ASE national technicians conference

7 - 8 July 2016

The popular ASE national technicians conference is back for 2016, delivered in partnership between the Association for Science Education (ASE) and the National STEM Learning Centre and Network.

Last year's conference attracted over 150 technicians with a wide variety of workshops and lectures. This year, we hope to be even bigger and better with 19 exciting and engaging sessions designed specifically for technicians, delivered by experienced technicians, and a large exhibition of science suppliers.

"I don't think this conference can be improved, it was more than I expected, definitely exceeded my expectations, a job well done!"

Participant feedback

Run across two days at the National STEM Learning Centre in York, you can choose to attend one or both days. Workshops are the same across the two days to enable you to attend everything you want to and experience a greater mix of sessions. If you are planning on attending both days, you will need to book each day separately.

Book your place here: www.stem.org.uk/ny609

Conference dates: 7 - 8 July 2016 (attend one or both days)

ENTHUSE bursary funding your school receives £100 (conference fee is just £80 + VAT)

Sessions

3A Molecular gastronomy is not just for Michelin star chefs! Gillian Collins, National STEM Learning Centre and Network

This session will be a chance to widen your knowledge of biotechnology by learning a variety of techniques which are an extension to the more familiar ‘algal beads’. Remember, your kitchen is your personal lab, and every time you cook food you are performing a complicated scientific process!

3B Working with the CMA data logging system Coach 7 Ton Van der Vaart, TOA

You will be introduced to the Netherlands most commonly used data logging system of CMA, a system that allows students to investigate various scientific concepts. Experiments that might be shown are: influence of crumple zone at cars, loading and unloading a RC combination, measuring the speed of sound and many more.

3C What should technicians do? Chris Peel, ex CLEAPSS Technicians Advisor

What do schools want from their technicians? Do schools make the best use of technicians’ skills, knowledge and expertise? This workshop will enable technicians to discuss the above, explore good practice, look at strategies to work more efficiently and safely, and find out how best to support practical work.

3D The power of enzymes Tina Farr, Senior Technician

In this interactive and hands on session, you will explore a range of engaging enzyme practicals which will explain the power of enzymes and the work they do. Practicals include simple iodine clocks, the effects of trypsin, how to immobilise enzymes, and enzymes and DNA!

3E Chemistry on a small scale Mary Owen, CLEAPSS Senior Science Technician

Small scale chemistry is quick and saves on chemicals and washing up! Come have a go at a range of practical activities which can successfully be carried out on a small scale. You will use equipment which can easily be put together using items routinely found in the prep room.

3F Making waves Mark Robinson, Physics Technician

This session will use fire, jelly and spaghetti — among other things — to demonstrate waves, with an emphasis on standing waves and resonance. Each participant will assemble their own resonance tube (Kundt’s Tube). This apparatus allows standing sound waves to be visualised and enables easy measurement of the speed of sound.

4A STEM clubs: curriculum design and activities Angie Ridout, Senior Technician

Are you running and writing your own scheme of work for STEM clubs? This practical session will show how you can connect super heroes, fairy tale characters and more to science. We will also explore how to use STEMNET resources.

"You always come away with new knowledge and ideas"

Participant feedback

4B Personality and technicians Sarah Atkinson, Senior Technician

In this session participants will reflect on their own personality types and think about how they work and communicate with others. Explore the effect of different aspects of verbal and non-verbal behaviour and skills to work with and listen to others,.

4C To blast or not to blast? Michelle Mcanallen and Marie Guinness, Senior Technicians

A selection of quiet and not so quiet hands-on activities to use or not to use! Various rocket experiments, STEM club ideas and biology experiments to get you thinking, and some to take away.

4D The art of the demonstration Simon Quinnell, National STEM Learning Centre and Network

In this session we will look at ways to make sure demonstrations across all three science subjects can be as interactive and as engaging as possible. We will explore the art of the performance, how to give demonstrations, and added extras that can make your demonstrations go off with a bang!

4E Biology practicals that work from SAPS (Science and Plants for Schools) Gail Webdell, SAPS ambassador

Plants make a great basis for biology practicals, they are cheap, engaging, and - with our tested protocols - reliable. Gail Webdell will be sharing hints and tips for the smooth running of tricky core practicals. Covering practical resources to support GCSE and A level biology.

4F Getting the most out of social media and technology Liz Shaw, RScitech and Phil Wilson RScitech

A session on how to use social media and technology in the Science department and improve technician recognition outside of school. We will be looking at the benefits of being on some of the more popular social media sites such as Twitter, Facebook, Pintrest and Linkedin.

4G Dazzling diffusion Liz Testa, Senior Technician

In this session we will explore and try a range of diffusion practicals for biology and chemistry lessons. From simple sweet diffusion to osmosis and plasmolysis in plants and alternatives to bromine for chemistry. This session will take you through and engaging mix of diffusions style practicals suitable for key stage 3 and 4.

5A Simulating digestion with visking tubing Ineke Koldenhof, Toa commission NVON

Digestion is an important topic in science, using dialysis tubing (vising tubing) as a model intestinal wall, we will explore how different substances can pass through and how to indicate for them.

5B What's in your tray? Dr Katherine Forsey

A carousel of practical key stage 3 science activities to do indoors and out, covering a mixture of science subjects. The activities and concepts should work well for science clubs, science week or a parents evening/open day. This will be a fast paced, hands on workshop.

5C How many science technicians does it take to change a light bulb?

Tracey Padgham, Emma Hawkey, Phil Wilson and Karen Gill

You may be aware that there is a Facebook group called 'School Science Technicians' which is proving to be a valuable resource for its many members. At this year's conference, our aim is that we will use social media, our ever-trusty reps and you the delegates to help solve as many of your problems as possible. Alongside this, we are also hoping to run the conferences first ever "Technicians swap shop! Bring along any old (but working), unused or unwanted equipment/ apparatus you may have laying around your department.

5D Master the dark side - help with physics Paul Cook, Senior Technician

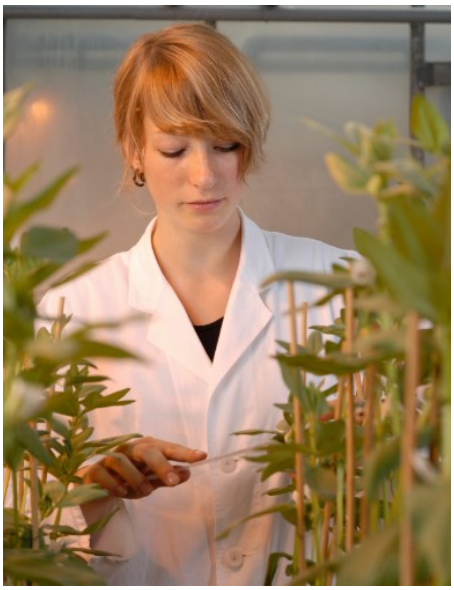
This session is designed for technicians, new or inexperienced, with physics and will explore some interesting quick easy demos, hands-on inspiring activities and classic commonly requested set ups that you will be able to do. Together we will bring physics into the light!

5E Practical progression in chemistry Mark Langley, National STEM Learning Centre and Network

This hands-on session will look at how teachers and students can be supported in developing their practical chemistry; planning for progression and mapping essential skills in the subject, so helping them with the most lab based of the sciences.

5F Physics on a budget Samir Moezzi, CLEAPSS Physics adviser

A range of physics equipment, which technicians can put together themselves at less cost than buying 'off the shelf', will be demonstrated during this session. Items will include those which can be made from scratch, to more sophisticated kit incorporating the use of a microcomputer controller.



ASE national technicians conference timetable

Thursday 7 July and Friday 8 July 2016

Time	Session	Title
9.00-9.30		Registration
9.30-9.50		Welcome
9.50-10.05		Presentation
10.15-11.15	3A	Molecular gastronomy is not just for Michelin star chefs!
	3B	Working with the CMA data logging system Coach 7
	3C	What should technicians do?
10.15-11.30	3D	The power of enzymes
	3E	CLEAPSS Chemistry on a small scale
	3F	Making Waves
11.15-12.00		Break
12.00-13.00	4A	STEM clubs: curriculum design and activities
	4B	Personality and technicians
	4C	To blast or not to blast!
	4D	The art of the demonstration
12.00-13.15	4E	Biology practicals that work from SAPS (Science and Plants for Schools)
	4F	Getting the most out of social media and technology
	4G	Dazzling diffusion
13.00-14.00		Lunch first sitting
13.15-14.00		Lunch second sitting
14.00-15.00	5A	Simulating digestion with visking tubing
	5B	What's in your tray?
	5C	How many technicians does it take to change a light bulb?
14.00-15.15	5D	Master the dark side — help with physics
	5E	Practical progression in chemistry
	5F	CLEAPSS Physics on a budget
15.00-15.30		Break
15.30-16.00		Final plenary and goodbye