Chemistry in ACTION

Midlands

NOV
19
2024

Chemistry in Action

For A-level, IB, BTEC Level 3 and T Level chemistry students

Join us for an amazing day of exhilarating chemistry which will take students from key concepts learnt in the classroom to the latest advancements in chemical research! Through five engaging sessions students will meet experienced scientists from academia and industry and be inspired to become the scientists of the future.

Each day also includes a special session on examination success that will ensure students are equipped with the tools they need to excel. There will be plenty of interactivity throughout the day, with polls, quizzes and (of course) your chance to question the scientists – join us at Chemistry in Action this autumn!

Host: Alex Baker (Organic chemist, University of Warwick

Exam Session: Peter Hoare (Newcastle University)

- Strange Ice
- When Medicines become Drugs – How Small Chemical Changes Change the World
- Scent-sational Chemistry: Unmasking the Secrets of Smells
- The wonders of element number six
- The New Dawn of Materials Discovery

University of Warwick,
Coventry,
CV4 7AL

Venue: £24 +VAT *

Plus one COMPLIMENTARY staff ticket per 10 students.

*VAT may be reclaimable. Please check with your finance department

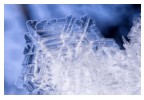
Education in Action is the leading provider of inspirational, informative, Education in Action study days for A-level, IB, BTEC and GCSE students.

Award-winning, world-class speakers
Cutting-edge content
Thought-provoking demos and presentations
Examination hints, tips and guidance
Modestly priced to offer access to all
Complimentary staff ticket for every 10 students booked
Bookings can be amended up to 28 days before the event day

NOV
19
2024

Chemistry in ACTION

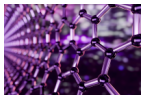
Strange Ice /
Andrea Sella – Chemist and broadcaster, University College London



From the freezer to a refreshing drink, ice is everywhere. But how well do you really know it? Andrea Sella will demonstrate how ice is a material so strange that it breaks almost every rule in our textbooks. Discover its unusual properties, compare it with other ices, and uncover what ice may be telling us about the certainty of our futures…

Andrea is a synthetic chemist and broadcaster who is interested in the structure and bonding in the rare earths. He has been involved in numerous radio and television projects.

The wonders of element number six /
Julie MacPherson – University of Warwick



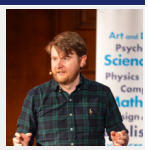
Julie will explore the many allotropes of carbon, from Nobel Prizes to synthesis and applications. Discover the future with carbon nanotubes, graphene and diamond, and see what a nano world will look like.

Julie works on the development of new electrochemical sensors using carbon based materials for applications in healthcare and environmental monitoring, she is also active in the use of carbon based electrochemical technologies for the removal of harmful pollutants from water sources.

When Medicines become Drugs – How Small Chemical Changes Change the World /
Alex Baker – University of Warwick

Why is morphine used in the NHS but heroin isn't? Why is an isomer of methamphetamine sold over the counter in the USA? It's simple Chemistry. In this talk, Alex will consider the small chemical changes that separate molecules that heal, from molecules that harm and explore the impacts these chemical changes have on the world. Along the way we will think about isomerism, solubility and how medicines work.

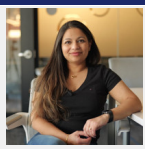
Alex is an organic chemist with a particular interest in carbohydrates, polymers and nanoparticles. His work is used to design medical diagnostics with a particular focus on the developing world and fighting health inequalities.



The New Dawn of Materials Discovery /
Suze Kundu – Digital Science

Discover how AI and data are transforming materials chemistry, driving sustainable solutions to global challenges. Explore cutting-edge technologies revolutionizing the discovery of eco-friendly materials and their impact on our future.

Suze Kundu is a nanochemist, science communicator and Director of Researcher and Community Engagement at Digital Science. She has presented on many shows on the Discovery Channel, National Geographic and Curiosity Stream, been a science expert on TV and radio, and a science writer for Forbes. (Image credit: Huw James)



Scent-sational Chemistry: Unmasking the Secrets of Smells /
Stephen Belding – Chemistry Teacher and A-level Examiner

Unlock the mysteries behind the scents that surround us as we dive into the chemistry of smell. Discover how tiny differences in molecular structure—such as isomers—create vastly different aromas, and learn about our incredible ability to detect scents as dilute as 0.1 ppt, equivalent to a single drop in 200 Olympic swimming pools! Join us for an aromatic adventure that connects these fascinating phenomena to your A-level Chemistry studies.

Stephen is Director of Academic Programmes for Rugby School Global Partnerships, a School Governor, A-level Examiner, and Science Council member for ISEB. He believes that curiosity in the classroom is not a moment but a movement—one that ignites ambition, transforms learning, and endures as a lifelong passion for science.

Education in Action

Gilmoora House | 57-61 Mortimer Street | London W1W 8HS
020 3008 6441 | office@educationinaction.org.uk
www.educationinaction.org.uk