

## The Technician’s Conference June 30<sup>th</sup> 2023 Workshop Information




### An outline of the activities on offer

There are only **three workshops** (yes just 3) you can go to in the day. Many workshops must have attendance numbers capped due to their very practical nature and the intention to give the best experience in the constraints of an event environment. Most workshops can accommodate about **20 attendees, some more, some less.** Not all activities will run three times so look closely at the options. Each session is scheduled to run for **45 minutes** or thereabouts. There’s plenty of buffer time built in to find the next session and browse the exhibition stands.





**Workshop Dress Code:** If you intend to go to a lab session or go outdoors even, then please dress accordingly; bring your own lab coat / eye protection etc if that looks appropriate.




The **workshop preference system** is a guide for our purposes; it does not guarantee you a place at that session so **please have a reserve choice or two.**


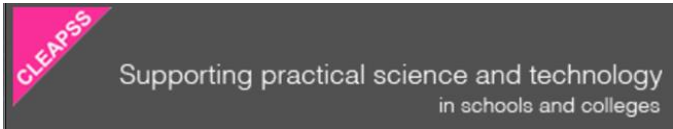
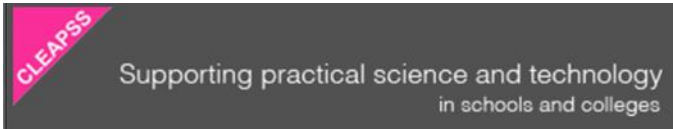
Code WS zero	<b>WS Option Zero:</b> don’t go to a workshop. Spend more time in the Exhibition Zone when it’s nice and quiet, or sit having a chat over a cuppa somewhere. <i>You know it makes sense!</i> No booking required.	Session 1 & 2
Use the information to help decide your preferred sessions.		
WS 1	<b>Steve Hinton Lead Ranger and Ecologist from the Lickey Hills Outdoor Centre</b> Steve has unrivalled skills in engaging all sorts of learners with the wonders of the outdoors. In fact, he ran my fieldwork ecology days for ages. He plans to show all sorts of sampling procedures alongside the more familiar transects and quadrats. Pick up the tips and tricks to take back to your departments. <i>BE DRESSED FOR THE OUTDOORS! It is summer in England!</i>	Outside Sessions 1 2 3  20 per session
<div style="text-align: center;">  <p><b>We are Philip Harris. Explorers of science since 1817.</b></p> </div> <p>Website link <a href="http://www.philipharris.co.uk">www.philipharris.co.uk</a>            Contact: Team Philip Harris <a href="mailto:techsupport@philipharris.co.uk">techsupport@philipharris.co.uk</a> 0345 120 4520            Attending the show:            Jo Rowbotham / Karen Carley / Jackie McKie / Scarlett Ryan / Laura Dowden</p> <p>And remember to pick up the coveted 2023 Philip Harris pun towel too.</p>		



<p>WS 2</p>	<p style="text-align: center;"><b>Supercharge your laser optics practicals</b>  <b>with Philip Harris and Lascells (session 2) and with Philip Harris (session 3)</b></p> <p>Presenters: Karen Carley, Scott Dearnaley and Dr Nichola Swann of Lascells</p> <p>Join us for an inspiring practical workshop, in which you will use a diffraction grating to measure the wavelength of a laser, and investigate the wavelength dependence of Bragg's Law. We will then explore the real-world application of data transmission, showcasing spectacular demonstrations of total internal reflection and laser modulation, through sending music across the laboratory by laser light.</p>	<p>Session 2 &amp; 3 20 per session Visit the Philip Harris for an informal look at laser optics</p>
<p>WS 3</p>	<div style="text-align: center;">  </div> <p><a href="http://www.medicalmavericks.co.uk">www.medicalmavericks.co.uk</a> <a href="http://www.medicalmavericksacademy.co.uk">www.medicalmavericksacademy.co.uk</a>          contact: General: <a href="mailto:Hello@medicalmavericks.co.uk">Hello@medicalmavericks.co.uk</a>          Rebecca (enquiries): <a href="mailto:rebecca@medicalmavericks.co.uk">rebecca@medicalmavericks.co.uk</a> Tel: (01902) 595 089</p> <p style="text-align: center;"><b>Medical Mavericks Careers in Health</b></p> <p>Join us for a hands on workshop where you can take blood, record and print an ECG, try keyhole surgery, see inside your body with an ultrasound machine and take a picture of the inside of your eye! Introduce a huge range of careers in the NHS to your students!</p> <p>The medical workshop activities include:</p> <ul style="list-style-type: none"> <li>· Record and print an ECG from your heart</li> <li>· Use a real needle to take fake blood from a dummy arm</li> <li>· Try their hand at keyhole surgery</li> <li>· See inside their body with an ultrasound machine (we show them their muscles, bones and growth plates!)</li> <li>· Scan their retina with an ophthalmoscope attached to an iPhone</li> <li>· Listen to their pulse with a pulse doppler</li> <li>· See their veins under a vein scanner</li> <li>· Experience different eye diseases with our pathology goggles</li> <li>· Take basic medical obs including, blood pressure, oxygen level and temperature</li> </ul>	<p>Session 1 2 3 35 per session</p>
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div data-bbox="536 1686 715 1865">  </div> <div data-bbox="767 1686 1086 1865"> <p>Brought to you by</p>  </div> </div> <p><b>SLS Select Education</b> is a division of Scientific Laboratory Supplies (SLS), the largest independent supplier of scientific laboratory apparatus, chemicals and services in the UK. As a division of SLS, SLS Select Education benefits from a global supply portfolio ensuring our customers have access to the widest</p>	

	<p>range of products available to school laboratories at the most competitive prices. Our SLS Select Education team are an experienced group focussed entirely on supplying and supporting school science laboratories.</p> <p>Your Contacts at the Conference are Gary D’Cruz; Martin Hinsley; Julie Els; Nicola Puckey.</p>	
WS 4	<p><b>SLS Workshop 1</b>  <b>Get confident with Physics Required Practicals</b>            Run By: Dr Nichola Swann of Lascells &amp; Select Education</p> <p>Focussing on GCSE and A-Level required practicals, get hands-on with affordable solutions from Lascells. Explore and walk through the set up and execution of experiments for Waves, RC circuits, I-V Characteristics, Resistance and more. All attendees will be entered into a raffle to be in with a chance of winning a new Lascells milliammeter</p>	<p>Session 1 2 3</p> <p>20 per session</p>
WS 5	<p><b>SLS Workshop 2</b>  <b>Chemical Storage and Stock Control Systems with the Labexpert Software</b>            Run By: Chris Pambou (Chief Science Technician &amp; Developer of Labexpert UK Stock Control Software)</p> <p>This session is designed to provide all the relevant information on chemical storage which technicians need to know which include: a) Legislation on Health &amp; Safety b) Chemical stores c) Store requirements d) Specialist stores e) Radiation f) Storage groups g) GHS/CLP. You will also see a demo of the Labexpert software with barcode scanners and label printers and how they can enhance the role of science technicians</p>	<p>Session 1 2 3</p> <p>25 per session</p>
WS 6	<p><b>SLS Workshop 3</b>  <b>Practical Physics for GCSE &amp; A level - designed to Inspire</b>            Run By: Rajat Rishi &amp; Ajay Sagar</p> <p>Join us for a circus of hands-on activities aimed at the required practicals in the Physics GCSE &amp; A Level syllabuses.</p> <p>The workshop includes: <b>Dynamics</b> - a range of experiments supported by easy-to-use software for PC and Android devices; <b>Electricity</b>- Using the impressive Inspire transformer kit, <b>Waves</b> using a signal generator and laser ray kit; <b>G by Free Fall</b> using the timing ball and magnetism using the Inspire <b>Magnetic Field</b> investigation apparatus.</p> <p><i>If you want to upskill your personal understanding of practical physics beyond GCSE then this could be for you. JB</i></p>	<p>Session 1 2 3</p> <p>20 per session</p>
WS 7	<p><b>SLS Workshop 4</b>  <b>BioRad Biology: Genes in a Bottle</b>            Run By: Tahmina Bakth &amp; Amrul Ali</p> <p>Introduce your students to molecular biology with their own DNA!            Extract DNA from cheek cells with a real-world method and bottle it in a necklace to see the normally invisible substance of life.</p>	<p>Session 2 and 3</p> <p>20 per session</p>

<p>WS 8</p>	 <p>OHAUS</p> <p><b>Guess the density, weigh it yourself and win Champagne!</b></p> <p>A workshop presented by Scott Marsden and Julia Szymanowicz</p> <p>Join us in this workshop looking at the best weighing practices for a school balance, (including balance calibration, care of balances, test weights and the free Ohaus software). Then a hands on session to try out density determination to see if you're a winner.</p>	<p>Session 1 2 3</p> <p>20 per session</p>
<p>WS 9</p>	 <p>Iain Davison of DATA HARVEST presents this workshop.</p> <p><b>Data logging without data loggers – the next generation!</b></p> <p>This totally hands-on BOD session will give you the opportunity to try out a number of experiments including, Cooling effect of Evaporation, Thermal imaging, Cola and Alka Seltzer (pH), Heart-rate, Breathing, Transpiration: Water loss from plants, Reaction times, Hit the brakes, Timing cars (light-gates), Acceleration due to gravity, Magnet through a coil, Walk this Way and Speed of Sound using our latest bluetooth sensors connected straight to your device. (Please download the EasySense2 app to your phone/tablet/pc etc before the session, it's free (if Android, please allow it to know where you are)).</p>	<p>Sessions 1 2 3</p> <p>20 per session</p>
<p>WS 10</p>	  <p><i>Workshop Applicable to all technicians</i></p> <p><i>Presented by Catherine Tuckey RSciTech MRSC</i></p> <p>Professional Registration Specialist, Royal Society of Chemistry</p> <p><b>Your Technician Commitment</b> – how Professional Bodies can support technicians' professional development.</p> <p>In this workshop, you will hear about professional development opportunities through the Royal Society of Chemistry, including professional registration and the benefits for technicians. We will look at career development and how the registered awards support recognition of the skills gained through professional experience. We will go over the application process and how professional bodies like the Royal Society of Chemistry can support further professional development for technical staff, as well as additional RSC member benefits.</p>	<p>Sessions 1 2 3</p> <p>20 per session</p>




	<p>Outcomes: By the end of the session, attendees will:</p> <ul style="list-style-type: none"> <li>• Know what professional registration is and understand the relevance and benefits for technicians</li> <li>• Have an overview of what the application process entails</li> <li>• Learn more about the RSC's support for the Technician Commitment</li> <li>• Know where to get support from</li> </ul> <p>Just a note – I would be happy to welcome any technicians from outside chemistry as well since a lot of the content is transferrable across different professional bodies.</p>	
<p>WS 11</p>	<div style="text-align: center;">   </div> <p>Beth Anderson Education Coordinator, Education Strategic Programmes, Royal Society of Chemistry</p> <p><b>The benefits of microscale chemistry</b></p> <p>In this session, you will learn about the benefits of microscale chemistry. You will know where to find teaching resources for a range of microscale experiments, including some of the GCSE core practicals and you will be able to try out some simple experiments.</p>	<p>Sessions 1 2 3</p> <p>20 per session</p>
<p>WS 11</p>	<div style="text-align: center;">  </div> <p>Website Link: <a href="http://www.brecklandscientific.co.uk">www.brecklandscientific.co.uk</a> Telephone: 01785227227 Contact Email: <a href="mailto:sales@brecklandscientific.co.uk">sales@brecklandscientific.co.uk</a> Main contact Lee Richards</p> <p><b>Make your own loudspeakers with Breckland Scientific and Lascells.</b> Presenters: Lee Richards (Breckland Scientific) &amp; Dr Nichola Swann (Lascells)</p> <p>Join us for a fun, hands-on session in electromagnetism. In this guided practical workshop, you will make your own loudspeakers and hear them play your favourite songs. This session will also explore the underlying physics behind the construction and operation of the speakers, allowing you to confidently embed this content within your teaching and STEM club activities.</p>	<p>Sessions 1 2 3</p> <p>20 per session</p>

<p>WS 13</p>	<div style="text-align: center;">  </div> <p style="text-align: center;">:      <b>Making microscope slides to show mitosis</b></p> <p>Presented by Catherine Mellor of Timstar.</p> <p>This a commonly done practical, so refine your skills on how to produce root squash slides of garlic roots to show as many stages of mitosis as possible.</p>	<p>Sessions 1 2 3</p> <p>20 per session</p>
<p>WS 14</p>	<div style="text-align: center;">  </div> <p>CLEAPSS WS 1 Presenter: Ai-Linh Tran, Biology Adviser</p> <p style="text-align: center;"><b>An introduction to microbiology and pressure vessels</b></p> <p>This session gives a whistle-stop tour of microbiology theory in terms of sterilisation, aseptic techniques, and disposal.</p> <p>There is an opportunity to practice some hands-on microbiology using yeast agar plates.</p> <p>The second focus looks at pressure vessels and how to comply with the Pressure Systems Safety Regulations.</p>	<p>Session 1 2 3</p> <p>20 per session</p>
<p>WS 15</p>	<div style="text-align: center;">  </div> <p>CLEAPSS workshop 2 <b>Health &amp; Safety Updates with CLEAPSS</b> Presenter: Jane Major, Section Leader Technical Services</p> <p><b>Disposing of waste</b> What's the best way to dispose of chemical waste from practical activities? What about waste from a chemical store clear-out? How do I dispose of microbiological waste? Can I just put dissection waste in a bin? What about getting rid of sharps, broken glass .....?</p> <p>Duty of care applies to ALL waste disposals in the science department. Invariably it falls to technicians to organise the disposal of such waste. This workshop identifies CLEAPSS resources which can help technicians make sensible decisions when disposing of a range of waste generated in the science department. It involves a mixture of presenter input, discussion and tasks.</p>	<p>Session 1 2 3</p> <p>25 per session</p>

<p>WS 16</p>	<div style="text-align: center;">  <p><b>Physics for Non-Specialists with Better Equipped</b></p> <p>Graeme Coleman will be presenting a workshop aimed at improving the confidence of non-physicists. The session will focus on a circus of classic physics experiments listed in the syllabus including: Specific Heat Capacity, Demonstration Transformers, Boyles Law and Energy Transfer.</p> <p>The session will start with a demonstration of each of the experiment stations and then allow users plenty of time to get hands on with the equipment.</p> </div>	<p>Session 1 2 3</p> <p>20 per session</p>
	<div style="text-align: center;">  <p>VITTA EDUCATION</p> <p>VITTA Education is the home of scientific supplies direct to schools, colleges, and universities. We are here today offer a choice of three workshops for your professional development.</p> <p>Come to our stand and workshops to meet our team, see our range, pick up some nifty freebies and enter some awesome competitions.</p> <p>Website: <a href="http://vittaeducation.com">vittaeducation.com</a>              Email: <a href="mailto:hello@vittaeducation.com">hello@vittaeducation.com</a>              Phone: 03339961611</p> </div>	
<p>WS 17</p>	<p><b>VITTA WS 1</b>  <b>Microscopes Maintenance &amp; Measuring Mastery</b></p> <p>A workshop presented by Eugene Dams</p> <p>In this workshop, you are introduced to the technique of measuring and will cover a variety of essential microscopy topics that will sharpen your skills:</p> <ul style="list-style-type: none"> <li>• Measuring principles, measuring errors and reading accuracy</li> <li>• Measuring eyepieces and graticules</li> <li>• Calibration of the microscope</li> <li>• Digital camera and measuring</li> <li>• Maintenance tips and advice</li> </ul> <p>Throughout the session, you will be provided with plenty of hands-on practice opportunities where you'll get to put your newfound knowledge to the test as you explore measurements using microscopes and maintenance techniques.</p> <p>This practical experience will solidify your understanding of measuring principles, conditions, result interpretation, and the various factors that can influence your measurements. Also, explore the enhanced student experience that emerges when you integrate digital cameras into your measuring process.</p>	<p>Session 1 2 3</p> <p>20 per session</p>

<p>WS 18</p>	<p><b>VITTA W2S 2</b>  <b>How to integrate coding into Science and STEM Education with cross-curricular activities</b></p> <p>Join Silas Norma in this hands-on STEM workshop, discover how you can transform your students' laboratory experience using interactive wireless sensor technology and the easy-to-use SPARKvue software/app.</p> <p>Explore how data logging and coding can effortlessly be integrated into new and existing methods of data collection across STEM and cross-curricular subjects.</p> <p>Ideal for ensuring you get the most out of your kit whilst aligning with GCSE and A-Level required practicals, we embark on everything from calibration and sampling seamless data to graphing it, analysing it, and interpreting it. Plus, why it is fun!</p>	<p>Session 1 2 3</p> <p>25 per session</p>
<p>WS 19</p>	<p><b>VITTA WS 3</b>  <b>Unleashing the Power of Science Technicians: Elevating Your Profile</b></p> <p>Join Paul Cook for an engaging and informative session centred around elevating the role of science technicians within your own school. Paul has dedicated many years to advocating for science technicians and highlighting the incredible impact they have on students' practical experiences in STEM education.</p> <p>In this session, he will provide invaluable insights and straightforward advice tailored to science technicians like yourself, empowering you to gain the recognition you deserve.</p> <p>The workshop segment will allow you to collaborate with fellow technicians and explore effective strategies to advocate for your role within your school.</p> <p>By the end of this session, you will walk away equipped with practical techniques and knowledge to elevate your profile as a science technician.</p> <p>Whether you're looking to enhance communication with colleagues, secure more resources, or foster a culture of recognition and appreciation, this event is your opportunity to make a tangible difference in your school community.</p>	<p>Session 1 2 3</p> <p>25 per person</p>
<p>WS 20</p>	<p><b>Fairfax Academy</b></p> <p><b>Technicians 'make and take' hands-on workshop</b></p> <p>This workshop is brought to you by Senior Technicians <b>Sarah James</b> and <b>Marjorie James</b></p> <p>Come and get hands on with some fun activities and ideas perfect for use in lessons and science clubs. In this session you will make your own functioning arm muscle model from easily obtainable supplies, make LED torches, a material testing kit as well as an array of other easy makes to take home. This workshop is run by technicians for technicians so please drop in and join us!</p> <p><i><b>This workshop is run by technicians, for technicians so please come and join us.</b></i></p>	<p>Session 1 2 3</p> <p>20 per session</p>



<p>WS 21</p>	<div style="text-align: center;">  <p><b>UNIVERSITY OF BIRMINGHAM</b></p> </div> <p style="text-align: center;"><b>The School of Education, University of Birmingham</b> Joan Shaw, Senior Technician</p> <p style="text-align: center;"><b>Working with glass tubing: A Make and Take Session</b></p> <p>Learn how to safely cut, bend and then insert glass tubing into rubber bungs. Make a combustion tube, delivery tube, pipette and lawn spreader, all to take away with you.</p> <p>Learn new skills or just come and practice</p> <p><b><i>This is a very practical session so numbers will need to be limited to 20 per session</i></b></p> <p style="text-align: center;">Please have the appropriate PPE for this activity.</p> <p style="text-align: center;">It would help if you brought a boiling tube with a bung to fit, plus a 2-hole bung.</p>	<p>Sessions 1 2 3</p> <p>20 per session</p>
<p>WS 22</p>	<div style="text-align: center;">  <p><b>UNIVERSITY OF BIRMINGHAM</b></p> </div> <p><b>‘Setting Up and Using the Oscilloscope and Signal Generator in the Context of Curriculum Physics’</b></p> <p>Presented by <b>Dan Cottle</b>, Lecturer in Secondary Education (Physics) and Lecturer in Physics at the University of Birmingham.</p> <p>This is a hands-on session to become familiar with setting up, problem solving and making measurements with:</p> <ul style="list-style-type: none"> <li>• Cathode ray oscilloscope</li> <li>• Signal generator</li> </ul> <p>For a range of experiments such as: KS3 demonstrations of waves, range of hearing, KS4 demonstrations of AC and DC, speakers, A level investigations of oscillation and electromagnetism.</p>	<p>Session 1 2 3</p> <p>25 per session</p>
<p>WS 23</p>	<div style="text-align: center;">  <p><b>UNIVERSITY OF BIRMINGHAM</b></p> </div> <p style="text-align: center;">School of Chemistry, ChemBAM project</p> <p style="text-align: center;"><b>Making chemistry accessible for students with vision impairment</b> With Zoe Schnepf and Rachel Chataway-Green</p> <p>This will be an informal workshop where you can come and try out some adaptive technologies and accessible experiments. Strategies to support practical chemistry delivery that could well help many learners.</p>	<p>Session 1 2 3</p> <p>20 per session</p>

<p>WS 24</p>	<p><b>King Edward VI Camp Hill School for Boys</b>  <b>A chemistry practical workshop</b> presented by Stephen O'Malley (WMCTC) and Karen Mitchell          An action-packed session to include:</p> <ul style="list-style-type: none"> <li>· Ideas for making molecular models for KS4 and KS5.</li> <li>· A handy tool to support learning ionic charges and formulae (KS3/KS4)</li> <li>· Demonstration practical: using electrochemical potentials to predict reactions (KS5)</li> </ul> <p>Many more ideas to support practical chemistry</p>	<p>Session 1 2 3</p> <p>25 per session</p>
<p>WS 25</p>	<div data-bbox="635 600 1002 689" style="text-align: center;">  </div> <div data-bbox="609 721 1024 927" style="text-align: center;">  </div> <p style="text-align: center;"><b>Hi-Spec Mocktails made with care and precision:</b></p> <p>This workshop is run by <b>Michelle Powner of DWK Life Sciences</b>. Michelle has worked in the glass manufacturing industry concentrating on the its use in the education sector. Come and join her to 'brush up' on your use of volumetric equipment to make accurately prepared solutions. Then expand your analytical and 'quality control' skills of titration; simple and fractional distillation for example. You will have guidance on how to make better use of your distillation glassware. Please bring photographs of any 'odd-looking' pieces of glassware. Let's see if we can give them a purpose again. Bring the actual item if it's safe to do so. There will be opportunities to look at other techniques if time permits.</p>	<p>Sessions 1 2 3</p> <p>25 per session</p>
<p>WS 26</p>	<div data-bbox="577 1393 1056 1518" style="text-align: center;">  </div> <p style="text-align: center;"><b>Birmingham City University, Life Sciences</b>  <b>"From Home to Hospital - a Diagnostic pathway"</b></p> <p>The Technician Team from BCU Life Sciences namely Andrew Anetts, Bernadette O'Brien, Isabella Romeo Melody, Laura Oldfield, Nicole Pratt will give a presentation of basic clinical laboratory tests.</p> <p><b>A. Point of Care Testing:</b> Sampling mock urine for: High Glucose – Diabetes; UTI Infection – Nephritis; Anaemia          Mock Stool Sample: Bowel disorders          Mock Blood Glucose sampling</p> <p><b>B. Clinical Laboratory Tests:</b> White blood cell count ; Haemoglobin level          Prepared blood films to show white blood cells, Leukaemia, Sickle cell anaemia          Gel Electrophoresis of mock sickle cell gene samples</p>	<p>Session 1 2 3</p> <p>20 per session</p>