

# ANALYTICAL MATTERS

ISSUE 19 – SUMMER EDITION 2021

## ONLINE EVENTS

*Due to the current crisis, many events have been moved online:*

**Analytical Research forum 2021 (ARF21) – more info [here](#)**

15-16 June 2021, online

**JPAG mini-Symposium: Risk assessment: Opportunities and challenges – more info [here](#)**

17 June 2021, online

**RSC Molecular Spectroscopy Group Online Seminar Series— more info [here](#)**

23 June 2021, online

**Radiochemistry Group Young Researchers Meeting 2021— more info [here](#)**

13-15 July 2021, online

**Workshop on Open-Source Tools for Chemistry – more info [here](#)**

22-2 July 2021, online

## CPD RESOURCES

**Analytical Methods Committee Technical Briefs**

Technical information on a wide range of analytical techniques, found [here](#)

**RSC online CPD**

[Log](#) your continuing professional development

Welcome to the nineteenth issue of Analytical Matters, the e-newsletter of the Analytical Division of the Royal Society of Chemistry (RSC). Analytical Matters aims to showcase the wide range of analytical science activities being run across the Royal Society of Chemistry Analytical Division as well as linking with parts of the UK analytical community beyond our membership.

The annual Analytical Research Forum 2021 is set to take place online this year, with a range of talks and posters lined up to be presented virtually. The merits of this online format are already evident with more attendees signed up than ever before, with representation from several countries around the globe. The topics that will be covered span the full breadth of analytical science from electrochemistry to spectroscopy, from big data, to the conservation of cannonballs. We look forward to seeing many of you there.

Elections for new committee members of the Analytical Division Council are now open for voting, closing on Friday 18 June 2021. The individuals selected will help drive Division activities over the coming years so I encourage you to use your vote. Candidate statements can be found on the RSC website.

Winners of the 2021 Analytical Division Prizes will be announced on 08 June and we invite you to join us in the online [celebrations](#). A round up of this year's winners will be included in the next issue of Analytical Matters.

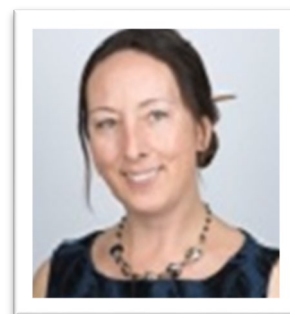
Finally, I'd like to draw your attention to the Analytical Chemistry Trust Fund COVID-19 Disruption grant (more details in the newsletter) which has just been announced to help final year PhD students with financial concerns and enable them to complete their analytical science studies.

Please send your feedback and any content for the next issue by August 31<sup>st</sup> by emailing the Editor [here](#).

With my very best wishes,

**Diane Turner FRSC**

President, RSC Analytical Division



### Elections are now open

We are holding elections for elected members of the Analytical Division Council (two vacancies). The candidates are:

- Ian Ball CSci CChem FRSC
- James Bramley CChem MRSC
- Daren Caruana MRSC
- Robert Channon MRSC
- Jose Gonzalez-Rodriguez CSci CChem FRSC
- Imran Janmohamed MRSC
- Jonathan Jones CSci CChem MRSC
- Paul O'Nion CSci CChem MRSC
- Bhavik Patel FRSC

All members of the Analytical Division will be contacted by electoral services provider, Mi-Voice, with information on how to vote on-line.

**The elections will close at 17:00 (UK time) on Friday 18 June 2020.**

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### Analytical scientists and cancer researchers come together to form new cancer early detection collaborations

The Analytical Division and Cancer Research UK (CRUK) hosted a joint online workshop and networking event, Measuring Cancer Earlier, to bring together 60 researchers representing the analytical and cancer research communities. Read more about the collaboration [here](#).

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### Analytical Research Forum 2021

Join us online at the Analytical Division's flagship event to keep up-to-date on cutting edge analytical science techniques and applications, participate in career panel discussions and network with other researchers.

View the [programme](#) for more information.

ARF 2021 is not to be missed and the Scientific Committee look forward to welcoming you to the online event on the 15 and 16 June 2021.

There's still time to register - [book your place today](#)

The RSC Careers Team are also providing on-to-one CV consultations at the ARF. Slots will be available to book in advance from 9.30 – 11.30 BST on the 15th and 16th June and CVs should be submitted in advance of the consultation. Book your slot via the [webpage](#).

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### Analytical Methods Committee Technical Briefs

Technical Briefs published by the AMC in the journal [Analytical Methods](#) are prepared by experts in the field to highlight recent information on topics of interest to the analytical chemistry community. Recent Technical Briefs include:

- 101 [Analysis of historical dyes in heritage objects](#).
- 102 [Simplex optimisation in practice](#).
- 103 [Wax and wax-like materials](#) – the what, where, and how in heritage collections (soon to be online).
- 104 [Thermal desorption part 2](#): applications in analytical measurement (soon to be online)

**For free technical briefs of many topics of interest to the analytical chemistry community, please visit**

<https://www.rsc.org/Membership/Networking/InterestGroups/Analytical/AMC/TechnicalBriefs.asp>

**All technical briefs can be used towards CPD!**

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## Committee Opportunity – Analytical Methods Committee Technical Brief Editor

The Analytical Methods Committee publishes a series of Technical Briefs dealing with information and issues of interest to the Analytical Community. They are normally prepared within the AMC's Expert Working Groups and published in the RSC's journal Analytical Methods and on the AMC Website. The current editor will soon be retiring and a replacement is being sought. The role includes liaising with the individual authors of the Technical Briefs and then with the journal.

Ideally the editor should have experience in such work but importantly to be able to look at the content of each Brief from a technical aspect.

More details about Technical Briefs are available on the AMC website or from the Secretary. If you are interested please contact the [AMC Secretary](#) by 30th June.

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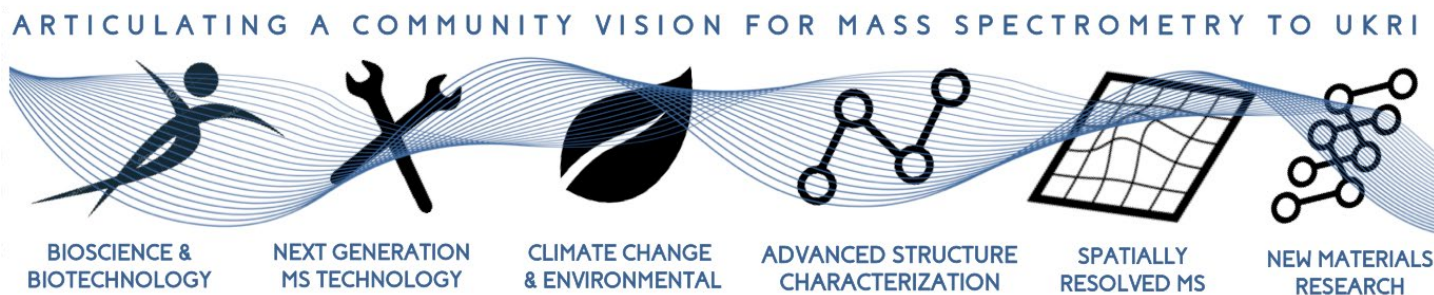
## CALL FOR EXPERTISE

### The UK MS Vision Working Group Invites Community Participation in Mass Spectrometry Proposal to UKRI Infrastructure Advisory Committee.

The UK MS Vision Working Group submitted a 'Statement of Need' to EPSRC on 15th February 2021, outlining the resource and infrastructure required for our community to deliver world-class mass spectrometry over the next 5-10 years. We are pleased to announce that our Statement of Need has been accepted. The Statement of Need, together with related documents, can be viewed here: <https://www.bmss.org.uk/about-us/uk-mass-spectrometry-vision/>

The next steps in this process involve working with EPSRC to refine our vision into a proposal to the UKRI Infrastructure Advisory Committee by Autumn of 2021. Feedback and input from the community is encouraged. We are now actively seeking members of the UK MS community with interest in mass spectrometry in the areas of bioscience and biotechnology; next generation instrumentation; climate change and environmental; advanced structure characterisation; new materials research; spatially resolved MS who have the perspective and commitment to join the UK MS Vision Working Group and help deliver our proposal to UKRI.

If you would like to contribute please contact the BMSS Chair Dr Jackie Mosely: [chair@bmss.org.uk](mailto:chair@bmss.org.uk)



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## ACS Curriculum Survey

The ACS Division of Analytical Chemistry's Education Committee are interested in learning about the current norms, topics, and practices in the undergraduate analytical chemistry curriculum.

If you have taught an undergraduate course in analytical chemistry in the past 5 years, they would appreciate hearing about your teaching, including from institutions outside the US.

The survey can be found [here](#).

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## UPCOMING RSC INTEREST GROUP EVENTS

### Atomic Spectroscopy Virtual Symposium 'C is for Chromatography'

22 June 2021, online

The meeting will provide the opportunity to hear about research in the area of chromatography applications to determine elemental species. We have invited four speakers who will each present on their recent speciation projects.

Registration and details of abstract submission are now available on the RSC events [webpage](#).

### 2nd Chemical and Physical Modelling of Food

12-13 October 2021, online

Following from last year's successful conference, the RSC's Food Group and the IOP's Food Physics group are pleased to be organising the second Chemical and Physical Modelling of Food conference. This conference will be covering topics related to chemistry and physics (and anything in between) of food manufacture, preparation and consumption, including measurement, model building and model validation.

Anyone interested in submitting an oral abstract to present at the conference, or a poster abstract to present the poster virtually, need to do so via [this website](#).

This conference is aimed at academics, university students and people working in industry, although anyone will be able to register. As last year, the conference will be held fully online in two sessions on 12 and 13 October 2021. There will also be opportunities for online networking between delegates, and asking further questions to the speakers and poster presenters, including video chats.

## OTHER EVENTS

THE GREAT SCIENTIFIC EXCHANGE  
**SciX2021**  
September 26 - October 1, 2021  
Rhode Island Convention Center  
Providence, RI

The premier meeting for Analytical Chemistry and Allied Sciences

**Arrrrreeee you ready to see other human beings?**

Set your science sailing at SciX 2021 and join your colleagues at one of the first in-person analytical chemistry conferences in over a year!

**PROGRAM:**  
Learn the latest in analytical sciences

**EXHIBIT:**  
See the latest technology to enable your next scientific breakthrough

**WORKSHOPS:**  
Advance your career with new knowledge in data analysis or analytical techniques

**NETWORKING:**  
Expand and deepen your professional connections

[www.SciXconference.org](http://www.SciXconference.org)

### SciX Sneak Preview

**KEYNOTE SPEAKER**  
"Measuring Scientific Impact"  
David R. Walt, PhD  
Wyss Institute, Harvard University



Plenary lectures in Raman spectroscopy, electrochemistry, single molecule techniques, biomedical optics, and atomic spectroscopy

**Abstracts now open! Submit your talk in these areas**

**Techniques in:**  
Atomic spectroscopy (LIBS, ICP-MS)  
Molecular spectroscopy (Raman, IR, NIR)  
Chemometrics  
Plasmonics  
Mass spectrometry  
Separation sciences  
UV spectroscopy

**Applications in:**  
Art and archaeology  
Biomedical and bioanalytical  
COVID-19 analyses  
Forensics and security  
Pharmaceutical and biopharmaceutical  
Process analysis  
Single molecules  
Plus contemporary issues and special sessions

**Important Details and Dates**

ORAL ABSTRACT DEADLINE:  
**May 17<sup>th</sup>**

POSTER ABSTRACT DEADLINE:  
**August 2<sup>nd</sup>**

The SciX 2021 committee welcomes you to a vibrant in-person meeting in beautiful Providence, Rhode Island! A strong scientific program, cutting-edge technical exhibition, and opportunities to network (safely) are at the core of SciX 2021. Say ahoy to your mates at the special pirate-themed gala and attend sessions in all the program areas you've come to expect at SciX. We will continue to update the community as we move forward with planning. We invite you to learn how we are adapting to the pandemic at:

[www.SciXconference.org](http://www.SciXconference.org)

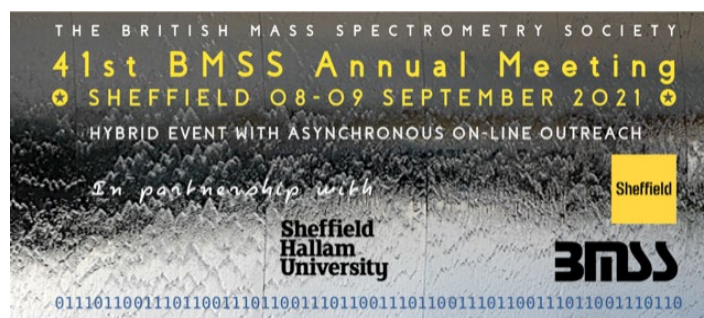


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## 41<sup>st</sup> BMSS Annual Meeting

08-09 September 2021, hybrid event

The BMSS has employed a prudent approach in developing the 2021 Annual Meeting format, as the Society cannot predict any residual COVID-19 regulations that may be in force in September. BMSS41 has been designed with provision for social distancing should that remain necessary. The Society has adopted a compact meeting format to minimise registration & accommodation charges and thus make the event as affordable as possible for members.



The 41st Annual Meeting will feature a two-day (one night) format incorporating 2x plenary lectures, 12x keynote lectures, 36x contributed talks, 6x partner presentations, 30x flash presentations and an inclusive social evening.

Registration and more information can be found at the BMSS [webpage](#) or under the #BMSS41 social media hashtag.

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## RSC SUPPORT AND FUNDING OPPORTUNITIES

### Chemists' Community Fund new wellbeing and listening service

Stressed? Anxious? Overwhelmed? If your feelings are interfering with day-to-day life, it's time to reach out to our confidential wellbeing and listening service for support.

We have been assisting our community and their family members with support in times of difficulty for many years. Now, in response to a year of unprecedented challenges we are launching a dedicated wellbeing and listening service – available from 8am to 8pm (UK time) Monday to Friday.

The service is confidential and available to all chemical scientists in the UK and Ireland, and RSC members anywhere in the world.

Please call our wellbeing and listening service on 0800 084 3451 (UK Freephone) or +44 1223 853549 (International), or visit our dedicated wellbeing and listening service page for more information.

## Wellbeing and listening service

For confidential support, call 0800 084 3451 (UK Freephone) or +44 1223 853549 (International).  
The phone line is available from 8am to 8pm (UK time) Monday – Friday.

The following schemes are accepting applications. Click on the links to find out more information:

- [Researcher Development Grant](#)
  - [Chemists' Community Fund](#)
  - [Grants for Carers and Assistance Grants](#)
  - [RSC Outreach Fund](#)
  - [Inclusion and Diversity Fund](#)
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## RSC Education Prizes

The Royal Society of Chemistry's new portfolio of Education Prizes is now open for nominations.

The prizes below are open to individuals and teams working in the Higher Education sector:

- **New [Horizon Prizes for Education](#)** – for individuals, collaborations or teams, celebrating the ground-breaking innovations and initiatives that mark a step change in education. Self-nomination for these prizes is permitted and encouraged.
- **New [Early Career Prize for Excellence in Higher Education](#)**
- **New [Excellence in Higher Education Prize](#)**
- **New [Team Prize for Excellence in Higher Education](#)**
- **[Nyholm Prize for Education](#)**

There is no requirement for nominees or nominators to be a member of the Royal Society of Chemistry for any of the prizes listed above. [Our website](#) has a full list of prizes open, as well as [guidance for nominators](#), containing useful information for those nominating for the first time.

Nominations close on Tuesday 29 June at 17:00 BST. Please don't hesitate to contact the RSC team with any queries at [awards@rsc.org](mailto:awards@rsc.org).

## KNOWING ME, KNOWING YOU – ANALYTICAL DIVISION COUNCIL MEMBER PROFILES

In order to reacquaint the analytical community with the analytical scientists representing them on the Analytical Division Council, we have decided to profile our Council members. We will look at extending this program in the future to feature you too!

### ANALYTICAL SCIENTIST PROFILES



**Philip Dunn**

he/him

National Measurement Laboratory at LGC

#### **What is your area of analytical science expertise?**

*Isotope ratio mass spectrometry (IRMS)*

#### **What are you working on at the moment?**

*Generally my work concerns improving measurement methods of isotope ratio analysis. I'm currently expanding our measurement capabilities to include determination of hydrogen and oxygen isotope ratios in foodstuffs – these can be used to help verify geographical origin of foods. I'm also working on a collaborative project with other measurement institutes and with academic groups on isotope ratio measurements of greenhouse gases.*

#### **What do you enjoy most about your work?**

*It's given me the opportunity to collaborate, either through research projects or by participation in committees and networks, with many different scientists across the world*

#### **What do you enjoy doing outside of work?**

*Outside of work I play real tennis to a fairly high standard – I'm looking forward to being back on court again now that the clubs are open!*



ROYAL SOCIETY  
OF CHEMISTRY

ANALYTICAL  
DIVISION

### New ACTF logo and launch of COVID-19 Disruption Grant

The Analytical Chemistry Trust Fund (ACTF) is a charity established for the purposes of promoting, assisting and extending the science and study of Analytical Chemistry and of all questions relating to the analysis, nature and composition of natural and manufactured materials for the benefit of the public.

In early 2020, ACTF launched a competition to design a new logo for the trust aimed at those that would normally be participating in the Schools Analysts Competition. Thirty high quality entries were received from students at schools around the UK and RoI. ACTF Trustees selected two winners – Katie Hartwright from Comberton Sixth Form in East Anglia and Sandali Narasinghe of Hymers College in the North East Region. Their designs were submitted to a professional designer to use as inspiration for the final design, shown here.



Announcing the



ACTF Trustees recognise the disruption that the COVID-19 pandemic has had on analytical science students. We are launching a disruption grant of **£500** aimed at analytical PhD students who are in the **last 6 months of their PhD** and need additional monetary support to complete their studies.

*Note, this fund is to support personal costs to help enable students to complete their studies for example rent, or other caring or living costs, and cannot be used for laboratory research costs. Students must be resident in the UK or Republic of Ireland and registered at a University in the UK or Republic of Ireland.*

**To apply see application link below**

**Deadline: June 30, 2021**

In the event of eligible applications exceeding the budget we will assign grants based on a lottery system. We have intentionally kept questions short and evidence of hardship required to a minimum to reduce any distress caused by the pandemic and support you in your career in analytical chemistry.

For more details and to apply, click [here](#).

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### 2021 EuChemS Division of Analytical Chemistry (DAC) Award Winners

Congratulations to the 2021 DAC-EuChemS Award winner, **Aldo Roda, Alma Laurea University of Bologna (Italy)** for “Recent Advances and Challenges in bio-chemiluminescence based biosensors” and the 2021 Rober Kellner Lecture winner, **Karen Faulds, University of Strathclyde (UK)** for “Development of SERS and SESORRS for Multiplexed Bioanalysis”

Please join us at the 2021 DAC-EuChemS Lectures Awardees Webinar for the awards presentations on Thursday 16 September 2021, from 11:00 to 13:30 CEST.

To register, just follow the [link](#).

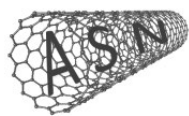
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### 2021 FACSS Charles Mann Award Winner

Congratulations to the 2021 Charles Mann Award recipient, Royston Goodacre, University of Liverpool (UK) for his scientific, leadership, and mentoring achievements. Roy is recognised for his contributions to Raman in metabolomics and his pioneering work in the use of advanced data analysis approaches to Raman spectral data. Find out more [here](#).



## Analytical Science Network Update



**Analytical Science Network**  
Supporting early career analysts

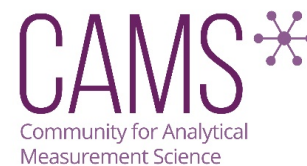
Due to COVID-19 uncertainty, the 2021 Emerging Analytical Professionals conference for 2021 has been cancelled. The new date for your diary is Friday 13<sup>th</sup>-Sunday 15<sup>th</sup> May 2022. The Bright Sparks Symposium is likely to be held virtually in September. Subscribe for all ASN event updates via our website <https://www.analyticalsciencenetwork.co.uk/> and follow us on Twitter @ASN\_RSC.

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## Community for Analytical Measurement Science (CAMS) Update

### CAMS Events

The CAMS Surface Characterisation Analysis Webinar in April 2021 was a successful collaboration between RSSL, the National Physical Laboratory, University of Strathclyde and the National Measurement Laboratory at LGC. It highlighted current and innovative technologies that are being applied both in industry and for research, and brought together a range of speakers from across the career spectrum, including a PhD student and early career researchers, as well as more experienced scientists. A freely available recording of the webinar can be found here: <https://vimeo.com/539722817/3d78d624c2>



### CAMS Conference 2021

Be sure to keep an eye on the [CAMS website](#) for news of our annual virtual conference and poster competition. We are in the early stages of planning these events, but intend for them to run in the week commencing 13 Sep 2021. If you'd like to know more or be involved please contact the CAMS [Secretariat](#).

### CAMS Events Calendar

Training and events haven't stopped during the pandemic, why not check out the CAMS [Events Calendar](#) for details of upcoming training events, webinars and conferences that CAMS members and partners are hosting throughout 2021. If you, or your organisation, would like to promote an event via the calendar please contact the CAMS [Secretariat](#).

## CONTINUING PROFESSIONAL DEVELOPMENT (CPD) RESOURCES

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### Are you looking for an independent career in academic research?

The **Joliot-Curie online conference** is a must-attend event dedicated to supporting the aspirations of early career researchers. On the 8 + 9 September, hear from high profile speakers, including Prof Tom Welton who will share their multiple pathways into an academic career. You will also find out more about presenting your research, funding, getting published, exploring interdisciplinary opportunities, and how to find and apply for permanent academic positions. Registration [here](#).

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### Looking to build your leadership skills?

Following on from our popular 'developing leadership skills' webinar, we will look at building on your leadership skills wherever you work. This live webinar is open to all members followed by Q&A. [Register for 21 July](#).

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### Mentoring training – dates throughout 2021

Our member-to-member mentoring scheme has +150 active partnerships and we are looking for members from a wide variety of academic and industrial backgrounds to become a mentor, or a mentee. Training is provided remotely for mentors before you are matched with a mentee. Sign up for training or find out more [mentoring@rsc.org](mailto:mentoring@rsc.org)

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### Chartered Status

Why not work towards [chartered status](#)? The award of chartered status recognises the well-developed skills, knowledge and professionalism of those working within the chemical sciences. They are part of a broader recognition and development framework that includes the professional registers: Registered Science Technician (RSciTech) and Registered Scientist (RSci).



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## Analytical Sciences Digital Library

The Analytical Sciences Digital Library (<https://home.asdlib.org/>) is a free repository of materials for teaching analytical chemistry. It has curated lists of webpages of use for teaching, active learning curricular materials, and a collection of remote labs and simulations. A 17 min introduction to the active learning materials at ASDL by Tom Wenzel of Bates College is available at <https://www.youtube.com/watch?v=2KS0oaM8Xto>

Members of the RSC are welcome to use the ASDL materials, and to contribute to the collection.

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## EVENT REVIEWS

### A to Z of Spectroscopy – Review so far

The [Atomic Spectroscopy Group](#) (ASG) have launched an online seminar series: The A to Z of Spectroscopy. The first event was "A is for Arsenic"

on the 24th March featuring 4 speakers covering a range of topics related to arsenic analysis. Prof Julian Tyson (UMass Amherst, USA) provided an overview of the developments in the analytical chemistry of arsenic, setting the scene for the following talks. Dr Debapriya Mondal (St George's University, London) covered arsenic exposure from food intake in endemic areas of Bihar, India whilst atmospheric deposition of arsenic from natural sources was the focus for Dr Laurie Savage (University of Aberdeen). The final talk was from Dr Jackie Morton who presented a case study exploring the benefits and challenges for exposure monitoring of arsenic. The session concluded with a round table discussion with the presenters and questions from the audience.



The second webinar was "B is for Biomonitoring" held on the 12th May, bringing together 3 speakers from public health research institutes. Lead and chromium were the main elements under discussion, with tungsten making an unexpected appearance for Dr Robert Jones (CDC) in his research. Tungsten was found to be elevated in a county under investigation due to some unusual health effects. The work highlighted the need for further data at the state and country level for these more unusual elements. The power of lead isotope ratios was the subject of a talk by Dr Adam Laycock (PHE) who presented data from an exploratory study in Georgia. Dr Elizabeth Leese (HSE) describes her work investigating occupational exposure to hexavalent chromium. As with the first event, there was a nice discussion following questions from the audience.

Both events were successful with up to 100 live attendees and represents the ASG's first foray into online seminars. We hope you enjoyed them too and would very much appreciate any feedback. The next event is "[C is for Chromatography](#)" on the 22nd June at 3pm UK time, featuring:

Christian Ward-Deitrich, LGC, UK.

Roberto Álvarez-Fernández García, University of Oviedo, Spain.

Nancy Wanna, Belgian Nuclear Research Centre, SCK CEN, Belgium.

Elliot Hamilton, British Geological Survey, UK.

We are currently planning for "D is for Development" and "E is for Early Career". Please get in touch if you would like to get involved. Hope to see you there.

*Written by Jackie Morton and Sarah Hill, Seminar organisers, ASG Committee*

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## OTHER COMMUNITY NEWSLETTERS YOU MAY BE INTERESTED IN

[Chemistry in Europe – Brussels News Update - EUChemS](#)

To view previous issues of Analytical Matters please use the link: <http://rsc.li/analytical-matters>