



Division of Nuclear Chemistry and Technology
American Chemical Society

DNCT WWW Home Page – <http://www.cofc.edu/~nuclear>

NEWSLETTER
APRIL 2004

Newsletter Editor: Paul Mantica
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Topics

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PRESIDENTIAL EVENT – GRADUATE SYMPOSIUM

Paul Duval and Dave Robertson (University of Missouri) are organizing a symposium for Philadelphia entitled "Recent Advances in Nuclear and Radiochemistry: A Graduate Student Symposium." Only students will present talks and there will be a round table discussion of opportunities in our field at the end. Please consider sending your students to this symposium at Philadelphia. We have gotten support to be an ACS "Presidential Event" and we hope that it will be an opportunity for networking among the young people in our field. The deadline for submission of abstracts is April 29th!

ANAHEIM ACS MEETING

Chair's Report – Dave Morrissey

The Program at the Anaheim meeting had a lively mix of nuclear and radiochemistry. The Seaborg award symposium in honor of Don Fleming from UBC in Vancouver was held in the middle of the meeting and was surrounded by symposia on actinides in geological matrices, analytical chemistry in nuclear technology, and a memorial symposium on f-element chemistry for William Carnall.

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Alternate Councilor

SILVIA JURISSON, 2003-2005

Division Councilor Emeritus

ELLIOT S. PIERCE

Members-at-Large, Executive Committee

DAEG S. BRENNER, 2003-2005

STEVEN W. YATES, 2004-2006

The agendas for the Executive Committee and Business Meeting in Anaheim were full. Several important topics were discussed that will have an impact on the Division, the most important of which is the status of the Seaborg Award. As many of you are aware, the division has not been able to secure the \$300,000 required by the ACS to endow the award. As part of the committee to work on this problem, Suresh Srivastava was able to secure an offer from the ACS that our Division could sponsor the award at a somewhat reduced rate for the next year using division funds. The Executive Committee decided to take the offer so that the award will be presented in 2005 but the amount of flexibility in the division budget will be severely reduced. An alternative to be considered for the future is removing the Seaborg award from the ACS national award list and making it solely a divisional award. This would lower the prestige and cost of the award but would bring it fully under the control of the division. Please contact me or any of the members of the Division Leadership if you have any suggestions or would like to discuss options for the future of the Seaborg Award.

In other business, the status of the ACS Summer-schools in nuclear chemistry was discussed. Two specific items about the future direction of the schools were discussed. Ken Nash (Washington State University) was proposed as a co-PI for the existing DOE grant to help Sue Clark administer the program and the possible addition of a third site, possibly at Carlsbad, NM was discussed. The present DOE grant extends for three more summers and the Executive Committee agreed to the addition of Ken Nash to the leadership so that the duties could be shared with Sue Clark as they see fit. Don Reed (LANL, Carlsbad) presented the possibility that a third summer school might be based in Carlsbad using some locally generated funds. After extensive discussion the Executive Committee restated the position that the Summer Schools have a formal status that is derived from the DOE grant and

that informal arrangements are not appropriate. The Division would like to see the schools flourish and we have reached the point that we are turning away qualified applicants so we can consider expansion if the funds can be secured. During the term of the present DOE grant (through 2005) the Executive Committee will consider written proposals to include additional sites and Don Reed was encouraged to develop a formal proposal that could be considered at the Philadelphia meeting. Moreover, any group that would like to become involved in the future direction of the summer schools and in formulating the next DOE proposal in 2004 is encouraged to contact Sue Clark or Ken Nash.

Finally, the Bylaws of the Division are out of step with the way that we actually operate and should be modified to bring them in line. We will prepare a revised set that will be distributed to the membership in the early summer. We hope to vote on the proposed changes at the ACS meeting at Philadelphia in August of this year.

Councilor's Report – Joe Peterson

The ACS Council in Anaheim chose F. Sherwood Rowland (a former Chair of NUCL) and Isiah M. Warner to be the candidates for 2005 President-Elect. They join E. Ann Nalley, who was previously certified as a petition candidate for 2005 President-Elect. Connie J. Murphy was elected to fill a vacancy on the Committee on Committees for the period 2004-05, and Roger A. Parker was elected to fill a vacancy on the Committee on Nominations and Elections for the period 2004-05. In addition the Council decided to permit the member dues for CY2005 to rise to the fully escalated value (up \$3) of \$123. The CY2005 dues assessment to fund the approved increased allotments to local sections and divisions was already set at \$4. Council also voted to dissolve the probationary Division of Laboratory Automation (LABA), in accord with the request of the LABA leadership.

As of March 30th the Anaheim meeting had attracted 14,141 registrants, comprised of 7595 regular attendees, 3801 students, 467 guests, and 2278 exhibitors. Total membership in the ACS was 159,332 as of year-end 2003, a decline of 1% over the year-end 2002 number. However the number of student members was up by 3.7% and the number of recent B.S. graduates was up by 50%.

The three petitions before Council were for consideration only (votes expected to be taken at the August national meeting in Philadelphia): permit electronic balloting for ACS national elections; change the division annual report deadline to February 15 to be consistent with that of local sections; and establish criteria for admission of pre-college teachers to ACS membership. As is usual practice at Council meetings, reports were heard from the President, President-Elect, Immediate Past President, Board Chair, Executive Director, each of the three Elected Committees of Council (CPC, ConC, N&E), the two Society Committees (B&F, SOCED), ComSci, each of the six Council Standing Committees (DAC, CEPA, LSAC, M&E, MAC, C&B), and a number of Other Committees. One "Special Discussion" item was also on the Agenda – What are the implications for ACS of an Alliance with the American Institute of Chemical Engineers (AIChE)? Currently the ACS and AIChE are pursuing a programmatic alliance that will more fully serve the needs of their members and the chemical enterprise, while enhancing both organizations' abilities to achieve their missions. Consideration is also being given to a membership alliance that could include expanded opportunities for members to participate more fully in both organizations. The discussion at Council revealed strong support for moving forward with these initiatives and identified key factors for consideration.

Joe continues to serve on the Membership Affairs Committee (MAC), has been

appointed MAC Vice-Chair for 2004, and is still the MAC Liaison to the Younger Chemists Committee. He also serves on the Editorial Advisory Board of the ACS quarterly CHEMISTRY. Elliot performs conscientiously his duties as Division Councilor Emeritus.

FUTURE ACS NATIONAL MEETINGS

Divisional members who would like to organize a symposium at an upcoming ACS National Meeting should contact the appropriate program chair.

Program Chair for 2004: Dave Morrissey (morrissey@nscl.msu.edu)

Philadelphia, PA, August 22 – 26, 2004

The deadline for electronic abstracts submitted for Philadelphia symposia is April 29, 2004.

Recent Advances in Nuclear and Radiochemistry: A Graduate Student Symposium

<http://www.cofc.edu/~nuclear/2004PhiladelphiaGraduateSymposiumCall.htm>

Dave Robertson, Department of Chemistry, University of Missouri, Columbia, MO 65211, robertsonjo@missouri.edu

Paul Duval, Department of Chemistry, University of Missouri, Columbia, MO 65211, duvalp@missouri.edu

Recent Advances in Diagnostic and Therapeutic Radiopharmaceutical Chemistry

Silvia Jurisson, Department of Chemistry, University of Missouri, Columbia, MO 65211, jurissons@missouri.edu

Martin Brechbiel, Building 10, Room B3B69

NCI-Bethesda, Bethesda, MD 20892,
martinwb@mail.nih.gov

***The Nuclear Equation of State and Its
Use in Astrophysics***

[http://www.nscl.msu.edu/~tsang/ACS_EOS.h
tm](http://www.nscl.msu.edu/~tsang/ACS_EOS.htm)

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Walter Loveland, Department of Chemistry,
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***Additional Aspects of
Nuclear and Radiochemistry***

Dave Morrissey, Department of Chemistry,
Michigan State University, East Lansing, MI
48824, morrissey@nscl.msu.edu

Program Chair for 2005: Kim W. Thomas
(kwthomas@lanl.gov)

San Diego, CA, March 13 – 17, 2005

Nuclear Technology Applications

Dana Christensen, Lawrence Livermore
National Laboratory, 7000 East Ave.,
Livermore, CA 94550, dchristensen@llnl.gov

***Seaborg Institute's Contributions to
Nuclear and Radiochemistry***

Dave Clark, Los Alamos National
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87545, dlclark@lanl.gov

Christine Hartmann Siantar, Glenn T.
Seaborg Institute, Lawrence Livermore
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Ken Raymond, Department of Chemistry

University of California, Berkeley, CA
94720-1460, raymond@socrates.berkeley.edu

Isotope Production Techniques

Wolfgang Runde, Los Alamos National
Laboratory, P.O. Box 1663, Mail Stop G739,
Los Alamos, NM 87545, runde@lanl.gov

Biological Behavior of Plutonium

Mary Neu, Los Alamos National Laboratory,
P.O. Box 1663, Mail Stop G739, Los Alamos,
NM 87545, mneu@lanl.gov

Glenn T. Seaborg Award Symposium

Until awardee is selected, contact:
Kim Thomas, Chemistry Division, Mail Stop
J515, Los Alamos National Laboratory
Los Alamos, NM 87545, kwthomas@lanl.gov

***Additional Aspects of
Nuclear and Radiochemistry***

Kim Thomas, Chemistry Division, Mail Stop
J515, Los Alamos National Laboratory
Los Alamos, NM 87545, kwthomas@lanl.gov

Washington, DC, August 28-Sept 1, 2005

Additional or modified topics are encouraged!

***Applied Modeling and Computations in
Nuclear Chemistry***

[http://www.cofc.edu/~nuclear/2005Washingto
nComputationSymposium.pdf](http://www.cofc.edu/~nuclear/2005WashingtonComputationSymposium.pdf)

Thomas M Semkow, Wadsworth Center,
New York State Department of Health and
SUNY, PO Box 509, Albany, NY 12201,
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Low-Activity Waste Issues

John Wiley, Board on Radioactive Waste
Management, The National Academies
500 5th Street, NW, 6th Floor

Washington, DC 20001, jwiley@nas.edu

Nuclear Forensics

Ken Moody, Analytical and Nuclear
Chemistry Division, Lawrence Livermore
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Livermore, CA 94550, moody3@llnl.gov

Martine Duff, Savannah River Technology
Center, Westinghouse Savannah River
Company, Aiken, SC 29808,
martine.duff@srs.gov

OTHER MEETINGS

2004 Gordon Research Conference in
Nuclear Chemistry
Nuclear Reactions: Flavors across Energies
Colby Sawyer College, New London, New
Hampshire, June 13-18, 2004
[http://www.grc.org/programs/2004/nuchem.h
tm](http://www.grc.org/programs/2004/nuchem.htm)

NEWS FROM NSAC – Dave Morrissey

I attended the NSAC meeting in February as
the representative of the Division. The
meeting lasted about one and a half days and
the committee dealt with four charges from
the DOE/NSF. The list of charges and the
reports resulting from the charges can be
found on the DoE website:

<http://www.sc.doe.gov/henp/np/nsac/nsac.htm>
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Charges completed in February:

1) Establish a Committee of Visitors to
Assess Operations of Office of Nuclear
Physics and Recommendations Regarding
Performance Measures for the Nuclear
Physics Program. A subcommittee chaired by
John Cameron (Indiana University)
presented a report prepared by a committee
of visitors that contains a detailed
investigation of the operations of the office
including information on how proposals are
handled and the way that funds are

allocated. The committee was very favorably
impressed and recommended only a small
number of changes. NSAC accepted the
report after some minor discussion of specific
points mentioned in the report that were not
in the charge. The text of the report is on
the web. (The report on the other aspect of
performance measures was submitted in
November, 2003.)

2) Compare Opportunities at RIA and GSI.
A question was raised at a very high
government level about how the proposed
facility at GSI in Germany might impact the
need for RIA in the US. A subcommittee
chaired by Peter Bond (Brookhaven National
Lab) was formed to review the project plans
of both facilities, their capabilities and their
prospective scientific projects. The
subcommittee provided an extensive and
thorough report on a short timescale
(approximately three months including the
holidays) that was presented to NSAC.
In a nutshell, the report shows that there is
a small overlap between the two facilities but
the physics program at GSI will be very
broad and rare-isotope physics with fast
beams will be only a fraction of the program,
whereas RIA will be a dedicated facility to
provide rare-isotope beams across the full
spectrum of nuclear physics. The report
deals a number of nuclear physics issues that
require the RIA facility. The text of this
report is also on the web.

3) Assess the present NSF and DOE
educational investments and identify key
strategies for preparing future generations of
nuclear physicists and chemists. Status
report only: a subcommittee chaired by Joe
Cerny (UC Berkeley) is working on collecting
information and preparing a report. It is
expected that the report will be presented to
NSAC in the Fall of this year. *It is
important that any division members with
information or ideas on strategies for
education contact Joe Cerny as soon as
possible.*

4) NEW: Examine current and proposed US efforts in heavy-ion nuclear physics and the effectiveness of the Relativistic Heavy-ion Collider (RHIC). A new charge was presented to NSAC to form a subcommittee to review the status of all of heavy-ion reaction work.

The major part of this work is done at RHIC but the charge includes other work on reaction dynamics as well. This charge will require a progress report in the summer (probably late July) and a final report in the early Fall of this year. A subcommittee is being formed under the leadership of Peter Barnes from Los Alamos.

SUMMER SCHOOL NEWS

For additional information regarding the ACS Summer Schools in Nuclear Chemistry, please contact the Prof. Sue Clark, National Director of the Summer Schools in Nuclear and Radiochemistry, Department of Chemistry, Washington State University, Pullman, WA 99164-4630; Phone: 509-335-1411; FAX: 509-335-8867; email: s_clark@wsu.edu.