

NATIONAL CONFERENCE ON HIGH VOLTAGE ENGINEERING & TECHNOLOGY (NCHVET2022)

February 25, 2022
(Online Mode)



Organized By

**Ultra-High Voltage Research Laboratory, Hyderabad
&
High Voltage Division, Bengaluru**



Central Power Research Institute (CPRI), INDIA
www.cpri.res.in

About CPRI

Central Power Research Institute (CPRI) set up in 1960 by the Government of India, functions as a National organization for applied research in power sector and also serves as an independent laboratory for testing and certification of power equipment. CPRI is a member of STL (Short Circuit Testing Liaison) of Europe and is accredited by M/s ASTA of UK. CPRI also provides consultancy services on various facets of power sector. CPRI has expertise in the area of simulation, diagnostics, system analysis and testing. CPRI laboratories have modern equipment needed for power system simulation, short circuit testing, diagnostics of equipment, materials engineering, seismic qualification, cables testing, electrical appliances testing, renewable energy products testing, meters testing, tower testing etc.

High Voltage Division of CPRI at Bengaluru undertakes quality assurance tests as per national (IS) and International standards, like BS, IEC, ANSI, Canadian standards etc. All the test facilities are of the state of the art type and compare well with the facilities available at other international laboratories like KEMA-Holland, CESI, Italy, IREQ, Canada etc., provides consultancy on transmission line insulation related problems and develops indigenous high voltage test and measurement systems. The division has good R& D track record with its technical personnel publishing many papers in International and National journals, conferences and symposiums. The laboratory has NABL and ASTA accreditation and serves clients from within the country and abroad.

UHV Research Laboratory of CPRI at Hyderabad was established in 1993 to undertake research on electro-technical, biological effect of UHV and also to undertake high voltage testing of equipment rated up to 1200 kV AC. The laboratory has successfully tested many 1200 kV and 765 kV transmission systems equipment viz. Instrument Transformers, Switchgear and Insulators. A ± 1200 kV / 200 mA DC Generator has been added to the existing facilities to undertake HVDC transmission line research and dielectric DC voltage testing of equipment rated up to ± 800 kV DC system. A doubly shielded indoor UHV laboratory with independent 1200 kV / 2A AC source with associated test and measuring equipment is established to undertake partial discharge, Corona, RIV, capacitance and tan delta measurement, accuracy measurements, etc. tests for all equipment rated up to 765kV system. Transformer oil test laboratory, Light Emitting Diode (LED) test facility and tower testing station at UHVRL Hyderabad are in advanced stage of completion.

About Conference

Ever increasing demand for electric power necessitates large generation capacity addition and commensurate increase in transmission and distribution network. The need for enormous increase in the transmission line capacity with minimum Right of Way requirement and maximum power density in the transmission line corridor could be visualized. It is projected that countries like India need transmission lines which carry more than 5000 MW over comparatively longer distances. It is understood that by increasing the transmission line voltage, power transmission of the desired order could be achieved. Transmission system by AC/DC necessitates the considerations of number of factors Viz., Design of line and substation equipment's with regard to insulation, Insulation coordination, overvoltage, electromagnetic field effects, environmental effects etc. It is also essential to consider proper testing & measurement, condition monitoring & fault diagnosis etc. tools for assessing the health of the large power equipment to ensure safe and reliable operation of the power system.

CPRI has been contributing significantly by way of research and testing of equipment for the development of high voltage transmission system in India. Recognizing the importance of various aspects involved in the field high voltage engineering, CPRI is organizing an online mode "**National Conference on High Voltage Engineering & Technology**" (**NCHVET 2022**), on **February 25** to provide a common platform to all stake holders Viz., manufacturers, utilities, researchers, policy makers, academicians, consultants, testing and O&M engineers etc. to share the latest developments.

Who Should Attend

The conference will be useful to share and acquire knowledge on latest developments for manufacturers of electrical equipment, manufacturers of test and measuring equipment, utilities, researchers, policy makers, academicians, research scholars, students, transmission power consultants/contractors, testing and O&M engineers etc.

Call for Papers

In order to achieve the objective of covering various aspects of high voltage engineering, technical papers are solicited on any subject pertaining to the scope of the conference that includes, but is not limited to, the following major topics:

1. Electromagnetic Fields: Computation, Measurement, Effects
2. Transients and EMC: Lightning, Switching, Very Fast Transient Over voltages (VFTO), Repetitive Transients
3. High Voltage Testing, Measurement, Digital Instrumentation & Software Techniques
4. High Voltage Insulation System: Gas, Liquid, Solid, Vacuum & Composite Dielectrics
5. Outdoor Insulation AC/DC: Insulators, Bushings, Environmental Effects
6. High Voltage Equipment: Power/Instrument Transformers, Switchgears, Cables, Capacitors, Rotating Machines, Surge Arresters, GIS etc.
7. High Voltage Insulation for UHVAC and UHVDC Systems
8. High Voltage Apparatus: Reliability and Maintenance, Condition Monitoring, Fault Diagnosis techniques, Remaining Life Assessment (RLA) studies etc.
9. High Voltage Applications in Smart Grid
10. New Insulation Materials
11. Aging, Space Charge, and Industrial Applications
12. Applications of Artificial Intelligence (AI) techniques in High Voltage Engineering
13. New Features and Special Interests in High Voltage Engineering

Paper Submission Guideline

Prospective authors are requested to submit a full paper no longer than six (6) pages as per CPRI Journal paper format available at http://cprijournal.in/public/journals/309/images/cpri_paper_templet_28-10-15.PDF. The paper should include key equations, figures, tables and references as appropriate. The papers must clearly state the objectives of the work, its significance in advancing engineering or science, and the methods and specific results in sufficient detail. Full papers in MS Word format as well as in PDF format may be sent to **Conference Secretariat**
Email: nchvet2022@gmail.com.

Accepted and presented papers are included in the conference e-proceedings. **Presented technical papers will be submitted for possible publication in CPRI Journal**. E-certificate will be provided to all participants.

Important Dates/ Deadlines

Last date for submission of full papers	: December 18, 2021
Notification of acceptance of the manuscript	: January 28, 2022
Last date for submission of final camera ready paper:	February 11, 2022
Last date for registration	: February 18, 2022
Conference Date	: February 25, 2022

Registration

Registration Fee		
SI.No	Category	Fee per participant
1	General	Rs.2360/-
2	Power Utilities/ Government Agencies	Rs.1770/-
3	Faculty members of Educational Institutes	Rs.1180/-
4	Students of Educational institutions	Rs.590/-
Details of concession fee for group participation		
5	General (6 to 10 participants from same organization)	Rs.1770/-
6	Power Utilities/ Government Agencies (6 to 10 participants from same organization)	Rs.1534/-
7	11 to 50 participants from same organisation	Rs.17700/- (Lump sum)
The fee is inclusive of GST		

Account Details for Online Payment: Please enter “NCHVET2022” in remarks while doing transaction which is mandatory

Account No.	34707702369
Acc. Holder Name	Central Power Research Institute, Hyderabad
Bank Name	State Bank of India, Peerzadiguda Branch, Uppal, Hyderabad
IFSC Code	SBIN0012664
Branch MICR No.	500002136

Click the link for filling registration form: <https://forms.gle/yCjtBScpsVFIBZDB8>

Last Date for Registration: 18th February 2022

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