

## Presented by two renowned experts

PROFESSOR MARK MACALPINE & DR JURIS RUNGIS



**Professor Mark MacAlpine:** Since 1973, has been at the Hong Kong Polytechnic University, starting off as a Lecturer, ending up as a Professor in the EE Department. He is now an Honorary Consultant of the Industrial Centre of the PolyU, a Guest Professor at Shanghai Jiao Tong University, a Visiting Scholar at Sydney University and an Associate Editor of the IEEE Transactions on Dielectrics and Electrical Insulation. His research interests continue to be in electrical corona, statistical aspects of spark and lightning paths, fibre-optic sensors and the condition monitoring of electrical plant.



**Dr Juris Rungis:** Since 1987 has been in charge of the high-voltage laboratory at the CSIRO, National Measurement Laboratory (now the National Measurement Institute). Since 2000 he has been manager of the Electricity Section. His research interests include high voltage measurement and testing techniques and high voltage insulation diagnostics. He is a senior member of IEEE, a foundation member of the Metrology Society of Australia and a Fellow of the Australian Institute of Physics. In 2005 he was elected chairman of IEC technical Committee 42, High-Voltage Testing Techniques.

## Summary of Course Content

- Insulation Co-ordination
- Breakdown Mechanisms
- Breakdown in Liquids
- Breakdown in Solids
- Breakdown across Surfaces
- Design of Cables
- Design of Bushings
- Design of Circuit Breakers
- Design of Insulators
- High Voltage AC and DC Generators
- HV Impulse Generators
- Partial Discharge Detection
- DGA of Oil Filled Transformers
- Furfural Analysis
- High Voltage Measurement and Testing
- Standards for Testing

The initial three days of the course will cover the theory underpinning the insulation design of high voltage equipment.

The final day will give a background of the methods used in testing to establish the conformity to the design standards by testing. This segment will be conducted at Australia's premier high voltage laboratory, The National Measurements Laboratory at Lindfield.

The Australian Power Institute and EEA will issue a Certificate of Attendance on completion

The course is recognised by Engineers Australia for Continuing Professional Development.



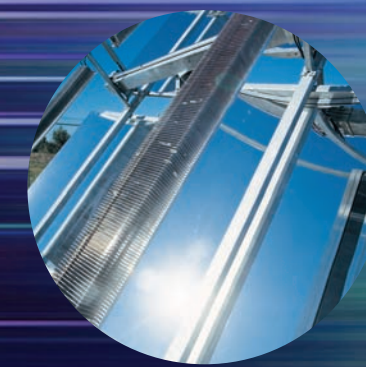
## • The Australian Power Institute

Engineering Education Australia (EEA)

Intensive Short Course

# High Voltage Engineering

Presenters – Prof. Mark McAlpine  
Dr. Juris Rungis



### Costs

\$1900 plus GST – Non-Members of API    \$1300 plus GST – Members of API

### Course Enquiries – API

Bryce Corderoy    Phone: (02) 9484 6356    Mob: 0419 400542    Email: bryce@chca.com.au

### Registration Contact – EEA

Frank Martinelli    Phone (03) 9326 9777    Fax (03) 9326 9888    Email: frankm@eeast.com.au

Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Organisation \_\_\_\_\_ Fax: \_\_\_\_\_

Sydney Marriot Hotel and National Measurement Laboratory  
14th to 17th August 2006