



CALL FOR PAPERS



Are you an electrical professional from the mining, industrial, power, defence, oil & gas, construction, transport, manufacturing or utilities industry?

We are looking for a number of electrical engineering professionals to present their technical topics at the upcoming Earthing Conference in the UK. Join your peers in a vigorous and positive exchange of views, building your career and public profile and contributing to European engineering practice!

Few topics generate as much controversy and debate as that of earthing and the associated topics of bonding, grounding, surge protection, shielding and lightning protection of electrical and electronic systems. Poor earthing practices can be the cause of continual and intermittent difficult-to-diagnose problems in a facility. This conference will explore these issues from a fresh yet practical perspective to help delegates reduce expensive downtime in their plant and/or equipment by identifying the correct application of these principles.

The aim of this conference is to demystify the subject of earthing and present the subject in a clear, straightforward manner. Earthing as a subject has been under-represented over the years and this event will attempt to remedy the gaps in technical knowledge and improve practices in the industry. The UK & Europe need a unified practical approach to earthing which can be commonly understood and widely applied.

We are seeking speakers who can cover design, installation, testing and inspection procedures for industrial and commercial power systems in detail. We also want to cover earthing and surge protection for telecommunications and IT systems and the impact of lightning including simple techniques for minimising its impact. Strategic and sensitive electronic equipment can be put out of service due to a single lightning-induced surge, resulting in millions of dollars of lost production and in addition necessitating expensive replacements.



Suggested topics:

POWER SYSTEMS

- System earthing
- Equipment grounding & earthing of structures
- Electrical safety earthing
- Static earthing
- Solid, impedance, touch potentials
- Electric shock
- Earth leakage protection
- Design
- Protection

EARTHING

- Design and testing
- Earthing electrodes
- Measurement
- Neutral earthing
- Corrosion problems in earthing
- Earthing of surge protection devices

BONDING

- Sizing conductors
- Parasitic & stray currents
- Interference
- Hazardous areas
- Inspection procedures
- Equipotential grids

EARTHING, COMMS & INSTRUMENTATION

- Protection of instrumentation
- Instrumentation, radio & telemetry transmitters
- Telephone networks
- IT & wireless networks
- Mobile radio networks
- System bonding

TESTING

- Earth resistivity
- Earth loop impedance
- Grid resistance
- Earth continuity

INSTALLATIONS

- High voltage & low voltage
- Substations
- Augmentation of buried grids
- Geotechnical issues
- Hazardous areas
- Mining and oil & gas
- Marine and offshore

- Mobile plant
- Domestic electrical wiring
- Transmission, distribution & rail

LIGHTNING

- Protection design
- Non conventional lightning systems
- Side flash and preventive measures
- Down conductor installation and termination
- Grid design
- Bonding
- Surge impedance
- Probabilistic risk factors
- EPR due to lightning
- Pitfalls of isolated earthing

STANDARDS & REGULATIONS

- Standards and best practice
- State and utility regulations
- The need for new standards
- Inspection and testing
- BS 50522, BS 7430, BS 7354,
- BS 7671 – UK Wiring Regulations
- IEEE Std 80, ENA TS 41-24

SOFTWARE

- Load flow studies
- Fault load studies
- Equipment sizing
- Earth potential rise

UPS SYSTEMS

- Power quality
- Standby sources
- Solid state systems
- Redundancy
- UPS configurations

SURGE PROTECTION

- Bonding practice
- Surge protection practice
- Positioning and selection of lightning/surge arrester

ELECTRICAL NOISE & MITIGATION

- Categories of noise
- Harmonics
- Frequency analysis
- Electrostatic/capacitive coupling

All submissions welcome.

IDC Events do not allow vendors to “sell” their products in training sessions but rather we aim to focus on practical applications and solutions – which is probably the best way to showcase your technologies and engineering skills. In particular, we are seeking practical case studies, technical content, applications and the newest developments in this critical subject.

Note: We are seeking papers that cover a selection of case studies and examples of real world working systems, and problem solving scenarios. Sales or product based presentations are not accepted.

This event is an excellent opportunity to network with your industry peers and for speakers to gain significant new information and techniques on earthing and related electrical safety.

What is required from you?

- A **100 word abstract**, which outlines the topic you, would like to present. This needs to be submitted electronically as soon as possible, to secure your place.
- Once your topic is approved, your **technical paper and PowerPoint slides** will be due six weeks prior to the event.
- Speaking slots are allocated on topic suitability and on a first come first served basis, so please register your interest today by emailing emma.cameron@idc-online.com.

For further information on this event or to discuss sponsorship opportunities contact:

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