



The Knowledge Network

IET Scotland Christmas School Lecture

A Lot of Hot Air



Inspiring careers

Engineering affects everyone, everywhere in the world and the IET Scotland Christmas School Lecture is suitable for the 14-18 year old age group and aims at supporting schools and fostering interest in engineering and technology.

Lecture Summary

There is increasing focus and activity on harnessing the 'forces of nature' as alternative energy sources – particularly in Scotland where the government aims to significantly increase the supply of electricity from renewable sources by 2020. Scotland's natural resources place it in an excellent position to capitalise on the drive to create a sustainable economy – it is estimated that for wind and tidal power alone, Scotland could hold a substantial proportion of the European Union's total capacity. The technology is still developing and our scientists and engineers will be a key force in the delivery of energy sustainability.

This lecture will focus on our atmosphere and develop from a few simple concepts and practical demonstrations an appreciation of the forces and energy associated with the air around us.

During the lecture, and with the help of the audience, we will: weigh air; consider some effects of heated air, determine the forces caused by the wind; and discuss the amount of wind energy that can be extracted, both in principle and in practice from the air that surrounds us.

The Presenter

John Pugh is a Fellow of the Institute of Measurement and Control and a Fellow of the Institute of Physics. Throughout his career he has concentrated on making measurement, starting in the area of the detection of gravitational waves and currently in the development of measurement systems associated with transporting granular materials by flowing air. He views public lectures as an opportunity to engage the audience through explaining topics by using a few simple concepts. Previously he has delivered public lectures on the Foucault Pendulum and on The Measurement of Music.



Venues & Registration

The Knowledge Network

Registration:

Entrance to the lecture is free, but booking is required as places are limited. For more details or to register for any of the events, please contact Lynsay Callaghan by emailing lcallaghan@theiet.org or by telephoning 0141 566 1871.

Tuesday 2nd December
Glasgow Science Centre
IMAX Theatre
50 Pacific Quay
Glasgow, G51 1EA

<http://www.gsc.org.uk/>
Time: 10.00am

Wednesday 3rd December
Perth College UHI
Crieff Road
Perth
PH1 2NX

<http://www.perth.ac.uk>
Time: 2.00pm

Tuesday 2nd December
Glasgow Science Centre
IMAX Theatre
50 Pacific Quay
Glasgow, G51 1EA

<http://www.gsc.org.uk/>
Time: 11.30am

Friday 5th December
Royal Botanic Gardens Edinburgh
20a Inverleith Row
Edinburgh
EH3 5LR

[http://www.rbge.org.uk/](http://www.rbge.org.uk)
Time: 11.00am

Sponsored by:



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Institute of Measurement and Control

Additional Information

Entrance to the lecture is free but booking is required as places are limited. Groups are responsible for their own transport arrangements and costs. Please discuss drop off, parking and pick up details directly with the venue. The lecture is scheduled to last 1 hour.

As part of the IET Scotland School Christmas Lecture 2008 we will be inviting the local media to attend, taking photographs for IET use and filming the event for use on IET.tv. IET.tv is a Web-based service and one of the largest sources of engineering and technology content on the internet. By signing up for this lecture you agree that the IET and other identified media may take and use the photographic images and/or film the pupils from your School for PR and publicity purposes after the event. You are also confirming that you consent to your School taking part in this out of school activity.