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RADIOCHEMISTRY IN EUROPE
THE NEWSLETTER of the
DIVISION of NUCLEAR and RADIOCHEMISTRY

Issue 37 – February 2007

EDITORIAL COMMENT

Welcome to the thirty seventh newsletter for Radiochemists in Europe. The WebPages of the Division can still be found at www.euchems.org/Divisions/NRC. From the home page the “Future Events” and Radiochemistry newsletters are readily available. 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 conferences in other disciplines, which have or could have a section involving nuclear and radiochemistry and also conferences of interest outside of Europe are included.

The aims and objectives of the division as given in our Procedures and Practices are given below.

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. See the 10year Planning Calendar on the website. Details of any courses would also be of interest to extend the existing database.

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

Providing that information is available it is intended 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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□ **DIVISION of NUCLEAR and RADIOCHEMISTRY.**

Mission and Objectives

The Division of Nuclear and Radiochemistry is a network of societies and their scientists working in nuclear and radiochemistry throughout Europe and aims to have close links to related institutions all over the world. A broad communicative basis is achieved by cooperation with relevant supranational bodies such as IUPAC and IAEA as well as with journals and newsletters. It endeavours to establish and maintain the highest quality standards in science and research. NRC accepts a role to harmonise education and training in all aspects of nuclear and radiochemistry and to offer a means of communication and collaboration between scientists working in the fields.

Objectives of the NRC are:

- To contribute to the advancement of nuclear and radiochemistry in Europe;
- To identify important areas in science, technology and other human activities relevant to nuclear and radiochemistry, and to stimulate actions in such fields;
- To address aspects of importance in or to nuclear and radiochemistry which need regulation, harmonisation, standardisation or codification, and to make recommendations as appropriate;

- To encourage cooperation between analytical chemists whether working in academia, industry or governance, in particular within the countries of the member societies of EuCheMS
- To foster close contacts and cooperation of NRC with the European Commission and other relevant institutions;
- To safeguard the interests of the nuclear and radiochemistry community, especially concerning recognition and legitimisation in matters of regulation and legislation as well as decision making in economic and in social areas;
- To assist and strengthen quality in teaching and training of nuclear and radiochemistry in education and in daily practice;
- To support the transfer and exchange of knowledge, equipment and personnel in the areas of NRC expertise both within Europe and in non-European countries;
- To hold a European Conference at least every other year;
- To assume a general promotion and coordination function for other conferences and courses in Europe related to NRC activities;
- To disseminate information to the wider scientific community and general public about nuclear and radiochemistry and its achievements.

Priorities of the Division

1. Constitution was established as Practices and Procedures with the aims and objectives given above.
2. The Division should continue editing the Newsletter as official information periodical of the Division with S. Jerome and A. Vertes agreeing to assist A. Ware in editing.
3. Web site. All members are asked to send any links, they would like to have listed here, to A. Ware.
4. Diary of future events (10-years Calendar) – has been established
4. Co-ordination of T&E in Radiochemistry and Review of Courses. A survey will be circulated to Division members for comments.
5. Contact has been made with the Technical Advisory Boards of both the NRC and Radchem series of meetings. The list of these and other Future Events are being maintained up to date on the website.

Membership

I have been in contact with Dr Divna Djokić who wishes to remain a member of the Division even though Montenegro has separated from Serbia. He is now in Serbia but his address and e-mail remain unchanged. There is no indication as yet as to whether the Chemical Society will split or remain to cover both countries. **(Dr Tony Ware)**

If your country does not have a nominee to the Division, please press your Chemical Society to nominate a candidate.

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□ EUROPEAN ASSOCIATION for CHEMICAL and MOLECULAR SCIENCES

European Chemists Database

There is now a database of European Chemists which can be accessed at www.euchems.org/Database/index.asp In view of the various laws regarding Data Protection it is not possible to automatically place existing Chemical Societies' database of members on a European basis. However individuals can register themselves on the database giving their personal details. The site can be accessed to view existing entries and to permit anyone to add their own entry. Please use this remembering to mention nuclear and radiochemistry. In this way we may be able to search the database for an "effective" Division of Nuclear and Radiochemistry membership.

Europe's Energy Policy depends on Chemistry

EuCheMS welcomes the publication of the Commission's Communication on an Energy Policy for Europe, setting out an Action Plan of measures to achieve the objective of becoming the world's most energy efficient region. The new European Energy Policy aims to be ambitious, effective and long-term;

success will be dependent upon the chemical and molecular sciences.

Energy, which accounts for 93% of carbon dioxide emissions in Europe, is at the root of climate change; advances in chemistry will have a significant role to play in reducing these emissions and in transforming Europe into a highly energy efficient and low CO₂ energy economy. Boosting investment in energy efficiency and renewable energy will be key to developing the EU as the global leader in renewable technologies; advances in the chemical and molecular sciences will support energy efficiency in homes and industries, as well as the development of effective renewable energy technologies.

EuCheMS is pleased that the Commission, in catalysing a new industrial revolution, will increase by at least 50% its annual spending on energy research over the next seven years. Research in chemistry will be essential to the future development of a number of key low carbon technologies, including solar power, fuel cells, hydrogen as a fuel, safe nuclear waste management, carbon capture and storage, energy storage and energy efficient lighting.

EuCheMS believes that Europe is ideally placed technologically, economically and socially to demonstrate a successful low carbon economy. Chemistry will play a vital role in delivering sources of sustainable, secure and competitive energy, and in accelerating the competitiveness of low carbon technology. It is vital that future low carbon technologies are developed as soon as possible. It is also important that the EU skills base in science, engineering and mathematics remains strong so that the human as well as the financial resource is available to meet the challenges ahead.

To support input to future discussion of the contribution of chemistry to Europe's Energy Policy, EuCheMS has established a new working group on Chemistry and Energy, led by Richard Pike, CEO at the Royal Society of Chemistry.

COMMUNICATION FROM THE COMMISSION - AN ENERGY POLICY FOR EUROPE

http://ec.europa.eu/energy/energy_policy/doc/01_energy_policy_for_europe_en.pdf

EuCheMS Award for service

This was awarded to Professor Peter Kündig in recognition of his significant contribution to European cooperation. Peter Kündig made an exceptional contribution to the success of the 1st European Chemistry Congress, held in Budapest in August 2006.

As co-chair of the Congress Scientific Committee, Peter Kündig worked with representatives of the chemistry community across Europe to develop and deliver a high quality scientific programme which attracted nearly 2,500 participants. His vision for the Congress, the first event of its kind, and his dedication were key factors in ensuring the success of this major EuCheMS initiative.

As the current Chair of the EuCheMS Division of Organometallic Chemistry, Peter Kündig is also a member of the EuCheMS Executive Committee.

Peter Kündig is Director of the Department of Organic Chemistry at the University of Geneva, Switzerland where he heads a research group active in the area organic synthesis and catalysis with transition metals. He is an organiser of the annual 'Bürgenstock' conferences on stereochemistry and a member of the Editorial Boards of Helvetica Chimica Acta and of Chemical Communications and of the Advisory Boards of a number of other high-profile chemistry journals.

The European Chemistry Congress, held every two years, provides a showcase for chemical sciences in Europe and brings together chemical and molecular scientists from industry, academia and government institutions across Europe and from around the world. Further information is available at <http://www.euchems.org/EuCheMSChemistryCongress>

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•LABORATORY/BUSINESS PROFILES

None offered in the last few months. Please send copy if you wish your laboratory or business to be featured.

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•CONFERENCE & MEETING REPORTS

Radiochemistry Group (RCG), Royal Society of Chemistry

The award of the Group's Becquerel Medal was made at the Symposium on Radioactively Contaminated Land. Nov 29th 2006, University of Leeds.

The meeting in 2006 was the largest in recent years with over 80 delegates attending the sessions. The symposium attracted a world class speaker, Prof. Philip Long from Pacific Northwestern National Lab who gave a keynote talk on his work on bioremediation of uranium contamination in the sub-surface. Additional speakers included key players from the UK and all symposium talks will be archived on the RCG website. Finally, Prof. John Jones was awarded the Becquerel Medal in recognition of his lifetime work associated with tritium chemistry. To round off the symposium, Prof. Jones gave an excellent plenary talk "Tritium Chemistry: synthesis, analysis and applications".



Presentation of Becquerel Medal by Dr. Jon Martin (Chair RCG) to Prof. John Jones

It is with regret that we have to announce the death of Prof. Jones earlier this.

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•CONFERENCE AND WORKSHOP DETAILS

Introduction to Practical Environmental Radiochemistry

11-15 June 2007, Meiringen, Switzerland, <http://www.itc-school.org>

This is a novel course for the ITC on the practical aspects of environmental radiochemistry. The 5-day programme for 2007 features a mix of lectures and hands-on field days.

Lectures

- fundamentals of radiochemistry, including case studies on natural radionuclides as environmental indicators
- recent advances in radiochemical methods
- appropriate environmental sampling protocols, something of interest to all professionals involved in radiochemical monitoring in and around power plants (nuclear and thermal)

Field days

- demonstration of appropriate environmental sampling in and around nuclear installations - a range of environmental samples with different sample matrices will be collected and different sampling strategies will be examined
- in situ radiochemical analytical techniques and the protocols behind the use of radioisotopes in the open environment
- appropriate field radioprotection and handling techniques will be presented and the participants will be involved in a simulated radiochemistry field experiment. Further to this, the participants will work-up their own datasets using computer codes used to analyse the transport of radionuclides in the environment

The course is ideal for a wide range of professionals with some interest or responsibility in the field of environmental radiochemical analysis and surveillance. It will be particularly useful to those in the nuclear power industry who require an understanding of the basic concepts of environmental monitoring, but will also be of interest to students and professionals in environmental protection who require knowledge of specific radioanalytical tools which can be utilised to assess mechanisms and processes in environmentally sensitive areas. **(Contact; <http://www.itc-school.org>)**

The eleventh international conference on the Chemistry and Migration Behaviour of Actinides and Fission Products in the Geosphere (MIGRATION 2007)

This will be held August 26 - 31, **2007**, in Munich, Germany. The MIGRATION conferences provide an international forum for the timely exchange of scientific information on chemical processes controlling the migration behaviour of actinides and fission products in natural aquifer systems. Experimental investigations and predictive modelling of these processes are the main topics of the conferences. The information generated from the MIGRATION conferences is the basis for the mechanistic understanding of the migration behaviour of long-lived radionuclides in the geosphere, which is essential for the long-term performance assessment of nuclear waste disposal.

After 20 years, MIGRATION '07 will get back to the grassroots, where everything started: Twenty years ago - in 1987 - J.I. Kim, at that time professor for radiochemistry at the TU München, Germany, called this conference in Munich into being. It is certainly his outstanding merit that the MIGRATION conferences remained such a successful story over this long time period.

Conference website: <http://www.fzk.de/migration2007>

Symposium on the Scientific Basis for Radioactive Waste Management XXXI

16 – 21 September 2007, Sheffield, UK.

The conference will cover; Decommissioning and Intermediate Waste, High Level Wastes and Spent Fuel, Low Level Wastes, Geological Repositories, Novel Techniques, Modelling, Transnational Programmes, Interface Science and Radionuclide solubility, speciation, sorption and migration.

The formal call for papers will be posted on the conference website <http://mrs2007.sheffield.ac.uk> For further information contact John Roberts at j.w.roberts@sheffield.ac.uk or Tel +44 (0) 114 222 6026

International Conference on Modern Trends in Activation Analysis (MTAA-12)

This Conference will be held from Sep 16 to 21, 2007 at Tokyo Metropolitan University, Hachioji, Tokyo, JAPAN. (<http://www.mtaa12.com/>). The Web page for the on-line abstract submission is now open.

Please prepare an abstract according to the instruction and submit it by on-line. If you cannot submit through the web, please contact the secretary. Deadline for abstract submission is Apr. 30, 2007.

Registration for the conference needs to be done separately. Please make your registration through the web. It should be noted that the presenter must register. (The on-line registration will be opened on March 2007)

The 2007 ICAA Young Scientist Award will be given at the MTAA-12 conference.

Deadline for the applications for Young Scientist Award is Apr.30, 2007.

Contact: OURA, Yasuji, Secretary of MTAA-12. Cosmochemistry Lab., Department of Chemistry, Graduate School of Science and Engineering, Tokyo Metropolitan University

Hachioji-shi, Tokyo 192-0397, JAPAN Web-site:<http://www.mtaa12.com>

2nd International Workshop on Application of the Ionizing Radiation & Nuclear Analytical Techniques in Industry, Medicine and Environment at High Performance (Nuclear PT-2007) will be held on 8-9 October 2007, in Bucharest - Romania. The detailed information can be obtained from website: <http://nuclearpt-2007.nipne.ro>

The Seventh International Conference on Nuclear and Radiochemistry (NRC-7) will be held in Budapest, Hungary, between 24 August and 29 August 2008. The Web page of the conference is now open for registration and abstract submission. For additional details please visit <http://www.nrc7.mke.org.hu/>

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NEWS FROM THE INTERNET

The International Nuclear Chemistry Society, INCS (<http://incs.ege.edu.tr>)

The Society has announced the organisation of the following activities:

- * INCS Awards for Young Scientists in 2007,
- * International Summer School on Recent Advances in Radioanalytical Techniques, 20 - 30 June 2007 (Provisional), Izmir, Turkey.

You will find the details of these events on their website. Please bring these announcements to young scientists who work under the widespread umbrella of Nuclear Chemistry.

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JOB OPPORTUNITIES

Radiochemist at SUBATECH/Ecole des Mines de Nantes

We are looking for a person with doctoral or equivalent degree, experienced in radioactivity measurements and chemical separations to work in our ServicSMART, a service dedicated to the measurement of radioactivity in industrial, field and urban environments.

For the first time, this will be a PostDoc type position but there is a good chance that we might be able to transform this position after some time into a permanent one.

If you are interested please send your CV to **Patrick Chardon** [Patrick.Chardon@subatech.in2p3.fr], who is the director of this service.

Radiation Biologist

The New York State Department of Health, the Laboratory of Inorganic and Nuclear Chemistry has an opening for an experienced Radiation Biologist. A

molecular biology background with emphasis on DNA damage and repair mechanisms would be suitable. One area of interest would be the development of markers for DNA double strand breaks to be used for dose calculation after exposure to ionising radiation.

Another area would be to study mutation and genomic instability induced by radiation. If you know any one who might be a good candidate for this position, please tell them to contact:

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State University of New York at Albany

Wadsworth Center

Laboratory of Inorganic and Nuclear Chemistry

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ilham.almahamid@wadsworth.org

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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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