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Tel: 022 2493 6528/6529/0532 or Handphone : 98200 71173

IEEMA – Organisers of TECH-IT
IEEMA is the representative national organization of manufacturers of electrical, industrial electronics and allied equipment, which was founded in 1948. The first ISO certified association, IEEMA undertakes various activities, major ones being dissemination of information such as production statistics, government policy changes; representing industry’s views to the government; evolving price variation clauses; publication of IEEMA Journal, organising ELECRAMA exhibitions.
Fourth International Conference on Instrument Transformers
13-14 December 2018, Hotel Crowne Plaza, Gurgaon, New Delhi (NCR)

The Instrument Transformers Division of IEEMA (Indian Electrical & Electronics Manufacturers’ Association) takes this opportunity to announce the fourth International Conference on Instrument Transformers, TECH-IT 2018, to take place on 13-14 December 2018 at New Delhi, India.

TECH-IT 2018, once again brings with it, a common platform for designers, R&D personnel, Academicians, Manufacturers & Users. The conference discusses state-of-the-art designs, latest developments, trends in materials, upcoming technologies, digital instrument transformers, power VTs, best practices in manufacturing, processing, testing, diagnostics & condition monitoring techniques, etc. TECH-IT 2018 offers a unique opportunity to present your technical work, views and experiences in the areas of technological development and efficient use of ITs offering smarter solutions.

Objective
Instrument transformers play an elemental and essential role in the electrical protection and metering system. As the end user requires to be precise for both metering and protection, proper selection of the IT plays a vital role avoiding ‘over- specification’. Technology advances all the time, making the equipment more sophisticated, precise and user friendly. The use of modern technology is not only limited to manufacturing processes alone, but also in testing, installation/commissioning practices, applications, storage/maintenance practices etc. In view of progressive fourth Industrial Revolution under 4.0, use of IOT for automation robotic technology in manufacturing & handling of ITs can also be discussed.

The fundamental objective behind the theme of the conference is to deliberate regarding futuristic requirement of Smart Grid and smart metering. It is to ensure and decide for firm action plan for longer service life and Smart Grid ready product.

The key actions would be in the areas of understanding future needs, standard specification and procurement, standard design, design review, site maintenance, condition monitoring, diagnostics, service behaviour, failure and forensic analysis.

The conference will provide a favourable platform for networking, exchange of knowledge & performance experience as well as expectations by the user.

Technical Sessions
The conference shall comprise of 7 technical sessions besides inaugural & concluding sessions over two days. The topics to be covered will be as follows:

1. EMERGING TECHNOLOGIES
   a. Digital Instrument Transformers, Optical CTs and PTs
   b. Hybrid Instrument Optical CTs for smart grid application
   c. Digital substations – Role of ITs
   d. 1200 KV substation – Special design considerations
   e. Power Voltage Transformers
   f. Emerging technologies for dielectrics (SF6 gas, Esters, Synthetic oils, etc)
   g. Integration of ITs with smart grid
   h. Innovating online monitoring devices – smart instrument transformers
   i. Dry type MV class CTs and PTs
   j. Revisit on application of CVT in the era of OPGW communication.
   k. Integration of Digital IT with control and operating equipment

2. STANDARDIZATION, SPECIFICATIONS AND DESIGN REVIEW
   a. Specification for long term failure free performance
   b. Automation for design and drawings
   c. Design review methodology & requirement
   d. Futuristic specification for non-conventional / optical ITs
   e. Standardization of Digital ITs
   f. Transient performance of Instrument Transformers – design considerations / effect on system protection
   g. Rationalization of specifications for Instrument Transformers
   h. Selection of specifications based on application
   i. Trends in power system requirements
   j. CTs and PTs for tariff metering
   k. Standardization of terminations/ terminal connectors
   l. Review of existing standards and latest of standards (IEC/BIS/CIGRE/IEEE)

3. DESIGN/PROCESSING/ MANUFACTURING
   a. ITs for GIS application
   b. Instrument transformers for capacitor bank application
   c. HV Insulation systems
   d. Application of software for HV insulation design
   e. Dry type instrument transformers
   f. Consideration of reliability, safety and environment issues
   g. Techniques of hermetic sealing and its effectiveness, bellows, N2 etc.
   h. Challenges in design, construction & manufacturing
   i. Error free design
   j. Modern trends in manufacturing, new developments in processing techniques
   k. Explosion safe design / Improved safety design
   l. Live Tank and Dead Tank design of Current transformer

4. TESTING AND CALIBRATION
   a. Insulation diagnostic test
   b. Environmental testing
   c. Limitations of type testing and calibration facilities in India
   d. Type test requirements – manufacturer & user perspective (validity, applicability, etc.)
   e. Material characteristic & Testing of composite insulators
   f. Special Tests like Multiple Chopped Impulse, Thermal Stability, Temperature Coefficient
   g. Internal Arc Test – design requirement
   h. Issues & Challenges in Testing & calibration
   i. NABL requirement
   j. Testing guidelines at factory and at site.
   k. Utility’s feedback on test parameters & limitations.

5. TRANSPORTATION/ INSTALLATION/ COMMISSIONING/SITE TESTING
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