

# **EI / IET JOINT EVENING LECTURE**



## **“Large Turbo-Generators and Auxiliary Systems”**

**Presented by**

**Mr. John Doyle, Senior Consultant, ESB International**

The presentation will provide an introduction to the theory of electrical generators and how the basic theory is implemented for large turbo generators used for power generation applications. Different generator types including synchronous and non-synchronous, cylindrical and salient pole will be outlined, as well as technologies currently being used in large generators such as air, hydrogen and water cooling. Generator operating modes and limitations will be explained. In addition the presentation will cover descriptions of generator auxiliary systems including excitation, gas, cooling and generator protection.

John Doyle is a Chartered Engineer who graduated as an Electrical Engineer from UCD. John has worked for ESB International for 10 years and also spent a number of years working in engineering consultancy for other industrial applications. John is a senior consultant with ESB International and specialises in electrical generator technology, including technical support for Operations and Maintenance of existing plants and development of new ESB plants. John has experience of a number of generator technologies from various manufacturer's including GE, Alstom, Siemens, Brush, English Electric and Fuji Electric. John was also lead electrical engineer for recently completed combined cycle power plants at Aghada in Cork and Marchwood in Southampton, UK

This lecture is hosted jointly by the Institution of Engineering and Technology (Ireland Network) and Engineers Ireland (Cork Region).

<b>Date:</b>	<b>Tuesday 7<sup>th</sup> December, 2010</b>
<b>Time:</b>	<b>6.15 p.m.</b> (Light refreshments served at 6.00 p.m.)
<b>Venue:</b>	<b>Cork Institute of Technology</b>
<b>Room:</b>	<b>B263</b> (Look out for directional signage on entry to main building)

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