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Mar-09

## RSC List of Presenters

US = University Students  
GP = General Public  
\* Preferred Target Audience

### Suitable for Primary and/or Pre Sixth Form

Name	Title	Description	Age Groups*	Group Size*	Email Tel / Fax	Address	Costs/ Comments
AKHAVAN, Professor Jacqueline	<b>Pretty, Pretty, Bang, Bang</b>	For many years people have been enjoying fireworks on Guy Fawkes night but have never really appreciated the complexity of fireworks. This lecture will introduce the topic of fireworks and cover areas such as the production of colour, light and sound. During the lecture there will be many demonstrations illustrating the principles of fireworks. There will be many bangs, whistles, and small explosions not to mention the shower of sparks. The future of fireworks will also be covered.	5-16+, US, GP	ALL	<b>J.Akhavan@cranfield.ac.uk</b>  01793 785324 01793 785772	Cranfield University, Defence Academy of UK, Shrivenham, Swindon, SN6 8LA	
ARMSTRONG, Dr Susan (Sue)	<b>Medicines Through the Looking Glass</b>	An interactive lecture modelled on an RI Christmas Lecture and describing what chirality is, why it is important in medicine, and how an asymmetric catalyst can generate a single enantiomer from a flat precursor molecule.	11-16, 16+, US	10-100+	<b>armstrong277@btinternet.com</b>	Struan House, Old St Andrews Rd, Guardbridge, Fife, KY16 0UD	TE/ groups above 100 work best in a lecture theatre with CCTV & auxiliary screens. Only venues driveable in under 1.5 hours
ASPINALL, Dr Helen C	<b>Making Light Work of Chemistry</b>		11-adult	100+	<b>hca@liv.ac.uk</b>  02920 874778	Clean Technology Centre, Department of Chemistry, University of York, York YO10 5DD	TE
BAILEY, Prof Patrick D	<b>From Fireworks to Magic Bullet Medicines</b>	Use explosions, colour and taste experiments to show how the most fun bits of chemistry are connected to cutting edge research in medicinal chemistry.	11-16+,GP	ALL	<b>p.bailey@manc.chester.ac.uk</b>  0161 200 4448 0161 200 4541	Chemistry Building, Room 2.060, Brunswick Street, The University of Manchester, M13 9PL	Venues drivable in less than 2 hours.

BALLANTINE, Dr James A <i>and</i> WILLIAMS, A	<b>Science and Energy</b>	This is a demonstration lecture in which the children do all of the experiments. The theme is that although there are many forms of energy (chemical, heat, electrical, light, sound, work, potential & kinetic), energy can not be produced, but it can easily be transformed into other forms. There are about 26 different experiments for the children to perform involving chemical energy to heat, chemiluminescence, manufacture of electricity by a Voltaic cell, coloured light in flames, fluorescent and neon tubes, solar panels to electricity, thermocouple use involving liquid nitrogen as the cold junction, Faraday electricity generation by induction, electricity to sound etc. Invitations to schools organised by local RSC sections.	ten-12	100+	<b>Ballbish@aol.com</b>  01792 233960	59 Headland Road, Bishopston, Swansea, SA3 3HD	£1.00 per pupil. The demonstration lecture is given at community theatres or lecture halls usually on 3 successive days. Up to 400 miles from Swansea have been arranged. Prefer 10.00 to 13.00hrs.
BARBOUR, Laurie MADFLAP SCIENCE	<b>AIR, WATER, FIRE and EARTH</b>	MADFLAP offers over 150 workshops and activities and has three show formats for schools as well as events and festival versions. Will adapt/create material for any audience/topic.	ALL, US, GP	ALL, max 500 in show format	<b>clynes@bpc.ac.uk</b>  01305 265037	93 Damers Road, Dorchester. Dorset. DT1 2LB	£350-500 per day + travel & B&B Budget prices for museums & schools in Dorset, parts of Devon, Somerset - £150-300 per day.
BARHAM, Professor Peter	<b>The Science of Ice Cream</b>	Uses simple demonstrations to look at changes of state (solids, liquids and gasses). Use freezing point depression to create freezer to make ice cream; for older audiences demonstrations to illustrate the laws of thermodynamics; some mention of crystallization and possibly colour centres (depending on audience); all students leave with an ice cream made within seconds at the climax of the presentation.	11-16+, US, GP	>10	<b>peter.barham@bris.ac.uk</b>  0117 928 8711	H H Wills Physics Lab, Tyndall Avenue, Bristol, BS8 1TL	TE, cost of ice cream ingredients (approx 15p per person)
	<b>Kitchen Chemistry</b>	Why do we like some foods and hate others? What makes some foods taste really good together while other pairings are just plain disgusting? How far can science go in answering these (and other) questions that are so important for domestic cooks and chefs alike? In this short demonstration lecture we will show how we actually use all our senses to assess the food we eat. We use our eyes to see the colour, shape and size, our ears to hear any sizzling, or crackling, etc. we use our hands to feel the texture, we use our tongues to sense the taste, our noses to sense the aroma and all the nerves in our mouths to assess the "mouthfeel". We integrate all these sensations into what we call the "flavour" and then decide whether or not we like it.	14-16+, US, GP	>10			TE, cost of food demonstrations (approx £20 - more for audiences >50)

BATHAM, Dr Mike G <i>and</i> JANES, Dr Rob	<b>The Magic of Oxygen</b>	Oxygen is the most important element in the Earth's crust and accounts for about 21% of the air, without it there would be no life as we know it. But what is so special about this gas? Who discovered it? How have we put it to use? These questions and more are answered, and some of the more unusual properties of oxygen are demonstrated in a series of spectacular (and occasionally explosive) experiments, including how to make fire from water, produce a genie from a teapot, and we prove that you really can have money to burn!	eleven-14, Can be adapted for most school ages.	ALL	<b>m.g.batham@open.ac.uk</b>  01908 653155 01908 858327	Chemistry Department, The Open University, Walton Hall, Milton Keynes, Bucks MK7 6AA	TE + subsistence. Distance limit to 100 miles unless customer can provide chemicals needed. Duration 30-55 mins + 90 mins setup.
CLAYTON, Margaret	<b>Liquid Nitrogen Show</b>	Kinetic Theory of Solids, Liquids & Gases. Over 40 exciting demonstrations and experiments linked to the relevant National Curriculum Key Stage. These are also suitable for Family Learning Events.	May-16	ALL	<b>meclayton100@btinternet.com</b>  01980 862286	Dungarth, Middleton Road, Winterslow, Salisbury. SP5 1QL	£220 for 1 lecture, £110 for subsequent lectures at same or nearby venue. No limitations on distance if more than one lecture. Over 50 miles from home 50p per mile - South of England, Midlands.
COLQUHOUN, Professor Howard	<b>Our Light Materials</b>	Human history has been always been characterised by a drive to discover new materials with better properties. Stone was thus superseded by bronze, bronze by iron, and iron by steel and aluminium. In the 21st century however we are living in an age dominated by lightweight polymeric materials which are principally based on carbon. Since the early discoveries of polymers such as polyethylene, nylon and PET, research in polymer chemistry has continued to yield astonishing results. Synthetic polymer fibres have been discovered which are as strong as high-tensile steel yet many times lighter, and high-strength polymer-composites are now widely used in aircraft construction. The lecture explores the science behind these advanced polymeric materials, and highlights some of the latest research in the field.	14-16+, US, GP	ALL	<b>h.m.colquhoun@rdg.ac.uk</b>  0118 378 8454 0118 378 8450	School of Chemistry, University of Reading, Whiteknights, READING RG6 6AD	TE

COLPMAN, Sharon MAKE IT SCIENCE	<b>Make It Workshops</b>	All Make it Science workshops combine a short interactive demonstration with the making of scientific toys. Reinforcement is the key to these workshops. All experiments can be repeated by the children at home. Often conducted as family involvement days to show parents how they can be part of their child's learning. Topics include: Kitchen Capers, Balancing Parrots, Air Powered Cars, Aircraft, Periscopes and Rockets. All with a good mix of Chemistry and Physics for Dummies. Bespoke workshops can be arranged with plenty of notice.	six - 12	30 max	<b>Sharon.colpman@ukgateway.net</b>  01264 355783	Kirk House, Goodworth Clatford, Andover, Hants.	From £2 per child (min fee £35), TE by arrangement. Within 1 hr of Andover. Prefers 10.00-14.00 hrs, evenings with notice.
CRONIN, Dr Lee	<b>From Molecules to Functional Nanosystems: Towards Molecular Computers</b>	Concept lecture describing the story of the computer highlighting the limits that may be faced by us in the near future using the conventional 'top-down' fabrication approach to microprocessors and memory, and suggesting how molecules assembled on the nano-scale 'from the bottom up' may be used in a type of molecular electronics to build a molecular scale computer based upon functional nanoscopic systems.	11- adult	ALL	<b>L.Cronin@chem.gla.ac.uk</b>  0141 330 6650	Department of Chemistry, Joseph Black Building, University of Glasgow. G12 8QQ.	TE
DALY, John	<b>Mindblaster Demos from Dr Y Knot's Experiment Emporium</b>	There are approximately twenty demonstrations presented, many involving audience participation. The first set of demonstrations is designed to probe the counter-intuitive nature of science. The audience is challenged to predict outcomes and to account for discrepancies. The second set of demonstrations is designed to introduce the audience in a deliberately attention-grabbing way to various chemical concepts. The lecture has been well received by audiences from age 10 to 80. It can be adapted to suit difference age groups and is best presented to a narrow range of ages any at one time. A science teacher 'professional development' version of the lecture can be presented also.	10 to 17 provided a particular pupil audience is all about the same age	Max 150 100 is best	<b>jdaly@blackrockcollege.com</b>  +353 1 288 8681 +353 1 283 4267	Blackrock College, Blackrock Co. Dublin. Republic of Ireland.	Fee negotiable also to cover consumables and TE. As I am a practising science teacher and Head of Department availability is limited. However feel free to email and ask.
DAVIDSON, Dr Christine M	<b>Demonstration Lecture</b>	Demonstration lecture covering colour changes in solution, chemistry of the atmosphere, liquid nitrogen, reaction rates and combustion, spectroscopy, chemiluminescence, (small scale) pyrotechnics. 40-55 mins	eleven - 16	40-100+	<b>c.m.davidson@strath.ac.uk</b>  0141 548 2134 0141 548 4212	University of Strathclyde, Dept of Pure & Applied Chemistry, Glasgow G1 1XL	TE/ Difficult to do more than a day's drive from Glasgow unless dry ice and liquid nitrogen available locally.

DOUGLAS, Dr Peter	<b>Photochemistry in Action</b>	The aim of the lecture is to increase awareness of the importance of photochemistry in our world. A series of demonstrations on the electrical, chemical, and photochemical generation of light, and its use in everyday life, technology, pollution control and as an alternative energy source.	8 - Adult, Most suitable for A Level	ALL	<b>P.Douglas @Swansea.ac.uk</b>  01792-513081	Chemistry Department, University of Wales Swansea, Singleton Park, Swansea, SA2 8PP	Needs a theatre/room which can be "blacked-out" as dark as possible for best effect.
DUNNE Ian B	Variety of shows including: <b>Science Magic and Chemical Hocus Pocus</b>  <b>Gases - Hydrogen, Helium and the Gang</b>  <a href="http://www.ianbdune.co.uk">www.ianbdune.co.uk</a>	A show with mystery, suspense and laughs containing lots of science tricks used for conjuring through the ages which can be used to demonstrate many principles along with the power of observation.  This show features pretty pictures, hydrogen 'pops', oxygen relighting a glowing splint, a balloon being blown up by a bottle of liquid and indoor airships.	KS3 & KS4	ALL	<b>ianbdunne@aol.com</b>  023 8077 2341	37 Upper Brownhill Road, Maybush, Southampton. SO16 5NG	£300 per day plus TE and consumables. One hour to set up.
EDWARDS, Prof Peter <i>and</i> HOLLAMBY, Mr Peter	<b>Flash, Bang, Wallop</b>	A lively demonstration lecture that has been developed during 20 years and which collects a series of chemical demonstrations exhibiting loud noises (bangs and whooshes), light and flames and colours and colour changes in solution. A light-hearted and entertaining delivery has been developed to emphasise the fact the chemistry is also fun. The demonstrations explore the themes of stability (thermodynamics) and reactivity (kinetics) looking at the driving forces behind chemical reactivity, the different forms of energy given out by chemical reactions and the factors that influence speed of chemical reactions (including catalysis). It emphasises the importance of chemistry in every day life as well as to other disciplines (e.g. biology and medicine) and to the economy as a whole. This benefits from the experience of Peter Hollamby, a recently retired head of secondary-level chemistry.	11-16+, US, GP  Can be tailored to a general audience or to schools audiences at either GCSE or A-level.	10-100+	<b>edwardspg@cardiff.ac.uk</b>  <b>hollambypm@cardiff.ac.uk</b> or <b>Dr Simon Pope</b> (School's Liaison) <b>popesj@cardiff.ac.uk</b>  029 20874083 029 20874023	School of Chemistry, Cardiff University, Main College, Park Place, Cardiff CF10 3AT	TE. Best performed in-house (lecture theatres seat up to 220) due to transportation of demonstrations, although the show has been transported to various venues in the South Wales area and Birmingham. Plenty of notice would be required to perform the show. Time can be tailored from 30 - 75 mins.
ELLAM, Richard	A Variety of Shows including: <b>Much Ado About Nothing - everything you ever wanted to know about vacuums.=</b>	If you suck all the air out of something you're left with a vacuum. This is pretty much like nothing, but most of the Universe is a vacuum, and some strange and wonderful things happen when there's no air around to spoil the fun. This interactive science show, suitable for KS2 and above looks at how vacuums (and the Earth's atmosphere) were discovered, how we use vacuums for far more than cleaning carpets, and, amongst other things, why you shouldn't go for a walk in space without your hat!	7-16+, GP 11-16+, GP	20-100+	<b>richard@lminteractive.eclipse.co.uk</b>  01761 412 797 tel & fax	L M Interactive, 3 Winterfield Road, Paulton, Bristol. BS39 7RF	TE, £200 +VAT for one performance, £300 + VAT per day (up to 3 performances)

	<b>Albert Einstein and the Mystery of Light</b>	Albert Einstein always said that he worked out his Theory of Relativity by thinking about what it might be like to ride on a beam of light. The basic principles of relativity are not difficult to grasp, and this lecture introduces them by looking at people's changing ideas about the nature of light from Newton's time onwards. Newton thought light was made up of particles, but 100 years later it became clear that light behaves like a wave. The search for a medium in which these waves travelled proved futile and caused a major crisis in physics which was only resolved when an unknown young scientist called Albert Einstein burst onto the scene. Special relativity changed the way we think about space and time, and the show ends with a brief explanation of special relativity - the best ever!					
EWINS, Dr Ciaran	<b>Soaps, Bubbles and Membranes</b>	An interactive demonstration lecture that explores many aspects of soap films. Such as why do we see colours in bubbles, why are bubbles spherical and why are bubbles important in Science? Talk also involves a number of demonstrations using dry ice.	Can be tailored to suit any age.	ALL	<b>Ciaran.ewins@paisley.ac.uk</b>  0141 848 3206 0141 848 3204	School of Engineering & Science, University of Paisley, High St, Paisley. PA1 2BE	TE
FREY, Dr Jeremy G	<b>The Ozone War</b>	45-50 mins	eleven - 18	ALL	Sue Pipe <b>S.M.Pipe@soton.ac.uk</b>  023 8059 4118	Sch of Chemistry, University of Southampton, Southampton SO17 1BJ	TE
GOODALL, Dr David C	<b>Chemistry in Coins</b>	The significance of chemistry in coin manufacture, aesthetics and coin conservation. Chemical analysis of ancient coinages & its relevance to the interpretation of historical events. 45 mins	14-16+, US, GP	ALL	01943 463049 01943 463049	Strathmore, Silver Mill Hill, Otley. West Yorkshire. LS21 3BJ	TE
GORE, Dr Bryson	<b>Chemistry is ..... Elementary</b>	This lecture traces the development of the periodic table from ancient Greece to the present day using demonstrations to show how the concept of periodic properties has withstood the passage of time. Additionally, by looking at extracts from the life and work of the 19th century's most famous chemist we will demonstrate how analytical chemistry and Greek philosophy answered the most fundamental question in Chemistry.	11-16+, US, GP	20-100+	<b>omniscience@blueyonder.co.uk</b>  <a href="http://www.omniscience.info">www.omniscience.info</a>  020 7226 4610 020 7690 4589	106 St Thomas's Rd, London N4 2QW	£300 per day for one lecture or £500 for two different ones.

	<b>Rates of Reaction: Turning a Whizz into a BANG!</b>	Chemical reactions are vital to modern society because they produce the chemical compounds upon which we rely, but chemical reactions are also fascinating as they enable us to visualise the structure and properties of matter on a sub-microscopic scale. By using numerous demonstrations, this lecture explores the concepts of mixing, temperature and catalysis to help us visualise the steps involved in any chemical reaction.	11-16+, US, GP	20-100+			
HARRISON, Tim	<b>The Gases of the Atmosphere</b>	A lecture demonstration that covers the chemistry of the main components of the atmosphere. Throughout the lecture there are chemistry demonstrations including those involving liquid nitrogen, oxygen foam, dry ice and a few explosions.	5-11	ALL	<b>t.g.harrison@bristol.ac.uk or sue.williams@bristol.ac.uk</b>	Bristol ChemLabS School of Chemistry, Cantock's Close, University of Bristol Bristol BS8 1TS	£150 for the first lecture, £75 for subsequent upto 4 per day plus TA if more than 1 hr from Bristol
HARWOOD, Prof Laurence M	<b>Colourful Chemistry</b>	Try out "vibrochemistry", watch chemical amoebae run around, see how gold can sometimes be purple, tell the time with chemical reactions, listen to hydrogen atoms, find out how insects brighten up their sex lives by getting the chemistry right or simply turn water into wine. A light-hearted demonstration lecture looking at chemical phenomena associated with light and colour with a few explanations thrown in for good measure.  Please note that, due to the nature of the chemicals needed for the reactions, I can only carry out the lecture at the School of Chemistry at Reading University. Audiences of around 125 can be accommodated within Chemistry and up to 400 can be accommodated in the Palmer Building auditorium on campus. Prior booking is necessary. There may be a charge for use of the Palmer Building.	11-16+, US, GP	100+	<b>I.m.harwood@reading.ac.uk</b>	School of Chemistry, University of Reading, Whiteknights, READING RG6 6AD	Please note that I can only carry out the lecture at Reading University.
HEARD, Professor Dwayne C	<b>Our Atmosphere: Chemistry Matters!</b>	<ul style="list-style-type: none"> <li>• The atmospheric problems we are facing</li> <li>• Why chemistry is at the heart of understanding our atmosphere</li> <li>• Sunlight initiated reactions and the destruction of ozone</li> <li>• Nature's detergent - the hydroxyl radical</li> <li>• Why chemical measurements in the atmosphere are important</li> <li>• The chemical control of greenhouse gases</li> </ul>	14-16, US, GP	ALL	<b>d.e.heard@leeds.ac.uk</b>	School of Chemistry, University of Leeds, Leeds. LS2 9JT	TE. Prefers trips which can be managed in the same day.

HODGSON, Dr Annie B	<b>Solids, Liquids and Gases</b>	An interactive demonstration lecture designed to fit with the Key Stage 1/2 unit on Solids, liquids and how they can be separated. When is a solid not a solid? What happens if we cool a gas? These are just some of the questions that will be answered. See some really cool chemistry when I bring out the liquid nitrogen! Find out what it is like to be a particle in a solid when it is heated to form a liquid then a gas. It works best if I can arrive at the start of the lunch hour to set up in a classroom (or similar) then I will give my talk at the start of the afternoon session. The length of the session depends on the level of interaction and the wishes of the teacher. I like to take the group outside (weather permitting) to pretend to be molecules in a solid, which I then "melt" and "boil". This is an optional extra, as the talk stands alone without it.	five - 11, works well when follows on from their topic work. Usually KS2.	class group best	<b>abh2@york.ac.uk</b>  01904 433022 01904 432516	Department of Chemistry, University of York, York. YO10 5DD.	No charge. Preferably within an hour's drive of York.
	<b>Science Fun Days</b>	A set of hands-on activities suitable for use with primary school classes. These include bubbles, popping film canisters, natural dyes, cabbage indicators and even DNA! These are designed in such a way that they can be lead either by me or the class teacher. Each workshop lasts about 35-40 mins. These activities have been run successfully with mixed age groups. I am happy to repeat an activity several times in a day to allow different groups to take part on a rota basis. If teachers are willing to run activities I can provide the ideas for a whole day of science so that the groups can move around a set of 4 or 5 activities. If I'm going to be at school for the whole day I do like school lunches! It is essential that these workshops be discussed with teachers before the event. I can provide a session for teachers on a prior day.	five - 11	20-40 best			Preferably within 30 min of York, but willing to go further depending on the type of event. A contribution to the cost of chemicals appreciated.
	<b>Colourful Chemistry</b>	A demonstration lecture showing that as chemists we can use colour to give us information about reactions, but also showing that we can use chemistry to brighten up all our lives by providing us with colour. For some demonstrations a portable fume cupboard or suitable ventilation is required. It is necessary to be able to black out the room. Access to a gas supply would be useful. 30 mins, but could be extended.	14-16+, GP	40-100+			TE and a contribution to the cost of chemicals would be appreciated. Within driving distance of York, for longer journeys by train, the host may need to provide some chemicals and equipment.

	<b>The Wonders of Chemistry</b>	A demonstration talk suitable for primary school assemblies. Lots of dramatic colour changes and loads of liquid nitrogen! We will address the question: what do scientists do? During the talk the audience get the chance to practice being scientists, by making observations, forming hypotheses and designing experiments. They also get the chance to ask me questions about what it means to be a scientist and in particular a chemist. 20-30 mins.	five - 11	40-100+			No charge. Preferably within 1 hour's drive of York.
HOLLOWAY, Prof John H OBE	<b>Art in Science ; Science in Art</b>	The lecture is about visual order and form and function. Three projectors and three screens are used to compare and discuss science/art images. The lecture is also available via PowerPoint.	11-16+, US, GP	100+	jhh2@le.ac.uk 0157 282 0276	5 Hall Gardens High Street East Uppingham Rutland LE15 9HG	TE + £200 for large public lectures
	<b>Fluorine The Ultimate Combiner</b>	This lecture is embellished with films/slides, models, etc and explains why compounds of fluorine behave as they do and how they are used to benefit people.	14-16+, US, GP	100+			
	<b>Fluorine the Tyrannosaurus Rex of the Elements</b>	This lecture is embellished with films/slides, models, etc and explains why compounds of fluorine behave as they do and how they are used to benefit people.	14-16+, US, GP	100+			
HOLMES, Dr Elaine	<b>Chemistry in Medicine</b>	A description of different uses of chemical techniques in solving medical problems. 30-60 mins.	14-16+, US, GP	ALL	Elaine.holmes@imperial.ac.uk 0207 594 3220 0207 594 3221	Biological Chemistry, SAF Building, Imperial College, Exhibition Road, S. Kensington, London. SW7 2AZ.	No charge. Willing to travel in and around London
JASPERS, Professor Marcel	<b>Drugs from the Deep</b>	Over 60% of the drugs we use today are derived from natural sources. The oceans, covering 70% of our planet, provide a rich source of new organisms which can be explored for their potential to produce compounds which can fight disease, from cancer to viral, bacterial and parasitic infections. The lecture covers chemistry, biology, ecology and pharmacology. Also to cover primary levels, the chemistry detail is removed and a focus is made of the integrated nature of science.	11-16+, US, GP Primary	ALL	m.jaspers@abdn.ac.uk 01224 272895 01224 272921	Department of Chemistry, University of Aberdeen, Old Aberdeen, AB24 3UE.	TE

JOHNSTON, Ian	<b>Rocket Science</b>	There are two events offered, workshops and lectures. The workshops are pitched at various levels from 10 years old upwards. All workshop events culminate in building model rockets and launching them to altitudes of up to 300m, before they return to earth safely under a parachute. Older groups do various additional experiments to derive the data necessary to predict the altitude the models will reach. Details, policies and risk assessment can be found at <a href="http://www.rocket-workshops.co.uk">www.rocket-workshops.co.uk</a>	9-11 workshop only, 11-16 + US = workshop + lecture	ALL for lectures workshop max 30	<b>ian@rocket-workshops.co.uk</b>  01905 773406 tel/fax	34 Moreland Road, Druidic. WR9 8RN	Lectures £150, Workshops £150, £6 per person. Anywhere in W Midlands, elsewhere TE
JONES, Graeme	<b>Sex, Flies and Smelly Sticky Tape</b>	How do you chat up a moth? Do bees only say "Buzz"? Parlez vous ant-speak? If you have ever wanted to talk to insects then this is your chance to learn their lingo. Plus can pheromones get you out of that awkward 'asking her out moment'? Come prepared for the nasal experience of a lifetime! See <a href="http://www.makeitmolecular.com">www.makeitmolecular.com</a> for more details and reviews	11-16+, US, GP	Up to 700	<b>g.r.jones@keele.ac.uk</b>  07816 210239		TE+negotiated fee. Large projection screen in darkened room. LCD projector - will bring own laptop and can bring projector if required.
	<b>makeitmolecular</b>	<b>makeitmolecular</b> is all about molecules. You can make a model of a molecule and have your picture taken with it, from caffeine to teflon, vitamin C to prozac, or why not invent your own! Reconnect with your molecular world Great for science festivals and science activity days. See <a href="http://www.makeitmolecular.com">www.makeitmolecular.com</a> for more details and pictures.	5 -16+, US, GP	Groups of 20	<b>g.r.jones@keele.ac.uk</b>  07816 210239		TE+negotiated fee.
	<b>Mega Mols</b>	These huge molecular sculptures have become the stars of the molecular model world. Somehow molecules become alive when they are on a mega scale and you can walk around them, touch them and even ride them! They are suitable for all sorts of events from science days, exhibitions to parades. See <a href="http://www.makeitmolecular.com">www.makeitmolecular.com</a> for more details and pictures.	5 -16+, US, GP	Groups of 20	<b>g.r.jones@keele.ac.uk</b>  07816 210239		TE+negotiated fee. Large outside or indoor space required for display and assembly
JONES, Dr Simon	<b>Nature's Chemistry Set</b>	Remember the Chemistry set that you had for Christmas? Well Nature has the biggest one ever made and can be much better at doing chemistry than chemists are. In this lecture we look at the building blocks that Nature uses to build organisms and some of the tools it uses to keep them working. We will also take a glimpse at some of the amazing ways in which organisms talk to each other and fight for survival.	14-16+	40-100+	<b>simon.jones@sheffield.ac.uk</b>  0114 233 2822 0114 222 9346	Department of Chemistry, Dainton Building, University of Sheffield, Brook Hill, Sheffield. S3 7HF	TE+ cost of consumables (£20-30).Willing to drive for 2 hours.

LOWRY, Dr Roy B	<b>Flash Chemistry</b>	A lecture on energetics with demonstrations. The first law of thermodynamics is emphasised and energy level diagrams used to explain topics such as combustions, fluorescence and chemiluminescence. Uses include catalytic converters, soap powder and light sticks. 40 mins	14-16, GP	ALL	<b>R.Lowry @plym.ac.uk</b>  01752 233017 01752 233035	University of Plymouth, Drake Circus, Plymouth. PL4 8AA	£100 plus fuel. Set up time 30-45 mins, Talk 40-60 mins. Venue requirements: 13A socket 2m of flat, stable, table top, NO (or disabled) SMOKE DETECTORS. AV, table protection & all chemicals provided
	<b>Pyromania!</b>	Designed for the general public or younger secondary school students, this talk requires no prior knowledge of chemistry. The demonstrations are initially from the world of fireworks, but later demonstrations use more common materials and liquid oxygen. The emphasis is on fun, lively presentation and the wow factor. This talk contains a video sequence taken from the 2006 Guinness World Record for the largest number of firework rockets.		ALL			£100 plus fuel. Set up time 30-45 mins, Talk 40-60 mins. Venue requirements: 13A socket 2m of flat, stable, table top, NO (or disabled) SMOKE DETECTORS. AV, table protection & all chemicals provided
	<b>From the Bunsen to the Sun</b>	This talk was the result of an award from the Engineering and Physical Sciences Research Council and is designed to support the analytical chemistry/science sections of AS and A2 syllabi. Starting with the work of Robert Bunsen (Flame colours) it discusses four analytical techniques. Each technique is demonstrated (either live or with a video clip) and an example of how the technique has been used given. The examples are chosen to be relevant to the SW		ALL			£100 plus fuel. Set up time 30-45 mins, Talk 40-60 mins. Venue requirements: 13A socket 2m of flat, stable, table top, NO (or disabled) SMOKE DETECTORS. AV, table protection & all chemicals provided
MACDONALD, Averil	<b>Fantastic Plastic</b>	What is the link between disposable nappies and zero pollution cars, between lego blocks and cress, between false legs and slime? They are all polymers. This talk takes you on a journey through the life history of a polymer, from how it is generated to how it can be used to make you a millionaire!	14-16+	100+	<b>amm4@soton.a c.uk</b>  01962 859989	5 Wentworth Grange, Winchester.	£250 or pro rata. 40p per mile. Some funding may be available from EPSRC for state schools.

MACDONALD, Dr J N	<b>Molecules in the Milky Way Galaxy and Beyond</b>	During the 1970's and 1980's much to everyone's amazement the existence of polyatomic molecules in interstellar space was established through a combination of laboratory based microwave spectroscopy and radioastronomy. Nowadays a wide range of complex molecules is known to exist and the challenge is to understand their origin, chemical and physical behaviour and purpose. Their very existence in our own and other galaxies has transformed our view of stellar evolution and galaxy formation. The lecture will describe the search for molecules in space and attempts to understand their role in the Universe as a whole.	14-16+, US, GP	ALL	<b>j.n.macdonald@bangor.ac.uk</b>  01248 388433 01248 370528	Department of Chemistry, University of Wales Bangor., Deniniol Road, Bangor, Gwynedd. LL57 2UW.	TE, accommodation if required. Darkened room with adequate blinds/curtains needed.
MIGAND, Dr Marie E <i>and</i> HARDACRE Prof Chris	<b>Why A "C" in Chemistry</b>	This is a demo lecture where chemical principles ranging from carbon and the constituent of cellulose via enzyme processes to gunpowder and levitating trains are addressed through the use of a PowerPoint presentation and hands-on experiments with the participation of the audience.	5 to 11	20-100+	<b>m.migaud@qub.ac.uk</b>  02890 974339 02890 382117	School of Chemistry; Queen's University Belfast.	TE
	<b>A Volatile Chemistry</b>	This is a demo lecture where chemical principles associated with "smell" are addressed through the use of a PowerPoint presentation and hands-on experiments with the participation of the audience; The principles covered are for instance: volatility of molecules, functional groups and types of smell; chirality; isomerism; chemoreceptors (receptor vs enzymes) and molecule binding/recognition: different types of molecular interactions.	14-16+	20-100+			
MORGAN, Dr Geraint Huw	<b>1. From the Moon to Mars: The Story of Beagle 2 and Beyond.</b>  <b>2. Chemistry in Space: The Search for Life. Variations of above including...Technology Transfer from Space.</b>	The Beagle2 mission captured the imagination of the country with its bold ambition of investigating our neighbouring planet for signs of present and past life. The talk will describe the scientific rationale behind the mission and in particular the development of the Gas Analysis Package (GAP). GAP was the distillation of decades of work analysing meteorite samples in the laboratory, miniaturised in to a form suitable for inclusion in the Beagle2 lander. The chronology of the design and build processes for GAP, including the development of the Rosetta instrument will be described and illustrated with video footage from the period. Following the events of Xmas 2003, the talk will conclude by suggesting solutions to the question...'where do we go from here?'	ALL	ALL	<b>g.h.morgan@open.ac.uk</b>  01908 655180 01908 858022	Planetary and Space Sciences Research Institute, The Open University, Walton Hall, Milton Keynes, MK7 6AA.	TE

NICHOLSON Professor John	<b>Molecules 'R' Us</b>	The lecture concludes with a demonstration of oxidation of glucose in the presence of indigo carmine, with information that oxidation of glucose is essential to give living things energy. see left. The lecture thus ends with an experiment relevant to the working of the pupils' bodies and concludes that they, too, are examples of the usefulness of chemistry.	seven-11	20-100	<b>J.W.Nicholson@gre.ac.uk</b>  020 8331 9965 020 8331 9805	School of Science, University of Greenwich, Chatham, Kent. ME4 4TB	No charge. 1 hour drive max because of the need to transport equipment.
OSBORNE, Dr Alan G	<b>Fun With Chemistry</b>	The solutions include proposals for a reflight, as part of the fledgling ESA Aurora programme, and the transfer of the technology to terrestrial applications, including its use as a medical tool. As a bonus the group's data from the successful Surface Science Package on the Cassini-Huygens lander will also be presented.	eleven - 14	300+	<b>dimequin@bushinternet.com</b>  020 8590 2021	7 Farley Drive, Seven Kings, Ilford. Essex. IG3 8LT	Preparation expenses of £75, overnight accommodation (takes 1-2 days to prepare), TE. Prefers pm.
PEARCE, Prof Frederick L	<b>Allergies: Wheezes and Sneezes, Itches and Rashes</b>		14-16+, US, GP	ALL	<b>f.i.pearce@ucl.ac.uk</b>  020 7679 7235	University College, London, 20 Gordon Street, London WC1H 0AJ	TE
PEARCE, Steve	<b>Flavours, Fragrances, or Food</b>	Will cover anything with flavours, fragrances or food – history, development, chemistry and applications – including creating and formulating products. Will tailor-make presentation to suit requirements either curriculum wise or according to age and interests of the group	5-16+, GP, US	ALL	<b>steve@maverickinnovations.co.uk</b>  01728 726627 01728 726533	Maverick Innovations Ltd, Technology Centre, Station Road, Framlingham, Suffolk IP13 9EZ	TE
	<b>“Chemists don’t just wear white coats”</b>	Career orientated talk	5-16+, GP, US	ALL			
PILLING, Professor Mike	<b>Chemistry in the Atmosphere</b>	Chemistry plays an important role in the atmosphere, influencing climate change, stratospheric ozone depletion and air quality. The lecture covers the underlying science and describes how the atmosphere can be investigated in field experiments – on the ground, in aircraft and from satellites. We need to be able to predict how the atmosphere will behave and this is achieved through models, that are based on the atmospheric measurements.	14-16+, US, GP	ALL	<b>m.j.pilling@leeds.ac.uk</b>  0113 343 6450 0131 343 6401	Sch of Chemistry University of Leeds, Leeds. LS2 9JT	No charge

PLEVEY, Dr Ray & Mrs Rosemary	<b>Chemical Magic</b>	A visual presentation, a kaleidoscope of chemical reactions demonstrated in a light-hearted manner. A melange of observations, sometimes old, maybe something blue (a quick flash perhaps) etc pass before the eyes. Results predictable or unexpected create an atmosphere of magic to the uninitiated but to those in the know - it's just chemistry, a collection of elements which compounded together make us and our world.	7-16+, US, GP	40-100? 100+	<b>r.g.plevey @bham.ac.uk</b>  0121 475 2266 (tel & fax)  0121 414 4403 (fax)	Sch of Chemistry, University of Birmingham, Birmingham B15 2TT  <i>or home address:</i> 46, Bryony Road, Selly Oak, Birmingham B29 4BU	TE+accomodation. Normally not more than 150 miles but would consider more.  Prefer late morning onwards.
POLEYKETT, Gary 'Gary the Clown'	<b>Fizzically Impossible</b>	Materials and their properties. Workshops and shows designed for several different topics. See website for teachers' link. <a href="http://www.garythec clown.co.uk">www.garythec clown.co.uk</a>	five - 11 + GP	ALL	<b>garythec clown@ clara.co.uk</b>  01622 727629 0774 782 6773	89 Chamberlain Avenue, Maidstone, Kent. ME16 8PE	£275 includes 1 presenter and up to 3 workshops/shows per day.
PULHAM, Dr Colin R	<b>Chemistry of the Stars</b>	In this exciting demonstration lecture find out about how elements are made in stars and what sort of chemistry might be associated with the 'stars' of stage and screen - Posh and Becks, Kylie, the Vicar of Dibley, Joe Pasquale and many others. Explore the properties of the elements and their compounds and discover how we can use them to make heat, light, sound and electricity. Find out how metals and their compounds can be used to protect us from harmful rays and can cure disease. Approx. 60 mins <a href="http://www.chem.ed.ac.uk/chemcon">www.chem.ed.ac.uk/chemcon</a>	12-14, 15-17	ALL	<b>C.R.Pulham@e d.ac.uk</b>  0131 650 4756	Based in Edinburgh, but will travel throughout Scotland and Northern England.	Free. Sponsored by EPSRC.
REEDER, Paul S	<b>Why I'm A Chemist.</b>	Talk directed to appropriate audience as to why I'm involved in chemistry. 30 mins	11-16+, GP	ALL	<b>paul@reeder 91.freeserve.co .uk</b>	102 Fairhope Avenue, Morecombe. LA4 6LA	TE
ROBINSON, Richard	<b>Atomic Circus</b>	Don't go near the water! It's tricky stuff - a slippery, sticky, invisible, gassy, liquid, solid. It can even explode. At least it does when Richard Robinson gets his hands on it. In the course of these tricks Richard shows you how atoms and molecules work, where they came from and what we can do with them.	eleven-14	40-100+	<b>richard@ smagic.demon. co.uk</b>  01273 777628	18 Temple Street, Brighton. BN1 3BH	£275 +expenses. likes mixed child/adult audiences.

	<b>Kitchen Konjuring Not to mention "KAOS"</b>	Never have kitchens been messed up in a better cause. These simple tricks demonstrate in a comical and simple form the basics of chemistry. Everyone, including grown-ups, learns something new in an action-packed hour. The show includes Joseph Priestley and his work with carbon dioxide and oxygen, acids, alkalis and digestion. All the ingredients for the first-time chemists can be found around the kitchen. For the jokes, though, you'll have to book the show.	seven-11	40-100+			
SELLA, Andrea	<b>When is a Gas not a Gas?</b>	This exciting lecture illustrates the basic phases of matter - gas, liquid, solid - in a number of unusual and unexpected contexts. The lecture covers issues relating to density, temperature, molar volumes and contains visible, audible and edible experiments. Although aimed primarily at kids aged 10-16, the lecture can be tailored to other audiences as well.	11-16, GP	100+	<b>a.sella@ucl.ac.uk</b>  020 7679 4687 020 7679 7463	Department of Chemistry, UCL, 20 Gordon Street, London. WC1H 0AJ	TE for fee paying schools. Unless transport is provided, limited to within taxi ride of Euston station.
	<b>How the tiger got its stripes - oscillations and patterns in chemistry and biology</b>	A talk on how oscillating reactions work and exploring how simple chemical rules can give rise to unexpected behaviour. The biological implications will be discussed.	15+ 50+				
SHALLCROSS, Prof Dudley <i>and</i> HARRISON, Mr Tim	<b>A Pollutant's Tale</b>	A lecture demonstration that covers the composition of the Earth's atmosphere in comparison to other planets, the structure of the atmosphere, an investigation of some of the chemistry and properties of nitrogen and oxygen, a few of the tropospheric pollutants and climate change and what can be done to minimise human impact. Throughout the lecture there are chemistry demonstrations including those involving liquid nitrogen, oxygen foam, dry ice and a few explosions. There is also an element of audience participation. Aspects of elementary Chemistry are reinforced during the lecture.	US, GP, versions for 11-14, 14-16 and 16+	ALL	<b>t.g.harrison@bristol.ac.uk</b> or <b>sue.williams@bristol.ac.uk</b>  0117 928 8663 0117 925 0612	Bristol ChemLabS School of Chemistry, Cantock's Close, University of Bristol Bristol, BS8 1TS	£175 for the first lecture, £75 for subsequent upto 4 per day plus TA if more than 1 hr from Brsitol. Data projector and screen required.
SMITH, David K	<b>Medicine Beyond the Molecule</b>	In the last 150 years, the human lifespan has almost doubled. This lecture outlines the crucial role in this achievement played by chemists, who have developed many effective medicines. Using illustrations, audience participation and demonstrations, we will explore what happens to drug molecules inside the human body. Most importantly, we shall begin to think 'beyond the molecule' and uncover the way in which the chemical drug interacts with the biological patient.	14-16+, US, GP	20-100+	<b>dks3@york.ac.uk</b>  01904 434181	Department of Chemistry, University of York, York. YO10 5DD.	TE

SMITH, Prof Keith	<b>The Need for Cleaner Processes</b>	Power point presentation on the need for cleaner processes and research aimed at finding such processes.	11+	ALL	<b>smithk13@cardiff.ac.uk</b>  029 20 870600 (tel & fax)	School of Chemistry Cardiff University Main Building Park Place Cardiff, CF10 3AT	TE
SNOWDEN, Prof Martin	<b>Additives in the Diet</b>	This talk reviews additives in the diet and explains their role. A short extract of a QED video is shown on the effect of additives on childrens' behaviour. This is followed by a short discussion. 60 mins	14-16+, GP	ALL	<b>m.j.snowden@gre.ac.uk</b>  020 8331 9981	Medway Sciences, University of Greenwich, Medway Campus, Chatham. Kent. ME4 4TB	TE
SPHERE SCIENCE	<b>Testing Fruits for Vitamin C</b>	Pupils test how much vitamin C is in different fruits using DCPIP. Preferred timings 1-1.5 hrs, but can be negotiated. Will normally consist of 3 classes (depending on the workshop selected). The three classes will normally be offered the same workshop however we can accommodate a change of workshop during the day with certain combinations of activity.	nine - 11	30 and below	<b>spherescience@yahoo.co.uk</b>  0207 978 7257		£400 per day
	<b>Changing States</b>	Pupils discuss the changing of state and then dip a candle into hot wax. Preferably 1 hr, but negotiable.	five - 11	30 and below			£400 per day
STYRING, Dr Peter	<b>Chemical Engineering in the Kitchen</b>	45 min	7-11, 11-14, US, GP	20-40	<b>p.styring@sheffield.ac.uk</b>  0114 222 7571 0114 222 7501	Dept of Chemical & Process Engineering University of Sheffield, Sheffield S1 3JD	TE / 60 mile radius
SZYDLO, Dr Andrew	<b>As if by Magic.....</b>	A spectacular chemistry lecture/demonstration, presented in theatrical style, with many experiments. Scientific explanations are provided, which are suitable for the age group of the audience. Other relevant aspects are also covered: history, environment and safety.	seven-14	ALL	<b>Andrew.Szydlo@highgateschool.org.uk</b>  0208 347 3585	Highgate School, London N6 4AY	Min £60 inclusive. Prefers school hols or weekends, but any time can be arranged with notice.

THOMPSON, Dr Richard L	<b>Ion Beam Analysis - Snooker with Atoms</b>	Newtons laws of motion were used by Rutherford nearly a century ago to interpret the scattering of alpha particles from a gold foil. This led to the discovery of the structure of the atom - the ion beam analysis techniques that have evolved from this experiment now allows us to study the surfaces of materials by 'playing snooker with atoms'. Examples of applications range from airborne analysis to the science behind air conditioners.	14-16+, US	ALL	<b>R.L.Thompson @dur.ac.uk</b>  0191 3342139	Department of Chemistry, University of Durham, Durham. DH1 3LE	TE if > 20 miles
WALTON, Prof Paul H	<b>Chemistry comes to Life</b>	The lecture will describe the ways in which the chemical elements are involved in organisms - the subject is sometimes called Biological Inorganic Chemistry.	11-14, 14- 16, GP	ALL	<b>phw2@ york.ac.uk</b>  01904 432500	University of York, Heslington, York. YO10 5DD	TE
WILSON, Lorelly	<b>Chemistry with Cabbage- Primary Day</b>	A full day of hands-on chemistry experiments which gives children the chance to do a number of chemistry experiments and absorb many chemical concepts.	seven-11	20-40	<b>wilson.underw ood@lineone.n et</b>  01565 653279	Underwood, Glebelands Road, Knutsford, Cheshire. WA16 9DZ	TE
	<b>Chemistry with Cabbage- Parents/PTAs</b>	An hour of chemistry experiments which gives parents ideas for experiments that they can do at home with their children and encourages them to make up a chemistry set.	parents	20+	<b>wilson.underw ood@lineone.n et</b>  01565 653279	Underwood, Glebelands Road, Knutsford, Cheshire. WA16 9DZ	TE
	<b>Fizz, Foam and Flubber- Family or School</b>	Chemistry experiments you can try at home. A one hour demonstration showing how chemistry, and indeed much of life, depends on an understanding of molecules. Experiments use easily obtainable chemicals and can be repeated at home.	families or schools, best to include eight-12s	40-100+	<b>wilson.underw ood@lineone.n et</b>  01565 653279	Underwood, Glebelands Road, Knutsford, Cheshire. WA16 9DZ	TE
WORLEY Robert	<b>Is Chemistry A Risky Business</b>	Pupils are now not experiencing the chemistry that many of their teachers experienced. Health and safety rules are often cited for this. This talk goes into the background of the rules with appropriate demonstrations, shows that most chemical demonstrations and class practical procedures can be carried out safely. Are there other reasons for pupils not taking chemistry beyond GCSE and A-Level? Time 1 hour.	14-16+, Education US, GP	ten-40	<b>robert.worley@ virgin.net</b>  0208 567 6287	Chemistry Advisor at the CLEAPPS School Science Service. 77 Elthorne Avenue, Hanwell, W7 2JZ	TE, Within 50 miles London, though can be delivered en route to other destinations further afield.

Apr-08

If you would like to amend or add entries to this RSC Presenters List,  
please contact Pauline Meakins, RSC, Thomas Graham House, Science Park, Milton Road, Cambridge CB4 0WF  
email: [meakinsp@rsc.org](mailto:meakinsp@rsc.org) tel: 01223 432266