The organisers of The Nigel Botting Meeting for Teachers of Chemistry thank the RSC, SSERC and the University of St Andrews for their continued support.

The meeting will be held in the main auditorium of the Byre Theatre in St Andrews (KY16 9LA). The map overleaf shows its location. Registration will be at the main entrance.

The Byre Theatre DOES NOT have a car park, however there are public car parks (P see map) in town, some free.

**Registration Details**

Due to generous sponsorship, there is no conference fee, however prior registration is required. To register for a place, please use the online form linked below.

[www.st-andrews.ac.uk/chemistry/outreach/schools/](http://www.st-andrews.ac.uk/chemistry/outreach/schools/)

A buffet lunch and refreshments will be provided free of charge.

Enquiries to Professor David O’Hagan
School of Chemistry, St Andrews
(dol@st-and.ac.uk)
Monday 13\textsuperscript{th} May 2019

Elements of Chemistry

PROGRAMME

09.45-10.05 Registration and Refreshments

MORNING SESSION

10.10 Welcome and introduction
David O’Hagan
(School of Chemistry, St Andrews University)

10.15 SQA Chemistry Update
Scottish Qualifications Authority

10.55 Standing up for chemistry teachers
Gill Berkeley (RSC Education Division Scotland)
Using dry ice activities to teach chemistry
Adrian Allan (Dornoch Academy)

11.25 The Periodic Table, Old and New?
Pilar Gill & Prof David Cole-Hamilton (St Andrews University)

12.00 The hot, the cold and the just right...Living in a chemically controlled cosmos
Prof Martin McCoustra (Heriot Watt University)

12.25 Lunch and Exhibitions

AFTERNOON SESSION

(Chair: Morag Easson, RSC)

13.40 Celebrating the International Year of the Periodic Table
Heather Milton & Stephen Hendry (RSC Education Coordinators)

14.00 The musings of a young Principal Teacher
Louise Hedley-Forrest (Dunfermline High School)

14.25 Coffee Break
(Chair: Chris Lloyd, SSERC)

14.55 The carbon nano-revolution
Prof. Eleanor Campbell FRS (University of Edinburgh)

15.30 Departure
All lectures will be held in the main auditorium of the Byre Theatre.

The 23rd Meeting of "The Nigel Botting Meeting for Teachers of Chemistry" is delighted to offer delegates FREE registration thanks to the generous sponsorship from the University of St Andrews, The Royal Society for Chemistry and SSERC.

This year’s conference continues at the splendid Byre Theatre. The Byre is now managed in a partnership between the University and Fife Council, and it has become an important venue for educational as well as art events. The Byre proved to be a spectacular success as a venue for this meeting, and we are very much looking forward to developing it as a stable venue for the future.

The meeting this year recognises that 2019 is the IUPAC International Year of the Periodic Table. It is 150 years since Dimitri Mendeleev presented his Table to the Russian Academy of Sciences. To acknowledge this we have various relevant presentations and take-home activities throughout the programme. Pilar Gill and David Cole-Hamilton will present ‘Periodic Table: The Old and the New’ where both the oldest surviving Periodic Table and the newest version launched this year will be discussed. The new version highlights impending shortages of many of the elements that are critical to the technologies underpinning modern society.

Representatives from the SQA will give the latest update and information for Chemistry which will also allow time for questions from teachers.

The Royal Society of Chemistry (RSC) continues to provide excellent support for chemistry education in Scotland, through several different channels. Firstly, Gill Berkeley, Chair of the RSC Education Division Scotland, will give an overview of how this group supports chemistry teachers and schools in Scotland. This includes listening to chemistry teachers’ current concerns and challenges and raising awareness of these more widely, to funding small projects annually in schools across Scotland that go beyond the normal curriculum to inspire the next generation. For example, Adrian Allan from Dornoch Academy will outline his project funded by one such RSC Inspiring Young Chemists award, and he may even give us a demo or two! A poster display of other projects supported in this way can be perused at the break.

Continuing the elemental theme, Professor Martin McCoustra of Heriot Watt University will outline the chemistry and elements of the cosmos. Lunch will be served at the close of the first session. The exhibition area and tea/coffee will be available as usual and with time for delegates to explore the exhibitions and to chat with each other before resuming their seats in the theatre for the afternoon session.

The RSC’s Education Coordinators, Heather Milton and Stephen Hendry continue to provide support in your local areas. With the International Year of the Periodic Table in full swing, find out how the RSC can help you celebrate. Classroom activities included! Please remember to talk with them at their exhibition stand at breaks throughout the day. Next, Louise Hedley-Forrest, from Dunfermline High School, will reflect on her experience to share some of her thoughts on the basics of effective teaching, key issues and also novel ideas.

Concluding the day in elemental theme, Professor Eleanor Campbell FRS from the University of Edinburgh, an expert on the allotropes of carbon, will discuss the latest technology associated with carbon in various forms.