

Radiochemical Methods Group
Analytical Division
The Royal Society of Chemistry
Burlington House
Piccadilly
London W1V 0BN
United Kingdom.



RADIOCHEMISTRY IN EUROPE NEWSLETTER

Issue 18 – May 2001

EDITORIAL COMMENT

Welcome to the eighteenth Newsletter for Radiochemists in Europe now under the sponsorship of the Federation of European Chemical Societies (FECS). At present the Radiochemical Methods Group of the Analytical Division of the Royal Society of Chemistry (UK) is acting as the secretariat and covering the expenses of me as Secretary/Chairman hence the address at the heading of this newsletter along with the logo for the FECS Working Party.

This newsletter has been posted on a web page (<http://www.rsc.org/pdf/andiv/europenews.pdf>) which can be accessed direct. The newsletter is available through the website of The WP on Nuclear and Radiochemistry of FECS, namely <http://www.chemsoc.org/networks/enc/fecs/fecsradiochemistry.htm> This website now established has connections to "Future Events" called nuclear and radiochemical activities in Europe, IUPAC Commission on Radiochemistry and Nuclear Techniques and the Homepage of the Radiochemical Methods Group of RSC. It is hoped shortly to extend this to cover the IAEA Future Events. Are there any other links that we should make? Please let me know.

If you prefer to access through the Homepage of the Radiochemical Methods Group it can be found at <http://www.rsc.org/lap/rsccom/dab/ana011.htm> and is linked to the homepage of the FECS.

All those for whom I have an e-mail address will have been informed of its posting by e-mail. There is no intention to charge a subscription for those receiving the newsletter by e-mail or visiting the web page at this time.

The Future Events now appears in HTML format and can be found direct at <http://www.rsc.org/lap/rsccom/dab/ana011events.htm> or through the FECS WP or RCMG Homepage. (This page on the website is being updated each month).

I hope that readers will make a resolution to contribute to the success of the newsletter with articles, reports on meetings, laboratory profiles, courses, positions vacant, redundant equipment and any other item you feel may be of interest to other radiochemists. Also the early announcement of dates for meetings and conferences is important to avoid the possibility of organising two at the same time on similar topics within Europe. Wherever possible the name and contact address of contributors is given at the end of each article with their permission.

Providing that information is available I intend to compile this newsletter 4 times per year in March, June, October and December/January. Please send information in good time for inclusion that is by the end of the month prior to publication. **Editor: Dr. Tony Ware (e-mail: tonyware@compuserve.com)**

•EUROPEAN RADIOCHEMISTS ASSOCIATION.

Aims and Objectives

The objective of the association is to extend and improve communications between radiochemists in Europe through a newsletter. 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 attendance
4. Exchanging details of specialist equipment, facilities and methodology.

•FEDERATION OF EUROPEAN CHEMICAL SOCIETIES

The web page for the Working Party on Nuclear and Radiochemistry has now been established. You can see it on <http://www.chemsoc.org/networks/enc/fecs/fecsradiochemistry.htm>. It is currently linked to the Royal Society of Chemistry webpages for the Newsletter and Future Events. It also has links to the IUPAC Commission on Radiochemistry and Nuclear Techniques and will shortly have a connection to IAEA Future Events.

The WP is progressing on its activity to review training courses for radiochemists in Europe and will be preparing a report later this year for discussion by the WP at its meeting in 2002.

----- x -----

•LIAISON PERSON

Note that we now have a Liaison person for Italy, Prof Mauro Bonardi.

----- x -----

• CONFERENCE AND WORKSHOP DETAILS

"Synthesis and Applications of Labelled Compounds" XI th annual meeting, 9 October 2001. AstraZeneca Pharmaceuticals, Charnwood, Loughborough, UK. Organisers: International Isotope Society (UK Group) and Royal Society of Chemistry & Radiochemical Methods Group, RSC.

Contact: Dr Bill Lockley, AstraZeneca, Loughborough tel 01509 644367, fax 01509 645571 e-mail bill.lockley@astrazeneca.com or Dr Ken Lawrie, GlaxoSmithKline, Harlow (tel 01279 622286, fax 01279 622455 e mail: ken_lawrie-1@sbphrd. Summary. The meeting will cover Organic Synthesis using C-14 and Tritium, Solid State ligand interaction NMR, Radiopharmaceutical Chemistry, PET Chemistry (C-11 and F18), New Chemical Methods and Biosynthetic Studies.

International Conference on Radioactivity in the Environment 2-5 September 2002. The Journal of Environmental Radioactivity (JER), in association with the International Union of Radioecology (IUR) and Elsevier Science Ltd, and in co-operation with the International Atomic Energy Agency, is pleased to announce a major international conference on Radioactivity in the Environment. The conference is expected to be the most significant of its kind ever held. It is being sponsored by the IUR and additional sponsorship currently under discussion will be acknowledged in subsequent announcements. The conference will mark 20 years of the Journal of Environmental Radioactivity and will be held in Monaco where it began. The scientific committee for the conference is the international Editorial Board of JER. Contact: Gill Heaton, the Conference Secretary, at e-mail address jer@heaton-connexion.co.uk

9th International Symposium on Environmental Radiochemical Analysis, 17-20 Sept 2002, Kent, England, UK This conference is the 9th in a series of well attended Symposia and will concentrate on the details of analytical procedures. The organisers expect it to be complimentary to the Monaco Conference and are in communication with those organisers to minimise overlap. Support from the FECS has been requested.

Contact: Mrs C Pickering, Department of Chemistry, Loughborough University, Loughborough, Leics. LE11 3TU. Tel and Fax: 01509 222750 Email: C.Pickering@lboro.ac.uk

----- x -----

•NEWS FROM THE INTERNET

General Engineering Laboratories, Inc. (GEL) currently has an opening for a Senior Chemist to support our radiochemistry laboratories in Charleston, South Carolina (USA). GEL has a full service radiochemistry laboratory specialising in the analysis of waste, environmental and bioassay matrices. The senior chemist supports the method development, training, and process improvement operations of the radiochemistry laboratory. Proficiency in all analytical areas of operations is required, including sample preparation, analytical separations and final data acquisition and calculations. Problem solving skills relating to technique, methods or instrumentation is essential for the successful applicant. The senior chemist will provide technical support to the laboratory in writing and reviewing standard operating procedures and conducting independent research for method development and non-routine operations. The senior chemist will train lab personnel in proper techniques and will serve as a mentor in developing others in their professional careers.

GEL offers a comprehensive benefits package including 401(k), relocation assistance, and a competitive salary commensurate with experience. Interested candidates should submit a resume and salary history to: General Engineering Laboratories, Inc. Attention: James Westmoreland, P.O. Box 30712, Charleston, SC 29417, e-mail: jbw@gel.com website: www.gel.net

Depleted Uranium

The opinion of the Group Experts Established according to Article 31 of the Euratom Treaty on Depleted Uranium can be found at <http://europa.eu.int/comm/environment/radprot/opinion.pdf>, European Commission Radiation Protection Web Page <http://europa.eu.int/comm/environment/radprot/> (Fred Dawson, Health Physics section of UK MOD's Directorate of Safety, Environment and Fire Policy at: Directorate of Safety, Environment and Fire Policy, Room 5/117 St Christopher House, Southwark Street, LONDON SE1 0TD, United Kingdom Tel: +44 20 7305 4175, Fax: +44 20 7305 4144

NIST Policy on Traceability

The Traceability Task Group has posted the NIST Policy on Traceability and associated materials on the new NIST Traceability Website at <http://www.nist.gov/traceability>. Both the Policy and materials, which have been approved by Karen Brown, reflect significant NIST staff input in what proved to be a good, open process, comprising NIST-level public

meetings in both Gaithersburg and Boulder and two opportunities for staff comment through Laboratory and Division management. The next phase of the effort is to publicise the NIST Traceability Website both inside and outside NIST. Therefore, please inform your customers about the website. Interested parties may submit comments to traceability@nist.gov.

(Rich Kayser, Director, Technology Services)

----- ✕ -----

•NEWS FROM SCIENTIFIC LITERATURE

Gross alpha and beta by LSC

We have published a simple and rapid method for gross alpha and beta measurements using liquid scintillation that solves many of the problems encountered when using gas counters. Sanchez-Cabeza, J.A. and Pujol, L.I. (1995) A rapid method for the simultaneous determination of gross alpha and beta activities in water samples using a low background liquid scintillation counter, *Health Physics*, 68(5): pp674-682.

(Dr. Joan-Albert Sanchez-Cabeza, Departament de Fisica, Universitat Autònoma de Barcelona, 08193 Bellaterra, Barcelona (Spain). Email: JoanAlbert.Sanchez@uab.es Web: <http://cc.uab.es/lra/>)

Now available: a new series of publications edited by the Academy of Sciences of France

The Academy of Sciences of France has edited a new series of publications on Science and Technology in response to a request lodged by the French Minister in charge of Research: the series now available comprises 12 reports that

address major current and emerging scientific and technological themes that will be of interest to academic staff, research scientists, lecturers and students alike. Each overview report represents a synthesis in a given field

and is framed in didactic style. The Academy of Sciences presents two volumes in the series that specifically

address the area of ionising radiation: Radiochemistry: radioactive matter and ionising radiation (Académie des sciences- RST Report #4 - Éditions Tec&Doc) and Nuclear Materials (Académie des sciences- RST Report #5 - Éditions Tec&Doc). (For further information:

http://www.academie-sciences.fr/index_publications.html)

The Elsevier Science Journal of Environmental Radioactivity are publishing a Special Issue entitled "Natural Radioactivity: Technological Enhancement, Detection and Migration" (Guest Editors William C Burnett and

Horst Monken Fernandes), vol 54/1, 2001. Papers in the issue include: Nuclide migration and the environmental radiochemistry of Florida phosphogypsum, W.C. Burnett, Radium contamination of the banks of the river Laak as a consequence of the phosphate industry in Belgium, J. Paridaens, Radionuclide fluxes at a plant manufacturing dicalcium phosphate for domestic animals, T. Gafvert, Radiological impact from atmospheric releases of 238U and 226Ra from phosphate rock processing plants, C. Papastefanou.

This issue can be purchased for the Special Price of US \$ 40/76 Dutch Guilders. Please contact Simon Richert (s.richert@elsevier.co.uk) for further information and to register your order.

New Publications

1) Instrumentation for PIXE and RBS. During the past two decades the IAEA has assisted many national laboratories in its member states in various fields where nuclear analytical methods based on ion beams have been applied – particularly PIXE (particle-induced x-ray emission) and RBS (Rutherford backscattering). The purpose of this publication is to give an overview of instrumentation for PIXE and RBS including the hardware and software

needed to perform the analysis. IAEA-TECDOC-1190 (December 2000) Cost free publication (71pp).

If interested, send your request to Stjepko Fazinic at the IAEA (S.Fazinic@iaea.org).

2). Reference Materials for Chemical Analysis - Certification, Availability and Proper Usage (edited by Markus Stoeppler, Wayne R. Wolf and Peter J. Jenks) 198. - DM / 101.24 EUR / 176. - SFR 2001, 297 pages, hardcover

ISBN 3-527-30162-3 Wiley-VCH, Weinheim. The topic of this book is of obvious relevance to many branches of

analytical chemistry, including nuclear analytical methods. Further information is available from the Wiley website at: <http://www.wiley-vch.de/books/tis/eng/3-527-30162-3.html> or directly from the principal editor, Markus Stoeppler (Markus.Stoeppler@t-online.de).

----- ✕ -----

· **AND FINALLY** Items for inclusion in future issues of the Radiochemistry in Europe Newsletter are welcome.

Please send information to your Liaison Person or myself Dr Tony Ware, Avoncastle, South Lane, Sutton Valence, Maidstone, Kent ME17 3AZ, UK. Tel: +44 (0)1622 842627, e-mail: tonyware@compuserve.com

IMPORTANT PLEASE send me your e-mail address so that I can inform you when websites have been updated.

----- x -----

LIST OF CURRENT LIAISON PERSONS

Dr Max Bichler (Austria)

Technische Universität
Wien, Atominst.
Abteilung Radiochemie Stadionallee 2,
A-1020 Wien, Austria
Tel.: 43 1 58801 14192
e-mail: bichler@ati.ac.at

Dr Ales Fajgelj (IAEA, Austria)

IAEA, Agency's Lab Seibersdorf
A-2444 Seibersdorf, Austria
Tel: 43 1 2600 28233
e-mail: a.fajgelj@iaea.org

Prof Dr P Benes (Czech Republic)

Czech Technical University
Nuclear Sciences & Physical
Engineering
115 19 PRAHA 1
Brehova 7, Czech Republic
Tel: (2) 231 76 26
e-mail: benes@br.fjfi.cvut.cz

Dr H Dahlgaard (Denmark)

Risoe National Laboratory,
P O Box 49, NUK-204
DK-4000 Roskilde
Denmark
Tel. 45-46775314
e-mail: henning.dahlgaard@risoe.dk

Dr J Lehto (Finland)

Laboratory of Radiochemistry
P.O.Box 55
00014 University of Helsinki
Finland
Tel: +358-9-19140137
Fax: +358-9-19140121
email: jukka.lehto@helsinki.fi

Dr D Trubert (France)

Institut de Physique Nucleaire
Division de Radiochimie
BP 1
F-91406 Orsay Cedex
France
Tel. (33) 16 1 69 41 73 45
e-mail: trubert@ipncls.in2p3.fr

**Dr. Norbert Trautmann,
(Germany)**

Institut fuer Kernchemie
Universitaet. Mainz,
Fritz Strassmann-Weg 2,
55128 Mainz, Germany
Tel: 49 6131 3925847,
e-mail: trautmann@mail.kernchemie.uni-mainz.de

Dr P Misaelides (Greece)

Dept. of Chemistry, Aristotle
University
PO Box 1547
GR-540 06 Thessaloniki
Greece

e-mail: misailid@chem.auth.gr

Dr Z Homonnay (Hungary)

Department of Nuclear Chemistry
Eotvos Lorand University
H-1117 Budapest
Pazmany Peter setany 2
Hungary
Tel: (36) 1 209 0593
e-mail: homonnay@para.chem.elte.hu

Prof. Z B Alfassi (Israel)

Department of Nuclear Engineering
Ben Gurion University
Beer Sheva, 84102 Israel
Tel. 972-57-461347
e-mail: alfassi@bgumail.bgu.ac.il

Prof Dr Mauro Bonardi , (Italy)

Nuclear and Radiochemistry,
Universita' degli Studi and National
Institute of Nuclear Physics,
INFN-Milano,
via F.lli Cervi 201, I-20090 Segrate
(Milano), Italy
Tel : +39 02 5835 9575
E-mail : Mauro.Bonardi@MI.INFN.IT

Dr. I Z Kolar (The Netherlands)

Interfaculty Reactor Institute
Delft University of Technology
2629 JB DELFT,
The Netherlands
Tel. (+31) 15 78 66 19
e-mail: kolar@iri.tudelft.nl

Prof P Hoff (Norway)

Nuclear Chemistry Section,
Department of Chemistry,
University of Oslo, PO Box 1033,
Blindern N-0315 Oslo
Norway
Tel: + 47 22 85 54 84
Fax: + 47 22 85 54 77
e-mail: per.hoff@kjemi.uio.no

Dr R Bojanowski (Poland)

Polish Academy of Sciences
Institute of Oceanology
Dept of Marine Chem. and Biology
Powstancow Warszawy 55
81-712 Sopot
P.O.Box 68, Poland
Tel. (48 58) 51 72 81
e-mail: rbojan@ocean.iopan.gda.pl

Dr V P Kolotov (Russia)

Verdnasky Institute of Geochemistry
and Analytical Chemistry
Kosygin str., 19
Moscow B-334, 117975
Russia
Fax: 7 (095) 9382054
e-mail: kolotov@glas.apc.org

Prof. Dr Fedor Macasek (Slovakia)

Department of Nuclear Chemistry
Comenius University
Mlynska dolina
SK-842 15 Bratislava, Slovakia
Tel. +421 7 60296308,
Fax: +421 7 65424685
e-mail: macasek@fns.uniba.sk

Dr Milka Benedik (Slovenia)

Laboratory for Radiochemistry
J Stefan Institute
1000 Ljubljana
Slovenia
Tel: + 386 1 5885 450
e-mail: ljudmila.benedik@ijs.si

Dra C Gasco (Spain)

CIEMAT (DIAF)(Ed3A)
Avda de la Complutense 22
Madrid 28040
Spain
e-mail: cata@ciemat.es

Prof. Gunnar Skarnemark (Sweden, Gothenburg area)

Dept of Nuclear Chemistry
Chalmers Univ of Technology
S-412 96 Goteborg
Sweden
Tel. +46 31 7722914
e-mail: gunnar@nc.chalmers.se

Prof. T Eriksen (Rest of Sweden)

Dept of Nuclear Chemistry
S-10044 Stockholm 70,
Sweden

Prof. Dr Heinz W Gaggeler (Switzerland)

University of Bern
Labor Fur Radio- and Umweltchemie
Freiestrasse 3
CH-3012 Bern, Switzerland
Tel; 4131-6314264
e-mail: gaeggeler@iac.unibe.ch

Prof Turan Unak (Turkey)

e-mail: incs@alpha.sci.ege.edu.tr

Dr A R Ware (United Kingdom)

Avoncastle, South Lane
Sutton Valence, Maidstone
Kent ME17 3AZ, UK
Tel. (44) (0)1622 842627
e-mail: tonyware@compuserve.com

Mr S Jerome (International Committee for Radionuclide Metrology)

National Physical Laboratory
Queen's Road
Teddington
Middlesex TW11 0LW, UK
Tel: +44 20 8943 6204
Fax: +44 20 8614 0490
e-mail: ICRM_LLTWG@npl.co.uk