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RADIOCHEMISTRY IN EUROPE NEWSLETTER

Issue 31 – May 2005

EDITORIAL COMMENT

Welcome to the thirty first Newsletter for Radiochemists in Europe under the sponsorship of the European Association for Chemistry and Molecular Sciences (EuChemS). Currently you will still find the WP WebPages at www.fecs-chemistry.org/nuclear

This newsletter is established on web page (<http://www.rsc.org/pdf/andiv/euopenews.pdf>). The newsletter is perhaps more easily accessed through the website of the WP on Nuclear and Radiochemistry of EuChemS, whose URL is still 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. Note that some changes have already been made. With regard to the Future Events I include conferences in other disciplines which have or could have a section involving nuclear and radiochemistry. 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)**

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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.

• EUROPEAN ASSOCIATION for CHEMICAL and MOLECULAR SCIENCES

EuCheMS Executive

The full list of the EuCheMS Executive Committee is on the web at <http://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)

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• LABORATORY PROFILES

The Radioactive Waste Immobilisation Network (RWIN)

The Radioactive Waste Immobilisation Network (RWIN) was formed in December 2003 in the UK 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.

(Contact Dr John Roberts e-mail: j.w.roberts@sheffield.ac.uk)

NSD Ltd.

This company was featured in an earlier edition of this newsletter. It now has a new website at www.nsd-fusion.com (www.neutrons.biz will redirect). The general email address is info@nsd-fusion.com

The main reason for the change is that NSD Ltd was dissolved and the vital assets relocated to Germany as shown on the

website. 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.

Over the past year NSD Ltd has been occupied with refinancing the business and has recently reached an advanced stage for a German based technology start-up (or perhaps re-start-up is a more accurate term). They achieved support within a regional Business Angel network and are now in dialogue with potential investors. Without commercial people involved, the innovation support banks will not support.

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.

John Sved of NSD 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. The NSD business is also frustrated that such a project does not move to the equipment-ordering phase! In other examples the customers have asked if NSD 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 Sved is seeking to network with radiochemists etc. who are seeking an opportunity in applied neutrons for industrial applications. If you are interested in learning more or can help please **contact John Sved** through the website or **e-mail address info@nsd-fusion.com**

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· LETTER TO EDITOR

Following my comments in the last newsletter re training grants, I received the following from the Radiochemistry Society.

Dear Sir,

The Radiochemistry Society (www.radiochemistry.org <<http://www.radiochemistry.org/>>) was founded in 2000 through the collaborative efforts of many scientists and professionals with the vision of establishing an International Resource that provides governments, agencies, and individuals with the technical support and guidance on issues dealing with radiochemistry, radiometric measurements, medical isotopes, national and international security issues.

I would especially like to bring to your attention the fact that the Radiochemistry Society is now offering several new (to be first awarded in July '05) graduate fellowships and scholarships to its members in all related scientific fields such as nuclear engineering, physics, chemistry, and environmental science. The review team for these applications will naturally favour those who show promise and interest towards radiochemistry. The graduate fellowships will range from \$7,000 to \$10,000 per year depending on need and scope of project. Personally, I have my doctorate in Nuclear Engineering Sciences from the University of Florida and have been very active at several levels in the nuclear industry over the past 31 years. I am an active member of the DOE Analytical Managers Group (<http://www.lanl.gov/orgs/nmt/nmt1/DAM/DOEAM.HTM>) and currently responsible for finding and selecting staff for a large DOE radiochemistry lab. As your group has noted there is currently a worldwide shortage of radiochemists. I would greatly appreciate that you bring this to the attention of your colleagues and if possible print the flyer shown on the web site below and post it on a prominent bulletin board in your department.

Applications can be found at <http://www.radiochemistry.org/scholarship>.

I believe this scholarship/fellowship offer represents a very good opportunity to redress these critical shortages. Your support in helping to remedy the shortfall of talent in this critical area is much appreciated.

Sincerely,

Dr. Bruce J. Kaiser

DOE Waste Treatment Plant, Washington Group International, Richland, WA

Email: bkaiser@radiochemistry.org Web: <http://www.Radiochemistry.org>

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· CONFERENCE AND WORKSHOP DETAILS

Centre for Advanced Technological & Environmental Training (FTU)

This Centre at Forschungszentrum Karlsruhe is to hold two advanced training activities in 2005.

The Regional Workshop on Alpha-spectrometry (S276) from 15 to 17 June will provide by means of lectures and laboratory exercises the knowledge and skills required for the proficient and reliable application of alpha-spectrometry. The second is a practice-oriented Training Course on Quality Management in Nuclear Analytical Techniques (S251). It is designed for the responsible personnel in laboratories who perform the task of evaluating and assessing radioanalytical measuring data.

For details of these and the entire training provided by FTU, visit their website at www.fortbildung.fzk.de

Courses at Nuclear Training Services Ltd.

Nuclear Training Services are still running training courses and can be contacted by email or via the web site

www.nucleartraining.co.uk

Courses for May/June are:

17th May - Introductory Gamma Spectrometry

18th-19th May - Practical Gamma Spectrometry

1st June - Neutron detection and measurement

2nd June - Gamma Spectrometry Uncertainty Budget Workshop

Full details at: www.nucleartraining.co.uk/program.htm

They are considering putting together a one day course 'Coping with GammaVision' which will look at using the program in a very practical manner, looking at its short-comings and ways round them. Please contact Gordon Gilmore at admin@nucleartraining.co.uk for more details.

7th International Conference Actinides 2005

Conference to be held 4th – 8th July in Oxford, England. This conference brings together researchers in the physics and chemistry of the actinides and superheavy elements. Topics will include actinide materials science; fundamental chemistry and physics; environmental science and nuclear fuel processing. The conference will comprise plenary lectures across all these disciplines given by leaders in the field, plus invited and contributed presentations, the latter in both oral and poster formats.

LSC 2005 17 – 21 October 2005

It is with great pleasure that the Central Mining Institute welcomes you to attend LSC 2005 Conference. It will be organized in Katowice, a capital city of Upper Silesia, Poland. The meeting will be held in October, 17th – 21st 2005. Come join us to present your achievements, to learn the latest developments of our colleagues and to enjoy the traditional hospitality of Polish people.

The main goal of the Conference is to provide a forum for all scientists, working in areas related to Liquid Scintillation Counting and Spectrometry (LSC). One of the objectives of the Conference is to enable and promote the exchange of information among scientists, develop future directions in LSC and give the opportunity to meet old and new friends. We would like to pay particular emphasis on the environmental studies and applications and the participation of young scientists.

Contact - Secretary of the Conference: Malgorzata Wysocka (+48-32) 2592382, fax (+48-32) 2585979
lsc@gig.katowice.pl (preferably), m.wysocka@gig.katowice.pl,

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•**RADIOCHEMISTRY WEBSITE**

A web site has been established at <http://fh.david.free.fr/> to allow interactions with scientists concerned with radiochemistry and the derived application studies, and, more generally, with the physico-chemistry of ions in aqueous solutions.

This site contains a few documents dedicated to:

1. Fundamental Researches
 - 1.1. Physicochemical Properties of Lanthanides
 - 1.2. Physicochemical Properties of Actinides
 - 1.3. Systematic. 4f and 5f, Elements Property Comparisons
 - 1.4. Physicochemical Properties of s, p and d Elements
 - 1.5. Electrochemical Properties of Elements
 - 1.6. Modelling of Aquo ions
 - 1.7. Various Researches
2. Applied researches in Radiochemistry
 - 2.1. Element separations
 - 2.2. Experimental developments
 - 2.3. Environmental studies
 - 2.4. Researches in electronuclear field

The designer of the site would like to receive your comments and suggestions by using the forum of discussion or email him at david@ipno.in2p3.fr.

Contact: François David, Institut de Physique Nucléaire, Bat. 100, 91406 Orsay, France

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•**NEWS FROM THE INTERNET**

Radiochemist at NIRAS, UK

NNC operates the NIRAS (NNC Independent Radiation Assessment Services) laboratory at Birchwood, near Warrington Cheshire, which is now one of the largest commercial radiochemical analysis testing houses in the UK.

Due to continued expansion we are seeking a radiochemist to join our successful team. The successful candidate will be involved in all aspects of the business from client liaison and technical input into tenders through to responsibility for project management of a number of radiochemical analysis projects ensuring that quality results are delivered on time to our clients. The ideal candidate will have a combination of excellent radiochemistry knowledge and organisational skills. Previous experience of working in a fast moving analysis laboratory would be an advantage, as would knowledge of the nuclear industry.

A competitive reward package is available to the right candidate, including relocation costs if appropriate. Salary will depend on skills and experience. This is an

excellent opportunity to join a successful team on the next phase of our ambitious growth programme.

If you would like to be considered for the role, please send a copy of your CV (including details of your salary requirements) to: Kathy Ross, NNC Ltd., Booths Hall, Chelford Road, Knutsford, Cheshire WA16 8QZ. E-mail: Kathy.ross@nnc.co.uk. Tel: 01565 843602. The closing date for this vacancy is 20th May

Radiochemistry Society

New for 2005, the Trilinear Chart of the Nuclides can be purchased from our online catalog (\$39.95 + shipping): http://www.radiochemistry.org/catalog/product_info.php?cPath=29&products_id=66

Submit articles to the Radiochemistry Society Journal: http://www.radiochemistry.org/journals_submit.html

New common radiation dose estimate tables (adult & pediatric) available in our nuclear medicine area:
<http://www.radiochemistry.org/nuclearmedicine/index.s.html>

Post-Doc in Thermodynamic properties of Pa(V) in aqueous media

A postdoctoral position is open in the frame of a collaboration between IPN Orsay and CEA Valrhô (France). The project is related to the study of thermodynamics and structural properties of protactinium(V) in sulfate and chloride aqueous media. This position is open starting September 2005 for one year and is granted by CEA. Experiments will be

conducted at IPN Orsay. Solvent extraction, spectrophotometry and thermodynamic modelling will be the main activities during this year. The applicant must have experience in solution chemistry (with actinides). Some knowledge in spectroscopic measurements will be also appreciated. More complete information can be obtained at (please mail one of the 4 addresses):

lenaour@ipno.in2p3.fr

trubert@ipno.in2p3.fr

simoni@ipno.in2p3.fr

philippe.moisy@cea.fr

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· 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.

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