

The Australasian Transformer Innovation Centre (TIC)



Drive your competitive advantage and enhance the performance of your transformer assets through:



Practical industry led research that generates breakthrough innovations



Ensuring you have the essential transformer skills for the future



Having access to key knowledge that delivers tangible strategic benefits and savings

Australasia's leading transformer innovation centre

Innovation program

The research program is designed to create innovations that meet the evolving needs of industry including:

- Decreasing the risk of transformer failure during normal and contingency events
- Reducing maintenance costs and extending life with improved condition monitoring.
- Investigating improved operation, performance and risks with mineral/ester oils
- Increasing transformer utilisation and working transformers smarter
- Investigating effects of renewable generation on transformer life and cyclic rating

Leading experts

Australia's leading transformer researchers and lecturers:

- Tapan Saha
- Chandima Ekanayake
- Hui Ma
- Shawn Nielsen

together with industry transformer practitioners:

- Ray Holzheimer
- Rob Milledge
- Christoph Krause
- Deepak Maini
- Michael O'Brien
- Thomas Smolka

Plus key engineers and scientists from utilities, manufacturers, testing and service companies.

Professional development

Basic transformer courses include transformer theory, designs and applications.

Advanced transformer courses include design, operation, maintenance, test, servicing, and life cycle management of:

- HV bushings
- Tap changers
- Mineral and ester oils
- Transformer testing
- Solid insulation
- Dielectric design

Courses are delivered by transformer experts from manufacturers, testing and service companies, utilities and universities.

Welcome to the Australasian Transformer Innovation Centre

The TIC centre opened its doors on the 1st July 2017. TIC has:

- completed 3 research projects
- has 6 industry sponsored research projects underway
- delivered nine continuing professional development (CPD) courses, with courses planned for 2020

The centre offers innovative research projects and CPD courses purpose built for the industry's future needs and delivered by acclaimed transformer experts.

The programs bring a total focus on best practice asset management and high performance. Member organisations will reap the benefits of this focus through reduced costs, increased asset performance, reliability and asset management breakthroughs.

The challenge

Transformer fleets across Australasia are ageing. For example, in Australia the fleet costs more than A\$200 million a year to maintain and its average age (28 years) is already 70% of a 40 year design life.

Every year around 12 transformers fail, some catastrophically involving fire or explosion, costing their owners millions of dollars.

Our mission

Our mission is to improve asset performance within modern electrical networks through innovative solutions and education. These will help to mitigate the risks that asset owners face and reduce the total cost of ownership.

We will achieve this by the provision and distribution of research findings together with professional training. The activities will be focused in an applied way by leveraging the collaboration between the diverse mix of centre members, including utilities, industry, universities, professional bodies and government.

The research and education opportunities that this industry led approach will create, will enable centre members to develop the knowledge and skills necessary to achieve their professional goals, improve the productivity of their organisations and provide leadership and service to their industry.

Membership

Membership is ideal for:

- Generation, transmission and distribution utilities
- Product manufacturers and service companies
- Renewables and consulting firms
- Industrial, mining and infrastructure organisations

Join today and put transformer innovation and performance at your fingertips!

Benefits of membership – gaining competitive advantage

- Access innovative transformer research solving tomorrow's challenges
- Empower employees with latest transformer know-how, learnt from Australia's experts
- Get hands-on experience with condition monitoring, dynamic loading and ester oil performance
- Reduce costs and increase performance through expert asset management breakthroughs

Opportunity for foundation long term membership at special introductory prices

- 20% saving in membership fees by committing to 5 year membership
- Complimentary first CPD course attendance every year, plus member discount
- Perpetual royalty free license to intellectual property generated by primary research projects
- Free access to and use and support of transformer assessment tools and applications generated at the TIC centre
- Eligibility to participate in centre's Steering Committee and Innovation/CPD committee



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CREATE CHANGE

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