KEYNOTE SESSION

Ed Walsh - Ed Walsh Consulting

From Controlled Assessment to Required Practical –progress or retrograde step?(Room 203)

Changes to GCSE Science specifications have prompted a range of responses. Few people are sorry to see the end of Controlled Assessments yet there is a fear that practical work may be marginalised in the new courses. Ed will explore the way that assessment requirements are shaping the nature of exams, influencing the way that grades are awarded and informing teaching and learning. He will argue that the emerging picture is one that includes enquiry being more closely integrated with the teaching of contexts and students being challenged to place practical work into a broader context.

Heidi Dobbs

The role of the RSC Education Co-ordinator. (Room 203)

BREAKOUT SESSIONS

Dr Sandy Wilkinson - Chemistry Tutor, School of Education, University of Birmingham

Using ICT to enhance the Teaching, Learning and Assessment in Chemistry. (Room 216)

A presentation /workshop around this theme. Participants may bring their own laptop/ipad etc.

Bob Worley - CLEAPSS

Suggested GCSE chemistry practical procedures in miniature (Lab Chem West B)

It is now becoming evident that miniaturised procedures save time in lessons for the teacher to teach and place less stress on the short-term working memory of students so they are hopefully less confused. In addition there are the well-known advantages on increased safety and savings on expense. In the time allowed, there will be a workshop where you will prepare copper sulfate crystals, analyse for ions and carry out micro-electrolysis. Demonstrations will include distillation, an introduction to titration without the paraphernalia. Exhibits will include chromatography, thermochemistry and the thiosulfate /acid rate experiment.

Dr David Paterson - OCR Chemistry Subject Advisor, Chemistry

Beyond the recipe – some ideas on making practical work more effective (Lab Chem West A)

How do we maximise the benefit of practical work for our students in our classrooms? How do we get beyond them just 'following the recipe'? How do we reduce the cognitive load inherent in some practical work? During this session, we will discuss some benefits of using simpler practical activities when working up to more complex tasks (in the context of titration) and the role that microscale activities can have in students getting rapidly to key observations and hence engagement with underlying concepts (in the context of electrolysis). There will be opportunities for some hands-on work as well as minds-on!

Simon Jukes – Director CSR scientific training group

Apprenticeships – Understanding Industrial Options (Room 301)

More and more pressure is being placed on employers and training providers to create real and viable opportunities for young people; Apprenticeship Levy, Government targets of 3M apprentices by 2020 and new apprenticeship standards aiming to improve quality. As the landscape is changing so quickly for all those involved it can be difficult to properly advise young people about the options for vocational education and which apprenticeship opportunities are the right ones.

Dr Andy Markwick – Evolution Educational Consultancy

Primary Chemistry Curriculum - What is needed at KS2 and how it interphases with KS3 - a quantum leap (Room 209)

KS2 Chemistry - what is involved - the problems primary schools face whilst teaching KS2 Chemistry - are secondary schools expectations realistic? Audience participation - expected - share your problems. Done in a seminar room - to realistically mimic what happens in the primary school.

CLOSING SESSION

Lorelly Wilson - Chemistry with Cabbage

Super Starters (Room 203)

What you need at the start of a lesson is something short, simple and dramatic which makes the class think. Something out of the ordinary that sparks off their curiosity. This is a demonstration giving you loads of ideas using household items and kitchen chemicals. These experiments can be used at lots of different levels - they are fun for six year olds or could turn into a research project for sixth formers. Using household kit, they are also ideal for students to try at home.