RSC NEWS

FEBRUARY 2015 www.rsc.org

Safeguarding the public

Supporting professionalism in the chemical sciences

ROYAL SOCIETY OF CHEMISTRY

▲Our regional meetings began on 6 January with members of Council and our communications, education and networks teams in Canterbury. For more information on our regional meetings, please contact **networks@rsc.org**.

▲7-10 January – our schools partnership team talking to chemistry teachers about our support at the Association of Science Education (ASE) annual conference at Reading University.

This 2014 Pan Africa Chemistry Network Annual Congress brought over 150 participants from across Africa and the globe to Addis Ababa, Ethiopia, to discuss current research, new developments and crucial issues on the topic of Biodiversity and Global Challenges.

WEBSITE
Find all the latest news at
www.rsc.org/news/

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Editor: Edwin Silvester

Design and production:
Vivienne Brar

Contact us:
RSC News editorial office
Thomas Graham House
Science Park, Milton Road
Cambridge, CB4 0WF, UK
Tel: +44 (0)1223 432294
Email: rscnews@rsc.org

Burlington House, Piccadilly
London W1J 0BA, UK
Tel: +44 (0)20 7437 8656

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THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2013

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Snapshot

A look at the latest news from around the world

INBRIEF

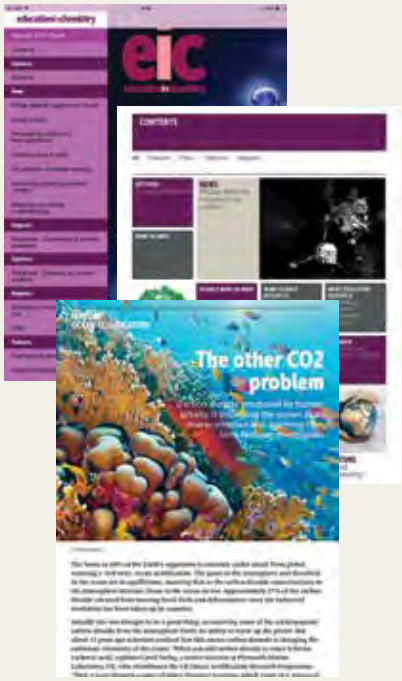
Education in Chemistry

Education in Chemistry, the leading magazine for chemistry teachers, is now available for the first time as an app on iOS and Android devices. In addition, the magazine is also available in a new web-reader format at **http://magazines.rsc.org/web-reader/eic**.

Education in Chemistry supports chemistry teachers across secondary, further and higher education with

- feature articles on a variety of chemical and innovative education topics
- news and opinions from across the science education spectrum
- research in chemistry and chemistry education
- ideas demonstration and advice to develop and support your teaching
- reviews of the latest books and resources

Exclusively for readers of the *Education in Chemistry* app, themed supplements on emerging topics in chemical education will also be available.



For 2015, all issues of *Education in Chemistry* will be free to download.

Strengthening our reputation

Our divisions, local sections and interest groups are part of the Royal Society of Chemistry community and together we're working to shape the future of the chemical sciences. To help people recognise us, we have created a logo for divisions and groups to use in their communications.

With such a diverse community (over 130 local sections and interest groups and nine divisions, two of which have 19 regional hubs between them) it's important that we make it as easy as possible for people to recognise us and connect with us.

The research that members and non-members took part in during the brand review in 2013 showed that we weren't always making a strong enough link to the Royal Society of Chemistry in the products, services and activities we offer. The new logo will help people find their way to the parts of our community and our activities that interest them the most.

Creating a new logo isn't something we do casually. Over the last three months we have been carefully considering the needs of the many groups that represent the Royal Society of Chemistry and the needs of our wider community. Some groups took part in interviews to help shape this work.

A coherent identity will strengthen our reputation and our collective voice – that is more important than ever in our work to show that chemistry is fundamental to our lives and the world around us.

The new logo will be rolled out to member groups and divisions in March.

ROYAL SOCIETY OF CHEMISTRY | ANALYTICAL DIVISION

ROYAL SOCIETY OF CHEMISTRY | SPECIALITY CHEMICALS SECTOR

ROYAL SOCIETY OF CHEMISTRY | CHILTERNS AND MIDDLESEX LOCAL SECTION

Browse free – issue 1 of our water journal is online

The very first issue of *Environmental Science: Water Research & Technology* unites high quality research on various aspects of water science and technology, particularly water resources, security and sustainability.

As we've come to expect from our author submissions, the quality of the articles received for this issue has been impressive. Topics range from sustainable sanitation to nitrogen recovery from wastewater.

What do you think of the newest addition to our journals portfolio? Visit **http://rsc.li/es-water** to read the full issue and share your thoughts with the team.

Remember, members get 15 free article downloads and access to a journal title of their choice, in addition to accessing the entire Journal Archive and Chemical Science.

Eminent chemists knighted in New Year's Honours

Congratulations to the members of our community who have been recognised in the New Year's Honours list (see p21 for the full list).

Our chief executive, Dr Robert Parker, paid specific tribute to Sir Simon Campbell and Sir Martyn Poliakoff, thanking them for their years of service to the chemical sciences.

"Simon is a former president of the Royal Society of Chemistry, an internationally-renowned synthetic organic chemist and has championed excellence in drug discovery from the UK.

"He has given exceptional service to our global initiative to raise the profile of the contribution of chemistry to the health and wellbeing of citizens in the UK and worldwide.

"Through Simon's leadership, the Campaign for Chemistry reinvigorated chemistry education in the UK and raised the profile of this issue through partnerships with institutions in China, India, South Africa, Japan and Brazil.

"He continues to represent the UK chemical sciences community internationally through consulting and advisory roles with a number of companies across the world.

"Martyn has emerged as a global leader in the field of green and sustainable chemistry, was recently elected an honorary fellow of the Royal Society of Chemistry by our council and is also Foreign Secretary of the Royal Society.

"He has given strong support to our efforts internationally, particularly in Africa and Russia, and his passion and enthusiasm on the difference chemistry can make to people's lives has been infectious, inspiring generations of chemists and chemical engineers all over the world.

"As well as being the author of over 300 peer-reviewed papers and having his work recognised with honours and awards, Martyn's work in engaging the public with chemistry has been acclaimed internationally, most notably through the hugely popular Periodic Table videos that have been viewed online by millions of people all around the world."

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Sir Simon Campbell was Royal Society of Chemistry president from 2004 to 2006

© CAMPBELL ROWLEY/ UNIVERSITY OF NOTTINGHAM

Sir Martyn Poliakoff is foreign secretary of the Royal Society and professor of chemistry at the University of Nottingham

RSC support for the Newton Fund to advance developing countries

The Newton Fund, launched in 2013 by the UK government Department for Business, Innovation and Skills, aims to build science capacity and partnerships to promote the economic development and social welfare of developing countries, and to support the UK's research community. The Newton Fund is a £375 million fund, providing £75 million per year for 5 years.

Through the Newton Fund, the UK will use its strength in research and innovation to support and advance developing countries. This will build strong, sustainable partnerships between the UK and 15 partner countries, funding programmes that will be implemented by delivery partners including the British Council, the Royal Society and Research Councils UK.

Any contributions from the Newton Fund towards the work of the delivery partner must be match-funded by the government of the developing country. We will partner with the British Council and, through their Researcher Links programme, we will match-fund at 50% a selection of chemistry applications that would not otherwise receive funding. We expect to fund around 10 Researcher Exchanges and 10 Workshops in 2015.

The aims of the British Council Researcher Links programme strongly align with our international strategy. Bringing together chemical scientists from all over the world to develop their skills, knowledge and practice of science is central in our mission to advance excellence in the chemical sciences.

INBRIEF

Chemistry Week 2015

Save the date – 14-20 November

Every two years our members organise and participate in a broad range of inspirational activities to promote a positive image of chemistry and increase public understanding of the chemical sciences.

This year we are encouraging and supporting our members to organise events that raise the awareness of the place of chemistry in people's everyday lives, with a specific focus on 'new audiences' – people who are not already interested in chemistry.

If you are interested in participating or would like to find out more contact **outreach@rsc.org**.

Royal Society of Chemistry supports the second series of family film project ExpeRimental

ExpeRimental is a series of free online films and resources from the Royal Institution of Great Britain, which aims to kick-start a revolution in science learning by supporting and empowering parents and families to do exciting and easy science activities with young children. The project aims to give viewers the confidence and ideas to explore, question and test some of the fundamentals of science with children aged four to nine and have fun at the same time! The activities have been specifically designed to appeal to those families who have never considered doing science at home with their children or who do not feel confident in their abilities to do so.

Each activity is designed to be easy to do using only common household objects. The project is based on the idea that playing, watching closely and asking questions is enough to light a spark of science learning at home with young children.

All the experiments are about encouraging natural curiosity and investigating the wonders of science while you play. The films are accompanied by a wide range of practical resources including downloadable instructions, badges and certificates.

The first ExpeRimental series launched with 10 physics films in summer 2014 and the second series, supported by the Royal Society of Chemistry, launched with another series of 10 films at the end of January.

Find out more at **rigb.org/experimental**, see the latest films on Ri's YouTube page and share your feedback on **Twitter @Ri_science and @RSC_Comms**.

One to one

Take advantage of a wide range of member services

Not chartered? No problem. You have options...

Celebrating diversity in the chemical science was important to our immediate past president, Professor Lesley Yellowlees and is a mission championed by our current president, Professor Dominic Tildesley. As the diversity of our membership continues to grow in rich and valuable ways, so we are passionate about continuing to offer our members the recognition they deserve. This means that as a member of our professional body, you have access to a range of professional qualifications:

- Registered Science Technician (RSciTech)
- Registered Scientist (RSci)
- Chartered Chemist (CChem)
- Chartered Science Teacher (CSciTeach)
- Chartered Scientist (CSci)
- Qualified Persons (QP)
- Mastership in Chemical Analysis (MChemA).

Supporting our members

Professional development doesn't only mean becoming chartered. We support the Science Council's mission to recognise professionalism in science roles, at all levels. Registered Science Technician (RSciTech) and Registered Scientist (RSci) are peer-reviewed professional awards which were developed in conjunction with leading employers and ten scientific professional bodies including us. They differentiate you from your peers by recognising your skills, knowledge and experience that are valued by industry.

Joining the registers, like chartered status, is not about sitting more exams or simply attending training courses but showcasing all of the valuable aspects that you develop. They are primarily aimed at those working in technical and chemical science roles.

Other sectors like engineering have reaped the rewards of recognising professional development such as increased employability, and we want to bring those benefits to our sector.

Becoming registered proves that you have been recognised by your peers as demonstrating professionalism to colleagues and clients, maintaining key scientific and transferable skills, working with integrity and are committed to developing your career. Visit **http://rsc.li/registers** for more information and to apply.

Registered Science Technician (RSciTech)

The RSciTech award is for those who apply sound scientific knowledge to their daily role. Being a registrant demonstrates they are reliable, responsible and trusted to conduct their work in a thoughtful and considered manner.

Examples of those who could be eligible include technicians in industry, apprentices, technicians in education, and early career scientists. This list is not exhaustive and you could be eligible if you demonstrate the right qualities.

Megan Carroll gained RSciTech status in 2012

"I don't hold a chemical science degree. However I wanted to start my professional development journey and was encouraged to apply by my line manager and mentor, both of whom are chartered".

Megan says that by being registered she demonstrates to her colleagues that she is highly committed to professional development throughout her career.

RSciTech applicants will be affiliate members, employed in a relevant science related role and hold qualifications such as Scottish Highers, National Vocational Qualification (NVQ) at level 3, A-levels and at level 3 BTECs. We also consider applications from experienced members without formal qualifications. If you are unsure about your eligibility, email **registers@rsc.org**.

Registered Scientist (RSci)

RSci is for those who apply their well-developed scientific knowledge to their daily role. Registrants will be proficient at solving problems, contribute to the organisation of tasks and resources, whilst also taking an active role in their professional development. Those eligible include scientists, senior technicians, advanced apprentices and research scientists.

Matt Fazakerley became a Registered Scientist in 2013

"Becoming registered helped me to reflect upon my experiences and skills, and I identified areas for development".

This crystallises how planning for and achieving professional awards can be used to help develop your career in a structured way.

RSci applicants will be affiliate or associate members, employed in a relevant science related role and normally hold at least QCF level 5 qualifications such as a Higher National Diploma, NVQ level 4, foundation or higher degree. Again, those with other qualifications (e.g HNC) or experience alone may be considered. Those completing a MChem degree with a year-in-industry are also eligible to apply.

Shape your career

Becoming registered also means a commitment to continuing professional development (CPD). This is the most important aspect of any professional award, because it is through on-going improvement that you stay relevant and your skills remain current. You should keep an annual record of CPD activities, which could be recorded using our online resource, **http://www.rsc.org/cpd/**, in the following areas:

1. Work-based learning
2. Professional activity
3. Formal / Educational
4. Self-directed learning
5. Other

The requirements for RSciTech, RSci and chartered status are designed in a way that you could also use them as a framework for your career development. Some of our RSciTech registrants develop into RSci status holders, and some become RSci whilst completing the 2 year CChem Professional Development Programme.

Profile

A closer look at our members and their interests

Dr Sean Thurston MRSC
Sean is possibly the only person in the world who has burned a diamond, made caesium fluoride, and exploded a kilometre-long pipe of hydrogen and oxygen.

Sean Thurston

Meet the inspiring chemist following in Faraday's footsteps at the Royal Institution

Q What inspired you to study chemistry?

A As a young boy I became fascinated by my father's fish, and was constantly asking questions about them. A family holiday to the Jacques Cousteau Institute in France ignited my desire to become a scientist, and for years I wanted to become a marine biologist.

It was thanks to my Year 9 teacher, a classic-looking mad-scientist with massive grey hair and glasses, who had a somewhat explosive approach to teaching, that chemistry first captured my attention. Someone made a joke while he was trying to explain something about methane, and he drew the structure up on the board – that was what got me interested in chemistry.

A year later I began work experience at Inspire, a public science centre in Norwich, and became interested in not just learning chemistry, but talking about it with other people.

"I've discovered that I really love inspiring kids into science, and it's really nice to see people enjoying the workshops and knowing that I had a hand in it."

Q Have you always been interested in both academia and outreach?

A Working at Inspire got me really into talking to other people about science and getting other people interested in it. When I was offered a part-time job I gratefully accepted and throughout my A-levels I became more involved with science outreach. Through the Royal Society of Chemistry I became involved with ChemNet, and later on as a STEM Ambassador. I went on to study chemistry at the University of East Anglia, becoming especially interested in synthetic organic chemistry, as I loved the thrill of holding something that no one had ever made before. Initially I wanted to be a researcher, staying on to study for a PhD in organocatalysis.

Q How did you come to work at the Royal Institution?

A At the end of my PhD, a friend showed me an advert for a job at the Royal Institution as an assistant for their famous CHRISTMAS LECTURES, which seemed too good to pass by. After an interview in which that year's presenter, organic chemist Peter Wothers, emerged from behind a door to ask what my favourite element was – "Iodine. Always iodine" – I started work just three days later.

Q Do you have a favourite Royal Institution demonstration?

A I was thrown straight into working with Peter, thinking about the experiments that we wanted to show during the CHRISTMAS LECTURES. With almost no limit to what we could do, I was able to bring together experiments and guests from right across chemistry: from hearing about a toddler cured by an experimental xenon therapy to burning a diamond with Nobel Prize winner Sir Harry Kroto.

The dramatic climax of the lectures was a classic demonstration: burning hydrogen in air to form water. Normally, this is done with a balloon full of hydrogen, but the occasion demanded something bigger: much bigger, as it turned out. We decided to perform the reaction in a length of pipe a kilometre long, which stretched all around the building, through the lecture theatre, the library and onto the balcony and roof.

Despite a few problems – we didn't realise at the time the logistics of handling a kilometre of pipe – the experiment was ready just in time to be filmed for the lectures. It's now my favourite demonstration, and I have been lucky enough to perform it with the Royal Institution in many places all around the world.

Q How did your career move into inspiring kids into science?

A I hesitate to call it a 'career', but, my career has always had two threads to it. There's always been the outreach side – through ChemNet and as a STEM Ambassador; and then there's been the academic side because I always saw myself going into research – I've always had an interest in wanting to help other people with it, I suppose, driven by the idea that if you could do something then you probably should.

After finishing my work on the lectures, luckily a job working at the L'Oréal Young Scientist Centre came along. I design and run workshops where students become a scientist or engineer for the day, testing their own ideas by designing and conducting creative experiments. I've discovered I really love inspiring kids into science and it's really nice to see people enjoying the workshops, knowing that I had a hand in it. I can't see myself ever wanting to leave the Royal Institution.

14-18 YEAR-OLDS: JOIN CHEMNET FREE

Get free chemistry help from our experts.

Find out where chemistry could take your career.

Keep up to date with the world of chemistry.

Membership benefits include:

- Exclusive members-only events, study help and careers advice.
- Electronic copy of *The Mole*, our magazine just for 14-18 year students.
- Ask the expert service – Dr ChemNet can answer your chemistry questions.

Safeguarding the public

Our specialist qualifications promote public safety and support professionalism in the chemical sciences.

Whether it's recognising people's scientific achievements and contributions through awards and professional registers or providing our members with opportunities to develop their skills through mentoring, training and continuing professional development, we support professionalism in our community in a many different ways. In fact, our work in this area is deeply embedded in our mission, with our Royal Charter stating that one of our objectives is "to establish, uphold and advance the standards of qualification, competence and conduct of those who practise chemistry as a profession".

WORDS
JANE MCLAUCHLIN
ANDREA MCGHEE

A professional chemical science community is a community that has the right people with the right skills. And we want to make sure that anyone who works with chemistry has the right tools and resources, knowledge and skills, and training and support to be professional in everything they do. One of the ways in which we do this is by providing our members with the opportunity to achieve a range of different professional accolades that allow individuals to clearly demonstrate the professional standards they have reached.

Ranging from chartered chemist (CChem), chartered scientist (CSci) and chartered science teacher (CSciTeach) status to the registered scientist (RSci) and registered science technician (RSciTech) registers, professional designations indicate an accredited standard of competence beyond official qualifications. In addition to these broad designations, we also award a number of specialist qualifications, including the Qualified Person (QP) register and the Mastership in Chemical Analysis (MChemA), that indicate that an individual demonstrates the necessary skills to carry out their role in safeguarding quality and public safety.

Safeguarding the quality of medicines

Anyone manufacturing pharmaceutical products is legally bound to have a QP who controls the quality and safety of medicines and certifies their release for public use. Any pharmaceutical product manufactured in or imported into the EU requires a licence from the regulatory authority, and it is the QP who is responsible for ensuring that the final product complies with it. The QP designation was first introduced in the EU in 1975 with the aim of improving the safety of drugs after adverse effects of drugs like thalidomide coming onto the market.

In the UK, the Human Medicines Regulations 2012 describes the requirements for the QP and the role of the professional bodies. Together with the Royal Pharmaceutical Society and the Society of Biology we jointly assess the eligibility of our members to act as QP on behalf of the Medicines and Healthcare products Regulatory Agency and the Veterinary Medicines Directorate. In addition, we maintain a register of all those members who are eligible to act as QP.

Reaching QP status

Candidates who would like to qualify as QP have to satisfy the legislative requirements for qualifications and experience and need to demonstrate a certain level of expert knowledge and experience in pharmaceutical manufacture. Following the submission of their application form providing a detailed account of their relevant knowledge and experience, all candidates are invited to attend a professional interview. In order to support their application, candidates must be supported by a sponsor – usually a QP themselves – who can attest to the candidate's experience and advise on training and the assessment.

Our Register of Eligible Qualified Persons currently includes around 600 QPs. If you would like to find out more information about applying to become a QP, visit **http://rsc.li/qualified-person**

For information on the latest regulatory requirements, take a look at our study guide at **http://rsc.li/qp-study-guide**

Maintaining the safety of our food

Following the horse meat scandal in the UK, in which horse meat was substituted for beef, the work of Public Analysts has entered the spotlight. They are highly-skilled analytical scientists who are responsible for the safety and quality of our foods. They also test a wide range of consumer goods, water and air samples that may have an effect on human health or the environment.

In the UK, each Local Authority (including other Food Authorities) must appoint one or more Public Analysts, who, in turn, must hold an MChemA, which we award in line with the Food Safety (Sampling and Qualifications) Regulations 2013. In addition, Public Analysts get involved in a range of different activities, and they are named in about 30 other pieces of UK legislation.

How to obtain MChemA

We have offered the MChemA qualification for more than 100 years. Initially, it was awarded as the Branch E Fellowship of the Royal Institute of Chemistry, and has been designated the MChemA since 1968. The qualification is run by the MChemA Examinations Board, which consists of Public Analysts and other Royal Society of Chemistry members who are experienced in analytical science and regulation.

In order to qualify as MChemA, candidates have to take a three-component examination. The first two parts assess their knowledge

Candidates take a three stage exam. Part A and Part B cover general analytical chemistry and the applications of analytical chemistry, both of which are essential to the work of a Public Analysts. The final part comprises a detailed portfolio of the candidate's knowledge, experience and skills, and a one-day practical examination to test the candidate's investigative and problem-solving skills. For regulations, the syllabus and guidance notes, visit **http://rsc.li/mchema-guidance-2015**

Championing professional development

One of the things that is common to all of the professional qualifications we award – whether QP, MChemA or one of the other designations – is continuing professional development (CPD). The holders of any professional qualification are committed to maintaining, improving and broadening their knowledge and skills to ensure continuing competence as a professional throughout their career. In practice, this means that all members with professional qualifications are expected to keep their knowledge and skills up to date and that we might ask them to provide evidence of this on an annually basis.

More than 60% of our eligible members hold CChem status, and interest in this and other designations continues to increase. But whether you are part of the group of 16,000 CChem holders or one of the 600 QPs listed in our registers, you can rightly be proud of your professional qualifications. Having obtained them, you are clearly demonstrating to your employers, your clients and the general public that you take your role as scientist seriously and act in an informed, responsible and professional manner in order to safeguard our everyday lives.

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Our strategy

When creating a strategy for the whole organisation, we look towards an ambitious future while drawing on our traditional strengths

Chemistry is everywhere and in everything – as chemists we know this. This means that we have an interest in almost every aspect of society, whether that's research, education, government policy or everyday life. With such an incredibly broad field of opportunities for chemists and chemistry to have a positive impact on the world, it's important for us to prioritise those countless possibilities. We do this by creating a strategy: a set of guiding principles and goals that articulate where can make the greatest impact and most efficiently use our resources.

Our current strategy was created in consultation with staff and members, and agreed by Council in 2012. It outlines the areas in which we can make a positive difference, what we hope to achieve, and how we will go about achieving those goals. But perhaps most importantly it explains why we've made these commitments. None of these programmes and projects are arbitrary; they flow from our core strengths, using our combined talents and knowledge to tackle new challenges for the benefit of science and humanity.

Beginnings

We've been advancing excellence in the chemical sciences since 1841, when 77 scientists – including doctors, academics, manufacturers and entrepreneurs – formed the Chemical Society of London, with dialysis inventor Thomas Graham as their first President.

Among those members were both household names in the burgeoning academic field of chemistry and those whose interests lay primarily in the application of chemistry, perhaps most famously the waterproof fabric inventor Charles Macintosh. From those very early days, our community has included scientists working in academia, industry and beyond. It was one of our great strengths in 1841 and it remains so in 2015.

In 1848, Queen Victoria granted a Royal Charter, confirming its purpose of "the general advancement of Chemical Science". After 170 years that purpose is just as relevant and valid, but we pursue it on a scale those initial 77 members would find inconceivable. We now have over 51,000 members across the world, an internationally-renowned and award-winning not-for-profit knowledge business, and a reputation as an influential champion for the chemical sciences.

Our global community now spans hundreds of thousands of scientists, librarians, teachers, students, pupils and people who love chemistry. Together we are the world's leading chemistry community and our shared mission is to advance excellence in the chemical sciences.

Strengths

Alongside the diversity of our community, there are other common themes that stretch back through our entire history. If we look at the purpose and methods of the organisation as time goes on we see that, although the scope and scale have dramatically increased, our core strengths have remained the same:

- **our reputation as a globally-trusted provider and interpreter of top-quality, accessible chemical science knowledge;**
- **our deep understanding of the needs and solutions for developing skills in the chemical sciences at all levels; and**
- **our ability to create, facilitate and grow the chemical sciences community.**

In 1841, we provided chemical knowledge by sharing the latest chemical discoveries, publishing Proceedings and Transactions, and maintaining our Library. We had brought together the world's first successful community of chemical scientists, providing facilities to

WORDS
JON EDWARDS

host members and visitors and welcoming international scientists to share knowledge and ideas. In fact the very first paper presented at a Chemical Society meeting was submitted by the renowned German chemist Justus von Liebig.

Skipping forward to 1980 and the formation of the Royal Society of Chemistry, we can see how these strengths continued to flourish. We were now publishing chemical science research journals and books, hosting international conferences, and serving the public interest by providing analytical science expertise to the government.

Through combining the Chemical Society with the Royal Institute of Chemistry and Society for Analytical Chemistry, we were now awarding and accrediting chemical science degrees, overseeing training and qualification of analysts, and policing ethical practice as the UK's professional body for chemists. And by this point our community had formed Divisions, interest groups, regional and local sections and started to recognise excellence with awards and prizes.

And what about 2015? We're still providing trustworthy chemical science knowledge, using the latest technologies to make it more accessible. We're now recognised experts in chemistry teaching at secondary school level, have expanded our accreditation programmes into vocational and industrial training and extended our professional recognition beyond traditional academic routes. Through new technologies and across new geographical boundaries we've expanded and strengthened the global chemistry community even further.

Strategy

How does all this history fit into creating a strategy for the future? It helps us to understand where our strengths lie, and draw on them to be as effective as we possibly can be. We created a strategy that helps us to focus on providing reputable knowledge, understanding the skills needs, and nurturing the community, so that we can best enable chemists worldwide to make discoveries, create new products, and play a key role in solving global challenges.

Knowledge: we want to make the best chemical science knowledge accessible to all those who need it. This means that while we continue to grow the quality and quantity of our journals, books and conferences, we'll also be using new technologies and methods to reach more people, more easily. Whether you're a scientist, a teacher, a student, a policymaker, or an interested member of the public, we want you to be able to get trustworthy chemical information in the right format and style.

Skills: we want to secure a strong, diverse and sustainable supply of chemical scientists at all levels. From encouraging young people to study chemistry, making that education engaging, inspiring and relevant, through to helping professional chemists train and develop throughout their careers, we want to support people in chemistry at all levels and all stages of their education and careers.

Community: we want to bring together and empower our global chemistry community for the benefit of science and humanity. As chemists further expand their horizons across scientific disciplines, geographical borders and open innovation, we'll aim to bring them together to collaborate and share knowledge.

Member engagement

Members both lead and support the Royal Society of Chemistry. Our President, Council and other governance committees – such as the Science, Education and Industry Board and Membership & Qualifications Board – make the top-level decisions on strategy about the future of the organisation, with close support from staff. Our 51,000 members across the world deliver that strategy on the ground: we rely on our generous, passionate members to be our most influential advocates for the chemical sciences.

An important part of our strategy is to further develop the way members influence our future – whether that's through broader consultation on the strategy itself, more support for on-the-ground activities, or more flexibility to better meet the specific needs of different members groups. Through larger conferences like the General Assembly, member-led initiatives like the Regional Steering Groups, and by enabling better member-to-member communications, we aim to celebrate and empower our members.

An ambitious future

The chemical sciences will play a vital role in prosperity – as they have done for hundreds of years. Better health, sustainable resources and new technologies will all depend on chemists working together and with others. And so we must focus on doing what we're best at doing: using our three core strengths to bring people together and advance excellence in the chemical sciences.

FROM LEFT TO RIGHT: © ROYAL SOCIETY OF CHEMISTRY (P10), © SCIENCE PHOTO LIBRARY, © STEPHEN LAKE, © MPP IMAGE CREATION (P11)

Opinion

Letters and comments on RSC activities and issues

FROM THE EDITOR

The New Year meant a new start and a change of editor for *RSC News*. Before I look forward, I'd like to take the opportunity to reflect, thanking Annika Grandison for her huge professionalism and the excellent job she's done in the editor's chair.

This issue also contains a good slice of professionalism, from the way our colleagues protect the public (p10) to your qualification options (p6) and the benefits of continuing to develop throughout your career (opposite page).

And the looking back and looking forward theme continues with a fascinating insight into how we articulate our strategy, looking towards an ambitious future while drawing on our traditional strengths (p8).

Working in our news and media team, I know there are plans in place for hugely exciting, inspirational and important projects this year. I look forward both to bringing you news of them and hearing how you're getting involved.

Edwin Silvester
rscnews@rsc.org

RSC News welcomes letters, which should be concise (normally less than 300 words) and timely. Those selected for publication are subject to editing for clarity and length. Letters should be marked 'for publication'; letters are not routinely acknowledged. **rscnews@rsc.org**

You can also let us know your thoughts and comments via Twitter or Facebook.

@RSC_Comms

facebook.com/RoyalSocietyofChemistry

Everyone can edit Wikipedia

In response to offering Wikipedia editors access to Royal Society of Chemistry resources (*RSC News* January 2015), I would like to say 'impressive step'.

Members should note that essentially anyone can edit Wikipedia entries, and anyone can get an account to enable editing more formally. I frequently make small corrections to articles when I encounter errors or infelicities.

Clearly, anyone with specific knowledge can a make a contribution of value. I would encourage all members to edit whenever they feel there is a factual problem even if disinclined to create a full article or section (although this of course remains a possibility for those with the motivation and time).

Professor Brian W. Darvell CSci CChem FRSC
Jabriya, Kuwait

Thank you for sharing your thoughts and also for contributing to Wikipedia and encouraging others to do likewise. Every change – from correcting a misplaced apostrophe to significantly expanding an article – helps. We recognise that Wikipedia is the first port of call for information on chemistry topics for students and the general public and, no doubt, many chemists.

Our donation of access to our portfolio of journals and databases to 100 active Wikipedia editors, who already edit on chemistry topics, is just one of the ways in which we're helping to make a real difference to the quality of chemical science information available on Wikipedia around the world, in many languages.

In addition, we are planning many other collaborative activities during the coming months, including hosting dedicated events to help our members to start editing Wikipedia.

If you'd like to find out more about our Wikipedia-related activities, you can read more on the **MyRSC blog at http://my.rsc.org/blogs/490/**

Andy Mabbett, Wikimedian in Residence
Royal Society of Chemistry

On tackling climate change

In the January 2015 issue of *RSC News* ('Global challenges, chemistry solutions' on p8), Deirdre Black outlines the valuable contribution chemical science can make to reducing the impact of climate change by developing technologies to help us adapt to and mitigate that impact. However since mitigating simply means 'reducing the severity of' a particular situation, we should add minimising (the ultimate cause of that situation) to our two goals.

For example, we could look to reduce the actual amount of CO_2 released to the atmosphere by helping to develop carbon capture and storage by finding a way of using that carbon source so it becomes a valuable resource rather than just a waste product to be disposed of, to improve the efficiency of alternative energy sources such as solar panels or to devise better/cheaper insulation materials.

By all means, let's still look for ways of minimising the impact of, or adapting to, the residual CO_2, but let's tackle the root cause as well!

Dr John B. Davis FRSC
Harpenden, UK

Competence, commitment and credibility

Why is CPD important, asks Jenny Boxwell

When I think about Continuing Professional Development (CPD), one of the first words that jumps to mind is 'opportunities' – those we make and those we take. I was privileged to receive an invitation to present at the recent Royal Society of Chemistry General Assembly in Manchester. I felt it was a fantastic opportunity to support my CPD.

So, why is CPD important? Of course there are two points of view to consider – the individual/employee and the company/employer.

The value of CPD is significant. Companies that support and encourage CPD for all their staff will be rewarded with the ability to not only recruit highly-skilled individuals, but also retain them. Competition for such individuals – particularly in the chemical sciences – is fierce and the importance and value of training and development plans for employees, along with clear career paths and mentors (where necessary), should not be underestimated. It is in the interest of every company, no matter what their business is, to ensure staff achieve their maximum potential. This in turn provides real benefit to the UK skills base.

From my own perspective, CPD increases confidence and motivation, instils individual pride and provides a sense of personal achievement. I feel it also demonstrates commitment and competence, as well as professional credibility. I think it's essential for individuals to take responsibility for their own development but seek support and guidance from mentors and managers when appropriate.

Finding opportunities

Chemistry has been at the core of my career, although I've moved away from the laboratory bench to an office-based role along the way. The Atomic Weapons Establishment (AWE) is responsible for building and maintaining Trident warheads for the UK deterrent and for delivering innovative national nuclear security solutions. On joining AWE as a research chemist in the Materials Science Research Division, I was the first member of staff to enrol onto the new RSC-Accredited scheme. After proving I met the 12 Chartered Chemist (CChem) attributes and an interview, I was thrilled to be awarded CChem and Chartered Scientist (CSci) status in 2005.

I was very proud to be one of the first three (female) members of staff to achieve chartership via the scheme and was delighted when the Royal Society of Chemistry appointed me as a site representative. I have since mentored a number of candidates on the scheme, in addition to undertaking reviews for MRSC and CChem, and I continue to manage the Accreditation Scheme. Most recently I have become a member of the new Head of Profession Chemistry and Materials Support Team – which focuses on enhancing the profile of the RSC across AWE and highlighting the benefits of being part of the chemistry community.

The range of development opportunities available alongside my specific technical role within materials science included networking at conferences, a short secondment, supervision of a university placement student, giving technical presentations to my peers and the wider AWE community, and co-authoring external technical publications (e.g. in the Polymer Degradation and Stability journal).

I gained confidence when voted, by my peers, to be the science graduate representative. The role enabled me to discuss the views of the Graduate community with senior managers and I started to broaden my knowledge of AWE. As part of the Graduate Programme, I was part of a cross-company team that developed an electronic study aid for Key Stage 3 students, a learning tool which a local school could use to help pupils build a good foundation in the sciences before embarking on their GCSEs.

New challenges

I have represented AWE and the chemistry community at a number of careers fairs and participated in 'Aim Higher' initiatives to raise awareness amongst school children of the exciting opportunities available to them in science. I found these events particularly rewarding; there is no substitute for face-to-face discussions with the schoolchildren who may have the potential to be the next generation of leading chemical scientists. Indeed, AWE undertakes graduate projects each year as part of its schools outreach programme aimed at different age groups.

Following a short project management placement within materials science, I successfully completed the Association for Project Management (APM) Introductory Course and then took on the role of Team Leader Polymer Development and Characterisation in 2007, which developed my leadership and management skills. In 2008, I was keen to look for new challenges and became the Programme Manager for AWE's materials science area.

I continue to seek new development opportunities and participated in the General Assembly discussion session on the importance of inclusion and diversity in the chemical sciences. I have recently talked to colleagues about promoting careers for women in STEM and actively support the national WISE (Women in Science and Engineering) campaign.

So going back to my original question – why is CPD important? I believe that opportunities are central to CPD and it is in our own interest to realise them for our own benefit, to continually develop, and for ensuring continued success in the organisation at which we work.

Dr Jenny Boxwell is a programme manager at AWE, a Chartered Chemist and Chartered Scientist.

"CPD increases confidence and motivation, instils individual pride and provides a sense of personal achievement."

Diary

Your guide to all important events

IN THE DIARY

NOTICES

Our South Africa Local Section take children on a molecular journey of discovery (p20).

Further information

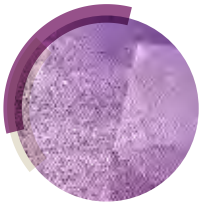
To find out more about any event on this page, see **www.rsc.org/events**

Call +44 (0) 1223 43 2254/2380

Or email **events@rsc.org**

RSC conferences

Faraday Discussion



Nanoparticle Assembly: From Fundamentals to Applications

7–9 January 2016
Mumbai, India

Abstract submission deadline – 20 April 2015

Complementing the Faraday Discussions meeting on Nanoparticle Synthesis and Assembly (Chicago, USA, April 2015), this Discussion focuses on the rapidly evolving field of nanoparticle self- and driven assembly.

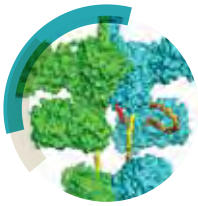
Three distinct classes of materials where nanoparticle assembly holds significant potential for applications will be covered – with a view to determining common features of structural organisation on the nanoscale. As such, it is an excellent opportunity to consider the implications of these ideas for the broader field of soft matter.

Does your research align with any of our central themes?

- synthesis and assembly of nanoparticles and their assemblies
- modeling and theory
- nanocomposites
- applications to soft matter

If so, don't miss this chance to get your work published. Submit your abstract by 20 April.

http://rsc.li/assembly-fd2016



Directing Biosynthesis IV

25-27 March 2015
Norwich, UK

Final registration deadline 25 February 2015

Natural products produced predominantly by microorganisms and plants have inspired the development of many blockbuster drugs and crop protection agents. As such, Natural Products research is strategically important to industry and society globally.

Directing Biosynthesis IV will be the fourth in a successful series of meetings. This 2014 Conference will be set around 5 key session themes:

- natural products frontiers
- discovery and diversity
- perspective: thiotemplate assembly line biosynthesis
- tools & technology
- synthetic biology and bioengineering

This is a significant networking opportunity for anybody interested in the biosynthesis of natural products. Make sure you register now to be a part of DBIV.

http://rsc.li/dbiv

ANNOUNCING

Challenges in Organic Materials and Supramolecular Chemistry (ISACS18)
19-21 November 2015
Bangalore, India
http://rsc.li/isacs18

DATES AND DEADLINES

Nucleation – a Transition State to the Directed Assembly of Materials (Faraday Discussion)
30 March-1 April 2015
Leeds, UK
Bursary applications: 9 February 2015
Early bird registration: 9 February 2015
Final registration: 2 March 2015
http://rsc.li/nucleation-fd2015

Corrosion Chemistry (Faraday Discussion)
13-15 April 2015
London, UK
Poster abstract submission: 9 February 2015
Bursary applications: 23 February 2015
Early bird registration: 23 February 2015
http://rsc.li/corrosion-fd2015

Nanoparticle Synthesis and Assembly (Faraday Discussion)
20-22 April 2015
Chicago, USA
Poster abstract submission: 16 February 2015
Early bird registration: 2 March 2015
http://rsc.li/nanoparticle-fd2015

Challenges in Chemical Biology (ISACS16)
15-18 June 2015
Zurich, Switzerland
Oral abstract submission deadline – 9 February 2015
http://rsc.li/isacs16

Teacher Training Scholarships
Inspire the next generation
Apply for a Royal Society of Chemistry Teacher Training Scholarship
http://rsc.li/teacher-scholarships

Events

Further information

The *RSC News* Diary this month lists RSC events from February to March 2015 that are held on the RSC conference database. Further details on any of these meetings can be obtained from the named contact or from the conference website at **www.rsc.org/events**

You can search events by name, date or keywords and have the option to browse by location, subject area and event type.

EASTERN

East Anglia Section

UEA School of Chemistry Research Seminar

11 February
University of East Anglia, Norwich
Prof Michael Greaney of the University of Manchester will give a lecture on research in organic chemistry.
Contact John Fielden
01603 593137
john.fielden@uea.ac.uk

UEA School of Chemistry Research Seminar

11 March
University of East Anglia, Norwich
Dr Chris Russell of the University of Bristol will give a lecture on research in organometallic chemistry.
Contact John Fielden
01603 593137
john.fielden@uea.ac.uk

Other Events

Analytical Division – East Anglia

Social Event – Gourmet Meal

12 March
Cambridge Regional College
The restaurant has been reserved for an evening social event, where a three course meal, inclusive of wine, will be cooked and served to us by the students, with their tutors overseeing the process. The cost of attending this event will be £22.50 per head. Members will be allowed to bring along one guest.
Contact Brian Woodget
07899 910954
bwoodget1@sky.com

Biological and Medicinal Chemistry Sector

Fragments 2015: Fifth RSC-BMCS Fragment-Based Drug Discovery Meeting

22-24 March
Churchill College, Cambridge
The aim of the meeting will be to continue the focus on case studies in Fragment-based Drug Discovery that have delivered compounds to late stage medicinal chemistry, preclinical or clinical programmes. The conference will include successful examples from all types of fragment-based approaches, including high concentration, NMR, SPR and X-ray screening.
Contact Maggi Churchouse
01359 221004
maggi@maggichurchouseevents.co.uk

Chemistry Biology Interface Division

Directing Biosynthesis IV

25-27 March
The John Innes Centre, Norwich
Natural products produced predominantly by microorganisms and plants have inspired the development of many blockbuster drugs and crop protection agents. Natural Products research is strategically important to industry and society globally.
Contact RSC Events Department
01223 432380
events@rsc.org

INTERNATIONAL

Singapore Section

Communicating as a Scientist Workshop

4 February
British Council Professional Development Centre
Contact O. Koentjoro
+65 9062 1052
okoentjoro@hotmail.com

IRELAND

Northern Ireland Section

The Chemists' War 1914-1918

19 February
The Somme Museum, Newtownards
Chemistry underpinned military strategy and determined the shape, duration and outcome of the First World War. Michael Freemantle will describe how the First World War was a 'Chemists' War'. Chemistry underpinned military strategy and determined the shape, duration and outcome of the First World War. Chemistry was not only a destructive instrument of war but also protected troops and healed the sick and wounded.
Contact Dermot Hanna
07894 309840
hughdiarmaid@btinternet.com

Other Events

RSC Ireland Regional Meeting

12 March
Chartered Accountants House, Dublin
Once a year active RSC members attend our regional meetings. These provide a fantastic opportunity for members to meet representatives of RSC Council and to find out more about our strategic goals. It is also the perfect opportunity to discover the wonderful work of our member networks and the work we are doing to support your community, and network with RSC staff and members in your local area. Attendance is by invitation only but any interested member can apply to attend.
Contact Marie Chapman, RSC
01223 432274
networks@rsc.org

MIDLANDS

Other Events

Education Division – Midlands

Using ICT To Enhance Teaching And Learning In Chemistry

3 February
The University of Birmingham, School of Education
Teachers CPD Meeting. The meeting will explore ways of using ICT on tablets, computers and mobile devices in the teaching and learning of chemistry. There is no registration fee and a certificate of attendance will be provided.
Contact Sandy Wilkinson
0121 414 4866
s.wilkinson@bham.ac.uk

Discovering New Medicines: The Role Of The Chemist

10 February 2015
University of Birmingham
After a brief review of ailments through the ages the lecture will look at the many roles played by chemists in the modern drug discovery process. A lecture for Sixth Form students. Tickets are free but registration is required.
Contact N Briggs
01827 311205
briggswmctc@btinternet.com

RSC Midlands Regional Meeting

5 February
IET Birmingham
Once a year active RSC members attend our regional meetings. These provide a fantastic opportunity for members to meet representatives of RSC Council and to find out more about our strategic goals. It is also the perfect opportunity to discover the wonderful work of our member networks and the work we are doing to support your community, and network with RSC staff and members in your local area. Attendance is by invitation only but any interested member can apply to attend.
Contact Marie Chapman, RSC
01223 432274
networks@rsc.org

Energy Sector

Early Career Energy Sector Chemists Symposium

6 February
Rolls-Royce Learning & Career Development Centre (LCDC)
All chemists working in the energy area in the early stages of their careers and their supervisors are invited to attend, including industrial chemists, academic researchers, post-graduates, undergraduate students and those with a background in chemistry.
Contact Paul Brack
P.Brack@lboro.ac.uk

Khorana Prize Lecture by Prof Gideon Davies

12 March
University of Warwick,
Physics Lecture Theatre
Prof Davies is the 2014 winner of the RSC Khorana Prize for his seminal and lasting contributions to our understanding of carbohydrate enzymology, particularly in his pioneering work on conformational analysis of enzyme action.
Contact Christophe Corre
02476 523557
C.Corre@warwick.ac.uk

NMR Discussion Group

Spring Meeting: Diffusion NMR

31 March
The School of Chemistry,
Birmingham University
This is a one day event focussing on NMR diffusion, as applied to different disciplines of NMR spectroscopy. The meeting will include presentations from leading practitioners in addition to a poster session.
Contact Melanie Britton
0121 414 4391
m.m.britton@bham.ac.uk

NORTH EAST

Newcastle upon Tyne and North East Section

Seminar – Dr John Spencer

3 February
Newcastle University
The speaker will address a general audience drawn from all parts of the subject and related areas, and ranging from Stage 4 undergraduates to senior academic staff. All are welcome.
Contact Graeme Turnbull
0191 227 4228
g.turnbull@unn.ac.uk

Seminar – Prof Duncan Wass

10 February
Newcastle University
The speaker will address a general audience drawn from all parts of the subject and related areas, and ranging from Stage 4 undergraduates to senior academic staff. All are welcome.
Contact Graeme Turnbull
0191 227 4228
g.turnbull@unn.ac.uk

Seminar – Rita and John Cornforth Award, 2014 – Dr Paul Brennan

3 March
Newcastle University
The speaker will address a general audience drawn from all parts of the subject and related areas, and ranging from Stage 4 undergraduates to senior academic staff. All are welcome.
Contact Graeme Turnbull
0191 227 4228
g.turnbull@unn.ac.uk

Southumbria Section

Wine tasting – Alsace and Jura

27 March
Conoco Room, Louth
Wine tasting followed by a buffet. Cost £5.00 per person.
Contact Keith Hardy
01507 603847
e.hardy@talktalk.net

Other Events

RSC Award Lecture: Professor Guy Lloyd-Jones

4 February
University of Leeds, School of Chemistry
Contact Paul Beales
0113 343 9101
p.a.beales@leeds.ac.uk

Water Science Forum, Environmental Chemistry Group, International Network of Environmental Forensics

Emerging Contaminants in Waters and Soils, Practical Considerations: Sampling, Analysis and Consequences.

4 March
The Source Skills Academy, Sheffield
Contact Kevin Prior
01890 818050
kevin@thackie.co.uk

Faraday Division

Nucleation – A Transition State to the Directed Assembly of Materials: Faraday Discussion

30 March-1 April
Leeds MET
The crystallisation phase transformation process and the resulting creation of crystalline materials from liquid phase precursors are central to the science and process engineering.
Contact RSC Events Department
01223 432380
events@rsc.org

NORTH WEST

Lancaster and District Section

Science, Scientists and Cinema

10 February at 19.00
University of Central Lancashire.
Contact Harry Clarke
01995 640003
hclarke906@btinternet.com

Other Events

Professor Milo Shaffer: Corday-Morgan Prize 2014 Lecture Tour

11 February
University of Manchester,
Chemistry Building
Contact Sven Koehler
0161 306 4448
sven.koehler@manchester.ac.uk

RSC Award Lecture

11 February
University of Liverpool,
Chemistry Department,
Brunner Lecture Theatre
Contact Roman Boulatov
0151 794 3479
boulatov@liv.ac.uk

RSC North West Regional Meeting

12 February
Harris Museum and Art Gallery, Preston
Once a year active RSC members attend our regional meetings. These provide a fantastic opportunity for members to meet representatives of RSC Council and to find out more about our strategic goals. It is also the perfect opportunity to discover the wonderful work of our member networks and the work we are doing to support your community, and network with RSC staff and members in your local area.
Contact Marie Chapman, RSC
01223 432274
networks@rsc.org

REACH and Small Businesses Workshop

25 February
Radisson Blu Hotel Manchester Airport
The Royal Society of Chemistry is partnering with REACHReady to deliver this one-day workshops on REACH. The programme has been specifically tailored for small companies in the chemical and downstream industries.
Contact RSC Events
01223 432380
events@rsc.org

SCOTLAND

Mid-Scotland Section

Alchemy or How to Make Gold

11 February
Ineos Exhibition Centre, Grangemouth
A talk by Dr John Hudson that takes a light-hearted look at the long history of alchemy. It discusses the various phases of alchemy – in Alexandria, Ancient China, the Islamic world, and in Europe.
Contact Mark Dennis
07859 027868
mark1_dennis@hotmail.com

The Best of the Rest

27 March at 19.00
Best Western Park Hotel, Falkirk
Professor John Hepworth from Preston will delight us with a fine selection of wines supplemented by a feast of appropriate cuisine.
Contact Mark Dennis
07859 027868
mark1_dennis@hotmail.com

Tayside Section

RSC Tayside Section Annual General Meeting

2 February
Discovery Centre for Translational & Interdisciplinary Research, University of Dundee
After the formal meeting, there will be a tour of the Centre conducted by Dr David Foley, University of Dundee, followed by dinner at a local restaurant. All are invited, and attendees pay for their own dinner.
Contact Neil Keddie
01334 467254
nsk@st-andrews.ac.uk

Other Events

RSC Scotland Regional Meeting 2015

19 February
IET Glasgow
Once a year active RSC members attend our regional meetings. These provide a fantastic opportunity for members to meet representatives of RSC Council and to find out more about our strategic goals. It is also the perfect opportunity to discover the wonderful work of our member networks and the work we are doing to support your community, and network with RSC staff and members in your local area. Attendance is by invitation only but any interested member can apply to attend.
Contact Marie Chapman, RSC
01223 432274
networks@rsc.org

Protein and Peptide Science Group

Nanopeptide

2-4 March
University of Strathclyde, Glasgow
Programme Topics range from materials science, soft matter physics, biophysics and chemistry through to biomedical applications of peptide and protein biomaterials.
Contact Stephen Hoare
01949 839586
shoare@peptideconferences.org

SOUTH EAST

Chilterns and Middlesex Section

Visit to the Bank of England Museum

18 February
Bank of England Museum
Video presentation 'Bank of England Past & Present' and viewing of museum exhibits, followed by lunch in local restaurant.
Contact Dr Stephen Robinson
0208 546 7940
stephenrobinson_3@hotmail.com

Kent Section

'Fuels for the Future' British Science Week Symposium

18 March
University of Greenwich at Medway
This symposium is aimed at Yr 11 and A-Level students, with the intention of promoting diverse and exciting science based careers. The event is not only open to students and parents – we would like anyone with a passionate interest in science to attend.
Contact Sam Booth
0208 331 9965
S.E.Booth@gre.ac.uk

Annual General Meeting

25 March
Kent Science Park
AGM followed by a lecture: 'A Mass Spectrometer Too Far? The Rosetta Mission to Analyse a Comet' by Prof John Todd, University of Kent. Both members and partners/guests are welcome at the AGM and lecture. If you are interested in serving on the Kent Local Section committee in any capacity, please contact Dave Alker by 13 March.
Contact Dave Alker
07962 929700
dave.alker@btinternet.com

Other Events

Organic Division

RSC South East Regional Meeting – Organic Division

4 February
Imperial College London, Skempton Building
The meeting will include talks from three 2014 RSC Award Winners as well as a wine reception and a poster session to provide opportunities for students to participate.
Contact Matt Fuchter
0207 594 5815
m.fuchter@imperial.ac.uk

Joint Pharmaceutical Analysis Group

Quality Risk Management: a Pragmatic Approach

5 February
GlaxoSmithKline
QRM uses risk assessment to identify & control issues in product development using scientific approaches to estimate likelihood, method development and specification setting.
Contact Amy Le Vannais
0207 572 2326
events@jpag.org

Drug Discovery Workshop

6 February
Society of Biology, Charles Darwin House
This course is suitable for scientists considering a career in the pharmaceutical industry, academics who want to understand more about where medicines come from and a wide variety of people who interact with scientists working in the drug discovery arena. The course is run by the Society of Biology in collaboration with the Royal Society of Chemistry and the Biochemical Society. Members are entitled a 75% discount.
Contact Society of Biology's training officer
0207 685 2550
training@societyofbiology.org

Environmental Chemistry Group, Separation Science Group, Analytical Division

New developments in the analysis of complex environmental matrices

6 February
The Royal Society of Chemistry at Burlington House, London
This meeting aims to cover developments in analytical instrumentation that make it possible to simultaneously analyse numerous pollutants in complex matrices using minimal sample clean-up.
Contact Roger Reeve
0191 515 2596
roger.reeve@sunderland.ac.uk

Faraday Division

Nanoplasmonics: Faraday Discussion 178

16-18 February
The Royal Society of Chemistry, Burlington House, London
Recent advances in nanofabrication and subwavelength optical characterisation have led to significant new advances in plasmonics. In addition to traditional top-down nanofabrication techniques, chemical-based fabrication has emerged as an inexpensive and viable alternative with electrochemical and self-organisation methods for fabrication of plasmonic nanoparticles and extended plasmonic structures. The meeting will focus on areas where progress is expected to have a most significant impact on a whole area of nanoplasmonics and on commercial exploitation.
Contact RSC Events
01223 432254
events@rsc.org

Education Division

Directors of Undergraduate Teaching Policy

25 February at 10.30
The Royal Society of Chemistry, Burlington House, London
This meeting brings together directors of undergraduate chemistry teaching in UK universities to discuss policy issues that affect the sector and share examples of best practice.
Contact Izzie Radford, RSC
01223 420066
education@rsc.org

Biological and Medicinal Chemistry Sector

Mastering MedChem: 1st RSC-BMCS symposium on mastering medicinal chemistry

26 February
The Royal Society of Chemistry, Burlington House, London
In the main there are two types of drug discovery programmes: those that hit serious problems and those that are going to hit serious problems. The difference between success and failure is how we, as medicinal chemists, tackle and resolve the problems.
Contact Maggi Churchouse
01359 221004
maggi@maggichurchouseevents.co.uk

2014 Corday-Morgan Prize Winner Lecture

18 March
University College London
This is a lecture delivered by Professor Molly Stevens from Imperial College London, the 2014 winner of the RSC's Corday-Morgan Prize. Professor Stevens was awarded the Corday-Morgan Prize for her research in the field of biomedical materials, especially her development of nanoparticles and diagnostic platforms that can detect biomarkers corresponding to specific disease states such as cancer and infectious disease.
Contact Martijn Zwijnenburg
0207 679 4558
m.zwijnenburg@ucl.ac.uk

2014 Rita and John Cornforth Award Winner Lecture

18 March
University College London
This is a lecture delivered by Professor Stefan Knapp of the Structural Genomics Consortium at the University of Oxford, the 2014 winner of the RSC's Rita and John Cornforth Award. The topic of the lecture is 'Specific targeting of protein interactions mediated by epigenetic reader domains'.
Contact Hugo Bronstein
0207 679 7466
h.bronstein@ucl.ac.uk

Joint Pharmaceutical Analysis Group

Combating Counterfeit Medicines: the Solutions

19 March
The Royal Society of Chemistry, Burlington House, London
Sub-standard and counterfeit medicines are a great threat to patient health and safety as well as the profitability of the UK pharmaceutical industry. This symposium looks at the big issues and current best practice: designing the formulation of medicines for authentication, the steps being taken by the European pharmaceutical industry to implement the European Falsified Medicines Directive as well as the MHRA's enforcement successes and the role of its Laboratory.
Contact Amy Le Vannais
0207 572 2326
events@jpag.org

Marketing Group

Top Secret – British Boffins in WWII

23 March
The Royal Society of Chemistry, Burlington House, London
This talk will bring to light some of the remarkable achievements by academics in aid of the war efforts, People from Alan Turing, working in Bletchley Park, to people who designed and supervised the Mulberry Harbours for the invasion of France. Sir Frank Whittle also came to the public's attention for his war work on the jet engine.
Contact Paul Fielding
01256 478509
paul.fielding@cogo.co.uk

Dalton Division

Poster Symposium

31 March
The Royal Society of Chemistry, Burlington House, London
A poster symposium, bringing together young inorganic chemists from across the breadth of the field to give them the opportunity to present their work to their peers and senior representatives from industry and academia, with the opportunity to win significant prizes.
Contact RSC Events Team
01223 434048
events@rsc.org

SOUTH WEST

Bristol and District Section

Annual General Meeting followed by lecture From Bunsen to POWs: Dr K E Markel, a Chemist in the Great War

5 February
BAWA, Bristol
Free Buffet available after AGM. Lecture follows. Booking essential for the buffet.
Contact Hilary Kitchen
0117 939 2563
papahil@blueyonder.co.uk

Superconducting Seaweed

9 February
Swindon Academy
Public event
Contact Tim Harrison
0117 928 8663
t.g.harrison@bristol.ac.uk

Grow Your Own Diamonds

25 March
University of Bristol
Contact Tim Harrison
0117 928 8663
t.g.harrison@bristol.ac.uk

Other Events

RSC Southwest Regional Meeting

19 March
Bristol Marriott Hotel City Centre
Once a year active RSC members attend our regional meetings. These provide a fantastic opportunity for members to meet representatives of RSC Council and to find out more about our strategic goals. It is also the perfect opportunity to discover the wonderful work of our member networks and the work we are doing to support your community, and network with RSC staff and members in your local area. Attendance is by invitation only but any interested member can apply to attend.
Contact Marie Chapman, RSC
01223 432274
networks@rsc.org

WALES

South East Wales Section

Porphyrins and Related Systems for Multimodal Imaging

2 February
Cardiff University
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

3D Printing of Chemical Reactors

9 February
Cardiff University
No registration necessary.
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

Modelling Isotope Effects in the Supramolecular Age

16 February
Cardiff University
No registration necessary.
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

Design of Artificial Metalloenzymes for Applications in Homogeneous Catalysis

23 February
Cardiff University
No registration necessary.
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

Chemistry and Biology of Englerin A

2 March 2015
Cardiff University
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

Microwave-assisted Synthesis of Noble Metal and Bimetal Nanosols.

16 March
Cardiff University
The seminar lasts for approximately one hour.
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

Multicomponent Supramolecular Hydrogels

23 March
Cardiff University
The seminar will last for one hour. No registration necessary.
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

Adventures in Continuous Flow Chemistry

30 March
Cardiff University
Contact James Redman
02920 876273
redmanje@cardiff.ac.uk

South Wales West Section

Adventures with Oxygen: A Radical Perspective

19 February
Neath Port Talbot College
Contact Bill George
01792 406994
bill.george@southwales.ac.uk

Annual General Meeting and Dinner

24 March
Sketty Hall, Swansea
Dinner preceded by the Local Section AGM
Contact John Davies
01792 894778
j.s.davies131@btinternet.com

Adventure in Organic Chemistry: Synthesis Structure and Mechanism

26 March
Swansea University
Contact Bill George
01792 406994
bill.george@southwales.ac.uk

Other Events

RSC Wales Regional Meeting

5 March
Millennium Stadium, Cardiff
Once a year active RSC members attend our regional meetings. These provide a fantastic opportunity for members to meet representatives of RSC Council and to find out more about our strategic goals. It is also the perfect opportunity to discover the wonderful work of our member networks and the work we are doing to support your community, and network with RSC staff and members in your local area. Attendance is by invitation only but any interested member can apply to attend.
Contact Marie Chapman, RSC
01223 432274
networks@rsc.org

Notices

Try your hand at research with our Undergraduate Bursaries

Since 2012, we have been awarding Undergraduate Research Bursaries to support promising chemistry undergraduates to gain valuable research experience in a university or industry. The popular scheme has been going from strength to strength, and this year we have increased the number of bursaries on offer from 35 to 90 in order to support even more students across the UK and the Republic of Ireland.

The principle behind the scheme is simple: we fund undergraduate students studying chemical-science-related degrees to undertake a six-to-eight- week long research placement. This provides them with experience of real-life research, which can be far removed from the teaching lab.

As these summer research placements open for applications for another set of students, those who completed a placement last year gave us some very positive feedback. Youssef Itani, a student from London Metropolitan University, for example, found that "the research experience provided valuable insight, introduced new skills and honed existing competencies in a very short period of time."

He went on to say: "I developed a greater understanding of the approaches to problems, became more appreciative of precision and lab etiquette as well as working on practical applications to theories learned previously during my course. Overall I would recommend others to apply for such opportunities as the experience introduces one to a whole new world beyond the classroom and practicals carried out throughout a degree course."

This year's application round closes on 22 February. For more information on how to apply, visit **http://rsc.li/undergrad-bursary**

© IMAGE COURTESY OF NICK CHATTERTON

During his research placement, Youssef had a chance to explore chemistry research.

Looking for nominations for our governance bodies

We have a number of vacancies on our Council, Boards and Divisions. We would like the members serving on our governance bodies to represent the breadth and diversity of the chemical sciences, and are looking for nominations for these positions.

The closing date for nominations is 6 March. For further information on our vacancies, visit **http://rsc.li/vacancies-elections**

If nominations exceed vacancies, external provider Mi-Voice will help us manage an electronic and paper-based election process. All members who have provided us with a valid email address will be invited to vote electronically. If you would like to update your email address, please contact **membership@rsc.org** before 20 March.

Voting papers will be posted to all members who have not provided a valid email address.

Help shape the future of chemistry through IUPAC

This year's IUPAC World Chemistry Congress and General Assembly will take place in Busan, South Korea, from 6-13 August. As IUPAC's National Adhering Organisation for the UK, we are offering several bursaries for 'young observers' to encourage younger scientists to take an active part in the General Assembly as part of the UK delegation.

Formed in 1919, IUPAC represents chemists worldwide through work relating to the nomenclature, terminology, standards, and data for all the chemistry sub-disciplines. IUPAC's work is based on the contributions of leading chemists in academia, government and industry that are elected by their peers on the basis of their scientific contribution. Through its Project System, where more than a thousand expert chemists are engaged in task groups, IUPAC contributes strongly to key issues in the chemical sciences, including sustainable development, green chemistry, toxicology, medicinal chemistry and education.

Each bursary offers up to £2,500 towards the cost of travel, registration and accommodation. The programme provides an excellent opportunity to establish international collaborations, gain knowledge of global research activities and participate in IUPAC's work, with the intention of becoming active within IUPAC Projects, Committees and Divisions in the future. At the meeting, young observers will also participate in the World Chemistry Leadership Meeting, which this year will focus on chemistry's contribution towards the United Nations Sustainable Development Goals.

Applicants should be members of the Royal Society of Chemistry, resident in the UK or Ireland and, typically, under the age of 45. Your application should include a CV, publication list and a letter that includes confirmation of your current status and affiliation. The application deadline is 27 February.

For further information, visit **www.iupac.org** and **www.iupac2015.org** or contact our Head of Emerging Markets, David Clark, at **clarkd@rsc.org**

South Africa Local Section takes children on molecular journey

At the end of last year, our South Africa (South) Local Section came together with the University of Capetown's chemistry department to organise Jack Elsworth lecture/demonstration titled 'How to train your molecule'.

The event used to be known as the annual 'Christmas lecture', when Dr Jack Elsworth, who taught chemistry to medical students at the University of Capetown for decades, organised a special lecture with experiments to demonstrate to schoolchildren the exciting chemistry in the world we live in. In recent years, the event has been taken over by postgraduate students and staff from the university, who put together an evening performance with bangs, whistles and changing colours with the aim to entertain and educate.

Previously, audiences experienced Dorothy and Toto defeat the profit-hungry Wicked Witch that was destroying the land with air pollution from her factories in 'The wizard of O_2'. Another time, Harry and his friends attempted to foil Voldemort and his cronies before they could discover the molecule of doom (which turned out to be sugar).

This year's production of 'How to train your molecule' also intended to enthuse the next generation with chemistry. During the performance, schoolchildren and their parents followed the adventures of sodium and chlorine (who learnt about the romantic attraction of an ionic bond), nitrogen (whose purpose in the laboratory is to keep things very, very cold) and carbon dioxide (who, despite being breathed out by everyone because "they don't want me", discovers that she has a useful purpose after all as a key ingredient for photosynthesis).

For the past two years, the organisers also brought in children from underprivileged areas around Cape Town for a special afternoon performance.

◀ The cast took the audience on an entertaining journey of atoms and molecules.

▼ Through the performance, schoolchildren had a chance to learn about chemistry in an entertaining way.

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Connecting pedagogical researchers across the Atlantic through our bursaries

Pedagogical research in higher education in science in the USA is much better funded than it is in the UK, and there is a greater range of high-quality pedagogical research in higher education in the USA. Nonetheless, there is limited contact and collaboration between researchers there and in the UK.

To help address this situation and to work towards raising the profile of research in this area in the UK, our Education Division is offering our members a chance to widen their contacts and explore pedagogical research in the USA through a bursary scheme.

Up to six bursaries of £1,500 per applicant are available each year to cover the cost of travel, accommodation and registration of attending a major conference in the USA, with the aim of sharing research and fostering collaborations with a focus on learning and teaching in higher education.

In 2014, we awarded a total of four bursaries. Peter Hoare (Newcastle University), Julie Hyde (University of Hull), Samantha Pugh (University of Leeds) and David Read (University of Southampton) attended the Biennial Conference on Chemical Education at Grand Valley State University in August last year.

On her return to the UK, Julie commented: "I learnt a lot from the sessions I attended, which I plan to take back and introduce into my teaching and share new ideas with my colleagues. It was a great learning curve and has given me the opportunity to gain many new ideas and have a better understanding of pedagogic research. It was a super chance to network internationally."

Her feelings were echoed by Peter Hoare, who said that attending the conference was "an excellent experience, which enlightened me further to the US education system and [allowed me to make] several potentially valuable collaboration contacts."

The application deadline for this year's bursaries is 23 February. For more information and an application form, visit **http://rsc.li/activating-research-bursaries**

New Year's Honours 2014

The following RSC members have been recognised by Her Majesty the Queen in the New Year's Honours list for 2015.

Knighthood

Sir Simon Fraser Campbell CBE BSc PhD FRSC FRS
Drug Discoverer and Scientific Adviser
For services to Chemistry

Professor Sir Martyn Poliakoff CBE MA PhD CChem HonFRSC FRS
Research Professor of Chemistry, University of Nottingham
For services to the Chemical Sciences

Officer of the Order of the British Empire (OBE)

Dr Robert Hardy OBE BSc CChem FRSC
Chief Executive Aesica Pharmaceuticals Ltd
For services to the Pharmaceutical and Chemical Industry. (Ponteland, Northumberland)

Dr Roshan Maini OBE BSc FRSC
For services to the Life Sciences Industry. (Bridge of Weir, Renfrewshire)

Emeritus Professor Ian M Mills OBE BSc DPhil CChem FRSC FRS
Emeritus Professor of Chemical Spectroscopy, University of Reading
For services to Chemistry and Metrology. (Reading, Berkshire)

Professor Kenneth R Seddon OBE BSc MA PhD CChem FRSC
Director Queen's University Ionic Liquid Laboratories (QUILL), Queen's University Belfast.
For services to Chemistry. (Donaghadee, Down)

British Empire Medal (BEM)

Mrs Mary Ann Macleod BEM MSc CChem MRSC
Convenor, The Lewis and Harris Breast Cancer Support Group
For services to the Treatment of Breast Cancer in Lewis and Harris. (Isle of Lewis, Western Isles)

Admissions February 2015

Fellow (FRSC)

Martin Addicott, Folahan Adekola, Kazunari Akiyoshi, Hitoshi Ashida, Martin Atkins, Lane Baker, Partha Basu, Holger Becker, Louise Berben, Guy Bertrand, Matthias Bickelhaupt, Harald Bolt, Rinus Broxterman, Xian-He Bu, Jillian Buriak, John Byrne, Jose Luis Capelo Martinez, Christopher Chang, Jiang Chang, Emma Chapman, Hong Chen, Yu-Kai Chen, Manish Chhowalla, Cinzia Chiappe, Kelly Chibale, Wonyong Choi, Helmut Colfen, Jonathan Connick, Stephen Courtney, Al Crumbliss, Marcetta Darensboug, Wim Dehaen, Dino Di Carlo, Luiz Dias, Luis Ramón Domingo, Enrico Drioli, Franck Dumeignil, Matthew Duncton, Sherif ElSafty, William Evans, Ghazwan Fadhil, Xinliang Feng, E. Allen Foegeding, Elzbieta Frackowiak, Kathy Franz, David Giedroc, Declan Gilheany, Pedro Gomez-Romero, John Gordon, Norman Govan, David Griffiths, Bartosz Grzybowski, Liang-Hong Guo, Vincent Hackley, Darrell Hall, Gyoonhee Han, Sheetal Handa, Dominic Hare, Darryl Hawker, Christy Haynes, Roque Hidalgo-Alvarez, Akon Higuchi, So Hirata, Chi-Tang Ho, Michael Hochella Jr, Ian Holmes, Mark Howard, Xile Hu, Yanyi Huang, Cheol Seong Hwang, Tomiki Ikeda, Hiroshi Imahori, Oliver Inderwildi, Masayuki Inoue, Renee Jiji, Richard Kaner, Takashi Kato, Vadim Kessler, Jan Korvink, Frederik Krebs, Jerome Lacour, Jinghong Li, Yan Li, Zhiqun Lin, Ai-Qun Liu, Antoni Llobet Dalmases, Teck-Peng Loh, Bettina Lotsch, Malik Maaza, Zong-Wan Mao, Hai-Quan Mao, Hedi Mattoussi, Alexander Mayweg, Julian McClements, Jonathan McMaster, Claire Mills, Susheel Mittal, Partha Mukherjee, Gauri Sankar Mukherjee, Paul Mulvaney, Michio Murata, Catherine Murphy, Hiromi Nakai, Karlheinz Niederreiter, Georgii Nikonov, Hiroshi Nishihara, Peter Nunn, Michael Oelgemoller, Keiichiro Ogawa, Steve Oh, Teruo Okano, Jun Okuda, Neil Oldham, Patrick O'Malley, Takashi Ooi, Carlos Otero Arean, Gangfeng Ouyang, Mario Pagliaro, Emilio Palomares, Dipanjan Pan, Vinood Patel, Nicholas Peppas, Thalappil Pradeep, John Protasiewicz, Tharmalingam Punniyamurthy, Jianhua Qin, Mark Rehkamper, Peter Roesky, Natalie Rowley, Michael Rowley, Siddhartha Roy, Clement Sanchez, Laurel Schafer, Gregory Scholes, Imelda Shanahan, Yang Shao-Horn, Sanjay K. Sharma, Sarah Shepley, Ruth Signorell, Sheo Singh, Sarah Skerratt, Christopher Smith, Nick Stone, Wei-Yin Sun, Roman Surmenev, Igal Szleifer, Masaki Takata, Dmitri Talapin, Matthias Tamm, Junji Terao, Venkataraman Thangadurai, Christine Thomas, Peter Tieleman, Tomas Torres, Sanjiv Tyagi, Georgios Vassilikogiannakis, Nishith Verma, Nico Voelcker, Dayang Wang, Minmin Wang, Michael Washburn, Richard Webster, David Weitz, Carsten Werner, Andrew Whiting, Richard Wool, Christopher Wright, Zuowei Xie, Xianran Xing, Shigehiro Yamaguchi, Xueming Yang, Yang Yang, Peidong Yang, Jackie Ying, Yeo Joon Yoon, Juyoung Yoon, Po Ki Yuen, Davit Zargarian, Anatoly Zayats, Per Zetterlund, Hua Zhang, Xueji Zhang, Chi Zhang, Jian Zhou, John Zhu, Rachel A. Caruso, Stephen A. Makin, Philip Adrian Martin, Jose Alberto Fracassi Da Silva, Karen Ann Weaver, Elizabeth Anne Arnold, Mohammad Azad Malik, Sherilyn Carol Fields, Gow Chin Yen, Nigel David Gill, Paul Derek Ravenscroft, Richard George Chapman, Helena Isabel Seguro Nogueira, Chaoyong J. Yang, Zhong Lin Wang, GAOQING Max Lu, Ghulam Murtza Khokhar, Katriona Rosalyn Methven, Joshua S. Figueroa, Ulrich S. Schubert, Tim S. Zhao, Xiu Song Zhao, Lauro Tatsuo Kubota, Gregory V Hartland

Member (MRSC)

Claire Elizabeth McKillen, Gareth Watson, Melissa Sharp, Svemir Rudic, Catherine Cropper, Robin Dent, Niall Thomson, Mark Ross Dewey, Michelle Barker, Francesco De Leonardis, Matthew Simpson, Nicholas Jarvis, James Frost, Rosemary Coates, Alexander Chatterley, Ryan Skilton, Sarah Taylor, Brian Chalmers, Reuben Holmes, Samuel Rust, Duygu Celebi, Tom Atherton, Molly Shoichet, Matthew Langton, Thomas Wildsmith, Robert Alford, Sacha Lynn Wason, Andrew Pitts, Helen Willcock, Emma Stefaniak, Mark Dodsworth, George Sanderson, Anna Rozej, Benjamin Irving, Andrew Fish, Patrick Floris, Niall Hynes, Alexandra Horton, Kyle Clark, Aaron Roffey, James Radcliffe, Mischa Zelzer, Catherine Frankis, Michael Townsend, Samuel Timson, Tom Carter, Alexander Henderson, Stephanie Jones, Julian Shaw, Hans-Georg Eckhardt, Ernest Chow, Adrian Jack, Gee-Sian Leung, Anica Dose, Sarah Wallace, Michele Zanoni, Giuseppe Pileio, Thomas Winstanley, Claire Campbell, Evgenia Pancheva, Kevin Mahoney, Jessica Shaw, Ben Day, Keith Michael McLean, John Price, Sean Butterworth, Dan Mu, Blair McKay, Hannah Buckley, Rowan Frame, Matthew William French, Ari Rasul, Yuandi Li, Bruce Rigby, Hanan Alchaghouri, Pierre De Jager, Katie Feeney, Niall McCreanor, Michelle Montgomery, Sofia Papadouli, Peng Wang, Pawel Pohl, Elizabeth Smith, Piero Ugliengo, Ljiljana Fruk, Suzanne Jones, Geoffrey Passmore, Sohan Jheeta, Mark Albery, Margaret Faul, Annie Jacobs, Matthias D'Hooghe, Claire Rye, Bastien Nay, Ffion Abraham, Peter Senter, Lokesh Kumar, Asif Tahir, Stewart Robinson, Zia Siddiqi, Mondher Srasra, Hassen Harzali, Amine Mnif, TerriAnn Berry, Arthur Ganga, Timothy Easun, Nicholas Musyoka, Venkateswara Rao Gudivaka, Francine Atkinson, Sarah Ellis, Maxine Doran, Sharifah Bee Abdul Hamid, Simon Hepburn, Carlos Marti Gastaldo, Hilary Rimbi, Kathleen Chu, Kevin To, Hsisheng Teng, Rebecca Rees, Robert Ducker, Virgene Mulligan, Monika Szczygiel, Jonathan Peverley, Esther Clark, Emilie Tones, Andrew Burgess, Sellathurai Ravichandran, Zulkifli Ahmad, Jaime Castillo Leon, Hamad Al-Arji, Hua Dong, Louise Walport, Michael Horne, Mitsutoshi Jikei, Pooja Jagasia, Camille Petit, Pingwu Du, Nigel Hall, Ashok Patel, Allen White, Trevor Davies, Dmitriy Malinovskiy, Anup Sharma, Helen Blade, Stephen Coombs, Umang Shah, Yahia Lemmouchi, Paul Ashford, Adonay Loiola, Shaun Robinson, Malgorzata SwadzbaKwasny, William Mackintosh, Tung Man Kin Sam, LaShanda Korley, Cun Wen, Mahesh Potdar, Clare Downs, Gerard Hobley, Michelle Mace, Alexander Hamilton, Lindsay Tatham, James Earley, Linda Rix, Elizabeth Biju, Simon Turega, Andrew McLaren, Zofia Komsta, Ananya Sen, Helena Azevedo, Hannah Newton, Jiawei Wang, Peter Birch, Laura Pinkney, Sally Loughlin, HuoLei Peng, James Smith, Sebastian Spain, Eleonora Cerasoli, Paul McDermott, Andrew Neylon, Donna Wrublewski, Florence Abram, Sharon Williams, Wing-Fu Lai, Yimin Hu, Olga Efremova, Lauren Graham, Darren Horsley, Gertrude Amoadu, Peter Jelfs, Eric Schelter, Susana Garcia Lopez, Matthew Parkin, Anthony Davis, Stephen Anthony Wells, Alessandro Patti, Hedef El-Yassin, Sadaf Khan, Alfred Aquilina, Wilai Siriwatcharapiboon, Jamie Clifton, Prashant Reddy, Rob Evans, David Berry, Maura Keown, Mariana Rossi, Nina Proffitt, Maud Silvent, Petr Sherin, Olga Kuzmina, Ceri Hammond, Fabio Nudelman, Gary Bird, Tomoaki Tanase, Thomas Inglis, Andrew Armitage, Michael Pitcher, Arnab Bhattacharya, Bingxing Wang, Owen Guy, Scott Twiddy, Victor Sans Sangorrin, Alan Elsey, Iain Macdonald, Matthew Kennett, Sik Ping Samuel Lam, Olalekan Abdul Muiz Popoola, Nelly Abena Fosu-Mensah, Glenn Adam Hurst, Ian Alexander Cade, Carl Andrew Roeschlaub, Paul Andrew Young, Carolyn Anne McCavera, Humphrey Anthony Moynihan, Samuel Antony Lea, Adebomi Ayodeji Ikotun, Hatem Ben Romdhane, Joanne Bethany Sampson, Juan Carlos Martin Pereira, Stephanie Caroline Brookes, Peter David Abram, Glyn David Cobourne, Peter David Maskell, Andrew Donald Stark, Laura Elizabeth Wilkinson, James Frank Staff, Gardiya Patabandigae Gaya Amali Fonseka, Thomas H. Epps, Andrew James Tyrrell, Neil James Whittingham, Antony James Burton, Gary James Hunt, Linda Jane Maguire, Amy Jean Young, Amy Joan Managh, Alexander John Kennedy, Michael Joseph Dowler, Adam Joseph Lawton, Helen Katherine Potter, Kieran Lee Hudson, Morgan Leslie Thomas, Tamara Lloyd Griffiths, Bun Luen Tse, Nathan Luke Abraham, Ahmed M. Eissa, Sofia Maria Kapetanaki, David Mark Whittaker, Thomas Martin Charlton, David Michael Renshaw, Jeremy Peter Allen, Anuradha Radhakrishnan Pallipurath, David Russell Gregory, Alanna Stacey Campbell, Nitin T. Patil, Nicolai Ulrich Kraut, Henrietta Wakuna Langmi, Thomas William Hornsby

Associate Member (AMRSC)

James Squires, Richard Clarke, Chiaki Crews, Edward Halford, Ruth Oakley, Joshua Kelly, Emma Reed, Kevin Biscoe, David Malone, Katie Scarth, Sandipan Banerjee, Carl Reynolds, Rosanna De Dios Fisher, Jamie Purcell, Pamela Maher, Victoria Dickson, Anjali Reddy, Robert Price, Jamie Harrower, Simon Reeves, Julie Brooks, Philip Cobb, Alice Thomas, Jonathan Rains, Judith Scurfield, Siobhan Conner, Anais Kahve, Helena Coker, Sapna Ponja, Lucy Jakubecz, Neil Robinson,

Stamatis Korkis, Benjamin Bower, Rosemary Philpott, Thomas MacGregor, Julija Kezina, Oliver Davis, Martin Jones, Rachel Holmes, Michael Kenny, Wai Kin Tang, Philip Walsh Atkins, Edward Wilmot, Gordon Douglas, Peter Campbell, Adam Grzelak, Prospero Taroni-Junior, Andrew King, Thomas Crutchley, Aoife McDonald, Saskia Boardman, Julia Fones, Perry Devo, Mark Allison, Antoine Buchard, Stephanie Flynn, Jiri Kulhavy, Samantha Coyle, Yvonne Kavanagh, William Jakes, Victoria Walpole, Hannah Paterson, Duncan Sinclair, Sambavi Ganeshamoorthy, Fahim Choudhury, Emma Durham, Hannah Stafford, Pola Goldberg Oppenheimer, Azzedine Dabo, Matthew Treliving, Heather Davies, Sebastian Cosgrove, Anthony Harrington, Luigi Da Via, Saranya Gurusamy, Carlos Adelantado-Sanchez, Toryn Dalton, Bright Makafui Foli, Mairi Littleson, Erli Lu, Mark McDowell, Yousillya Bunga, Joseph McMorrow, Andrew Rogers, Jia Jun Fong, Claire Parker, Athanasios Anthopoulos, Leonard Chia, Marco Sacchi, Zeba Khanam, Ata Dolatmoradi, Addy Rachmat, Rachel Norman, Tengyao Jiang, Subhashi Jayathilake, Bassim Abdulwahaab, ChungYao Wang, Bethan Nichols, Olik Kholidah, Amanda Rees, Luyi Yang, Benjamin Edwin Alexander, Anitha Patlolla, Jocelyn Tillner, Janine Hudson, Julie Christy, Georg Arju, Stephen Kelleher, Jane Beebwa, ChingHong Tan, Lesley Cornish, Kamaru Bashir Muhammad, Thomas Swift, Guy Entract, Christoffer Bengtsson, Mathew Savage, Callum Thomas, Qingyu Zhu, Esereosa Omoarukhe, Fadwa El Haddassi, Andrei Dragan, AlinaMariana Crainic, Shun Xiao, Lukasz Mendecki, Maria Shchepinova, Juan Beltran Huarac, Oluwaseun Oyetade, Nabeel Mohammed, Michele Cariello, Dongda Zhang, Christos Nitsos, James Ryan, Bakul Gupta, Marianne Rolph, Alice Hill, Rhiannon Jones, Anu Daniel, Lewis Blackman, Prima Thakrar, Debabrata Maiti, Suthananda Sunassee, Hemachandra Nishanth Kandepedu, Steven Wilcock, Cristina Fernandes, Bernhard Naafs, Nicola Shepherd, Ghazala Ehsan, Hollie Smith, Katerina Gjeshovska, Alexandra Ramadan, Alshaimaa Gad, Rebecca Winsbury, Bijoyananda Mishra, Lauren Hatcher, Kelly Davis, Cristina Nunez Gonzalez, Dolca Fabregat Montfort, Raysa Khan, Sami Almabrok, Jennifer Johnson, Arun Tanpure, Josephine Brannon, Emilio Cortes, Waqar Ahmed, Robert Laverick, Madeline Kavanagh, Miffy Cheng, Gregory Craven, Fiona Horne, Herman Fung, Elmira Abdollahzadeh Esmaeili, Ekemena Oghenovoh Oseghe, Olufunke Akiyode, Sarkawt Hama, Robert Jago, Laszlo Ryan Seress, Julie Troshkova, Zan Hua, Richard Horniblow, Philip Quayle, Valentina Santolini, Kamal Nayan Jhunjhunwalla, Susannah Bowskill, Mo Qiao, Shanshan Zhou, Saranphong Yimklan, Simon Nicolle, Camilo Mesa-Zamora, Ceri Cairnduff, Ian Houlsby, Glenn Tobias, Jennifer Anne Lovell, Matthew Christopher Leech, Felipe David Pozo Gutierrez, Miles Harry Aukland, Rachel Helen Shaddick, Fitriana Indah Lestari Situmorane, Adam James Dennington, Rebecca Jane Lindsay, Rachel Jeanie Luney, David John Gibbs, Lisna Junaeni Muiz, Elisabeth Katharina Martin, Guat Ling Lee, Catriona Margaret MacRury Harris, Andrew Mark Ragdale Hall, Thomas Michael Roseveare, Nura Mohamed Hassan, Kavirajaa Pandian Sambasevam, Ciaran Paul Seath, Samah Qasim Addan, Hayley R. Green, Venkateswara Reddy Maram, Muhammad Safwan Akram, Maya Sari Ananda Pohan, Alastair Stephen Allen, Lucy Victoria Tunstall, James William Dibden

Chartered Chemist (CChem)

Lindsay Wager, Julia Helen Abda, David Chappell, Sara-Jane Dickson, Benjamin Welsh, Anna Giela, Jacob Irwin, Philip Morris, Stewart Henderson, Tilele Stevens, Jennifer Nicholls, Emma Cochrane, Mark Collins, Julia Mills, Adam Ellis, Michelle Eccles, Paul Woodbridge, Lyn Jennens, Nicholas Bryan, Chunfei Wu, Ndidi Ihekwaba, Ali Aboel Dahab, Naheem Ali Sadiq, Stephanie Caroline Brookes, Martina Elizabeth Wieder, Francis Eugene David Gaffney, Sarah Joanne Aves, David Michael Renshaw, Andrew Michael Smith, Susan R. Brittain, Drew Sebastian Royal, Simon Timothy Bedford

Chartered Scientist (CSci)

Christian Pfrang, Giles Brown, Sara-Jane Dickson, Stewart Henderson, Guobao Xu, James Meldrum, Chunfei Wu, Aloysius Soon, Simon Watson, Marcus Damian Phillips, Gayle Frances Cairns, Louise Jane Warren, Sarah Joanne Aves, Jayne Louise James, David William James

Registered Science Technician (RSciTech)

Emily Bulloch, Sue Dently, Richard Allitt, Lucy Emma Brown, Shona Smyth, Lisa Marie Tanner

Registered Scientist (RSci)

Oritsejolomi Elsie Etuwewe-Mordi, Robert Alford, Andrew Gwyn Manley, Jamie Harrower

Deaths

Dr Russell James Bayly CChem FRSC Retired manager, scientific affairs, Amersham International Plc. Died 1 November 2014, aged 90

Professor David Arthur Brown CChem FRSC Emeritus Professor, University College Dublin. Died 27 September 2014, aged 85

Mr Arthur Clark CChem FRSC Retired top grade biochemist, Pembrokeshire Health Authority. Died 3 November 2014, aged 84

Mr Robin Leslie Thomas Cooper CChem MRSC Retired marketing executive, Euro-DPC Ltd. Died 20 November 2014, aged 67

Mr Cyril Cresswell CChem FRSC Retired self-employed consultant. Died 29 November 2014, aged 84

Professor Roger J Griffin CChem FRSC Professor of medicinal chemistry, Newcastle University. Died 24 September 2014, aged 59

Mr David Holey MRSC Retired product manager, speciality, Bayer New Zealand Ltd. Died 11 September 2014, aged 75

Dr Lyn Holt CChem MRSC Retired, proprietor, Applied Technology. Date of death not supplied

Professor Dr Rudolf Reinhold Otto Hoppe MRSC Retired. Died 24 November 2014, aged 92

Professor Gerald Houghton CChem FRSC Retired Professor of engineering science, University of North Carolina at Charlotte, USA. Died 17 November 2014, aged 88

Mr Anthony Martin Humphrey MRSC Retired consultant. Date of death not supplied

Dr Ernest A Knipp MRSC Date of death not supplied

Dr Alan Wallace Nineham MRSC Retired head of information services, May & Baker Ltd. Date of death not supplied

Mr Narayan Mangesh Rege CChem MRSC Retired executive director, Soybean Processors Association of India. Died 28 February 2014, aged 74

Dr Hilary Muir Smith CChem MRSC Retired assistant toxicology manager, ICI Plc. Died 7 November 2014, aged 83

Professor Alistair Matthew Stephen CChem MRSC Emeritus Professor, University of Cape Town. Died 8 November 2014, aged 92

Mr John Edward Stuckey CChem FRSC Retired lecturer in polymer chemistry. Died 5 May 2014, aged 88

Mr Ramachandran Subramanian CChem FRSC Retired. Date of death not supplied

Dr Vincent Roy Switsur CChem MRSC Retired director, radio carbon dating research laboratory, University of Cambridge. Died 5 November 2014, aged 85

Mr Paul Anthony Thomson CChem MRSC Retired. Died June 2014, aged 73

To inform us of the death of an RSC member please contact the Membership Department on 01223 432141 **membership@rsc.org**

ROYAL SOCIETY OF CHEMISTRY

Stay ahead, get noticed, make connections

Register for our conferences and events

Our 2015 calendar includes:

Temporally and Spatially Resolved Molecular Science (Faraday Discussion 177)
12–14 January 2015, Bangalore, India
http://rsc.li/fd177

Nanoplasmonics (Faraday Discussion 178)
16–18 February 2015, London, UK
http://rsc.li/fd178

Directing Biosynthesis IV (DBIV)
25–27 March 2015, Norwich, UK
http://rsc.li/dbiv

Nucleation - a Transition State to the Directed Assembly of Materials (Faraday Discussion)
30 March–1 April 2015, Leeds, UK
http://rsc.li/nucleation-fd2015

Corrosion Chemistry (Faraday Discussion)
13–15 April 2015, London, UK
http://rsc.li/corrosion-fd2015

Nanoparticle Synthesis and Assembly (Faraday Discussion)
20–22 April 2015, Chicago, USA
http://rsc.li/nanoparticle-fd2015

Challenges in Chemical Biology (ISACS16)
15–18 June 2015, Zurich, Switzerland
http://rsc.li/isacs16

Solid Oxide Electrolysis: Fuels and Feedstocks from Water and Air (Faraday Discussion)
13–15 July 2015, York, UK
http://rsc.li/electrolysis-fd2015
Register for this event and receive 25% discount off your registration fee for the 12th International Conference on Materials Chemistry (MC12).

12th International Conference on Materials Chemistry (MC12)
20–23 July 2015, York, UK
http://rsc.li/mc12
Register for this event and receive 25% discount off your registration fee for Solid Oxide Electrolysis: Fuels and Feedstocks from Water and Air: Faraday Discussion.

24th International Symposium: Synthesis in Organic Chemistry (OS24)
20–23 July 2015, Cambridge, UK
http://rsc.li/os24

Carbon Dioxide Utilisation (Faraday Discussion)
7–9 September 2015, Sheffield, UK
http://rsc.li/cdu-fd2015

Challenges in Chemical Renewable Energy (ISACS17)
8–11 September 2015, Rio de Janeiro, Brazil
http://rsc.li/isacs17

Single-Molecule Microscopy and Spectroscopy (Faraday Discussion)
14–16 September 2015, London, UK
http://rsc.li/molecule-fd2015

Supramolecular Photochemistry (Faraday Discussion)
15–17 September 2015, Cambridge, UK
http://rsc.li/photochemistry-fd2015

Challenges in Organic Materials & Supramolecular Chemistry (ISACS18)
19–21 November 2015, Bangalore, India
http://rsc.li/isacs18

Discounted rates available for Royal Society of Chemistry members at all events listed here.

THE QUEEN'S AWARDS FOR ENTERPRISE: INTERNATIONAL TRADE 2013

http://rsc.li/events

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