

Secretariat: Radiochemistry Group
Analytical Division
The Royal Society of Chemistry
Burlington House
Piccadilly
London W1V 0BN
United Kingdom.



RADIOCHEMISTRY IN EUROPE NEWSLETTER

Issue 32 – August 2005

EDITORIAL COMMENT

Welcome to the thirty second Newsletter for Radiochemists in Europe now under the sponsorship of the European Association for Chemical and Molecular Sciences (EuCheMS). The new WebPages for the WP can be found at www.euchems.org/Divisions/NRC

From the home page the "Future Events" and Radiochemistry newsletters are readily available. Some readers had difficulty in locating Issue 31 of the Radiochemistry in Europe Newsletter as a result of the changes being made to the web sites operated by the Royal Society of Chemistry. It is now in the list of newsletters. Useful Links have also been established, including 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 include conferences in other disciplines which have or could have a section involving nuclear and radiochemistry and also conferences of interest outside of Europe. It is the 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? I ask this question again as I had limited response last time. Please let us have your comments and send details of any courses that you run including any courses available through a website.

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.

May I remind readers to inform me of any change to their e-mail address?

Providing that information is available I intend to compile this newsletter 4 times per year in March, June, September, and December/January. At present the timing is not precise as only three newsletters were issued in 2004 due to lack of information. 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.

? EUROPEAN ASSOCIATION for CHEMICAL and MOLECULAR SCIENCES

1st European Chemistry Congress

The 1st European Chemistry Congress will be held in Budapest, Hungary from 27 to 31 August 2006. The Congress website is www.euchems-budapest2006.hu. One of the Special Topics Symposia during the Congress is on "Hot Topics in Nuclear & Radiochemistry" arranged by the WP on Nuclear and Radiochemistry. It is scheduled to take place on 30 - 31 August 2006. This symposium aims at reviewing the state of the art and outlining the most prospective directions in the field of Nuclear- and Radiochemistry. The invited lectures will cover four of the most dynamic topics in the field, specifically

- Chemistry of New Elements (Heinz W. Gäggeler, Switzerland)
- Radionuclides in the Environment (Heino Nitsche, Berkeley, USA)
- Radiopharmaceuticals (H H Coenen, Jülich, Germany)
- Chemistry of the Nuclear Fuel Cycle (Charles Madić, CEA, France)

These lectures will address not only the specialists, they should give a clear picture of the development in this field to the general chemical public.

An additional invited lecture - Teaching of nuclear and radiochemistry in the modern age (Anthony R. Ware, England) - is aimed to trigger discussion on the ways of prevention of the decline of numbers of students in this field, that recently became a global problem.

The programme of the Symposium will further include a few contributed lectures and a poster session that should cover all the areas of Nuclear & Radiochemistry, not only those highlighted by the invited lectures. For further details, registration and offer of paper/poster presentation visit the Congress website at www.euchems-budapest2006.hu.

2nd European Chemistry Congress

This is to let you know that the Italian Chemical Society will be organising the 2nd European Chemistry Congress in Torino on 16-20 September 2008.

EuCheMS Executive

The full list of the EuCheMS Executive Committee is on the web at www.euchems.org. From there you can access the WP on Nuclear and Radiochemistry with further links to useful websites related to nuclear and radiochemistry.

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

Minutes of the WORKING PARTY on NUCLEAR and RADIOCHEMISTRY

Held on Wednesday 6th July 2005 at 10.00hrs at RSC Burlington House, London

Those present: Prof. Dr. Heinz Gaeggeler (Switzerland), Mr. Simon Jerome (UK), Prof. Dr. Jan John (Czech Republic), Prof. Gunnar Skarnemark (Sweden) and Dr. Anthony Ware (UK, Sec/Chair).
Apologies were received from: Prof. Dr. Jukka Lehto (Finland), Dr. Panagiotis Misaelides (Greece), Prof. Jerzy Narbutt (Poland), Dr. Árpád Vincze (Hungary), Prof. Per Hoff (Norway, Invited member).

1. New member (S. Jerome) was introduced, apologies passed to those present, and changes to membership presented by A. Ware.
2. The meeting agreed to the Agenda as circulated.
3. The minutes of the previous meeting were approved.
4. Review of matters arising:
 - 4.1. National Contact Points for EURATOM. No contact by any WP member was reported. The possibility of using the EC Erasmus scheme to reach the WP aims in the field of Training & Education in the field of Radiochemistry (RC T&E) was discussed. Further, the possibility of directly contacting the responsible officers at EC Brussels to investigate the possibility of including RC T&E into the later stages of FP6 or FP7 was discussed.
An attempt should be made to discuss the problem directly with the EC officers.
ACTION All to consider ERASMUS and A Ware & J John to contact EC Officers.
 - 4.2. FECS European Network for Chemistry (ENC). A Ware reported that ENC (www.chemsoc.org/networks/enc/education.htm) is prepared to give lump sums for development of new education schemes.
CONCLUSION: Contacts will be continued.
 - 4.3. IAEA activities. No new information on development and availability of distant learning modules in nuclear and radiochemistry has been made available since the last meeting.
 - 4.4. 10 year Conference/Symposium Calendar. A program of radiochemistry and nuclear chemistry (and related) conferences was discussed, some activities were added on-site.

CONCLUSIONS: The calendar is useful and should be maintained as a Diary on the website.

- 4.5. Website for Radiochemistry in Europe. EuCheMS web site (www.euchems.org/Divisions/NRC/) to be maintained by A. Ware. All WP members were invited to suggest "Useful links" pointing to their national groups or any other web sites of interest for the community.
- 4.6. 1st EuCheMS European Chemistry Congress, Hungary, 27-31 August 2006. J. John, who is a member of the congress Scientific Committee (SC), and A. Ware, who is a member of the congress Organising Committee (OC), reported that the programme suggested by the WP has been accepted by the SC. At the time of the meeting, all the suggested speakers accepted the invitation. Two blocks per 1,5 hours have been reserved for the Special Topics Symposium "Hot Topics in Nuclear- and Radiochemistry".
CONCLUSIONS: WP feels that the Congress is not properly advertised at this moment, the names of the invited speakers should be made known ASAP to attract the participants and call for presentations is required.
5. FECS lectureship at 15th Radiochemical Conference, Czech Republic, 2006. J. John reported that the application will be re-submitted to the autumn meeting of the EuCheMS Executive in Nicosia.
6. FECS sponsorship of future events.
 - 6.1. 15th Radiochemical Conference, Czech Republic, 2006. Sponsorship was approved.
 - 6.2. Nuclear and Radiochemistry. NRC6 in Aachen 2004 was sponsored. WP has no formal means to push the organisers of the next meeting to seek this sponsorship.
 - 6.3. ERA, Oxford 2006. Sponsorship will be sought.
 - Consideration of Draft Constitution as Division or WP. After a short discussion the meeting agreed that a Constitution should be written, constitution of the Division of Analytical Chemistry may be used as basis for this draft. The main aim of this action should be to start conversion of the WP to a Division of EuCheMS.
7. Election of Secretary and Chair for 2006. The number of participants was too low to carry on any election. Following the EuCheMS Constitution, A. Ware may continue chairing till 2006. A. Ware extended to the meeting the preparedness of the RSC to carry on the secretariat of the WP. S. Jerome agreed to take up the respective duties, J. John agreed to continue his help.
CONCLUSIONS: A. Ware will continue chairing till 2006.
8. Review priorities of action for the WP. The priorities of the WP were thoroughly discussed and the following were identified:
 - 1) Draft a Constitution and act towards conversion of WP into an EuCheMS Division.
 - 2) Continue editing the Newsletter.
 - 3) Continue developing and maintaining the web site.
 - 4) Continue editing the Diary of future events.
 - 5) Continue the activities in the field of co-ordination of Training & Education in the field of Radiochemistry
 - 6) Review the existing courses.
9. AOB.
 - 9.1. Possibility for the WP to "meet" more frequently through Internet-based conferences has been discussed again (see the Minutes of the previous meeting).
CONCLUSION: WP agreed to ask P. Misaelides to communicate the results of his activities in this field to the WP.
 - 9.2. Participation of WP in the preparation of lunchtime seminar in European Parliament on the topic of "RA Waste disposal in Expanded Europe" was discussed again.
CONCLUSION: WP agreed to consider this activity again and, if appropriate, to suggest a topic.
 - 9.3. J. John informed the WP about his participation in a joint meeting of the running EC FP6 EURATOM projects on nuclear education in Europe. The activities were concluded not to be well co-ordinated and of little relevance to the aims of the WP.

Date and Venue for next meeting. It was agreed to hold the next meeting during the 1st EuCheMS European Chemistry Congress in Budapest, Hungary, on 31 August at 13:00. The place will be specified later.

----- ✶ -----
? LABORATORY PROFILES

The Radioactive Waste Immobilisation Network

The Radioactive Waste Immobilisation Network (RWIN) was formed in December 2003 and is funded by the Engineering and Physical Sciences Research Council (EPSRC). The network is the first of its kind and provides a focus for research and development in the field of nuclear waste immobilisation in the UK by facilitating discussion

and collaborative research projects between network members.

To date there have been three very successful meetings at the Universities of Sheffield and Cambridge and Imperial College London. Speakers have included representatives from Nexia Solutions (formerly BNFL R&T), Nirex, NDA, Environment Agency, several universities

and Gordon Mackerron, Chair of the CoRWM. The next meeting will take place at the University of Sheffield on July 19th and 20th 2005. RWIN also has funding available to kick-start collaborative projects between members. Further details can be found at the RWIN website <http://www.sheffield.ac.uk/rwin>

If you are interested in becoming a member of the network please contact the RWIN Director Dr

John Roberts at j.w.roberts@sheffield.ac.uk. RWIN is co-ordinated by the Immobilisation Science Laboratory (ISL) in the Department of Engineering Materials, at The University of Sheffield. The ISL is the largest independent research laboratory in the UK, with over 40 research scientists, working in the field of radioactive waste immobilisation.

----- ✧ -----

? CONFERENCE REPORTS

Report on the NAMLS-8 Conference held in Brazil, April 2005

For those of you who attended the NAMLS-8 conference in Brazil, the NAMLS-8 Local Organizing Committee and the NAMLS International Committee would like to thank you for contributing to a conference which, by all accounts, was judged to have been a great success. The proceedings will be published in the Journal of Radioanalytical and Nuclear Chemistry. There were 193 participants from 29 countries who gave 123 Oral presentations and 154 Poster presentations.

A highlight of the conference was the presentation of the Hevesy Medal 2005 to Professor Nicholas Spyrou (UK). The full programme of the meeting (PDF, 885 KB) may be viewed and/or downloaded via the following link: NAMLS-8 Programme <http://members.aon.at/namls/8/Program.pdf>

The great success of the NAMLS-8 conference, supported by the favourable comments of many participants, convinced the NAMLS International Committee (NAMLS-IC) to convene a new conference, NAMLS-9, in around three years' time. Informal expressions of interest in hosting this conference have already been communicated to the Committee by participants from four different countries.

In preparation for this conference, it is expected that some changes will be made in the composition of the NAMLS-IC. Dr. Jan Kucera will stay on as NAMLS-IC Chair. The new secretary is Dr. Elizabeth Mackey, National Institute of Standards and Technology, USA.

----- ✧ -----

? CONFERENCE AND WORKSHOP DETAILS

15th Radiochemical Conference (RadChem 2006)

RadChem 2006 - the 15th Radiochemical Conference, will take place on 23 - 28 April 2006 in Mariánské Lázně, Czech Republic. Details on the website <http://www.fjfi.cvut.cz/radchem>.

The scope of the 15th Radiochemical Conference will cover most aspects of nuclear- and radiochemistry including, but not limited to

- Radionuclides in the Environment, Radioecology
- Nuclear Analytical Methods
- Chemistry of Actinide and Trans-actinide Elements
- Radiation Chemistry
- Production and Application of Radionuclides
- Separation Methods, Speciation
- Chemistry of Nuclear Fuel Cycle, Radiochemical Problems in Nuclear Waste Management
- Nuclear Methods in Medicine, Radiopharmaceuticals and Radiodiagnostics, Labelled Compounds

The full peer-reviewed papers (meeting the criteria of the journal) will be published as conference proceedings in a special volume of an international scientific journal (to be selected).

The Conference is sponsored by EuCheMS.

1st European Chemistry Congress

The 1st European Chemistry Congress will be held in Budapest, Hungary from 27 to 31 August 2006. The Congress website is www.euchems-budapest2006.hu. One of the Special Topics Symposia during the Congress is on "Hot Topics in Nuclear & Radiochemistry" arranged by the WP on Nuclear and Radiochemistry. (For further details see EuCheMS Report earlier in this newsletter.)

10th International Symposium on Environmental Radiochemical Analysis (ERA10)

ERA10 will take place at the Randolph Hotel, Oxford, England from 13th to 15th September 2006. The preliminary scientific programme covers nuclear counting techniques applicable to environmental measurements, the determination of radionuclides in environmental materials (solids and aqueous matrices), the determination of radionuclides in biological samples (Bioassay), the application of radiochemical methods to environmental studies and quality assurance. Full details, costs and timescale can be found on the symposium website at www.rsc.org/era2006/

----- x -----

“An Introduction to Nuclear Waste Management”

A new book "An Introduction to Nuclear Waste Management" written by Michael Ojovan and Bill Lee is now available. It covers in detail the matrices used in nuclear waste immobilisation, as well as the important issues surrounding nuclear waste, including: Nuclear waste generation and sources, Treatment schemes and technologies, Immobilisation technologies and waste forms and Disposal and long term behaviour. Particular attention is paid to internationally approved and worldwide applied approaches and technologies. Further details at <http://www.elsevier.com/locate/isbn/0080444628>

Temporal Positions for Experienced Researchers in Radiopharmaceutical Chemistry

The Institute of Nuclear Chemistry and Technology (ICHTJ) in Warsaw, Poland, announced recruitment for temporal positions for scientists - experts in radiopharmaceutical chemistry. The positions will be founded by the European Commission within the Programme Marie Curie Host Fellowships for Transfer of Knowledge (ToK) in the frame of the project Chemical Studies for Design and Production of New Radiopharmaceuticals (POL-RAD-PHARM, EC Grant No 509224). The objective of the project is to introduce new aspects of radiopharmaceutical sciences to the ICHTJ staff by leading European researchers.

Applications for positions for 2005/2006 were required in July. Further positions will be available in subsequent years.

Contact Prof. Jerzy Narbutt
Head, Department of Radiochemistry
Institute of Nuclear Chemistry and Technology
03-195 Warsaw, Poland
Phone: +48 22 811 2735
Fax: +48 22 811 1532

Nuclear Technology Education Consortium

Here is some information about the Nuclear Technology Education Consortium. Modules cover all aspects of nuclear science and technology including waste immobilisation. Fully funded studentships are available.

A new concept in postgraduate-level education for the nuclear sector is being developed by a strong consortium of UK universities and HE Institutions.

The Nuclear Technology Education Consortium, NTEC, has been formed in the UK with the objective of delivering Masters' level courses in Nuclear Science & Technology. Drawing upon the wide range of expertise within the consortium, whose members represent more than 90% of the nuclear postgraduate teaching expertise residing in the UK's universities and research institutes, this modular programme offers a broad range of topics from nuclear physics to decommissioning and waste disposal. Applications are now being accepted for the programme, which commences in September 2005.

Further details at: www.ntec.ac.uk or
Contact: John Roberts,
j.w.roberts@sheffield.ac.uk

Source Exchange

For future acquisitions of sources, please consider SourceExchange at <http://www.SourceExchange.org> We would also be very grateful to receive details on any redundant sources you might have. Mike Scott (Contact Manager)

IAEA Fellowship

Matthias Rossbach would be interested to know about users of CSS for NAA and for natural radioisotope measurements in the EU and abroad. There is a request for a fellowship supported by the IAEA on this subject. Reply to m.rossbach@iaea.org

NSD Ltd

Since the article on NSD Ltd in this newsletter the company was dissolved. Details can be found on the new website at www.nsd-fusion.com The vital assets were relocated to Germany: the demonstrator NSD neutron generator is now installed at the Technical University of Aachen in Juelich thanks to the generosity of Prof. Dr. Ulrich Scherer.

An advanced stage for a German based technology start-up has been reached and John Sved feels that the advantages of the NSD neutron generator products are becoming more apparent to potential customers. Such customers are OEMs who have or will have their own applications systems products or who want a neutron interrogation system within their product. He is sensing that nuclear chemists, radiochemists and applied neutronics specialists

are in demand. This is particularly so in the security systems industry. The addition of neutron interrogation to x-ray based or other techniques requires such specialists. At least one major European Company seems to have hired a young PhD but he is frustrated by lack of a decision to implement a development project. In other examples the customers have asked if the micro company can undertake the neutron applications system project. The quick answer is yes, if there is an adequate business case, contract and skilled specialists available.

John is seeking to network with radiochemists etc. who are interested in an opportunity in applied neutrons for industrial applications. Anyone interested should contact John Sved at NSD-Fusion GmbH i.G., Falkenstrasse 3, 27755 Delmenhorst, Germany. Tel: +49 4221 924 926, Fax: +49 4221 924 927, Mobile: +49 177 430 4775 Email: John.Sved@nsd-fusion.com

----- □ -----
? AND FINALLY

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.

----- □ -----
WP Members

Dr Mauro Bonardi

Head of Radiochemistry Laboratory
LASA
Segrate, Milano, Italy
mauro.bonardi@miinf.ni.it

Prof. Alexander Chekmarev

Russian D Mendeleev University of
Chemical Technology
Miusskaya Sic9, 125190 Moscow,
Russia
chizh@inter.net

Prof. Dr. Heinz W Gaeggeler

Dept. for Chemistry and Biochemistry
Freiestrasse 3, CH-3012 Bern,
Switzerland
heinz.gaeggeler@iac.unibe.ch
and heinz.gaeggeler@psi.ch

Dr Xiaolin Hou

Risø National Laboratory
Department of Radiation Research
NUK-202, DK-4000
Roskilde, Denmark
xiaolin.hou@risoe.dk

Prof Per Hoff

Nuclear Chemistry Section,
Department of Chemistry,
University of Oslo, PO Box 1033,
Blindern N-0315 Oslo, Norway
per.hoff@kjemi.uio.no

Mr S Jerome

National Physical Laboratory
Queen's Road
Teddington
Middlesex TW11 0LW, UK
ICRM_LLTWG@npl.co.uk

Dr Jan John

Dept Nuc Chem, Czech Tech.Univ.in
Prague
Brehova 7, 115 19 Praha 1, Czech

Republic

jan.john@fffi.cvut.cz

Ir. Zvonimir I Kolar, MSc

Interfaculty Reactor Institute
Delft University of Technology
NL-2629 JB Delft, The Netherlands
kolar@iri.tudelft.nl

Dr Jukka Lehto

Laboratory of Radiochemistry
P.O.Box 55
00014 University of Helsinki, Finland
jukka.lehto@helsinki.fi

Prof. Dr. R. Michel

Zentrum für Strahlenschutz und
Radioökologie
Am Kleinen Felde 30
D-30167 Hannover, Germany
michel@zsr.uni-hannover.de

Dr Panagiotis Misaelides

Dept. of Chemistry, Aristotle
University, PO Box 1547
GR-54006 Thessaloniki, Greece
misailid@chem.auth.gr

Prof. Jerzy Narbutt,

Head of Dept of Radiochemistry
Institute of Nuclear Chemistry &
Technology
Dorodna 16, 03-195 Warszawa,
Poland
jnarbut@orange.ichtj.waw.pl

Dr Isabel Santos

Instituto Tecnológico de Nuclear,
Departamento de Quimica
Est. Nacional 10, 2686 Sacavém,
Portugal
isantos@itn.pt

Prof. Eric Simoni (France)

IPN, Paris XI University,

France

simoni@ipno.in2p3.fr

Prof Gunnar Skarnemark

Dept of Nuclear Chemistry, Chalmers
Univ of Technology
S-41296 Goteborg, Sweden
gunnar@nc.chalmers.se

Prof. Turan Unak

Ege University, Faculty of Science
Dept of Chemistry, Div Nuclear Chem
Bornova, Izmir 35100, Turkey
incs@sci.ege.edu.tr

Dr A Vincze (Hungary)

Zrinyi Miklos National Defense
University
Hungary
e-mail: vincze.arpad@zmne.hu

Dr A R Ware

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

Observer

Dr. Dusan Razem, Head,

Radiation Chemistry and Dosimetry
Laboratory
Dept of Chemistry
Rudjer Boskovic Institute
Bijenicka cesta 54, P.O.Box 180
1000 Zagreb
Croatia
razem@rudjer.irb.hr

LIST OF ADDITIONAL 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: petr.benes@jfifi.cvut.cz

Dr H Dahlggaard (Denmark)

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

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

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

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 or
kolotov@online.ru

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@biont.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. T Eriksen (Rest of Sweden)

Dept of Nuclear Chemistry
S-10044 Stockholm 70,
Sweden
e-mail: tee@nuchem.kth.se

Dr G Hunter (International Union of Radioecology)

7A Park Ave.
Stirling, Scotland
UK FK82QR
e-mail: twhunters@btopenworld.com