# **ANNOUNCEMENTS**

## FINANCIAL ASSISTANCE TO STUDENTS ATTENDING CONFERENCES DURING 1984

The British Vacuum Council offers awards to assist second and third year postgraduate students, working in the field of vacuum technology, surface science, thin films, or any related topic in which vacuum science plays an important role, to attend conferences in the UK or overseas.

To ensure that as many students as possible may benefit from a limited budget, the maximum grant will not normally exceed £ 130. The award, in general, is not intended to cover the total cost of attendance at a conference, but to supplement financial assistance from other sources.

Further information may be had from: The Secretary, The British Vacuum Council, 47 Belgrave Square, London SW1X 8QX.

### NINTH EUROPEAN CONFERENCE ON THERMOPHYSICAL PROPERTIES

The Institute of Physics, London, is organizing the 9th European Conference on Thermophysical Properties to be held at UMIST, Manchester, from 17-21 September 1984.

The general theme of the Conference will cover all aspects of thermophysical properties of solids and fluids at elevated temperatures. Measured properties and techniques will include: emissivity, thermal expansion, thermal diffusivity and thermal conductivity, heat capacity, differential thermal analysis and heats of transition, heat transfer and thermal shock resistance. Papers in the following areas will be particularly welcomed: thermometry, geological materials, composites, glasses, nuclear fuels, insulations, porous substances (especially containing moisture) relationship between microstructure and properties, standard reference materials, theory of thermophysical properties of solids and fluids.

Part of the Conference will be devoted to Workshops on the following themes: High temperature thermophysical properties of nuclear oxide fuels. Radiation phenomena in thermal conductivity of solids and liquids. Thermophysical properties of geological materials.

Contributions on the topics outlined above are solicited. Offers of papers (with short 200-300 words) abstracts should be sent by 30 April 1984 to Dr R. Taylor, Metallurgy Department, UMIST, Grosvenor Street, Manchester M1 7HS, UK.

Further information about the conference and submission of abstracts may be obtained from the Meetings Officer, The Institute of Physics, 47 Belgrave Square, London SW1X 8QX, UK.

#### THIRD CHEMRAWN CONFERENCE

The third Chemrawn Conference will be held in The Hague, Holland, from 25 to 29 of June 1984, under the auspices of IUPAC (International Union of Pure and Applied Chemistry), KNVC (Royal Netherlands Chemical Society), the European Federation of Chemical Engineering, and the Federation of European Chemical Societies.

The third World Conference on Resource Material Conversion will focus on our flexibility in (bio)-

chemical processing, thus extending the line of thought from CHEMRAWN I (inventory of resources) and CHEMRAWN II (world food supplies) to the conversion process as a bridge between available raw materials and future needs. The main theme of CHEMRAWN III is the transformation of raw materials into products. On the basis of existing and proven technology, it will discuss new chemical routes and identify feasible but not yet developed or

CHEMRAWN conferences, the present one will suggest a research programme for chemical conversions needed for our future. Special attention will be given to the alternative options for developing countries with often different indigenous raw materials. The involvement of participants in various parallel working sessions will contribute to this purpose.

The first working session will be devoted to Resources.

Invited speakers will deal with technological, economic and societal aspects. Scenarios for the availability of major resources (coal, oil, gas, renewables) will be reviewed. Their use either as a raw material for chemicals or as an energy source, as well as the diversification in the use of coal and renewables will be conference topics.

Resource to base chemicals, the second session, will be concerned with resource and routing dilemmas and the contribution of biotechnology and new forms of catalysis to economic production. Specific areas of interest will be design optimization and enzymes and fermentation. Overviews of existing and future technologies will be presented for the enzymatic production of compounds with complicated structures.

Base chemicals to end products, the third session, will

analyse the conversion of base chemicals to end products in two ways: end use and requirements supply optimization. Topics will be the use of non-metals (e.g. in transport), new ways of protection from corrosion, fibres with much increased strength/weight ratios, materials with ultra-high temperature resistance and large-scale versus small-scale production.

Resubstitution, session four, will discuss ideas for alternative products, available or feasible. Trends in coating, investment and governmental policies will be analysed for rubbers, textiles and films with special emphasis on the potential use of natural or synthetic material for specific functions. Further, in this session the role of and opportunities for developing countries will be an important issue.

Loss prevention, session five, will analyse possibilities and problems of recycling. An overview of the most important aspects of the economics of prevention measures will be presented as a basis for discussion between industrial and governmental policy makers.

For further information and registration, please apply to: CHEMRAWN III Congress Bureau, QLT Convention Services, Keizersgrachl 192, 1017 EC AMSTERDAM, The Netherlands.

# SEMINAR ON ENVIRONMENTAL ASPECTS OF GEOLOGY

As part of the Silver Jubilee Celebrations of the Geological Society of India, a seminar on Environmental Aspects of Geology is proposed to be held at Trivandrum during the month of November 1984 under the joint auspices of the Geological Society of India and The Centre for Earth Science Studies.

Since mineral resources play an important role in the average well-being of modern man, availability of this resource to future generations is a point worthy of serious consideration. The increasing demand and stress on our precious land would mean that only after comprehensive planning and analysis of the relevant factors that any future land-use activity could be thought of. The Seminar is being organised to provide a platform for a meaningful interaction and discussion among various geoscientists who would focus attention on problems and prospects related to our physical environment and its resources, based on case studies and evaluation of case histories, leading to a better understanding of our environment and, therefore, of its better management for our well-being and that of generations to come.

The Seminar would cover the following aspects: (1) Minerals for future, enrichment studies and feasibility of recycling; (2) Water pollution and water resources management; (3) Energy resources—coal, petroleum, atomic minerals, geothermal energy; (4) Environmental geological mapping; (5) Natural geological hazards—predictions and assessments; (6) Impact of human interference on physical environments; (7) Human and plant diseases vis-a-vis minerals and trace elements; and (8) Mining and environmental problems.

Abstracts not exceeding 600 words are invited. These should reach the Convener before the end of May 1984.

For further information related to the conduct of the Seminar please contact: Dr K. K. Ramachandran, Scientist and Convener, Environmental Sciences Group, Centre for Earth Science Studies, P.B. No. 2235, Sasthamangalam, Trivandrum 695 010.

### INTERNATIONAL ATOMIC ENERGY AGENCY SCIENTIFIC MEETINGS

Seven major scientific conferences and symposia will be convened by the International Atomic Energy Agency (IAEA) during 1984. Two of these meetings will be held in Vienna. At the invitation of the government concerned, the others will be held in the Federal Republic of Germany, France, Japan and the U.K. In addition there will be twelve scientific seminars.

Conferences and Symposia: (1) IAEA/WHO/UNEP International Symposium on the Risks and Benefits of Energy Systems-Julich, F.R. Germany, 9-13 April, (2) International Symposium on Nuclear Power Plant Outage Experience—Karlsruhe, F.R. Germany, 18-22 June, (3) Tenth International Conference on Plasma Physics and Controlled Nuclear Fusion Research—London, U.K. 12–19 September, (4) International Symposium on High-Dose Dosimetry— Vienna, Austria, 8-12 October, (5) International Conference on Radiopharmaceuticals and Labelled Compounds—Tokyo, Japan, 22-26 October, (6) International Symposium on the Implementation of the IAEA Codes of Practice and Safety Guides for Nuclear Power Plants (NUSS)—Vienna, Austria, 29 October-2 November, (7) International Symposium on Assessment of Radioactive Contamination in Man—Paris, France, 19–23 November.

Seminars: (1) Seminar on Site Investigation and Assessment Methods and Techniques for Underground Disposal of Radioactive Wastes—Sofia, Bulgaria, 6–10 February, (2) Seminar on Practical Experience in the Application of Quality Control in Water Reactor Fuel Fabrication—Karlsruhe, F. R.

Germany, 12-16 March, (3) Seminar on Tissue Banking of Radiation Sterilized Grafts for Clinical Use, for Asia and the Pacific-Quezon City, Philippines, 7-11 May, (4) Seminar on Quality Control in Radioimmunoassay, for Asia and the Pacific-Kuala Lumpur, Malaysia, 28 May to 1 June, (5) Seminar on Diagnosis of and Response to Abnormal Occurrences at Nuclear Power Plants— Dresden, G.D.R., 11-15 June, (6) FAO/IAEA Seminar on the Sterile Insect Technique for Tsetse Fly Eradication Control, for Developing Countries in Africa—Lusaka, Zambia, 25-29 June, (7) Seminar on the Use of Isotope Techniques in Water Resources Development, for Latin American Countries— Buenos Aires, Argentina, 16-27 July, (8) IAEA/NEA Seminar on Remote Handling Equipment for Nuclear Fuel Cycle Facilities—Harwell, UK, 2-5 October, (9) Inter-regional Seminar on Practical Problems Encountered in the Safe Transport of Radioactive Materials—Vienna, Austria, 5-8 November, (10) FAO/IAEA Seminar on the Use of Isotopes in Studies on Biological Nitrogen Fixation—Ankara, Turkey, 12-16 November, (11) Seminar on Nuclear Power Plant Operations Management—Vienna, Austria, and (12) Seminar on the use of Isotope and Geochemical Techniques in Geothermal Resources Exploration, for Latin American Countries.

Detailed information may be obtained from the appropriate National Authorities in Member States, e.g. the Ministry of Foreign Affairs, or the National Atomic Energy Authority, or by writing directly to the International Atomic Energy Agency, P.O. Box 100, Vienna International Centre, A-1400, Austria.

### ALL INDIA SEMINAR ON HYDROBIOLOGY AND POLLUTION

The All India Seminar on Hydrobiology and Pollution will be held during May-June 1984 at the Department of Zoology, Jamshedpur Co-operative College (Ranchi University) Jamshedpur.

Further particulars may be had from Dr N. K. Upadhyaya, Head of the Department of Zoology, Jamshedpur Co-operative College, Jamshedpur 831 001.