EDITORIAL COMMENT
Welcome to the twenty-eighth Newsletter for Radiochemists in Europe under the sponsorship of the Federation of European Chemical Societies (FECS).

I do not apologise for the fact that this Editorial Comment is similar to last time as I received minimal response to my requests for articles etc. The newsletter of the FECS WP on Nuclear and Radiochemistry is for everyone as its aims below indicate. It is important therefore to remind everyone that it is here to communicate with all radiochemists in Europe. This should be a two way process so please let the WP have your comments, plans etc for publishing.

This newsletter is established on web page (http://www.rsc.org/pdf/andiv/europenews.pdf). The newsletter is perhaps more easily accessed through the website of The WP on Nuclear and Radiochemistry of FECS, whose URL is now www.fecs-chemistry.org/nuclear. This website has other useful connections to “Future Events” called nuclear and radiochemical activities in Europe, and the Homepage of the Radiochemistry Group of RSC. If any other group would like their website to be linked, please send me the details. With regard to the Future Events I am trying to include conferences in other disciplines which have or could have a section involving nuclear and radiochemistry. This is in keeping with the FECS WP’s aim to involve scientists from a wide range of disciplines and topic areas.

The WP is interested in expanding an existing database on training courses in radiochemistry. Do you think that such a database should be widely available? Please let us have your comments and send details of any courses that you run. (See Radiochemistry Society item in “News from the Internet”).

This is your newsletter for radiochemists in Europe. Articles, reports on meetings, laboratory profiles, courses, positions vacant, redundant equipment and any other item you feel may be of interest to other radiochemists are still urgently required. 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.

Providing that information is available I intend to compile this newsletter 4 times per year in March, June, September, 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)

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•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.
2004 FECS Lecture
Professor Andreas Manz will deliver the 2004 FECS Lecture ‘Continuous-flow Bioassays, Separations and Isoelectric Focusing on Chip’ during Euroanalysis XIII, European Conference on Analytical Chemistry, in Salamanca, Spain, on 5-10 September 2004.

The Euroanalysis Conference, one of a series of FECS Conferences, promoted by the FECS Division of Analytical Chemistry, will bring together chemists from industry and academia and provide an international forum for the presentation and discussion of a broad spectrum of analytical topics under the banner “The Role of Analytical Chemistry in the Protection of the Citizens”, highly interesting for the community of analytical sciences. Further information is on the web at www.euroanalysis13.com

Andreas Manz is Head of ISAS - Institute for Analytical Sciences, Dortmund and Berlin, Germany, and professor at the University of Dortmund.

Andreas Manz is one of the pioneers in microchip technology used for chemical applications. The Manz Lab focuses on novel applications of chip technology in analytical chemistry and the life sciences. He has been involved in the development of high-speed analysers based on capillary electrophoresis, liquid chromatography and flow injection analysis. Much of his research has been carried out with his group at Ciba-Geigy Ltd. in Basel, Switzerland and at Imperial College in London, UK. Further details of his work are on the web at www.ansci.de

The FECS Lecture serves to enhance the image of European chemistry and to promote scientific cooperation in Europe. It rotates among FECS member societies and is delivered at a scientific event outside the lecturer’s own country. The Lecturer is given a Swarovski Crystal Owl, a gift from Swarovski Austria, to commemorate the event.

WP on Nuclear and Radiochemistry
The latest plans for the FECS European Chemistry Congress will be discussed at the FECS Executive in Bucharest in October. The WP has submitted its plan for a seminar on “Radiochemistry in the 21st Century” and a presentation on training for radiochemists. The proposal is that the seminar consists of the four following topics:
Chemistry of the Superheavy Elements, Advances in Radioecology, Radiopharmaceuticals, and Chemistry of the Nuclear Fuel Cycle

In addition, we suggest to include one more contribution that would cover training aspects and be entitled “Teaching of nuclear and radiochemistry in the modern age”. A decision on whether the seminar will be accepted will be made shortly in time for the FECS Executive Meeting in October. Dr Jan John, Technical University of Prague, represents the WP on the Advisory Committee for the Congress.

The WP will meet on 30th August during NRC6 in Aachen. If you have any views on the future of radiochemistry in Europe and the role of the WP please contact a representative on the WP. The representatives on the WP nominated by their National Chemical Society are:
Dr Mauro Bonardi, mauro.bonardi@miinfn.it
Prof. Alexander Chekmarev, chizh@interset.ru
Prof. Dr. Heinz W Gaeggeler, heinz.gaeggeler@iac.unibe.ch and heinz.gaeggeler@psi.ch
Dr Xiaolin Hou, xiaolin.hou@risoe.dk
Dr Jan John, jan.john@fjfi.cvut.cz
Ir. Zvonimir I Kolar, kolar@iri.tudelft.nl
Dr Jukka Lehto, jukka.lehto@helsinki.fi
Prof. Dr. R. Michel, michel@zsr.uni-hannover.de
Dr Panagiotis Misaelides, misailid@chem.auth.gr
Prof. Jerzy Narbutt, jnarbut@orange.ichtj.waw.pl
Dr Isabel Santos, isantos@itn.pt
Prof. Dr. Árpád Vincze, vincze@zmne.hu
Dr Tony Ware, tonyware@compuserve.com
Prof. Per Hoff, per.hoff@kjemi.uio.no.
Dr. Drusen Razem, Bijenicka cesta 54, P.O.Box 180

Further information on the WP and minutes of previous meetings can be found on the website at www.fecs-chemistry.org/nuclear

Contact: Editor Dr Tony Ware (e-mail:tonyware@compuserve.com)

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•LABORATORY PROFILE
Nuclear Training Services Ltd., UK

Nuclear training Services is run by Dr Gordon Gilmore, co-author of Practical Gamma-Ray Spectrometry, Wiley 1995. This year so far they have run the following series of courses.

30th April 2004 - One Day - Neutron Detection and Measurement
4th May 2004 - One Day - Introductory Gamma-Ray Spectrometry
5th-6th May 2004 - Two Day - Practical Gamma-Ray Spectrometry
4th-6th May 2004 - Three Day - Combined Practical Gamma-Ray Spectrometry
7th May 2004 - One Day - Uncertainty Budget Workshop

The following dates are planned for July.
26th July 2004 - One Day - Neutron Detection and Measurement
27th July 2004 - One Day - Introductory Gamma-Ray Spectrometry
28-29th July 2004 - Two Day - Practical Gamma-Ray Spectrometry
27-29th July 2004 - Three Day - Combined Practical Gamma-Ray Spectrometry
30th July 2004 - One Day - Uncertainty Budget Workshop

Full details of these courses and an online booking form visit their website at www.nucleartraining.co.uk

In addition to these courses Nuclear Training Services also operate on line courses in “Practical Gamma-Ray Spectrometry”, “Introductory Gamma-Ray Spectrometry” and “Introduction to Radioactivity”. Full details can be found at www.online.nucleartraining.co.uk

For more information about these courses contact Dr. Gordon Gilmore, Nuclear Training Services Ltd., 15 Lindfield Close, Moore, Warrington, WA4 6UG, UK, Tel+Fax: +44 (0) 1925-740769 Mobile: 07769 748431
http://www.nucleartraining.co.uk

Editor: If you would like your laboratory research or training group to be profiled, please contact editor with draft script.

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• CONFERENCE REPORTS

No reports have been received since the last newsletter. Please provide information particularly of publication of any proceedings.

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• CONFERENCE AND WORKSHOP DETAILS

6th International Conference on Nuclear and Radiochemistry (NRC-6)
The sixth conference in this series will be held from Aug 29 - Sep 3 2004 in Aachen, Germany.
Deadline for abstracts is now past and decisions on final program made. It is not too late to decide to attend.
E-mail: nrc6@fz-juelich.de
Website: http://www.fz-juelich.de/NRC6/

Physical and Chemical Aspects of PET Radiopharmaceuticals
A Regional Workshop on PET will be held on September 19-21, 2004, Bratislava, Slovakia at the Slovak Institute of Metrology (SMU). The Workshop will cover:-
Cyclotron and Target Constructions
Target Chemistry
Radiopharmaceuticals Synthesis
Quality Control of Radiopharmaceuticals
GLP-GMP Design
PET Imaging
The Workshop will coincide with the opening of the PET Centre of the Cyclotron Centre of the Slovak Republic.
A Satellite Seminar on "Ion-Beam Applications" will include, ion sources for cyclotrons, high energy ion-beam analysis and neutron production.
Application should be sent to e-mail: kufcakova@fns.uniba.sk or fax: 00421 2 602 96 705
Deadline for registration and fee payment September 6, 2004

NAMLS-8
The Eighth International Conference on Nuclear Analytical Methods in the Life Sciences (NAMLS-8) will take place in Rio de Janeiro, Brazil, from 17-22 April 2005.
Conference website: www.cena.usp.br/namls8
Conference e-mail: namls8@cena.usp.br
General Chair: Elisabete De Nadai Fernandes, CENA-USP, Piracicaba, Brazil
Deadline for abstracts: 2004 November 1

Please visit the above-mentioned website for pre-registration and for additional information about the conference. This announcement was issued on behalf of the NAMLS International Committee (NAMLS-IC), which is the convener of the NAMLS series of conferences.

(Jan Kucera, NAMLS-IC Chair & Robert Parr, NAMLS-IC Secretary Website: http://members.aon.at/namls/)

NAA
Consideration is being given to hold a workshop on NAA, Highrate-gamma-spectroscopy and TXRF in Vienna next Year. The local committee will be led by Dr Max Bichler. Watch this space for further details.

(Max Bichler e-mail: bichler@ati.ac.at)

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• NEWS FROM THE INTERNET

Chemical Thermodynamics of U, Np, Pu, Am and Tc
Following the publication in 2003 of the "Update on the Chemical Thermodynamics of Uranium, Neptunium, Plutonium, Americium and Technetium" there have been many requests for copies of the 1992 book on Uranium and the 1995 book on Americium, which are no longer available at bookshops. The main reason for the continued need for the 1992 and 1995 books is that the 2003 "Update" does not contain the rationale behind those data selections that have not been changed; these are only found in the original publications.

To assist the thermochemical database user community, the NEA has reprinted a limited number of copies of the 1992 book on Uranium and the 1995 book on Americium. These are available free on request. If you are interested in receiving a copy of any of them, please follow the instructions in the attached flyers. Since the number of copies reprinted is limited and the contents of the reprinted books are exactly the same as those in the original books, please kindly give preference to those colleagues who were not able to purchase the original books. If you already have a copy of these books, please help us reach a larger audience by forwarding this email to colleagues who could potentially be interested.

It is important to note that the currently NEA TDB selected data for U, Np, Pu, Am and Tc are given in the 2003 Update. The earlier books on U (1992), Am (1995), Tc (1999) and Np/Pu (2001) contain selected value tables that are superseded in part. As usual, the updated database (including the new files for SIT interaction parameters) can be downloaded from our web pages:
Further information on the complete suite of NEA TDB publications is available from:
(Contact e-mail: Federico.MOMPEAN@oecd.org)

Coordinated Research Project
Matthias Rossbach would like to bring to your attention a new Coordinated Research Project (CRP) on 'art object identification using nuclear techniques' organised by the IAEA, Industrial Applications and Chemistry Section, as described below.
The proposed CRP is aimed to explore new fields of application for nuclear analytical techniques in art and archaeology. It will help to foster collaboration between museum conservators and analytical researchers. The dissemination of information on applications of advanced analytical techniques to art objects will stimulate the use of these techniques in developing Member States and help in conservation and recovery of national heritage.
Specific Research Objectives:
The specific objectives may vary from country to country subject to the research priorities defined by the national teams. However, according to the overall objectives of this CRP they will add to the preservation and recognition of national heritage and may comprise some of the following:
Identification of authenticity of certain groups of artifacts being of particular national importance through chemical analysis.
Clarify authorship of valuable paintings, identify provenance and age of museum specimen.
Providing base line data for law enforcement to identify fraud.
Contribute information for the identification of seized illegally traded materials.
Assist conservators in restoration and preservation of cultural heritage.
Identify suitable methods and recommend procedures for chemical identification of art object.
Please consider it and apply with a proposal to the IAEA Research Contract Section, attn. Ms. Th. Benson (e-mail: t.benson@iaea.org) in hard copy, signed, to Research Contracts Administration Section, International Atomic Energy Agency, Vienna International Centre, Wagramer Strasse 5, P.O. Box 100, A-1400 Vienna, Austria before July 30, 2004. E-mail: crp.research@iaea.


(M. Rossbach, e-mail: m.rossbach@iaea.org)

Radioactivity, Ionising Radiation, and Nuclear Energy
By Jiri Hala and James D. Navratil
ISBN 80-7302-053-X, Publisher: Konvoj, Brno, Czech Republic, 2003
(Sold in North, Central and South America by Litarvan Literature, 102 Grand Oak Circle, Pendleton SC 29670: $49.95 plus $10.00 shipping and handling.)
(Sold elsewhere by Konvoj, spol. s r.o. (Ltd.), Berkova 22, Brno, CZ-612 00, Czech Republic; email:konvoj@konvoj.cz.)

This textbook focuses on basic information about radioactivity, nuclear reactions, properties and measurement of ionizing radiation, nuclear energy and technology, and their environmental aspects. The core of the book proceeds from the authors’ lectures in nuclear chemistry and environmental radioactivity at the School of Science, Masaryk University, Brno, Czech Republic, and in actinide and radiochemistry at Clemson University, Anderson, South Carolina.

The authors’ original intention was to write a basic textbook appropriate for introductory courses related to the science of radioactivity, ionizing radiation, and nuclear technology. While working on the manuscript it was felt that topics related to nuclear energy, biological risk of ionizing radiation for man, and environmental aspects of radioactivity and nuclear energy, including management of radioactive wastes, continue to be popular among a wider public. Therefore, the respective sections have been expanded to provide information not only to university students, but also to a wider readership with answers to often asked topical questions that continue to be the target of frequently unjustified criticism from opponents of nuclear and radiation technologies.

The subjects covered in this book have their foundations in a blend of physics, biology, chemistry and engineering. In relation to radiation and nuclear technologies, economics, psychology and politics take their share of credit as well. Having this in mind, and trying to cover as many topics as possible with numerous applications of radioactivity and ionizing radiation, and striving not to produce too extensive of text, some subjects had to be discussed in a simplified form. For the same reason, only a few, arbitrarily selected examples out of many were used to illustrate some facts and methods, and only simple mathematics and accompanying theory necessary for understanding the principles were utilized. The reader will find more information in the sources listed in the “Recommended Reading” sections at the end of each chapter and in electronic information resources listed in Appendix F. Emphasis was laid on more recent literature, predominantly review articles published in English. The authors adhered to the SI system of units, and some useful conversion factors are listed in Appendix G. Appendix E provides names and abbreviations of institutions and organizations mentioned in the textbook.

(James Navratil. E-mail: Nav@clemson.edu)

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Please send information for inclusion in future issues 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 and any other news of immediate interest.

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
Prof. Dr. R. Michel (Germany)
Zentrum für Strahlenschutz und Radioökologie
Am Kleinen Feld 30
D-30167 Hannover
Germany
Tel.: +49-511-762-3312
Fax:+49-511-762-3319
e-mail: michel@zsr.uni-hannover.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 A Vincze (Hungary)
Zrínyi Miklos National Defense University
Hungary
e-mail: incez@zmne.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 Fili Cervi 201, I-20090 Segrata (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.ioan.gda.pl

Dr V P Kolotov (Russia)
Verdinsky 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 65424685
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 (DIAM)(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 Gäggeler
(Switzerland)
University of Bern
Labor Fur Radio- and Unweltchemie
Freiestrasse 3
CH-3012 Bern, Switzerland
Tel:4131-6314264
e-mail:gaeggeler@iac.unibe.ch

Prof Turan Unak (Turkey)
Ege University, Faculty of Science
Dept. of Chemistry, Div. Nuclear Chem.
Bornova, Izmir 35100, Turkey
e-mail:inca@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 0940
e-mail:ICRM_LLTWG@npl.co.uk

Dr G Hunter (International Union of Radioecology)
7A Park Ave.
Stirling, Scotland
UK FK82QR
e-mail:twohunters@btopenworld.com