



Division of Nuclear Chemistry and Technology  
*American Chemical Society*

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## NEWSLETTER October 2007

*Newsletter Editor: Lætitia Delmau*  
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### FROM THE CHAIR – Heino Nitsche

#### ACS National Meeting Boston, August 20-24, 2007

Our volunteers had organized five very successful symposia during the ACS National Meeting in Boston last August. In the name of all members, I would like to thank very much the organizer who had assembled the following symposia:

1) **Meeting the Diverse Needs of the 21st Century Nuclear Science Workforce: A Symposium by Graduate Student Scientists in Nuclear and Radiochemistry** (Organizers: Prof. Nathalie A. Wall, Dr. Charles M. Folden III, Dr. Charles L. Crawford);

2) **Nuclear Structure and Reactions in the Era of Radioactive Beams**  
(Organizers: Prof. Romualdo T. de Souza, Dr. Larry Phair);

3) **Computational Actinide and Transactinide Chemistry: Progress and Perspectives**  
(Organizers: Dr. Jun Li, Prof. Peter Schwerdtfeger, Prof. Nick Kaltsoyannis);

#### **4) Molecular Imaging**

(Organizers: Prof. Alan B. Packard, Prof. Henry F. VanBroeklin) ;

#### **5) Analytical Chemistry in Nuclear Technology**

(Organizers: Dr. Charles J. Coleman, Dr. David T. Hobbs, Dr. David E. Hobart).

All symposia were very well attended and quite successful. The Executive Board decided to make the Graduate Student Symposium an annually recurring event at the ACS fall meetings.

#### **9th Annual ChemLuminary Award**

Congratulations to the ACS Savannah River Section (ACS-SR) which was recognized for outstanding performance at the 2007 ChemLuminary Awards sponsored by the American Chemical Society during the 234th National Meeting in Boston, MA. This award recognized the outstanding activities of the ACS-SR members, many of which are members of the Division of Nuclear Chemistry and Technology. In addition to celebrating the 50th anniversary of the local section, ACS-SR hosted the Southeastern Regional Meeting of the ACS (SERMACS 2006). SERMACS 2006 was highly successful, serving a large and diverse cross-section of the chemical community. There were 1359 attendees and 790 abstracts, making SERMACS the largest regional meeting in 2006.

The Division of Nuclear Chemistry and Technology (DNCT) and the Savannah River Local Section (ACS-SR) were recognized as a finalist for a 2007 ChemLuminary award sponsored by the American Chemical Society for Local Section/Division Interaction based on their joint efforts toward nuclear chemistry programming at SERMACS 2006. Together, DNCT and ACS-SR created a very strong nuclear chemistry program for a regional meeting. Two technical sessions with keynote speakers from outside the

Southeast drew nearly 50 attendees each. Funding obtained by DNCT supported the attendance of 25 graduate and undergraduate students, all of whom presented papers or posters. Twenty DNCT members attended the meeting, many of them organizing it as well. Organizers for the nuclear chemistry programming included David Hobbs, David DiPrete, Tracy Rudisill and Mark Barnes of the Savannah River National Laboratory, Laetitia Delmau of the Oak Ridge National Laboratory and Donivan Porterfield of the Los Alamos National Laboratory.

#### **The Long-Range Strategic Plan for the Division**

We have a Strategic Plan 2008-2010 for DNCT! Eleven members volunteered to participate in a one-day strategic planning session on August 18, 2007, the day before the start of the Boston ACS meeting. Ena Castro and Dale Gaddy have served as ACS co-facilitators for this strategic planning session. They did an outstanding job. I would like to thank the following volunteers for their precious time and effort to make this a very successful exercise: Abigail Bickley, Brienne Bottenus, Mike Bronikowski, Frank Kinard, Roy Lacey, Jun Li, Chris McGrath, Alice Mignerey, Mark Stoyer, and Nathalie Wall. After the Executive Committee approves the DNCT Strategic Plan 2008-2010, I will send it to all Division members with the request for suggestions and participation of volunteers to execute as many individual goals as possible. I would like to encourage everyone, especially the younger members, to consider taking on a volunteer role within the Division in the future. Please contact me if you would like to help.

In summary, three major goals were identified for the next three years:

#### **Goal #1:**

Provide a platform for career mentoring, networking, professional advancement, and leadership opportunities for young nuclear chemists (i.e., undergraduates, graduates, and junior professionals).

Goal #2:

Develop and facilitate events and communication tools that significantly increase collaborative and networking opportunities across diverse specialties and demographics, so as to build a real and virtual community.

Goal #3:

Enhance nuclear chemistry outreach, which will create a prominent presence at local, regional, national, and global levels, by providing timely and accurate information and by emphasizing the importance of nuclear chemistry in all aspects of society.

Nathalie Wall (nawall@wsu.edu), Chris McGrath (christopher.mcgrath@inl.gov), and Alice Mignery (mignerey@umd.edu) have kindly volunteered to lead Goals #1 to #3, respectively. Each goal has a list of action items that need to be accomplished within specific timelines to achieve the goal. All this will become more transparent to you once you have received the complete Strategic Plan.

This will be my last newsletter message to you as your Chair. I enjoyed serving you, and I look forward to your active participation in helping us execute our mission to make the future DNCT an even better and more attractive ACS Division.

And please remember: The Division of Nuclear Chemistry and Technology is your Division and needs your active participation and involvement.

Thank you very much for your support.

Heino Nitsche, Chair 2007

**ACS NATIONAL MEETINGS 2008** – Roy Lacey

New Orleans, LA, April 6-10, 2008

On behalf of the symposia organizing teams, I would like to invite your participation in the DNCT program at the Spring national meeting in New Orleans. Several symposia covering a diverse range of subjects are currently planned as follow;

**1) Global Nuclear Energy Partnership (GNEP): Science and Technology for a Nuclear Future**

Organizers: John T. Boger, DOE; Jack D. Law, Aqueous Separations and Radiochemistry Department, Idaho National Laboratory, Mail Stop 3870, Idaho Falls, ID 83415-3870

**2) A Life Well-spent in Actinide Science: Contributions of James C. Sullivan**

Organizers: Kenneth L. Nash, Department of Chemistry, Washington State University, PO Box 644630, Pullman, WA 99164-4630  
Linfeng Rao, Actinide Chemistry Group, The Glenn T. Seaborg Center, Chemical Sciences Division, Lawrence Berkeley National Laboratory, 1 Cyclotron Road, MS 70A-1150, Berkeley, CA 94720; Dennis W. Wester, Radiochemical Science and Engineering Group, Pacific Northwest National Laboratory, P.O. Box 999, MSIN P7-22, Richland, WA 99352; Judah I Friese, Radiological and Chemical Sciences, Pacific Northwest National Laboratory, 902 Battelle BVD PO Box 999, Richland, WA 99352; Leigh R Martin, Aqueous Separations and Radiochemistry Department, Idaho National Laboratory, P.O. Box 1625, Idaho Falls, ID 83415-2208

**3) Developments in Advanced Characterization Techniques in Actinide Science**

Organizers: Charles J. Coleman, Savannah River National Laboratory, Aiken, SC 29808; G. R. Choppin, Department of Chemistry,

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Florida State University, Tallahassee, FL 32306; David Hobart, Actinide Analytical Chemistry Group, Los Alamos National Laboratory, Mail Stop G740, Los Alamos, NM 87545

#### 4) **Frontiers of Basic and Applied Nuclear Science**

Organizers: Partha Chowdhury, Department of Physics, University of Massachusetts Lowell, Olney Science Center 136, One University Ave., Lowell, MA 01854; Roy Lacey, Department of Chemistry, State University of New York at Stony Brook, Stony Brook, NY 11794-3400; Jiangyong Jia, Department of Chemistry, State University of New York at Stony Brook, Stony Brook, NY 11794-3400; Pawel Danielewicz, Department of Physics, National Superconducting Cyclotron Laboratory and Department of Physics and Astronomy, NSCL/Cyclotron Laboratory, Michigan State University, 164 South Shaw Lane, East Lansing, MI 48824-1321; Wolf Holtzman, Columbia University and Nevis Laboratories, Physics Department, Columbia University, 538 West 120th Street, New York, NY 10027

Please do not hesitate to contact one or more of the symposia co-chairs to express your willingness to participate or contribute in some way. We would be especially grateful if you can encourage your students to attend. To assist with student participation, we intend to make available a number of travel grants for the meeting. Once again, we look forward to your advice, help and especially your participation in the upcoming Spring meeting.

Philadelphia, PA, August 17-21, 2008

Please do not forget to send Roy Lacey (Program Chair 2008, [roy.lacey@sunysb.edu](mailto:roy.lacey@sunysb.edu)) your suggestions for the 2008 meeting in Philadelphia and Mark Stoyer (Program

Chair 2009) for the 2009 Spring and Fall meetings.

## COUNCILOR'S REPORT

*From Joe Peterson*

*Boston, MA Meeting, Fall 2007*

Councilors: Joseph R. Peterson and Elliot S. Pierce (Emeritus)

Alternate Councilor: Jeff C. Bryan

The ACS Council in Boston had a relatively normal agenda with only one petition up for action to amend the Society's Bylaws. In addition there were three petitions up for consideration only: one to change the election procedures for President-Elect and District Director, moving toward a preferential ballot, both to make the balloting procedure more uniform and to avoid the complications and expense of run-off elections; one to change the election procedures for Local Sections and Divisions, providing options other than run-off elections for resolving tie votes; and one to change membership categories and requirements to permit undergraduate students to become Society members and broaden the membership eligibility pool for science educators, technologists, and multidisciplinary scientists. As usual for fall meetings, Councilors elected [six] members to serve on the Committee on Committees (ConC), [five] members to serve on the Council Policy Committee (CPC), and [five] members to serve on the Committee on Nominations and Elections (N&E). Council heard reports from all the national officers and then from the elected committees, standing committees, and some of the other committees.

ConC asked for votes of Council to continue the existence of the Committee on Nomenclature, Terminology and Symbols on the basis of its regular reviews of committee

performance, to change the charge for the Committee on Project SEED and the meaning of the acronym SEED (from “Summer Educational Experience for the Disadvantaged” to “Summer Experiences for the Economically Disadvantaged”), and to change the status of the Committee on Chemists with Disabilities from an “Other Board Committee” to a “Joint Board-Council Committee.” Council members responded in each case with a favorable vote.

The one petition up for Council action would assign oversight responsibility to the Committee on Local Section Activities (LSAC) for approving affiliations of Local Sections with other technical organizations, in accord with the similar process already in place for the Committee on Divisional Activities’ (DAC) approving such affiliations of divisions. Council voted to accept this petition, which will become valid only after confirmation by the Board of Directors within 90 days.

The 30-minute Council special discussion topic for this meeting focused on ACS policy development and advocacy efforts. Specific questions addressed were: (1) How can ACS encourage more members to participate by bringing their expertise to the development of more targeted policy positions? (2) What can ACS do to increase member involvement in public policy advocacy? (3) How can ACS be a more effective leader in policy activities in the broader science and technology communities? Councilors entered into a robust exchange, offering several useful comments and suggestions.

As of August 21, 2007, the ACS fall national meeting had attracted 15,344 registrants. Totals by category were as follows: Regular attendees 8,792; Students 3,518; Guests 574; Exhibit Only 784; and Exhibitors 1,676.

At the end of 2007 Joe completes his 3-y term of Society service as Chair of the Membership Affairs Committee (MAC), a

member of the Members Insurance Program Board of Trustees, and Chair of the Editorial Advisory Board of CHEMISTRY. He will also complete his service as NUCL Councilor and wishes to thank his many colleagues for their cooperation, support, and advice during his 15-y tenure. Joe greatly appreciated the plaque and recognition received at the division Business Meeting in Boston. He will continue to serve as a member of the Board-Council Policy Committee Governance Review Task Force and was recently named co-chair of its Action Team I, charged with developing a proposal for a national meeting program planning and coordination group. Councilor Emeritus Elliot Pierce remains available for limited tasks in the DC area and confirms his heartfelt enthusiasm for the division.

Finally, and especially for our division members residing in District II of the ACS, let me encourage you to VOTE in the fall national election for District II Director, who serves a three-year term on the ACS Board of Directors. The two candidates are incumbent Diane G. Schmidt (The Proctor & Gamble Company, Cincinnati) and Joseph R. Peterson (University of Tennessee, Knoxville and Oak Ridge National Laboratory, retired). Ballots with candidate bios and statements were scheduled to be mailed out on Sept. 24, 2007. PLEASE VOTE!

## SUMMER SCHOOL

*From Paul Mantica:*

The 2007 ACS/DOE Nuclear and Radiochemistry Summer School program came to a close at the end of July. Initial comments received from the student participants noted a very positive experience. Contact information for these students can be obtained by email (mantica@msu.edu). Thanks to all DNCT members who helped with the summer school this year.

### ***2007 Outstanding Students:***

Beth Long (Tennessee Technological University) and Ben Farah (Northwestern University, IL) were selected the 2007 Outstanding Students of the ACS Nuclear and Radiochemistry Summer Schools. Beth attended the SJSU school, while Ben was located at BNL. Both will be invited to attend the ACS National Meeting in New Orleans next April, and those present will be recognized at the DNCT Business Meeting.

### ***2008 Nuclear and Radiochemistry Summer School:***

The dates of the 2008 School will be Sunday, June 15 - Saturday, July 26.

It is never too early to start recruiting students for next summer's program. On-line application forms are now available on the DNCT website

<http://www.cofc.edu/~nuclear/nukess.html>

A recruiting poster is also available for printing and posting in view of potential undergraduate applicants

<http://www.msu.edu/~mantica/NuclearSummerSchoolFlyer2008.pdf>

An email reminder about the need for student recruiting will be sent to division members in mid-November.

Please encourage your outstanding undergraduate students to apply to the program.

Questions, comments, or concerns regarding the summer school

program should be directed to:

Paul Mantica

National Director, ACS Nuclear and Radiochemistry Summer Schools

Michigan State University

East Lansing, MI 48824

Phone 517-333-6456

FAX 517-353-5967

email [mantica@msu.edu](mailto:mantica@msu.edu)

### **ISEC 2008**

#### **International Solvent Extraction Conference ISEC 2008**

The International Solvent Extraction Conference (ISEC) is the premier meeting of solvent extraction experts, bringing together scientists and engineers from around the globe every three years. The ISEC meetings began in 1962 and have been held worldwide in the USA, UK, Israel, Netherlands, France, Canada, Belgium, Germany, Russia, Japan, Australia, Spain, South Africa, and, most recently, in China in 2005. The North America meetings were held in Gatlinburg, Tennessee, USA in 1963; Toronto, Canada in 1977; and Denver, Colorado, USA in 1983. The ISEC 2008 will be held in Tucson, Arizona, USA, from 15-19 September 2008 and promises to continue the high standard set by these triennial meetings. Eight major topics that will be covered which will have multiple sessions are: Fundamentals; Novel Reagents, Materials, and Techniques; Nuclear Fuel Reprocessing; Hydrometallurgy and Metals Extraction; Analytical Applications; Biotechnology, Pharmaceuticals, Life-Science Products, and Organic Products; Process Chemistry and Engineering; and Petrochemical Applications. Conference tours to mining, and nuclear, pharmaceutical and other industrial sites are planned. Interested participants can access the conference web site for further details at [www.isec2008.org](http://www.isec2008.org) or send an email to [isec2008@ecs.syr.edu](mailto:isec2008@ecs.syr.edu)

