

2025

AusEng

Business, Engineering & Scientific Services

ABN 34 113 823 537

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At AusEng, we specialise in the investigation of electrical and related systems in fire incidents, particularly in complex and challenging cases. Using a proven and systematic methodology, we help identify the role of electrical wiring, appliances, electrical energy storage systems (EESS), batteries (BESS), emobility and solar energy systems in fires. We also have extensive experience in handling fires involving internal combustion engines (ICE) and electric vehicles (EVs).

Our Capabilities

AusEng conducts thorough site and exhibit evaluations. We are equipped to respond quickly to fire site incidents, providing prompt assessments when needed. Our detailed reports are built on a meticulous process of fact-finding and analysis. With decades of practical experience in data collection, analysis and interpretation we integrate advanced engineering and scientific expertise into every project. We use leading universities and research institutions for specialised services, including chemical analysis, imaging, FTIR (Fourier Transform Infrared Spectroscopy), and SEM-EDX (Scanning Electron Microscopy with Energy Dispersive X-ray Spectroscopy) analysis.

Experience

In recent years, AusEng has helped police, the coroner, FRNSW, and NGOs. For the FRNSW fire investigation and research unit (FIRU), we were involved with monitoring and safety systems and demonstrations, including vehicle and battery fires. We also assist police, businesses, and insurance companies with fire investigations.

Peter Seebacher, the principal of AusEng, has represented Australia on the IEC TC120 EESS expert committee, where he contributed to the design, safety, and environmental impact of energy storage systems. Peter spent up to several months a year overseas working on EESS as an Australian expert, visiting laboratories such as NITE in Japan, KEMA Arnhem, DVN in China and Arnhem and Europe and UL in the USA. Very familiar with the Korean Testing and Research Institute's (KTR) work on the many large-scale EESS incidents in South Korea - KTR has substantial experience in fire initiation mechanisms.

Peter managed major projects here at universities and cooperative research centres (CRCs) and worked overseas. Spent the first 20 years of career in energy research at the University of Sydney eventually running the high-power research laboratory that contributed to fire investigations including the Luna park fire and the role of conductor clashing and fuses in the Ash Wednesday fires. Undertook a lengthy secondment to a research project on behalf of an energy industry consortium involved in European work.

Over the years, AusEng has provided services to numerous prestigious organizations, including ABB, Allens, AMP, Australian Greenhouse Office, Channel Nine, Cummins Engine Company, Department of Industry, GEC-Plessy, George Wilkenfeld & Associates, Halliburton, International Copper Association (Australia & India), FRNSW, MCW, NSW Police, Peaston Australia, SA Government, Sigma Cable (Singapore), The University of Sydney, Toll Holdings, Transgrid, Tyree Group, and Western Power.

Qualifications & Professional Memberships

Our team is highly experienced, with advanced qualifications across multiple disciplines. We hold two PhDs (from Sydney), one medical degree (MD Sydney), two Master's degrees (Sydney and Oxford), and various other degrees, including a law degree (Sydney). Peter holds a PhD, MEngSc, BAppSc (H1), and an electrical supervisor's certificate. He is a Professional Engineer and Fellow of the Institute of Engineers Australia (the highest level of membership, recognizing eminence in the engineering profession). Peter is also a Fellow of the Institute of Physics (AIP), acknowledging significant contributions to the field of physics. Additionally, he is a member of the IEEE (the world's largest professional engineering association), and a member of the NSW Association of Fire Investigators. Peter was awarded the Australian Institute of Physics prize for being the top student in his final year.



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