



## Education CPD+ Technicians Conference

**16<sup>th</sup> June 2017**

To be held at University of Leicester, School of Education, 2 University Road, Leicester LE1 7RB

<b>DELEGATE NAME</b>	<b>TITLE</b>	<b>FORENAME</b>	<b>SURNAME</b>		
<b>JOB ROLE/TITLE</b>					
<b>SCHOOL/COLLEGE NAME</b>					
<b>Address</b>					
<b>Postcode</b>			<b>Tele No.</b>		
<b>Email address</b>					
<b>Invoice to be sent to:</b>					
The cost is £65 per delegate (£40 for Network members). Schools will be invoiced prior to the event and payment to be made on receipt of invoice.					
<b>Please tick box if member of Technicians Network</b>			<input type="checkbox"/>		
<b>SPECIAL REQUIREMENTS – Please list any special requirements incl. dietary</b>					
<b>TERMS &amp; CONDITIONS</b>					
<ol style="list-style-type: none"> <li>All applications received will be acknowledged by email. If you do not receive an acknowledgement within 3 working days, please contact us to check that we have received your booking.</li> <li>Invoices will be issued ahead of the event by email and are to be paid in full prior to the event.</li> <li>Non-attendance without prior notice will result in the full delegate fee being charged.</li> <li>We reserve the right to amend the programme where circumstances dictate.</li> </ol>					
<b>Workshop Choices:</b>	<b>1 (AM)</b>	<b>2 (AM)</b>	<b>AM Reserve</b>	<b>3 (PM)</b>	<b>PM Reserve</b>
<b>PLEASE SEND THE COMPLETED FORM TO:</b>					
Education CPD+, School of Education, University of Leicester, 2 University Road, Leicester LE1 7RB					
EMAIL: educationcpd@le.ac.uk					
If you have any questions please call 0116 252 3771					

# Technicians Conference

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## Workshop Details:

There will be three workshop sessions during the conference - two 1 hour workshops in the morning and one 1.5 hour workshop in the afternoon.

Please select **two** workshops from the 'Morning Workshop sessions 1 and 2' choices and **one** from the 'Afternoon Workshop Session 3' choices.

## Morning Workshop Sessions 1 and 2

### **A - All the Exciting Bits are Waves**

*Peter Tiktin - IOP Teaching & Learning Coach*

Have you been asked to support staff teaching waves - electromagnetic waves (radio, microwaves, infrared, visible light, ultraviolet and gamma) plus sound waves? Do you find that much of the apparatus - signal generators, cathode ray oscilloscopes, microwave kits and ripple tanks incomprehensible and/or hardly ever works? Pop along and join Peter to unravel the mysteries and make your job easier.

How about also learning some extra tricks for demonstrating infrared and ultraviolet waves?

### **B – Why all the Best Chemists have Beards**

*Catherine Smith- Hinckley Academy & John Cleveland College Sixth Form Centre*

In this hands-on workshop you will look at the techniques involved in growing the perfect crystal and how the process of recrystallization can be used to purify solids (a required skill for A Level Chemistry).

The session will give you practical experience of interesting demos and experiments that can be used to enhance lessons at key stages 3, 4 & 5 and discuss the theory behind the art of crystal growing.

### **C – Microbiology Workshop which Doesn't Require Agar Plates**

*Matt Bricknell – Technical Product Specialist, 3M UK PLC*

Introducing a simple to use and accurate way to deliver Microbiology practicals in schools, at the same time reducing waste and reducing the risk associated with this kind of activity. There will be an opportunity for some hands-on participation.

Matt will talk about the work which has been done in conjunction with CLEAPSS to produce simple to set up practicals and also demonstrate how Petrifilm count plates are used following experiments written by CLEAPSS.

### **D – LabLogger Demonstration (10.55am – 12pm only)**

*Phil Wilson- RSciTech LabLogger Consultant & Senior Technician at Broadgreen International School, Liverpool*

A live demonstration of the online practical ordering system LabLogger. This is a chance to see how you can make the technical service in a Science Department more organised and for any questions you might have, to be answered.

### **E – What's Appening (12.05pm – 1.10pm only)**

*Phil Wilson – RsciTech LabLogger Consultant & Senior Technician at Broadgreen International School, Liverpool*

A session on using technology and apps in the Science Department.

## **Afternoon Workshop Session 3**

### **F – Solar Panel Workshop**

*David Garlovsky – Solar Active*

Participants will build solar/energy efficiency stem resources, to include: solar model car/boat [& remote control], a new PV testing device, mini-water pump, portable off grid PV system AND science activity about insulation and heat energy.

In building these devices students gain problem solving/employable skills and an understanding of scientific and mathematical concepts via direct experience with renewable and energy efficiency technologies

### **G – Will You Glow in the Dark?**

*Peter Tiktin - IOP Teaching & Learning Coach*

Have you been asked to support staff teaching radioactivity? Do you know how to safely use radioactive sources? Do you know how to detect radioactivity using gold leaf electrosopes, gm tubes, spark counters and cloud chambers? Would you like to make a cloud chamber and take it away with you?

Pop along and join me to unravel the mysteries and make your job easier.

### **H – Rates of Reaction - How Fast? Can it go Faster?**

*Heather Pope - Associate Tutor, University of Leicester*

An opportunity to have a go at the practical activities associated with the understanding of a chemical rate of reaction. We will be investigating just how the rate of a chemical reaction can be followed.

This workshop will be a great chance to try something new and share ideas with your colleagues.

### **I – Dynamic DNA**

*Dr Cas Kramer – Lecturer in Genetics Education, University of Leicester*

This is your chance to experience a taster session of Dynamic DNA, a two day annual outreach event organised and run by GENIE, the Centre for Excellence in Teaching and Learning in Genetics based within the Department of Genetics at the University of Leicester. Every year up to 600 Year 9 students and their teachers visit the University for a day full of Genetics fun and learning. Over 25 different interactive displays and hands-on activities are there to explore: from extracting DNA from a banana and making a DNA bracelet to solving a crime using DNA profiles and becoming a plant scientist and making plants glow!

Cas will explain the basic concepts behind this very successful event, and how these have been adapted to run events locally, nationally and even internationally - from a small-scale evening event in local college to a major event in a Chinese museum. There will also be an opportunity to see some of the DNA-related activities and displays in action, as well as to hear useful hints and tips for Genetics engagement.