

## Molecular beams

A half-day Faraday Division symposium on *Molecular beams in the chemical era* will be held at the Scientific Societies' Lecture Theatre commencing at 14.00 on Thursday 14 May 1992. The meeting will include the Faraday lecture by Prof Y. T. Lee (Berkeley, US) entitled *Molecular beam reaction dynamics*. Supporting lectures will be given by Dr M. N. R. Ashfold (Bristol), Dr P. Felder (Zurich, Switzerland), Dr J. M. Mestdagh (Saclay, France) and Dr J. C. Whitehead (Manchester).

Further information from S. S. Langer, RSC, Burlington House, Piccadilly, London W1V 0BN. □

## Automated analysis

The fifth in the series of Automatic Methods Group residential conferences, held on the general theme of the managerial aspects of automated analysis, will take place at the Viking Hotel, York, on 2-4 June 1992.

*Environmental protection—pollution control—is automation the cost effective answer?* will cover the problems raised by the Environmental Protection Act, which introduces two new systems of pollution control. Legislation requires the authorities to ensure that industry uses the best available techniques not entailing excessive cost (BATNEEC) to abate pollution. The act also introduces the idea of integrated pollution control.

The conference is arranged in four sessions: legislation; monitoring emissions; controlling emissions; and cleaning up the environment—all of them subjects of considerable interest to senior management in industry.

Details from R. Lidgett, AMG conference secretary, Fron Cottage, Llandynan, Llangollen, Clywd LL20 8UB; tel: 0978-861868. □

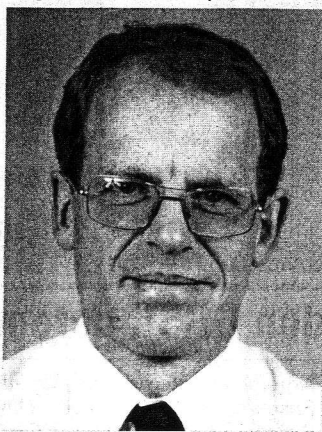
## Education research

*Research in assessment IX* has just been published by the Assessment Group of the Education Division. It contains articles on a range of topics that were originally presented at the

## Food chemistry medals

The RSC Food Chemistry Group 1991 medals have been awarded to Dr P. J. Lillford (Unilever) and Dr S. Harding (Nottingham).

Dr Lillford, (right) who received the senior medal, is principal chemist at Unilever where he has led background research groups in the investigation and development of several product ranges. He now leads a group carrying out fundamental research in the physical chemistry of biological materials, supporting all of Unilever's businesses. He holds a visiting professorship at Nottingham University and an



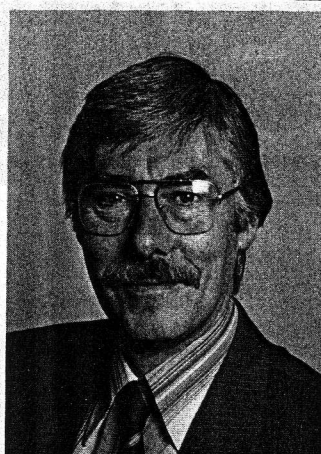
*Research in chemical education in the tertiary sector* symposium held in Nottingham in September 1990.

Contributions range from *Standards in chemistry at GCE advanced level*, through *Entropy and the second law—fourth year undergraduate's ideas*, to *Looking at lectures through the eyes of students*. All (1991) Group members should have received a free copy. Anyone who would like to receive a copy (price £3 plus 55p p&p, but free to members of the Assessment Group and the Chemical Education Research Group) should write to J. Brockington, Department of Science, Matthew Boulton College, Sherlock Street, Birmingham B5 7DB. □

## Pigments

*Tracking nature's pathways to the pigments of life* was the title of a stimulating lecture by Prof A. R. Battersby (Cambridge) at Minnesota 3M Research, Harlow, on 11 December 1991. The lecture was sponsored by 3M as part of the Essex Section programme.

This lecture provided a fascinating insight into the elucidation of biosynthetic pathways using techniques



honorary chair in the School of Molecular and Biological Sciences, University of Stirling.

Dr Harding (left), the junior medallist, is reader in physical biochemistry at the University of Nottingham. He is mainly known for his work on the analytical centrifuge and related hydrodynamic techniques, both in terms of developing the methodology and applying this methodology to the study of macromolecular solutions. His group is also known for the application of dynamic light scattering procedures to viral and bacterial systems. □

such as NMR, stable isotope labelling, independent synthesis and enzymology. To illustrate the use of these techniques Prof Battersby described the clarification of the biosynthesis of Uro'gen III, the parent ring system of pigments such as chlorophyll and haemoglobin. Some recent work on haem d<sub>1</sub>, the prosthetic group of nitrite reductase, was also described. Here synthesis has been used to clarify the structure of this material and thence show the biosynthetic relationship of haem d<sub>1</sub> to other families of the 'pigments of life'.

D. E. Stevenson

## Quality assurance

*Quality assurance in chemistry* was the subject of the Radiochemical Methods Group's AGM meeting, which was held recently at the National Physical Laboratory in Teddington. Contributions were given by Dr J. Beaumont (NPL) on the historical background to NAMAS and the international accreditation situation; Dr S. Jerome (NPL) spoke on radionuclide standards and nuclide standardisation methods; and Dr J. Fleming (LGC) discussed the

Valid Analytical Measurement programme and its future.

The meeting then turned its attention to the experience gained by several laboratories in implementing such schemes. Dr J. Winter (AEA Technology, Harwell Laboratory) described some of the problems that may be encountered when implementing a formal QA scheme in a multi-disciplinary organisation and Dr S. Parry (Imperial College) illustrated many of the problems faced in an academic environment. NAMAS is not always the accreditation system of choice and Dr R. Patel (MAFF, CVL, Weybridge) discussed the alternative of using GLP in toxicology laboratories. Returning to NAMAS, A. Lally (MAFF, CVL, Weybridge) illustrated how accreditation had been obtained for an environmental radiochemical analysis laboratory. All of the speakers emphasised the importance of involving staff at all levels in the development of an effective QA system.

Copies of an information leaflet about the group are available from Dr P. Warwick, Chemistry Department, University of Technology, Loughborough, Leics LE11 3TQ. P. Robb

## Fire chemistry

The next meeting of the Fire Chemistry Discussion Group will take place at the University of Leeds on Wednesday 29 April 1992. The main emphasis of the meeting will be the utilisation of thermal analysis techniques to study flame retardant phenomena.

Further details from Dr J. Ellwood, hon sec FCDG, Fire Research Station, Borehamwood, Herts WD6 2BL; tel: 081-953 6177. □

## Chemical education

The Education Division is making funds available to assist members of the Society who teach in schools, sixth form colleges or non-advanced education to attend the 12th international conference on *Chemical education* in Thailand on 17-21 December 1992. This conference follows a similar meeting held in York last year.

Further details of the conference and application forms for an RSC bursary can be obtained from Dr A. D. Ashmore, secretary (education), Royal Society of Chemistry, Burlington House, Piccadilly, London W1V 0BN. The closing date for application for a bursary is 30 June 1992. □