and professional to submit their research findings, field experiences and ideas in the form of technical papers in IEEE format to the programme coordinators (Smt. S Sudha / Shri Pradish M). The accepted papers will be published in the conference proceedings only if atleast one of the registered authors presents the paper in the conference as presentation is mandatory. The authors/co-authors, including the presenting author will be required to register individually by making applicable delegate fee for participating in the conference. **Few selected papers will be considered for publishing in "Power Research – A journal of CPRI".**

The conference topics for the technical sessions will include the following topics:

- Overview of Smart Grid
- Smart Metering Technology
- DLMS / COSEM Protocol
- AMR & AMI Technologies
- Net Metering
- Utility perspective on smart metering & billing efficiency
- Power System Security
- Digital Substation / Substation Automation Systems
- Cyber Security in Communication system
- Cyber Security for Smart Meters / AMI

WHO SHOULD ATTEND?

The conference is aimed at professionals of Power Utilities, Meter Manufacturers, Captive Power Plants (CPP), AMI Service Providers, Integrators, R&D Engineers, Test houses, Consultants, Regulators, Renewable energy producers, Faculties and students from Academic Institutes and other stake holders in power and energy sectors.

REGISTRATION FEE AND DISCOUNT FOR CONFERENCE

Sl.	Institutions	Registration fee
1	General registration fees	Rs.10,000+ 18% GST per head
1a)	For 3 participants	Rs.9,000+ 18% GST per head (including 10% discount)
1b)	For 4 or more participants	Rs.8,000+ 18% GST per head (including 20% discount)
2	Faculty Members from Educational Institutions	Rs.7,000+ 18% GST per head (including 30% discount)
3	Students of Educational Institutions	Rs.5,000+ 18% GST per head (including 50% discount)
4	Officials from State Govt./ Central Govt. / Public Sector Units / Power utilities	Rs.7,000+ 18% GST per head (including 30% discount)

Registration fee shall be paid in advance by online only through CPRI web portal, the link for making payment is: https://cpri.res.in/online-testing/pay_online

Note: On this payment portal, choose payment made against as "Training /Workshop/ Seminar/ Conference/ Webinar", select Unit as "CRTL, Bengaluru", division as "Metering and Utility Automation Division (MUAD)", Choose event as "Smart Grid, Smart Meter, Communication Technologies and Cyber Security for Power Sector, all other information as appropriate may be provided in respective fields.

It may please be noted that it may take 3 working days to reflect in CPRI account so kindly arrange to make the payment well in advance. Once the payment is made, bank transaction details may be shared with the conference coordinators.

Registration fee mentioned are for Indian nationals and it includes conference kit, course material, tea/coffee with snacks and lunch. Registration form may be completed in all respect and shall be sent to the program coordinators along with the registration fee details. Kindly use separate form for each participant, downloaded/photo copy of registration form is acceptable. It may please be noted that this is a non-residential programme. However, there is limited accommodation on twin accommodation facility available in our guest house at nominal charges and the same may be utilized on request on first come first serve basis.

Note: There is no separate participation fee for the one day workshop.

EVENT SPONSORSHIP OPPORTUNITIES

There is opportunity for sponsoring this event. The name and logo of the sponsor will be displayed at prominent locations in the venue of conference and in the conference proceedings.

Category/Type	Amount	Benefits
Diamond	Rs.8,00,000/-	This includes participation for 12 delegates, display of company logo at conference venue, at the entrance of the conference venue and at the lunch & refreshment area, printing of company logo on the delegate kit and conference proceedings, 2 page write-up about the company in the conference proceedings, Company logo in delegate badge, 3 minute of company movie played during break, Bigger size stall, one 5 minute presentation between technical sessions, note pad provided by sponsor with company logo and conference title for delegate kit, company fliers provided will be part of delegate kit.
Emerald	Rs.5,00,000/-	This includes participation for 9 delegates, display of company logo at conference venue, at the entrance of the conference venue and at the lunch and refreshment area and printing of company logo on the delegate kit and conference proceedings, 1 page write-up about the company in the conference proceedings, Bigger size stall, 5 minute presentation between technical sessions.
Platinum	Rs.2,00,000/-	This includes participation for 6 delegates, display of company logo at conference venue, at the entrance of the conference venue and printing of company logo on the delegate kit and conference proceedings, one standard size stall
Gold	Rs.1,50,000/-	This includes participation for 4 delegates, display of company logo at conference venue, at the entrance of the conference venue and printing of company logo on the delegate kit, one standard size stall
Silver	Rs.1,00,000/-	This includes participation for 2 delegates, display of company logo at conference venue, at the entrance of the conference venue and printing of company logo, one standard size stall.

One day workshop on CYBER SECURITY INITIATIVES IN THE POWER SECTOR

Workshop: 16 February, 2024

Venue: CPRI, Bengaluru

ABOUT THE ORGANIZING DIVISION

The Institute promotes applied Research leading to technology development in Power Sector. With the State-of-the-art infrastructure, CPRI has been carrying out R&D in the areas of electrical Power Generation, Transmission and Distribution in the endeavor to assist the Power Utilities to supply reliable, uninterrupted, safe and quality power to the consumers at affordable cost. The workshop is being organised by the R&D Management division, CPRI. The division has been instrumental in creating a conducive environment for collaborative research between R&D Institutions, Industry and Academia.

ABOUT THE WORKSHOP

The workshop is aimed at professionals of Power Utilities, Meter Manufacturers, Captive Power Plants (CPP), AMI Service Providers, Integrators, R&D Engineers, Test houses, Consultants, Regulators, Renewable energy producers, Faculties and students from Academic Institutes and other stake holders in power and energy who are interested in taking up R&D works and for taking forward the outcomes of the R&D Projects funded by CPRI to the end users and for commercialization.

The Workshop topics for the technical sessions will include:

- Exploring Cyber Security Challenges - Threats and Detection Strategies
- Quantification of Cyber Attack Risks with Strategies for Prevention and Mitigation
- Emerging Cyber Security Risks - Hardware Trojans
- Cyber Security Testing Facility at CPRI

REGISTRATION FOR WORKSHOP

There is no separate participation fee for participating in the workshop alone. However, registration for participating in the workshop is mandatory. Participants who would wish to participate in the conference and workshop or only for the conference shall make the registration fee as mentioned in this brochure. All participants shall fill in the registration form provided along with this brochure.

Workshop Coordinators

Please contact the workshop coordinators for registration and queries related to this workshop

Dr. TULIKA BHATTACHARJEE
Engineering Officer
R&D Management Division
tulikab@cpri.in / +91-9448800663

Shri ARKA CHAKRABORTY
Engineering Officer
R&D Management Division
arka@cpri.in / +91-9830717410

KINDLY VISIT CPRI WEBSITE FOR REGULAR UPDATES

IMPORTANT CONFERENCE DATES

- Cut off date for submission of full length Technical Paper: 30 January, 2024
- Confirmation of Acceptance of Paper: 05 February, 2024
- Conference Date and venue: 14 – 15 February, 2024 at CPRI, Bangalore (Physical mode only)

Note: All updates pertaining to this conference will be updated in CPRI website only. Please visit CPRI website for regular updates.

CONFERENCE COMMITTEE

Conference Patron

Shri B A Sawale
Director General, CPRI

Advisory Committee

Shri M.A.K.P. Singh CEA	Shri A K Rajput CEA	Prof. Laxmidhar Behera IIT Mandi	Dr. Tripta Thakur NPTI	Shri Prashant Chaturvedi MPERC
Shri Sunil Singhvi IEEMA	Shri Pushpendrasinh Zala Adani Energy Solutions	Shri Atul Kumar Bali NSGM	Smt. Valli Natarajan REC	Shri R S Rathore Genus Power
Shri Sundeep Tandon HPL Power and Energy	Shri Sridhar Tummala BCITS	Dr. S D Sudarsan CDAC	Shri Anand Shankar PGCIL	Prof. G. Gurunath IISc
Shri Jagadish Nanjappa ENZEN	Shri Yogesh Kumar MVVNL	Shri Udayan Ganguly CESC	Smt. S. Lakshmi TANGEDCO	

Technical Committee

Shri Vivek Goyal CEA	Smt. Lakshmi Eswari CDAC	Shri Rajnish Ameta Secure Meters	Dr. Anukram Mishra Genus Power	Shri Raman Garg REC
Shri Devendra Vyas HPL Power and Energy	Shri Vipin Mishra Capital Power Systems	Prof. Devender Singh IIT BHU	Prof. Trapti Jain IIT Indore	Prof. K. P. Vittal NIT Karnataka
Prof. Faruk A. S. Kazi VJTI	Shri Krishnan P V BCITS Pvt Ltd.	Shri Krishnan V Synergy Systems & Solutions	Shri Sarthak Mishra GMR	Shri Manav Arora Avon Meters
Shri Yashraj Khaitan Polaris Smart Metering	Shri Sujay Kulkarni Ashida Electronics	Prof. Naran Pindoria IIT Gandhinagar	Prof. Pradeep Yemula IIT Hyderabad	Prof. Anup Shukla IIT Jammu
Shri Vishwas Gaurav Siemens	Shri Vijayan SR Hitachi	Shri Shailendra Goyal ZERA	Shri Sunish Sukumaran GE T&D	Shri S.G.Sivaguru GE T&D
Shri Anil Kumar Kadam Schneider Electric	Shri Teja Chintalapati DSCI	Shri Venkateshwar Rao Visiontek	Shri Ashwani Duwedi Allied Engg. Works	

Organising Committee

Shri Ramjeet Singh CPRI	Shri Swaraj Kumar Das CPRI	Shri Gujjala B Balaraju CPRI	Smt. Sumbul Munshi CPRI
Dr. T Bhavani Shankar CPRI	Shri Manoj Kumar Jaiswal CPRI	Shri V Shivakumar CPRI	Smt. Deepa J Warudkar CPRI
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Shri Praveen Kumar K CPRI	Shri Shailesh Kapoor CPRI	Shri Shyam Agarwal CPRI	Shri Shivendra Kr. Sinha CPRI
Shri Riaz K I CPRI			

Conference Conveners

Dr. Amit Jain
Joint Director, SGRL, CPRI

Dr. P Kaliappan
Joint Director, MUAD, CPRI

Conference Coordinators

Please contact the coordinators for any queries and regarding sponsorship, registration, and paper submission.

Smt. S. Sudha
Joint Director, MUAD, CPRI
sudha@cpri.in / +91-9611843364

Shri Pradish M
Joint Director, SGRL, CPRI
pradish@cpri.in / +91-9448722416

मीटरन उपयोगिता स्वचालन प्रभाग / स्मार्ट ग्रिड अनुसंधान प्रयोगशाला
METERING UTILITY AUTOMATION DIVISION / SMART GRID RESEARCH LABORATORY

केन्द्रीय विद्युत अनुसंधान संस्थान

CENTRAL POWER RESEARCH INSTITUTE

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Prof. Sir C V Raman Road, P B No. 8066, Sadashivanagar Post Office

बेंगलुरु/Bengaluru – 560 080



MUAD, SGRL & R&D MANAGEMENT DIVISIONS
CENTRAL POWER RESEARCH INSTITUTE
PROF. SIR. C V RAMAN ROAD, PO BOX 8066,
SADASHIVANAGAR PO, BENGALURU – 560 080

REGISTRATION FORM

NATIONAL CONFERENCE

ON

SMART GRID, SMART METER, COMMUNICATION TECHNOLOGIES AND CYBER SECURITY

&

ONE DAY WORKSHOP ON CYBER SECURITY INITIATIVES IN THE POWER SECTOR

Conference: 14-15 February, 2024

Workshop : 16 February, 2024

www.cpri.res.in

I WOULD LIKE TO PARTICIPATE IN (Please tick any one):

ONLY CONFERENCE

CONFERENCE & WORKSHOP

Full Name of the Participant: _____

Designation: _____ Nationality: _____

Organization: _____

Full address of Organization: _____

(For Correspondence) _____

_____ PIN Code: _____

Mobile/Cell: _____ E-mail: _____

Payment details: Registration fee is to be paid online through CPRI web portal in advance.

The link for making the payment is: https://cpri.res.in/online-testing/pay_online

Note: On this payment portal, choose payment made against as "Training /Workshop/ Seminar/ Conference/ Webinar", select Unit as "CRTL, Bengaluru", division as "Metering and Utility Automation Division (MUAD)", Choose event as "Smart Grid, Smart Meter, Communication Technologies and Cyber Security For Power Sector, all other information as appropriate may be provided in respective fields.

It may please be noted that it may take 3 working days to reflect in CPRI account so kindly arrange to make the payment well in advance. Once the payment is made, bank transaction details may be shared with the programme contacts.

Note: There is no separate registration fee for participating in the workshop on 16th Feb 2024 for those participants who have registered for the conference.

Payment transaction No./ UTR No.: _____

Bank: _____ Amount: _____ Date: _____

Any other details: _____

The above payment is for _____ No. of participants from our organization.

Date: _____

Signature: _____

Filled Registration forms shall be sent to any of the following programme contacts:

CONFERENCE / CONFERENCE & WORKSHOP

Smt. S Sudha / Shri Pradish M
sudha@cpri.in / pradish@cpri.in

Kindly use separate form for each participant, downloaded / photocopies of this registration form is acceptable. Alternatively, registration can be made on line.

KINDLY VISIT CPRI WEBSITE FOR REGULAR UPDATES