

Brilliant Ideas and Great Resources for Teaching Leaving Certificate Chemistry

34th Annual ChemEd Conference, Eureka Centre, University College Cork Saturday 17 October 2015



PROGRAMME



9.00 - 9.45Registration Eureka Centre, Kane Building, UCC.

Tea/coffee

Welcome and Official Opening 9.45 - 10.00

Professor Paul Ross, Head of College of Science,

Engineering and Food Science. UCC.

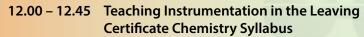
10.00 – 10.45 Teaching Atomic Structure in the Leaving Certificate **Chemistry Syllabus.**

> - Dr Fiona Desmond, State Examinations Commission. In this talk Fiona will consider various approaches to teaching the Atomic Structure of the Leaving Certificate Chemistry syllabus and will give an overview of the role that this section of the syllabus plays in the overall syllabus.

10.45 – 11.15 Tea / Coffee

11.15 - 12.00 A tour of Whitegate Oil Refinery.

- Michael King, Commercial Manager, Phillips66 Ireland. In this talk Michael will bring us on a tour of Whitegate Oil Refinery by means of a Powerpoint presentation showing the various areas of the refinery that are relevant to the Leaving Certificate Chemistry syllabus and explaining what happens at each stage of the process. A CD containing a copy of the Powerpoint presentation will be given to every teacher in the audiencel



Dr Mila Pravda, Department of Chemistry, UCC. In this talk Mila will discuss the key principles of Gas Chromatography (GC), High-Performance Liquid Chromatography (HPLC), Infra-Red Spectrometry (IR) and Ultraviolet Spectrometry (UV) as applicable to the Leaving Certificate Chemistry syllabus. He will also introduce four videos which have recently been specifically produced on the above topics to help teachers of Leaving Certificate chemistry bring these techniques to life in the classroom.

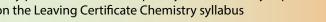
Lunch and Workshops 12.45 - 2.30

During lunch participants are invited to participate in a number of activities as follows:

- Launching of videos on Instrumentation
- Mr Conor Walker, Folens.

Attend the launching of the new videos that have been specifically made for the Leaving Certificate Chemistry syllabus and obtain a free DVD of these videos sponsored by Folens.

 Key practical skills developed by the Mandatory Experiments on the Leaving Certificate Chemistry syllabus



- Dr Declan Kennedy UCC and team,.

A wide range of the Mandatory Experiments experiments will be set up to enable teachers to discuss the key practical skills that could be assessed if assessment of practical work is introduced at Leaving Certificate level. In addition, some demonstration experiments relevant to the syllabus will be on display as well as apparatus such as the bomb calorimeter.

- Visit to Liquid Nitrogen plant.
- Dr Donnacha O'Connell, Department of Chemistry, UCC. Enhance your understanding of the liquefaction of air in the Atmospheric Chemistry section of the Leaving Certificate chemistry syllabus by visiting the liquid nitrogen plant in UCC.
- Spectroscopy in a Suitcase.
- Dr Trevor Carey, Department of Chemistry, UCC Learn about this free resource available from the Royal Society of Chemistry, see it in action and discuss how to organise a visit to your Leaving Cert Chemistry students by an RSC representative.

2.30 - 3.15Ideas and Experiments for teaching Thermochemistry

> - Dr Marc Stuckey, IGS Wilhelmshaven Secondary School, Germany. In this talk Marc will discuss various approaches to teaching topics on the Leaving Certificate Thermochemistry section of the syllabus and will suggest some interesting experiments to help students understand various concepts.

3.15 - 4.00Marking of the 2015 Leaving Certificate Higher Level Chemistry Examination – The Chief Examiner's Observations

> Dr Fiona Desmond, State Examinations Commission, Athlone. In this talk Fiona will give an overview of student performance in various areas of the Leaving Certificate syllabus. She will review the types of questions to which students have responded well over the years, the question types which students found more challenging and describe other recent trends as reflected in the 2015 Leaving Certificate Chemistry paper.

3.15 - 4.00Open Forum. Close of conference.

Tea/coffee



