

# International Tutorial on Diagnostic Measurements & Monitoring of Power Transformers

Date & Time: 12<sup>th</sup> – 14<sup>th</sup> October 2021 @ 15:00 IST (Online)

Revised Dates  
of  
Important Tutorial



## Keynote Speaker



**Adish Kr. Gupta**  
Chief General Manager  
POWERGRID

## Introduction

Power transformers are the vital assets and are also important from reliability point of view. Their failure generally result in loss of supply to customers and long lead times for replacement. Failure modes of transformers are wide and relate to equipment and components used in manufacturing these assets. Advanced diagnostic tools have been developed to establish the overall condition of transformers and give insight into the overall condition.

## Takeaways

Day 1 – 2: This Tutorial will give insight into various key failure modes of power transformer and the various advanced offline and online diagnostic methods which can be adopted to improve the overall reliability of the power system. Tutorial will cover discussion on Innovative methods and the advance tools adopted for condition assessment of power transformers.

**Day 3: Sharing of operational experience in the subject including case studies by K.S. Namboothiri**



**Michael Krüger**  
Consulting Engineer  
OMICRON, Austria  
Speaker



**G.K. Papneja**  
Application Specialist  
OMICRON, India  
Speaker



**K.S. Namboothiri**  
Former General Manager  
POWERGRID  
Speaker



**Sridhar Shenoy**  
Application Specialist  
OMICRON, India  
Speaker

Organizer



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## Background

Central Board of Irrigation & Power (CBIP) a premier Institution, setup by GOI in 1927 is serving the nation in the disciplines of Power, Renewable Energy and Water Resources Sectors for more than 94 years.

It is an exchange and knowledge bank for dissemination of technical knowledge & professional experience to help Engineers/ Professionals to update their knowledge and gain practical know-how.

## Unique Features of Online Trainings

- Training with high safety of participant's as no travel & travel related cost is involved.
- Expert's Panel discussions within participants.
- Learning and working balance as our sessions are planned for 2 hours per day.
- Well proven online platform with high cyber security.
- Live message chat, live voice chat, polls and quiz.
- Real time engagement.
- E-Certificates to the participants.

## Objective

- To disseminate technical knowledge through various modes, e.g., publication of technical documents, organizing conferences /workshops.
- To provide specialized training to the professionals in the Power, Renewable Energy and Water Resources Sectors.

## Address For Correspondence

Sh. A.K. Dinkar, Secretary, CBIP

Sh. Sanjeev Singh, Director (E), CBIP

Nodal Officer : Sh. Vishan Dutt, Chief Manager, CBIP

M: 9811431554, E-mail: [vishandutt@cbip.org](mailto:vishandutt@cbip.org)

Sh. S.K. Batra, Consultant, CBIP

M: 9811943812, E-mail: [batra@cbip.org](mailto:batra@cbip.org)

Central Board of Irrigation & Power

Malcha Marg, Chanakyapuri, New Delhi - 110021

Phone: 011 26115984/26116567, Fax: 011 2611 6347;

E-mail: [cbip@cbip.org](mailto:cbip@cbip.org)

## Sponsorship Opportunity

Platinum Sponsor: Rs. 1,00,000/-	Gold Sponsor: Rs. 50,000/-	Silver sponsor – Rs. 30,000/-
Free Login for the event: for Platinum Sponsor - up to 10 nos.	Free Login for the event: for Gold Sponsor - up to 5 nos.	Free Login for the event: for Silver Sponsor - up to 3 nos.
Speaking Slot : 10 minutes	-	-
Full visibility & wider publicity: through display of logo on the Brochure for email marketing for the virtual event, on the banner for display during the event, on the websites of CBIP/CIGRE-India.		
Sharing of data of participants: to have a chance to connect with new customers for business exposure.		
Coverage/ Publicity in Key Journal: i.e. Water & Energy Intl. Journal, which has a circulation of 10,000 to focused professionals & stakeholders.		
A4 size advt. for printing in monthly W&E Intl. journal (Special Position) single issue	A4 size advt. for printing in monthly W&E Intl. journal (Inside) single issue	-

## Facilitation Charges

The duration of the online training will be of 3 days (90 min. on each day) out of which 1 hr. will be for tech. session followed by 30 minutes for Q/A session.

Login fee for the participants is as follows:

Members*	Rs. 5,000/- per participant
(CBIP, CIGRE & AARO)	
Non Members	Rs. 6,000/- per participant
Students	Rs. 750/- per student
Note: 18% GST extra	

The program is limited to 200 participants, which will be on First cum First serve basis.

\*CPSUs, PSUs, Centre & State Utilities, Regulatory Commission, Research Institution and Key Pvt. Sector organization are member of CBIP.

## To Register

The perspective participants, desirous of attending the above event may register themselves by sending the following details to CBIP along with necessary payments:

Title of event, Name, Designation, Organization, Mailing address with Pin Code and Mobile no. / Fax /E-mail

Payments of facilitation charges should be made by bank transfer and cheque at par/Demand Draft drawn in favour of "Central Board of Irrigation and Power", payable at New Delhi.

### Account Details for Online Payment

Account No.	00031110004411
Account Name	Central Board of Irrigation and Power
Bank Name	HDFC Bank, 209-214, Kailash Building, 26, K.G. Marg, New Delhi 110001
IFS Code	HDFC0000003
MICR No.	110240001
Swift Code	HDFCINBBDEL
GST No.	07AAAJC0237F1ZU

### Note:

Registered participants will get link 1 day prior to event.

The Name of the event should be mentioned under subject in all the correspondence relating to this event. Also after making of the payment online in respect of the event, the details like UTR/Organization name to be furnished immediately.

# Speakers Profile

## DR. MICHAEL KRUEGER

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Michael Krüger works with OMICRON, Klaus, Austria since 1999. After working as product manager and head of engineering services, he is now consulting engineer for “Testing and Diagnosis of Electric Power Equipment”. He studied electrical engineering at the Technical University of Aachen (RWTH) and the Technical University of Kaiserslautern (Germany) and graduated in 1976 (Dipl.-Ing.). In 1990 he received the Dr. degree (PhD) from the Technical University of Vienna. Michael Krüger has more than 40 years of experience in high voltage engineering and testing and diagnosis on power and instrument transformers, rotating electrical machines, GIS and cables. He has published more than 50 technical papers about electrical measurement on power and instrument transformers, rotating electrical machines, GIS and cables and holds 15 patents. He is member of VDE for 40 years, CIGRE and Senior Member IEEE and works in several working groups of OEVE, IEC and CIGRE.

## G.K. PAPNEJA

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G.K. Papneja is currently the Regional Applications Specialist of Partial Discharge and Monitoring in South Asia. He has been associated with OMICRON for more than a decade and has extensive knowledge and experience in diagnostic testing of High Voltage Electrical Assets, including large Power Transformers and Power System Secondary Assets including Protection & Metering Devices. He is an active member of NSC B5 CIGRE India and has represented OMICRON in several National & International forums.

## K.S. NAMBOOTHIRI

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K.S. Namboothiri, CBIP Expert Panel Member on Transformers and Former General Manager, Power Grid Corporation of India Ltd, In his career spanning 40 years, he has worked in various functions such as Design, Erection, Testing, Commissioning, Operation, Maintenance, Trouble shooting, Repair of Power Transformers and Reactors up to 765 kV Voltage Level. He has contributed to setting up NABL accredited Insulating oil testing Laboratory at Hosur catering the requirement of Southern Region. He has contributed several Technical Papers in National and International conferences and participated in several committees/working groups at Regional and national in areas of Electrical condition monitoring of Power Transformers. He has actively involved in the project execution of several GIS/Conventional Sub Stations and its maintenance for the past 25 years. He was also team leader for trouble free operation and zero failure monitoring of Transformers and Reactors of Southern Region. Team member for taking up the study on life assessment of aged transformers & Reactors and expert panel for guidance to monitor this equipment to avoid catastrophic failures. He has served as task member for emergency restoration on failed switch yard equipment to reduce the outage and normalize the system at minimum time. Available as Transformer expert at Angamaly, Kerala for all practical solutions on trouble free operation and maintenance of Transformer.

## SRIDHAR SHENOY

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Sridhar Shenoy received his Bachelor's degree in Instrumentation Technology from University of Mysore in 1994.

He comes with > 25 years in this field of Testing & Diagnosis of High Voltage assets. He recently completed his 15 years of working with OMICRON

He is presently working as the “Application Specialist” for Power Transformer testing & Diagnostic applications for OMICRON in South Asia region He has authored no. of technical papers presented at National & International forums.

He is one of the leading trainers for OMICRON Academy on the topics of “Testing & Diagnosis for Power Transformers” & “Partial Discharge Measurements”