

WHAT IS TIC?

The Australasian Transformer Innovation Centre (TIC) is an initiative of The University of Queensland's Power and Energy Systems (PES) research group and committed Industry and academic participants.



We apply innovative research and industry experience together with professional training to help members operate their transformer fleets sustainably and efficiently.

TIC has a diversity of its industry member base, which ensures that the centre's focus spans all aspect of the life cycle asset management of power transformers.

GROWING MEMBERSHIP

35% of TIC members are Australian transmission and distribution companies, another 35% manufacture power transformers and key components with a global market, the remaining 30% of TIC members are national power industry associations, consultants and international technical publishers, researchers and educators from leading Australian universities.

Interest in TIC membership is growing monthly, with the latest enquiries including interstate transformer asset owners, leading international research organisations, interstate university researchers, global manufacturers and sub-suppliers of power transformers.

TIC's CPD courses are establishing a reputation across Australia and into South-east Asia, twenty three industry participants attended the third CPD course on Tap Changers in late June. Three more advanced CPD courses are planned to help it's members and industry staff, face the looming skills shortage.

TIC member's interest and participation in the six existing, industry driven research projects is also growing.

Members are "lining up" to participate in the first TIC Secondary research project into the Asset Management of Power Transformers in the presence of high penetration of solar PV and Wind power – due to increasing international concerns of high frequency harmonics from inverter connected renewables adversely impacting on power transformers.

Overall, it's been a great first year for TIC and its existing 22 members are looking forward to TIC delivering even greater value in the coming year.

ADVANCED CPD COURSE 12-13 NOVEMBER 2018

POWER TRANSFORMER HV BUSHINGS - DESIGN, MAINTENANCE AND RISK MITIGATION

Nine presenters from industry and academia will deliver the two day course, providing the desired balance between industry practicality and academic scientific understanding.

The course will be sectioned into areas of HV bushing design, mechanisms of failure, maintenance, failure statistics, factory & site testing.

KEY LEARNING OUTCOMES:

- Understand the basic design principles of HV Bushings.
- Learn the differences in technology for SRBP, OIP, RIP, RIS bushings and how these differences influence your maintenance and asset strategies.
- Be informed of the latest Australian HV bushing failure statistics.
- Understand the mechanisms of HV bushing failure.
- Learn how to detect bushing failures using offline techniques, such as the advantages of dissipation factor and capacitance at different frequencies.
- Learn practical methods to improve your bushing testing methodology.
- Understand online bushing monitoring techniques, what they measure, and diagnostic tools in common use.
- Learn what the common practices employed by other electrical utilities in: bushing life cycle management, testing, replacement practices and issues, determining end of life and justification to mitigate risks.
- Participate in group sharing activities and build your network of friends and technical experts.

HOW TO REGISTER

The online registration <http://www.itee.uq.edu.au/tic-cpd> or contact Ray Holzheimer, Manager, Australasian Transformer Innovation Centre, University of Queensland
E: r.holzheimer@uq.edu.au M: 0417 629 684

If you want to learn more about TIC and the benefits of becoming a member, visit: <http://www.itee.uq.edu.au/tic> or contact: Prof Tapan Saha, Director, Australasian Transformer Innovation Centre, University of Queensland -
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