

Thursday Booked Courses

BC01 Forensic Science: Fingerprinting and Forensic Science

Kimberlee Moran, Forensic Outreach

0930-1030 £15

Go far beyond arches, loops, and whorls, to discover how and why fingerprints form and what makes them unique. Participants will have an opportunity to test different dusting, developing, and lifting methods for fingerprints and learn about techniques and supplies they can implement at school.

Discipline: Teaching & Learning

Target audience: 14-16

BC02 IOP: New Ideas?

Gary Williams, Institute of Physics

0930-1030 £free

This session consists of 19 ideas that are either new or re-workings of an old gem. Participants receive a hand-out containing further details about the ideas and where to get the apparatus. The age range for which the ideas would be suitable for using in the classroom varies but the majority would be KS4 and KS5. Mode of delivery also varies, some ideas are for demonstrations, some are suitable for coursework etc.

Discipline: Teaching & Learning

Target audience: 11-14, 14-16, Post 16, ITE, Technicians, Advisors, Physics

BC03 IOP: Variety 3 Some New Ideas for Physics Lessons (repeated Thurs 1600)

Helen Pollard, Institute of Physics

0930-1030 £free

With the aim of spicing up your physics lessons, a few new ideas (or a new take on an old chestnut) for demonstration or class experiment. Items to take away and use immediately.

Discipline: Teaching & Learning

Target: 11-14, 14-16, Post 16, Technicians, Advisors

BC04 IOP: Satellite TV Meets Radio Astronomy

David Grace, Institute of Physics

0930-1230 £free

The availability of relatively cheap equipment for the reception of satellite TV offers an opportunity for schools to demonstrate and carry out some basic radio-astronomy. The most obvious target would be the sun but the resulting apparatus has the potential to be sensitive enough to detect signals from other astronomical sources. Participants will take away a satellite dish downconverter and a simple detector. The output is a varying dc signal that can be monitored on any computer interface that can measure a voltage. The session will involve some very basic construction and a small amount of soldering.

Discipline: ICT & Technology, Research

Target audience: 14-16, Post 16, Technicians

BC05 Writing for ASE: Get Yourself Published (repeated Sat 1400)

Bob Kibble, Valerie Wood-Robinson, ASE Publications Committee, Editors of Journals, Publications Committee members

1100-1300 £free

Articles in ASE journals and ASE books and web resources are written by folk like you. The workshop will consist of two parallel sessions, for journals and books, to give you practical experience in shaping your ideas for publication. ASE. Journal editors and members of the Publications Committee will help you develop your writing and take the first step towards publication. Bring your own ideas to the workshop. No matter how basic they are, we'll work on them with you.

Discipline: Teaching & Learning, Curriculum Development

Target audience: 0-4, 5-7, 7-11, 11-14, 14-16, Post 16, ITE, Advisors, Technicians

BC06 IOP: Lights, Camera, Images: Ideas for Teaching Light, Colour and Spectra 1 (repeated Thurs 1400)

Alison Alexander, Dr Ruth Wiltsher, Frances Green, Institute of Physics

1130-1230 £free

In this workshop we will be looking at a variety of activities for use in the classroom when teaching light, colour and spectra. Participants will find out how to make 3D images and how a visualiser can turn a small demo into a whole class activity. There will be plenty of hands-on and ideas for the use of images in general. Each participant will be given a CD with all the information needed to use the workshop ideas in their classroom.

Discipline: Teaching & Learning

Target audience: 11-14, 14-16

BC07 IOP: Software for Skint Schools

Gary Williams, Institute of Physics

1130-1230 £free

20 bits of free software that you could use in school to enliven your teaching while saving your budget. Schools are often bombarded with adverts for software by companies that have the money to invest in advertising. People who produce free software are, of course, unlikely to be able to publicise their products to the same extent. Their software can often be better though! Come along and see for yourself.

Discipline: Teaching & Learning, ICT & Technology

Target audience: 11-14, 14-16, Post 16, ITE, Physics

BC08 IOP: Using Radio Kits for KS4 "Wave Model of Radiation" (repeated Thurs 1600)

Lin Harwood, Institute of Physics

1130-1230 £free

Assemble and use kits which can be used by students. Circuit diagrams and component lists will be available. Ways of teaching this section will be discussed and demonstrated.

Discipline: Teaching & Learning

Target: 14-16

BC09 Science of Toys

Dr David Ward, Ann Todd, The STEM Centre

1130-1230 £25

The majority of toys are based on simple scientific concepts. The session will consider how toys have changed over a 200 year period e.g. construction, materials. A simple wooden toy will be assembled and participants gain an insight into "how science works". Participants will take away a pack of toys to share with others.

Discipline: Teaching & Learning, Curriculum Development

Target audience: 5-7, 7-11, 11-14

BC10 Sweetie Science

John Evans, Janine Carter, Lynne Pebworth, Sue Cooper, Oxfordshire County Council

1130-1230 £25

Come and take part in our science with sweets – free bag of mixed sweets to take home! How much science is there in a bag of sweets? Are they a resource full of excellent opportunities for learning, exploration and fun? Well, with a little bit of imagination, ingenuity and this workshop, you can make sweets 'do' exciting science in your classroom. Book early for this creative workshop – we are only allowed to invite 30 people to our sweetie experience!

Discipline: Teaching & Learning

Target audience: 7-11, 11-14

BC11 Developing Scientific Vocabulary: Something Worth Doing!

Hellen Ward, Keith Remnant, Putting Learning First

1400-1500 £20

Without language understanding is limited. This session looks at quick ways of enhancing scientific language acquisition in primary aged learners. The session uses games, practical tasks and science starters to promote enjoyment and language development. This is a "Hands on" and "minds on" session. This is a booked course as it comes with materials to use in your own classroom.

Discipline: Teaching & Learning

Target audience: 5-7, 7-11, ITE, Advisors

BC12 IOP: Lights, Camera, Images: Ideas for Teaching Light, Colour and Spectra 2 (repeat)

Alison Alexander, Dr Ruth Wiltsher, Frances Green, Institute of Physics

1400-1500 £free

In this workshop we will be looking at a variety of activities for use in the classroom when teaching light, colour and spectra. Participants will find out how to make 3D images and how a visualiser can turn a small demo into a whole class activity. There will be plenty of hands-on and ideas for the use of images in general. Each participant will be given a CD with all the information needed to use the workshop ideas in their classroom.

Discipline: Teaching & Learning

Target audience: 11-14, 14-16

BC13 IOP: Shocked and Stunned: Van de Graaffs

Gary Williams, Institute of Physics

1400-1500 £free

The aims of the workshop are to get those people who haven't used a Van de Graaff before confident enough to have a go and to improve people's knowledge of how the Van de Graaff works. While primarily aimed at those teaching physics

BC12 IOP: Lights, Camera, Images: Ideas for Teaching Light, Colour and Spectra 2

Thursday 1400-1500



Thursday 7 January Booked Courses continued

from a non-physics background even experienced physics teachers should get something from it. We have 4 portable Van de Graaffs with accessories that we will bring to the session. Participants will leave with a CD of resources.

Discipline: Teaching & Learning

Target audience: 11-14, 14-16, Post 16, ITE, Technicians, Advisors, Physics

BC14 IOP: Variety 3 Some New Ideas for Physics Lessons (repeat)

Helen Pollard, Institute of Physics

1400-1500 £free

With the aim of spicing up your physics lessons, a few new ideas (or a new take on an old chestnut) for demonstration or class experiment. Items to take away and use immediately.

Discipline: Teaching & Learning

Target: 11-14, 14-16, Post 16, Technicians, Advisors

BC15 IOP: What Happens Next? Experiments for All (Secondary)

David Featonby, Institute of Physics

1400-1500 £free

A selection of physics experiments, often with discrepant outcomes, which can be used with all ages to enhance learning and thinking and discussion skills. Experiments will be presented, then "paused" and students asked to predict the outcome. Participants will have access to a list of experiments, and be able to experience the puzzlement of "what happens next?" themselves. Different strategies for presenting these experiments in secondary schools will be suggested. An Institute of Physics Teacher Network Workshop.

Discipline: Teaching & Learning

Target audience: 5-7, 7-11

BC16 News + Views: Create a Mini Contemporary Science Exhibition

Nora Maddock, Beth Hawkins, Andrew Dand, Karen Davies, Science Museum

1600-1700 £20

In this hands-on workshop you will learn how to create a contemporary science exhibition for the classroom from scratch, inspired by the way that the Science Museum, London presents science news stories. This activity - called 'News & Views' - has been piloted with secondary science teachers and has proved to be an engaging way of exploring issues-based science (from cloning to climate change to robot technologies) with students in the classroom.

Discipline: Teaching & Learning

Target audience: 11-14, 14-16

BC17 Puppets: Talking Science, Engaging Science

Brenda Keogh, Stuart Naylor, Jane Turner, Millgate House Education

1400-1600 £10

Using puppets in science lessons engages children. They think more, talk more, learn more and enjoy science more. The PUPPETS Project has transformed both teachers' and children's experience of science. It can work for you too. This course is part of the PUPPETS Project INSET, supported by GlaxoSmithKline. Teachers can obtain puppets, storybooks and animated CDs at highly subsidised cost as part of the course. The session is aimed at primary teachers and enthusiastic secondary teachers.

Discipline: Teaching & Learning

Target audience: 5-7, 7-11, 11-14

BC18 Understanding Flavour Perception

Dr Joanne Hort, Sue Purcell, Campden BRI, Dr Louise Hewson, Inst of Food Sci and Technology

1400-1600 £free

Ever wondered why a strawberry tastes like a strawberry but not everyone likes them? Drawing on some research carried out at the University of Nottingham, this session begins with an overview of multimodal perception focusing in on how we taste and smell food and beverages, and what drives liking. Practical activities, which can be transferred to the classroom, e.g. 'are you a supertaster?' will complete the session to demonstrate concepts presented in the lecture.

Discipline: Teaching & Learning, Research

Target audience: 14-16, Post 16

BC19 Teaching Animal Welfare in the Science Curriculum

Anabela Pinto, ASE

1400-1700 £free

- What is animal welfare?
- Difference between the concepts of animal welfare and animal rights
- How do we measure animal welfare?

- Why should we bother about teaching animal welfare?
- The ethics of using animals
- Using models or live animals in lectures. Is there a need for dissecting?
- The link between animal cruelty and human cruelty
- The link between keeping animals and good human health
- Anthropomorphism and Anthropocentrism

Discipline: Teaching & Learning, Curriculum Development

Target audience: Technicians

BC20 IOP: Physics and Enterprise at a Music Festival

Tajamal Bhutta, Institute of Physics

1600-1700 £free

The Institute of Physics and the Careers Research Advisory Centre (CRAC) have developed a free resource pack to enable schools to run a one day, off-timetable team activity based around the planning of a music festival. The activity allows students to develop their enterprise skills in a physics context and illustrates a number of careers which use physics. In this workshop, we will show how the activity can be run and look at how to make best use of the materials.

Discipline: Teaching & Learning, Curriculum Development

Target audience: 11-14, 14-16, Post 16, Advisors, Physics

BC21 IOP: SPT14-16 Prevision (repeated Fri 0930)

Ian Lawrence, Institute of Physics

1600-1700 £free

The SPT materials are being extended for teachers of the 14-16 age groups. Aimed at those who will be supporting the development of such teachers, the workshop will introduce you to ways of working with these materials with teachers. This is one of the three strands that make up the core of SPT14-16, exemplifying the new approaches to showing how physics goes about its business, and how these resources will be made available and the advantages of embedding them in an on-line environment.

Discipline: Teaching & Learning, Curriculum Development, Research

Target audience: 14-16, Advisors, Physics

BC22 IOP: The Datamouse Project

Gary Williams, Institute of Physics

1600-1700 £free

This is a make-and-take workshop where we'll show you how to make a cheap computer mouse into a set of timing gates and then you'll actually do it and you get to take away what you make. We'll also show you how to make a mouse into a datalogging pendulum. Software and further resources will also be provided.

Discipline: Teaching & Learning, ICT & Technology

Target audience: 11-14, 14-16, Post 16, ITE, Technicians, Advisors, Physics

BC23 IOP: Using Radio Kits for KS4 "Wave Model of Radiation" (repeat)

Lin Harwood, Institute of Physics

1600-1700 £free

Assemble and use kits which can be used by students. Circuit diagrams and component lists will be available. Ways of teaching this section will be discussed and demonstrated.

Discipline: Teaching & Learning

Target: 14-16

BC24 STEM: A Focus on Mathematics

Ann Todd, Dr David Ward, The STEM Centre

1600-1700 £20

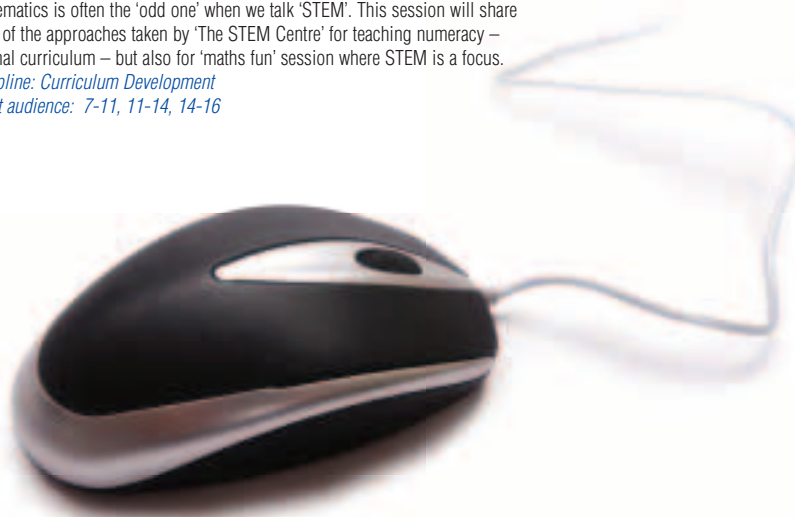
Mathematics is often the 'odd one' when we talk 'STEM'. This session will share some of the approaches taken by 'The STEM Centre' for teaching numeracy - national curriculum - but also for 'maths fun' session where STEM is a focus.

Discipline: Curriculum Development

Target audience: 7-11, 11-14, 14-16

BC22 IOP: The Datamouse Project

Thursday 1600-1700



Thursday Sessions by at-a-glance category

1100 Special Event

Primary Science Committee Session (Guest Speaker)

1500 Special Event

ASE Science Education Keynote Lecture: Genetic Fingerprinting: Past, Present and Future (Professor Sir Alec Jeffreys, Department of Genetics, University of Leicester)

0-11

1100 Talk
Pre-School Science Education in Portugal: Teacher Training and Innovative Practices

(Sara Pereira, Universidade de Aveiro – CIDTFF, Portugal) Pre-school science education: teacher training programme

5-11

0930 Workshop
An Engaging and Motivating Primary Science Week on a Budget (Damien Rowe, Kirklees Learning Service) How to deliver a high impact science week or event in your primary school

1130 Workshop
Darwin's Snails: Primary up8 Activities to Celebrate Darwin 200 (Cally Oldershaw, ASE) "Darwin's Snails - Primary up8 activities to celebrate Darwin 200"

1130 Talk
Primary Science Outside of the Classroom (Alexis Grosvenor, British Science Association) Engaging club activities

1400 Workshop
Studying Mini-Animals for Year 2/Year 3 (Dr Michael Dockery, Assoc for the Study of Animal Behaviour (ASAB)) Studying mini-animals for year2/year3

1400 Workshop
TTS Workshop: Exciting Discoveries in the Dark (Sue Martin, Talbot House Preparatory School) Fun, hands-on primary science investigations

1600 Talk
Primary Science: Is the Programme of Learning Enough? (Tim Gadd, 4science) More knowledge, more confidence, better teaching

7-11

1130 Workshop
TTS Workshop: Oldest Swinger in Town (Steve Marshall, London Borough of Barnet) Creative science with pendulums and swings

1600 Talk
Fabulous Forces: Twists, Squeezes and Squashes (Richard Ager, PrimaryViewPoint Training) Fresh and creative ideas for teaching primary "Forces" topics

11-14

0930 Workshop
Baubles and Beads: Approaches to Molecular Structures (Dr David Ward, The STEM Centre) A new look at molecular structures

11-19

0930 Frontier Science
Microbiology and Genetics with Attitude: Predatory Bdellovibrio as Living Antibiotics! (Prof. Liz Sockett, Institute of Genetics) Predatory Bdellovibrio bacteria as living antibiotics?

14-16

1130 Talk
Gateway Science GCSE Redevelopment for Teaching in 2011 (repeated Sat 1400) (Carolyn Brawn, OCR) Learn about progress being made

1400 Talk
OCR's KS4 Qualifications for Start of Teaching September 2011 (repeated Fri 0930) (John Noel, OCR) Learn about the choices available

1600 Talk
OCR Nationals in Science Redevelopment for Teaching in 2010 (repeated Sat 0930) (Richard Bowles, OCR) Learn about progress being made

Post 16

1400 Workshop
Genetic Experiments for Interactive Whiteboards, Laptops and Computer Labs (Michael O'Brien, Newbyte Educational Software) Fantastic genetic experiments in minutes!

1600 Talk
BIOZONE's New 2010 A-Level Biology Workbooks Including OCR & AQA (repeated Fri 1400) (Richard Allen, Biozone Learning Media (UK) Ltd) BIOZONE's New AS/A2 Biology Workbooks/Presentation Media

Assessment

0930 Talk
Creative Approaches to Assessment in Science (Stuart Naylor, Millgate House Education) Thinking, learning and assessment in science

0930 Talk
Learn More! Cambridge Pre-U Biology (Guest Speaker, University of Cambridge International Examinations) Cambridge Pre-U, an alternative to A Level

1130 Talk
An Alternative Model of APP to Support Enquiry Based Learning (Richard Aplin, HIAS (Hampshire Inspection and Advisory Service)) An alternative approach to APP

1130 Talk

APP in Primary Science: Making it Work for You in Your School or LA (Guest Speaker) LA Advisors, Teachers and Senior Leaders from APP Development Team Schools share experiences

1130 Talk
Learn More! Cambridge Pre-U Physics (Guest Speaker, University of Cambridge International Examinations) Cambridge Pre-U, an alternative to A Level

1130 Talk
SCORE: A Review of The 2008 GCSE Science Examinations by Teachers and Scientists (Guest Speaker, SCORE) 2008 GCSE Science Examinations – a review

1400 Workshop
Assessment for Learning in the Secondary Science Classroom (Dr Chris Harrison, King's College London) AfL Science ideas to improve repertoire

1400 Talk
Can International Studies Assess the Science National Curriculum? (Catharine Parkes, NFER) Mapping NC to domains for TIMSS/PISA

1400 Drop-in
Edexcel: GCSE 360: Getting Good Results from Internal Assessment Activities (repeated Fri 1600) (Richard Shewry) GCSE 360 Getting good results from internal assessment activities

1500 Workshop
APP Update (repeated Fri 1400) (Ed Walsh, National Strategies) Making the best use of APP

1600 Talk
An Update on AQA's GCSE Science (repeated Fri 1130) (Nigel English, AQA) GCSE examination update and future plans

1600 Talk
APP in Science at KS3: The Current Situation (Naomi Rowe, National Foundation for Edu. Research (NFER)) Implementation and uptake of APP

Behavioural Science

0930 Talk
Teaching How Science Works Through Behavioural Science and Psychology Activities (Helen Darlington, Helsby High School) Practical ideas and interesting topics

1130 Workshop
Psychology in 11-14 Science: Doing it Justice (Jeremy Airey, National Science Learning Centre) Approaches for psychology in 11-14 science

Biology

0930 Talk
Breakfast Biology (Sue Howarth, Institute of Education / University of Worcester) Enjoy breakfast and the associated Biology

Chemistry

1100 Workshop
Free Online Chemistry Resources from the RSC (Alison Eldridge, Royal Society of Chemistry) Introduction to a range of useful, online chemistry resources

1400 Workshop
A Level Chemistry on a Microscale (Mike Wooster, Edu-Lab) A Level Chemistry on a Microscale

1400 Talk
Chemistry for Non-Specialists: Lecture Demonstration (Amanda Middleton, Royal Society of Chemistry) Chemistry experiments and demonstrations for non-specialist teachers

Curriculum Development

1130 Talk
Promoting Science Specialism with PLTS: "Deep" Way Cross the Curriculum (Stuart Arch, King Charles I School) Using PLTS for Science across curriculum

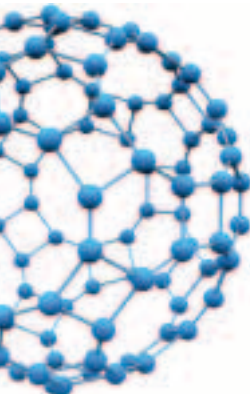
1400 Drop-in
Edexcel: GCE Chemistry: Getting Good Results for Units 3 and 6 (repeated Fri 1400) (Geoff Wright) GCE Chemistry: Getting good results for Units 3 and 6

1600 Drop-in
Edexcel: GCE Biology: Getting Good Results for Units 3 and 6 (repeated Fri 1600) (John Dunkerton) GCE Biology: Getting good results for Units 3 and 6

1600 Drop-in
Edexcel: GCE Physics: Getting Good Results for Units 3 and 6 (repeated Fri 1600) (Richard Laird) GCE Physics: Getting good results for Units 3 and 6

1600 Talk
The Use of Learning Communities to Develop New Teaching Materials (repeated Sat 1130) (Jan Apotheker, University of Groningen) Developing teaching materials using learning communities of teachers

1600 Talk
What's In A Name?: Developing a Biological Classification (Dr Mike Cassidy, University of Warwick) Modern biological classification (11-18 year olds)



Thursday 7 January

Enviro/Earth**0930 Workshop**

Earth Physics: Tackling Climate Change (ESEU; ESEU Facilitators) Teaching physics in a climate-change context

1130 Workshop

Earth Physics: Probing the Ground with 'Geophysics' (ESEU; ESEU Facilitators) Teaching physics through a 'Geophysics' context

1400 Workshop

Earth Physics: The Seismology Story (ESEU; ESEU Facilitators) Teaching physics through seismology contexts

ICT & Techno**0930 Talk**

Using Media Technology to Teach 'How Science Works' (Neil Ingram, University of Bristol) Film making and 'How Science Works'

1130 Workshop

Probably the Best Data Logger in the World! (Thomas Dudman, Philip Harris Education) Don't be frustrated by datalogging anymore!

1400 Workshop

Life By PowerPoint: Making Interactive, Engaging Classroom Presentations (Edward Upton, Teachable.net) Practical demonstration of building classroom presentations

1400 Talk

Why is My Red Green? ...and Other Spectroscopy Related Questions (Steve Emery, IDS Ltd.) Demonstrations of spectroscopy using food dye

International**0930 Drop-in**

CESI International Hands-on Primary Drop-in Workshop (Dr Sue Dale Tunnicliffe, CESI and Institute of Education) Workshop is run by members of the CESI

1400 Talk

Environmental Education in Greece Within Interdisciplinary and Cultural Approaches (Dr Zoe Zoni Kavogli, Varvakeios Experimental Junior High School) Environmental Education in Greece

1400 Talk

The Coreflect Approach: The Examples of The GMOs and Fog Web-Based Reflective Inquiry Environments (Dr Eleni A Kyza, Cyprus University of Technology) The CoReflect Approach: GMOs & Web-based Examples

Leadership & Management**0930 Talk**

Science Teachers' Experiences of Teams and Teamwork (Gregory Smith, Charles Darwin University, Darwin, Australia) If teams are so good... Science teachers' experiences of teams and teamwork

0930 Talk

Transforming Teaching and Learning in a Large Department (Elisabeth Zambo, Wildern School, Hampshire) Transforming learning in a large department

1400 Talk

Sustainable Energy: Science in Context (Dr Anne Wheldon, The Ashden Awards for Sustainable Energy) Ashden Awards reward excellent achievement in sustainable energy.

1600 Talk

Safe & Exciting Science: A Training Pack (Dr Peter Borrowes, ASE Safeguards in Science Committee) A chance to sample the activities.

Physics**0930 Talk**

IOP: Informing Students About Careers From Physics (Tajamal Bhutta, Institute of Physics) CPD materials supporting teachers informing students

1400 Talk

IOP: Voicebox: The Physics of Human Sound Production (Charles Tracy, Institute of Physics) The physics of human sound production

1400 Talk

Physics Experiments with Simple Apparatus (Keith Gibbs, Schoolphysics) Physics experiments with simple apparatus

1600 Workshop

Physics Can Be Fun (Guest Speaker, Pasco / Feedback) Physics can be fun with the right apparatus

Research**0930 Talk**

Darwin Education Projects: Lessons Learnt (Richard Lloyd, GHK Consulting) Wellcome Trust Darwin projects: evaluation findings

0930 Talk

Inside Chicken Run (Jen Jamieson, Royal Veterinary College, London) An educational intervention's impact on attitudes

0930 Frontier Science

Seeing the Nanoworld: New Solutions for Healthcare (Prof. Clive Roberts, School of Pharmacy) Revealing the nanostructure of medicines

1130 Frontier Science

Chemistry Inspired by Nature: The Search for New Medicines (Prof. Chris Moody, Chemistry/Science) Nature inspired chemistry; seeking new medicines

1130 Frontier Science

Revisiting Phage Therapy: Biological Control of Infectious Bacteria (Prof. Ian Connerton, School of Biosciences) Bacteriophages: Viruses that heal

1130 Talk

Science Education Roadmap (Derek Bell, Wellcome Trust) Future of science education: have your say

1400 Talk

ASPIRES: Investigating Science and Career Aspirations in Students Ages 10-14 (Dr Jennifer DeWitt, King's College London) Research on students' aspirations in science

1400 Frontier Science

How to Get Down from a Yak (Dr Mike Clifflord, Faculty of Engineering) Problems wanted: engineering solutions to poverty

1400 Frontier Science

Nanoscience: Physics of the Ultrasmall (Prof. Philip Moriarty, School of Physics and Astronomy) Nanoscientist, particularly interested in molecular manipulation

1600 Frontier Science

Understanding Visual Perception: All is Not As it Seems (Dr Jonathan Peirce, School of Psychology Faculty of Science) Understanding visual perception

1600 Frontier Science

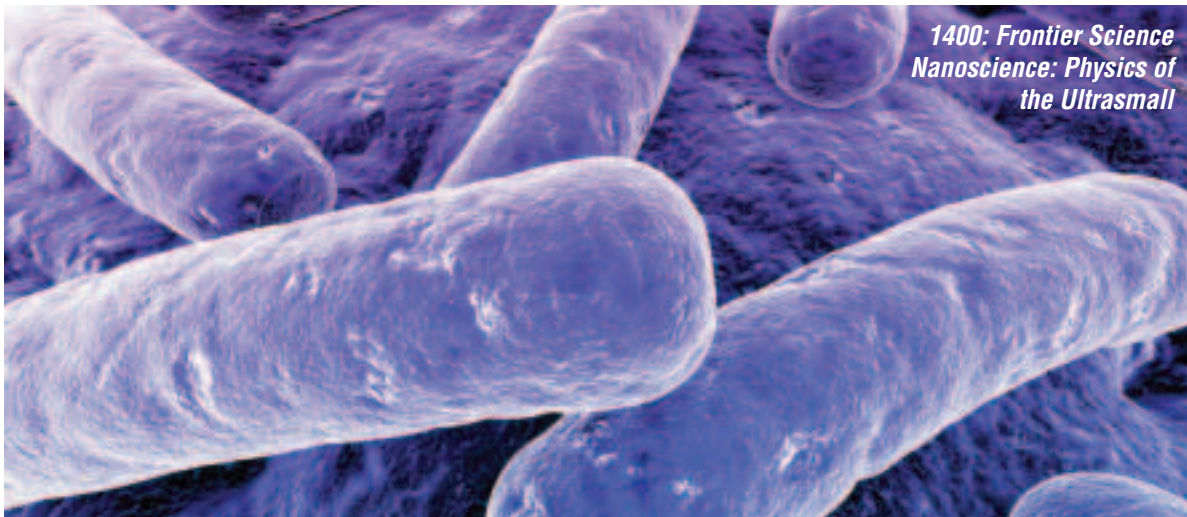
Using Transition Metal Chemistry to Store Hydrogen: The Future of Energy? (Prof. Neil Champness, School of Chemistry) Hydrogen storage using chemistry

Teaching/Learning**0930 Workshop**

Data Harvest: Tripping the Light Fantastic (Barry Hawkins, Curriculum Writer, Data Harvest) Data logging activities based on light

0930 Talk

Formal and Non Formal Science Education: Primary Teachers' Training Programme (Ana V. Rodrigues, University of Aveiro) An in-service primary teachers' training programme



*1400: Frontier Science
Nanoscience: Physics of
the Ultrasmall*

Thursday 7 January

0930 Talk

Going for Level 8!: Strategies for Stepping Up the Challenge (repeated Fri 0930) (Stella Paes, National Strategies) Increasing challenge in science demonstrations

0930 Talk

Greening Your School: Sustainable Solutions and Curriculum Connections (Dr Zoe Robinson, Keele University) Bringing sustainability into the science curriculum

0930 Workshop

Here Comes the Sun (Bob Kibble, University of Edinburgh) Shadows, sun and stone circles stories

0930 Talk

Inspiring Learning: Sharing What We All Do Best (Bridget Holligan, Science Oxford) Bringing formal and informal science educators together

0930 Talk

Principled Teaching and Learning of Science (Prof. Christine Howe, University of Cambridge) Get involved in research-informed science teaching

0930 Workshop

Remember the Egg Race (Geoff Auty, School Science Review) Easily organised practical (competitive?) group activities

0930 Talk

Reporting on the Use of Drama to Support Primary Science Learning (Debra McGregor, University of Wolverhampton) This workshop will show how different kinds of drama helped KS1 children learn science

0930 Workshop

What Darwin Never Knew: A Novel Approach to Population Genetics (Dr Barry Meatyard, Independent Consultant / University of Warwick) What Darwin Never Knew – A Novel Approach to Population Genetics

1100 Workshop

Bath Quakes: Differentiated Learning with a Fuzz (Dr. Johanne Patry, Ph.D., Collège Bourget) Bath Quakes: Learning with household substances

1100 Drop-in

Identifying, Assessing and Meeting CPD Needs (Guest Facilitators, National Science Learning Centre) Work with experienced CPD providers and use established CPD needs analysis tools to identify requirements and opportunities to meet these needs

1100 Talk

Inquiry-based Learning and Renewable Energies (Peter Pentland, Australian Academy of Tech. Sciences and Eng.) Aims and methodologies of STELR project

1100 Workshop

Merging Physics Teaching with Instant Diagnostic Assessment and Feedback (Ed van den Berg, AMSTEL Institute, University of Amsterdam) Merging physics learning and instant feedback

1100 Workshop

PLUGGING INTO THE SUN: To Achieve Stem Outcomes and Targets (David Garlovsky, Schools & Homes Energy Edu Proj./Solar-Active) To Achieve Stem Outcomes Plugging Into The Sun

1100 Workshop

Steps to Success in Progressing to Level Six & Beyond (Ed Walsh, National Strategies) Supporting better teaching using this approach.

1100 Workshop

Using the Global Positioning System in the Science Classroom (Simon Roberts, University of Nottingham) Global positioning systems in science classrooms

1130 Workshop

“Oh, Miss We’ve Heard it all Before!”: Re-engaging Children With Climate Change (Anne Strachan, Development Education Project) Bringing serious complex issues alive!

**1130 Workshop**

Data Harvest: Trigger Happy! (Barry Hawkins, Curriculum Writer, Data Harvest) How to use triggers in datalogging

1130 Talk

Effective Progression to AS Courses in Biology, Chemistry and Physics (repeated Sat 0930) (Julian Clarke, SNS Senior Adviser) Continuing research which is being undertaken by the Secondary National Strategy

1130 Workshop

Science and Technology: Enhancing Both Subjects! (Hellen Ward, Canterbury Christ Church University) How to link science and technology enhancing both

1130 Talk

The Language of Measurement: GCSE Science Terminology (Richard Needham, ASE) New ASE publication to clarify terminology

1130 Workshop

Value of Science, Value of Life (Chris Holmes, RSPCA Education) Challenge your students with scientific dilemmas

1230 Drop-in

The Wellcome Trust Funding Surgery (Tom Anthony, Wellcome Trust) Drop in to learn about our grants

1400 Talk

350 Years of Excellence in Science (A Range of Guest Speakers, The Royal Society) 350 years of excellence in science

1400 Talk

Astronomy: 50 Great Resources: All Free! (Johannes Kepler, Johannes Kepler Project) 50 Astronomy Resources – All Free!

1400 Talk

Chemistry and Physics Demonstrations (Ian Galloway, Science Learning Centre South East) Stimulating Chemistry and Physics Demonstrations

1400 Talk

Classroom CSI: The Applied Science GCSE & Beyond (Kimberlee Moran, Forensic Outreach) Forensic techniques for classroom use

1400 Workshop

Data Harvest: Olympic Science (repeated Fri 1400) (Barry Hawkins, Curriculum Writer) A circus of activities linked with sport

1400 Drop-in

Developing Your Practical Science Skills: For Teachers and Technicians (repeated Fri 1100, Fri 1400, Sat 1100) (Bob Worley, CLEAPSS) Hands-on Interesting Practical Work in Science

1400 Workshop

Having a Go at Real How Science Works (repeated Fri 1400) (Stuart Sherman, National Strategies) Does dowsing work? - Let's find out

1400 Talk

Is Dissection a Part of 'How Science Works'? (Rachel G Bishop, Anatomy Department, University of Bristol) Dissection in the 14-19 biology curriculum

1400 Special Event

Light Express (Pearl John, SEPnet) Educational laser light show

1400 Workshop

Look! Think! Talk! (Gaynor Weavers, Inspire) Look! Think! Talk! Activities for KS2

1400 Talk

More Strange & Weird Materials for Wow Factor Science (John Cave, Gatsby Science Enhancement Programme) Materials are getting smarter and stranger than ever

1400 Workshop

Sustaining the Science in Sustainability (Yvonne Caples, Essex SIEY, Science Team) Tracking

sustainability cross-phase KS1-4

1400 Talk

Using the Framework to Close the Gaps (repeated Fri 1400) (Lynn Henfield, National Strategies) Improving progression for pupils

1600 Workshop

Bloodsuckers: Using Malaria to Teach Key Scientific Concepts (Anne Strachan, Development Education Project) Participative workshop on science and society

**1600 Talk**

Exploring the Solar System, Rocks and Minerals: Integrated Educational Approach (Fernanda Couceiro, University of Aveiro) Integrated Didactic approaches in primary school

1600 Workshop

Interactive Teaching: A Dialogic Hot Spot! (Victoria Rigby, National Strategies) How can Interactive Teaching support learning?

1600 Workshop

Making Science Real and Relevant (Linda Atherton, Educational Development Service Warwickshire) Interactive secondary cross curricular workshop

1600 Workshop

Practical Ideas Enhancing Learning in Physics (1) (Gerry Blake, Gatsby Science Enhancement Programme) Practical Ideas Enhancing Learning in Physics

1600 Talk

Science Play: What's in it For You? (Leigh Hoath, University Centre Bradford College) Science play and its importance in Early Years

1600 Talk

Teaching Core Science Concepts Through Clean and Renewable Energy (Dr Zoe Robinson, Keele University) Bringing sustainability into the science curriculum

1600 Workshop

The Gender Agenda in Science Lessons (Margaret Smith, National Strategies) The gender agenda in science lessons

1600 Workshop

Virtual Learning Environments for Deep and Collaborative Science Learning (John Overby, Institute of Education, Reading University) Technology to promote real deep and collaborative learning