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## **RADIOCHEMISTRY IN EUROPE**

### **NEWSLETTER**

**Issue 1 – August 1995**

#### **DEAR READER**

Welcome to the first newsletter for Radiochemists in Europe. The objective of this newsletter is to provide nuclear and radiochemists with up to date information on activities and recent developments, together with relevant news items on a variety of issues which are hoped to be both interesting and informative.

It is perhaps useful to give some of the history surrounding the distribution of this Newsletter.

In the early 1980's the Chemical Societies of Europe were asked to indicate their interest in supporting Radiochemistry throughout Europe. As a result the First International Conference on Nuclear and Radiochemistry was held at Lindau, Germany in 1984. This was followed by conferences at Brighton (1988) and Vienna (1992). The 4th in the series is to be held at Saint Malo, France in 1996. These conferences have been initiated by an informal International Organising Committee which has invited a European Country to organise each individual event. The main aim has been to hold the conference somewhere in Europe so that there would be a greater attendance of Europeans. The committee has maintained links with the rest of the world to encourage similar conferences world-wide to be arranged in the intervening years. This has also applied to conferences and symposia held in individual European countries. This appears to have been reasonably successful.

It became clear that scientists from other disciplines were also interested and further there was a need to communicate more frequently. The Radiochemical Methods Group of The Royal Society of Chemistry therefore took the initiative to carry out a survey to determine the depth of interest in forming a more formal association. The results of the first survey yielded a list of leading radiochemists in most European countries. Replies were also received from China and Japan, although they had not been contacted.

Further enquiries indicated that there was no real support for a formal institute or society, but that a newsletter and a means of circulating meeting information would be welcome. Unfortunately to date no one source of income has been found to finance such a venture, although we will continue to investigate various possibilities. For a limited period the Radiochemical Methods Group in the UK has agreed to finance the printing and partial distribution of the newsletter. I, Dr Tony Ware, have been asked to produce a list of potential subscribers and act as editor/organiser for this first newsletter. To help me in this task I have established Liaison Persons in many countries (a list is included with this newsletter) who will aid in channelling information and articles to me and distributing newsletters to save on postage.

On the back page you will find a form asking you to register your interest in this venture and indicating your level of support. I hope that having read this Newsletter you will feel that you can give your support.

THE NEWSLETTER WILL ONLY BE AS SUCCESSFUL IF INFORMATION IS OFFERED FOR INCLUSION. If you have any comments or ideas on the contents of a European Newsletter, please contact your Liaison Person or myself, Dr Tony Ware, Avoncastle, South Lane, Sutton Valence, Kent ME17 3AZ, UK, Tel +44 (0)1622 842627.

## EUROPEAN RADIOCHEMISTS ASSOCIATION

### **Aims and Objectives** (as discussed with Liaison Persons)

The objective of any association, whether formal or informal, is to extend and improve communications between radiochemists in Europe.

This will be achieved through aims which include:

1. Establishing a liaison person within each country (or group)
2. Exchanging with each of the other liaison persons details of the activities of their own group during the current and subsequent years
3. Setting up a diary of relevant International Events to avoid duplication of dates and hence improve attendances
4. Exchanging details of specialist equipment, facilities and methodology.

You will find further information about the role of the Liaison Persons later in the newsletter.

## CENTENARY OF THE DISCOVERY OF RADIOACTIVITY

In 1896 Becquerel published his paper describing the discovery of radioactivity. To commemorate the centenary of that event the French are hosting the Fourth International Conference on Nuclear and Radiochemistry (NRC4) at St Malo from 8th to 13th September 1996. Included in the programme will be special invited lectures and the culmination of a nation-wide exhibition/lecture tour. [Further details of NRC4 from Mrs F Dykstra, Tel: (33) 169 41 73 18, Fax: (33) 1 69 41 64 70].

In the United Kingdom a series of schools lectures supported by a small exhibition is being given throughout the year. [Further details from Dr G W A Newton, Tel: (44) 161 794 2456, Fax: (44) 161 728 5164].

In the USA the American Chemical Society is holding its meeting in March 1996 at New Orleans with special events.

Radiochimica Acta is to issue a special edition, available in book form, at the end of this year, compiling invited papers to mark the centenary. The Journal of Radiochemical and Nuclear Chemistry is also to publish a special edition.

## INTERNATIONAL UNION OF PURE AND APPLIED CHEMISTRY

Within the Analytical Division of IUPAC the Commission on Radiochemistry and Nuclear Techniques met at the University of Surrey, Guildford, UK from 5th to 7th August 1995. Technical Reports published recently include "Applications of Accelerator Mass Spectrometry in Analysis of Trace Isotopes and Elements" by Liu Yuanfang et al (Pure and Appl. Chem., 66, 305-334, 1994) and "Determination of Very Low Levels of Radioactivity by I Zvara et al (Pure and Appl. Chem., 66, 2537-2586, 1994). Reports prepared and going to press in Pure and Applied Chemistry include "Neutron Activation Analysis" (R H Filby), "Elemental Isotopic Dilution Analysis with Radioactive and Stable Isotopes" (J D Fassett), "Nomenclature for Isotope, Nuclear and Radioanalytical Chemistry" (P Karol), "Critical Evaluation of Total Half-lives of Selected Ground State Nuclides" (N Holden) and "Critical Evaluation of Spontaneous Fission Half-lives of Selected Ground State Nuclides" (N Holden).

The Analytical Chemistry Division has issued "Nomenclature for Radioanalytical Chemistry" by R van Grieken and M de Bruin (Pure Appl. Chem. 66, 2513-2526, 1994).

## RADIOCHEMIST'S E-MAIL NETWORK

At the 7th International Symposium on Environmental Radiochemical Analysis, Bournemouth, UK, the "Radiochemist's e-mail network" was advertised with instructions on how to join up. Many participants asked for details and the following article was written by Simon Jerome (e-mail smj@newton.npl.co.uk).

**Starting up:** To join the network you need to have access to computer networks in general. Many organisations are already linked into one network such as INTERNET or BITNET and in this case all you need to do is to ask your 'Postmaster' (ie the person in the computing group with responsibility for e-mail, networking etc) to provide you with your own e-mail number and you are ready to go. For the smaller user or individual working from home, matters are a little more complex. You will need first to obtain the following:

- (i) A personal computer (either an IBM compatible or an Apple Macintosh),
- (ii) A MODEM to enable your pc to communicate with the outside world, via the telephone network;
- (iii) a connection to INTERNET. This can be done either via a dedicated high speed telephone line, or (preferably) by opening an account with a company providing access to INTERNET,
- (iv) Networking software.

You are now ready to use e-mail!

To send mail an e-mail address is required. Typically the e-mail address is something like this: smj1@newton.npl.co.uk. The characters to the left of '@' identifies the computer via which the link to the network is made, in this case the Mainframe computer called 'NEWTON' which is located at NPL (National Physical Laboratory, UK). The term 'co' defines NPL as a commercial organisation (others you may encounter are 'ac' academic, or 'gov' government (in the USA). Finally the term 'uk' means the computer is in the UK, as far as the network is concerned.

**Radiochemist's network:** To join this is very simple. You have to send the following message:  
SUB RADCH-L<Your surname> <your first name> to the list distributor (in France) whose address is: listserv@frcpn11.in2p3.fr. Within about 90 seconds, you will receive a message from the same address telling you that either you got it right first time and you are now on the Radiochemist's network, or you didn't and try again. You will automatically receive messages as other people send them to the Radiochemist's network. To send a message you send it to this address: RADCH-L@frcpn11.bitnet. This distributes your message to all the other members of the network – therefore stick to radiochemistry since other messages may become embarrassingly public! Currently, there are 128 subscribers to the Radiochemist's network from places as far afield as the USA, South Africa and Taiwan. Since 26th September 1994, there have been messages on Job vacancies, workers in the power industry, the effect of  $^{99m}\text{Tc}$  on ethylene oxide and an ongoing debate about a PC version of the Chart of the nuclides (it is available, based on the JEF-2 database, from the Nuclear Energy Agency Data Bank, Le Seine St. Germain, 12 Boulevard des Iles, 92130 Issy le Molineaux, France).

**Cost:** At present, you are not charged for the use of the Radiochemist's network, INTERNET or BITNET. However, this may change as the volume of traffic through INTERNET and BITNET increases. You must consider the cost of spending time connected to the network. If you use your Mainframe at work, you are using up CPU time which may be hard charged to your division or section. If you are working from a PC/MODEM/telephone line, you will pay for the cost of using the phone line, usually only a local call charge rate, and your line rental. You will also need to pay the company which holds your e-mail account in the region of £12 per month. Finally you will need to purchase the hardware; much networking software is in the public domain, ie free.

**Conclusion:** It is worth joining, since it offers a cheap and easy way of communicating with fellow radiochemists world-wide and serves as a talking and advice shop. It is a good way of finding out if there are any answers to the problems you may have in the lab.

## COURSE NOTIFICATION

Beginning in October 1995, the University of Liverpool is establishing a MSc in Radiometrics. This course will be available as either a one year full time, or part time over a maximum of 5 years. It will consist of modules and a major project. A certificate can be obtained for half the work load of the major MSc. Current courses are being developed into modules and for those who have already attended either the Gamma Spectrometry course or the course in Principles and Practice of Radiation Measurement may be required only to pass an assessment of their understanding of these courses. Each module may be attended as a stand-alone short course.

Further details are available from J Hemingway, Tel: +44 (0) 151 794 3376, Fax: +44 (0) 151 794 3348.

## FUTURE EVENTS

### **1995**

**4th European Conference on Accelerators in Applied Research and Technology (ECAART)**, 29 Aug - 2 Sept 1995, Zurich, Switzerland. Dr M Sutter, ETH-Honggerburg, CH-8093 Zurich, Switzerland.

**5th International Conference on the Chemistry and Migration behaviour of Actinides and Fission Products in the Geosphere (Migration '95)**, 10-15 Sept, Saint-Malo, France.

Mrs F Dykstra - Scientific Secretary, Institut de Physique Nucleaire, Bat. 100, F-91406 Orsay Cedex, France.  
Tel: (33) 1 69 41 73 18, Fax: (33) 1 69 41 64 70, e-mail: Dykstra@IPNCLS.IN2P3.FR

**International Conference on the Applications of the Mossbauer Effect**, 10-16 Sept, Rimini, Italy.  
Prof I Ortalli, University of Parma, Istituto di Scienze Fisiche, Via M D'Azeglio, 85, 43100, Parma, Italy.

**International Committee on Radionuclide Metrology (ICRM)**, Conference on low-level measurements, 2-6 Oct 1995, Seville, Spain.

Prof E Holm or M Tegling, Department of Radiation Physics, Lund University Hospital, S-221.85 Lund, Sweden.

**36th ORNL – DoE Conference on Analytical Chemistry in Energy Technology**, 10-12 Oct 1995, Gatlinburg, Tennessee, USA.

**41st Annual Conference on Bioassay, Analytical and Environmental Radiochemistry**, 13-17 November 1995, Boston, Massachusetts, USA.

**1996**

**International Congress on Radiation Protection (IRPA9)**, 14-19 April, 1996, Vienna, Austria.  
Austropa-Interconvention, PO Box 30, A-1043 Vienna, Austria.

**Solid State Chemistry '96**, 6-12 July 1996, Bratislava, Slovak Republic.  
SSCH'96, Institute of Inorganic Chemistry, Slovak Academy of Sciences. SK-842 36 Bratislava, Slovak Republic.  
Tel: (42) 7 375 170, Fax: (42) 7 373 541, e-mail: ssch96@savba.sk.

**14th International Conference on Chemical Education – Chemistry: Expanding the Boundaries**, 14-19 July, 1996, Brisbane, Australia.  
Dr W Beasley, Graduate School of Education, The University of Queensland, Brisbane, Queensland 4072, Australia.

**Fourth International Conference on Nuclear and Radiochemistry**, 8-13 Sept 1996, Saint-Malo, France.  
Mrs F Dykstra - Scientific Secretary, Institut de Physique Nucleaire, Bat. 100, F-91406 Orsay Cedex, France.  
Tel: (33) 1 69 41 73 18, Fax: (33) 1 69 41 64 70, e-mail: Dykstra@IPNCLS.IN2P3.FR

**1997**

**International Conference on Analytical Chemistry (Sections on Nuclear Methods, XRF and Quality Assurance)**, 15-21 June 1997, Moscow University, Russia.  
Dr L N Kolomiets, Scientific Council on Chromatography, Russian Academy of Sciences, 11791, Moscow, 31 Leninsky Prospect, Russia. Tel: 7-(095) 952-0065, Fax: 7-(095) 952 5308, e-mail: larionov@IMM.PHYCHE.MSK.SU.

**39th General Assembly of IUPAC**, 23-30 Aug 1997, Geneva, Switzerland.  
(To include Commission on Radiochemistry and Nuclear Techniques).

**LIAISON PERSONS**

Liaison Persons have been established to help in the following ways:

1. To aid in distribution of the Newsletter in their country/area
2. To collect and coordinate information and articles for subsequent newsletters and diary of events.
3. To coordinate their country's ideas on the way forward.

With regard to items 3, we could continue with the informal newsletter but how do we finance it? We could use e-mail, but everyone is not or cannot be connected? We could envisage a formal European Radiochemists Association in the future. YOUR VIEWS ARE IMPORTANT.

**AND FINALLY**

Items for inclusion in future issues of the Radiochemistry in Europe Newsletter are welcome. Input from the membership is vital and we need your support. Please do not hesitate to provide information which could benefit other radiochemists. This is possible through the Radiochemist's e-mail but as yet this is not supported by the majority and there are no facilities for editing. It is possible that eventually the Newsletter could be transmitted in its entirety to subscribers and Liaison Persons who could then transmit to others in hard copy. As indicated above, please send information to your Liaison Person or Dr Tony Ware and complete the form below.

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**REGISTRATION OF INTEREST IN RADIOCHEMISTRY IN EUROPE**

Title: ..... Name: .....

Organisation: .....

Address: .....

Phone: ..... Fax: ..... e-mail: .....

Would you prefer newsletter (a) Monthly (b) 4 times per year (c) Annually or (d) other (please state) .....

How much are you prepared to pay per year? (a) £10 (\$15) (b) £20 (\$30) (c) other (please indicate a maximum) .....

Are you prepared to contribute? How? (a) writing articles (b) other (please indicate) .....

Are you prepared to be a Liaison Person if one does not exist for your area or country? YES / NO

PLEASE INDICATE YOUR PREFERENCES ABOVE AND RETURN TO:  
Dr A R Ware, Avoncastle, South Lane, Sutton Valence, Maidstone, Kent ME17 3AZ, UK.  
I will ensure that your Liaison Person is informed of your reply.

**LIST OF CURRENT LIAISON PERSONS**  
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