Breaking down magnetism and electromagnetism

Wednesday 27 March, 2019

National Physical Laboratory, Hampton Road, Teddington TW11 0LW *Limited early bird places available for £145*



Richard Earp, Project Manager at National Grid

Gain access to a structured sequence of engaging and exciting lessons

that break difficult concepts down into easily digestible sections

- Enhance your confidence teaching this topic from delivering the basic laws of magnetism through to teaching modern uses of electromagnetism such as motors, generators and transformers
- Increase engagement and enthusiasm for the topic through innovative teaching strategies supported by practical activities and demonstrations
- Explore Flemming's left and right hand rules, and learn where and how to apply them
- Tour the National Physical Laboratory and update your knowledge on the latest

Prices (subject to VAT at 20%) *Limited early bird places available for £145* £195 (PTI Members) £295 (non-members) £145 (places from the same department) For more information, contact: **E: events@ptieducation.org T: 020 3174 1235**

This day is for you if:

- You teach Science at KS3, KS4 or KS5
- You would like to explore a range of practical activities and ideas to teach basic concepts and stretch and challenge students of all abilities
- You want to collaborate with others to turn this challenging topic into one of your strengths
- You would like to gain access to resources and activities to use in the classroom and beyond

Book now at www.ptieducation.org/events

Speakers Putting you in touch with up to date subject knowledge





Richard Earp is a Chartered Engineer with more than 30 years' experience in the electricity industry, including National Grid control centre operations, emergency planning, workforce strategy, management of maintenance teams, and policy and assurance for major substation sites. Richard has led major changes in the new-entrant training programmes including setting up new schemes at Foundation Degree level. His previous responsibilities included schools engagement programmes, including establishing a new work experience concept, support for the design of new engineering qualifications, and for UTC schools.

Teacher Leaders

All of our days are developed and led by practising teachers

This day will be led by **Dr Steven Squire**, Head of Science at Altrincham Grammar School for Boys in Cheshire. For 15 years, Steven has worked as a Physics specialist in a school where A Level uptake is high. A main aim, since the early part of his career, has been to make lessons engaging, challenging and relevant for his pupils. Steven has been involved with the PTI for a number of years and believes his PTI experience is amongst the most valuable he has had as a teacher.

Workshops

Workshop 1: The laws of magnetism, F = BII and how to build a motor Workshop 2: Electromagnetic Induction - generators, transformers and other applications. How they work and why we have to learn about them?

"The CPD day was very informative, and I am most grateful for the information and resources that I can use in the classroom."

- 2018 Science CPD Participant



About The PTI

We know that for every student in every school, every teacher matters.

The PTI is a charity run by teachers, for teachers. We re-engage teachers with their specialist subjects, inspiring them to bring enthusiasm into class and raise the aspirations of their students.

www.ptieducation.org