



Division of Nuclear Chemistry and Technology  
*American Chemical Society*

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## NEWSLETTER July 2018

*Newsletter Editor: Andrew Klose*  
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### Topics

- > FROM THE CHAIR
- > UPCOMING PROGRAMMING
- > NUCL MEMBER HIGHLIGHT
- > AWARD NOMINATIONS
- > FACULTY OPENING AT U. OF IOWA

### FROM THE CHAIR *Lynn Francesconi*

Greetings to the NUCL division members! Summer is half-way over and we are looking forward to the Fall National ACS meeting in Boston MA that will be held August 19 to 23. The NUCL sessions will be held at the Seaport Boston Hotel.

The agenda for the Boston meeting has been shaping up very nicely and will have seven symposia. Many thanks to John Auxier II for organizing the symposia and for providing the following summaries of the various symposia.

- A symposium in honor of Leonard Mausner. This symposium will kick-off the meeting and has a number of high profile speakers that will engage in some of the history of Leonard's contributions to the field, personal thoughts, and excellent presentations on the direction of this area of radiochemistry. This symposium is organized by Cathy Cutler and Silvia Jurisson.

- Nuclear Forensics. This is a chance for the researchers in the areas of radiochemistry that play a role in developing advanced separations, unique detection methods, and other areas that support this national security relevant field to engage with speakers from National Labs, U.S. Dept of Defense, and academia. This symposium is organized by John Auxier II, Todd Bredeweg, and Robert Serbella.
- New Radioisotope Chemistry for Nuclear Medicine. There will also be a session regarding the production methods for new isotopes ranging from medical approaches to new elements. The organizers are John Brockman and Roy Planalp.
- Environmental Radiochemistry. This session is jointly listed within GEO and highlights the breadth of environmental radiochemistry across a wide breadth of disciplines. This session has a set of Rock-star chemists as the organizers with numerous international participants as speakers and planners. Not to be missed. The organizers are Don Reed, Xavier Gaona, Marcus Altmaier, Amy Hixon, Brian Powell, and Mavrik Zavarin
- Radiochemical Education. This session serves as an outlet for folks to talk about their radiochemistry education program, highlight gaps in the education, and talk about the health of the pipeline for students in industry, medical, national labs, and the many areas that radiochemistry education supports. This symposia is organized by Melissa Deri and Donna McGregor.
- Computational Theory. This session serves as the highly basic science and advanced theory that allows for advanced computation approaches to be discussed and posit experiments that need to be performed to bench-mark the

theory to experiment approach. This symposium is organized by Deborah Penchoff and Charlie Peterson

- And of course the General Topics. As per tradition, this session has all of the talks that just “don’t fit in the box” but allows for the creative spirit of pushing the boundaries of where radiochemistry can go and the fields that it can touch.

If you are interested in organizing a symposium for a Spring National Meeting please contact Amy Hixon. If you wish to organize a symposium a Fall National Meeting, please contact John Auxier II.

In addition to the symposia at the Boston National Meeting, we have the Division Business Meeting that will be held in Flagstaff A of the Seaport Boston Hotel on Tuesday, August 21 at 5:30 PM (at the close of the sessions). Following the business meeting, the social time will be at Roza Lyons Restaurant at 6:30 PM. Roza Lyons is a short walk or Uber drive from the hotel. We will provide any other details at intermissions during the sessions. A big thank you goes to Alan Packard and Brian Powell for organizing this social time for the division.

In the past we found holding the social time off site is not only economical for the Division but the atmosphere and food are wonderful and we get to see a different aspect of the host city. Also, of course, we meet colleagues in the field and importantly, we meet and encourage students and post-docs just starting out. Since we have initiated this tradition the attendance has been stellar. Please invite your colleagues who are ACS members to join us.

I would like to congratulate Professor Steve Yates, University of Kentucky, who has been selected as the recipient of the 2018 W. Frank Kinard Distinguished Service Award. Steve will receive a wall plaque and certificate that

will be presented to him during the NUCL Business Meeting on Tuesday, August 21, 2018. Many thanks to the Awards Nominations Committee: Paul Mantica (chair), Walter Loveland, Kimberly Thomas and Scott Wilber.

The American Chemical Society has named 51 members as ACS Fellows. The fellows program recognizes and honors ACS members “for outstanding achievements in and contributions to science, the profession and the ACS”. The NUCL Division is very proud to have three of our members selected as fellows this year. The 2018 ACS fellows who are NUCL members are Jaqueline L. Kiplinger (Los Alamos National Laboratory), Walter D. Loveland (Oregon State University), and Dawn A. Shaughnessy (Lawrence Livermore National Laboratory). Heartiest Congratulations! Also thanks to those who wrote nominating and seconding letters.

I would like to draw attention to the need for financial support of the Glenn T. Seaborg Award in Nuclear Chemistry. We must develop a plan for continued funding for this important and prestigious ACS award. Please contact any of the NUCL officers if you have ideas for identifying future support.

The NUCL Division is a very supportive division and we welcome new members. I would like to ask our members to recruit new members among your colleagues, students, and friends. The Business Meeting and Social time may be a good venue for such recruiting. Nuclear and Radiochemistry permeates most other disciplines and interdisciplinary and multidisciplinary research is important. A little recruiting of ACS members into the NUCL division will promote the health and viability of the NUCL division. At future meetings, we will have a table/poster at the Sci Mix poster session and we need members, preferably young(er) to talk to potential new members.

Finally, please do not hesitate to contact me with concerns, comments and information that will be useful to the NUCL Division.

## UPCOMING PROGRAMMING

The **20<sup>th</sup> Symposium on Separation Science and Technology for Energy Applications** will be held Oct. 21<sup>st</sup> – 24<sup>th</sup>, 2018 at the Park Vista Hotel in Gatlinburg, TN.

**Plutonium Futures – The Science 2018, A Topical Conference on Plutonium and Actinides**, will be held Sep. 9<sup>th</sup> – 14<sup>th</sup>, 2018 at the Wyndham San Diego Bayside in San Diego, CA.

## NATIONAL MEETING PROGRAMMING

### FALL 2018 – Boston, MA

**August 19-23, 2018** (*John Auxier II*)

*Theme: Nanoscience, Nanotechnology & Beyond*

The 256<sup>th</sup> ACS National Meeting & Exposition will be held August 19-23, 2018 in Boston, MA. Abstract submission has passed and Conference registration is now open. Symposia are listed below and will take place in Seaport Boston Hotel. Please contact John Auxier, II ([jauxier@utk.edu](mailto:jauxier@utk.edu)) for more information.

- **Nuclear Forensics**

*Organizers:*

*John Auxier II* ([jauxier@utk.edu](mailto:jauxier@utk.edu)),

*Todd Bredeweg* ([toddb@lanl.gov](mailto:toddb@lanl.gov)), and

*Robert Serbella*

([Robert.surbella@pnnl.gov](mailto:Robert.surbella@pnnl.gov))

- **Symposium in honor of Leonard Mausner**  
Organizers: Cathy Cutler ([ccutler@bnl.gov](mailto:ccutler@bnl.gov)) and Silvia Jurisson ([JurissonS@missouri.edu](mailto:JurissonS@missouri.edu))
- **New Radioisotope Chemistry for Nuclear Medicine**  
Organizers: John Brockman ([brockmanJD@missouri.edu](mailto:brockmanJD@missouri.edu)) and Roy Planalp ([Roy.Planalp@unh.edu](mailto:Roy.Planalp@unh.edu))
- **Environmental Chemistry**  
Organizers: Don Reed ([dreed@lanl.gov](mailto:dreed@lanl.gov)), Marcus Altmaier ([marcus.altmaier@kit.edu](mailto:marcus.altmaier@kit.edu)), Xavier Gaona ([Xavier.Gaona@kit.edu](mailto:Xavier.Gaona@kit.edu)), Amy Hixon ([ahixon@nd.edu](mailto:ahixon@nd.edu)), Brian Powell ([bpowell@clemson.edu](mailto:bpowell@clemson.edu)), and Mavrik Zavarin ([zavarin1@llnl.gov](mailto:zavarin1@llnl.gov))
- **Radiochemistry Education**  
Organizers: Melissa Deri ([Melissa.deri@lehman.cuny.edu](mailto:Melissa.deri@lehman.cuny.edu)) and Donna McGregor ([donna.mcgregor@lehman.cuny.edu](mailto:donna.mcgregor@lehman.cuny.edu))
- **Computational Methods**  
Organizers: Deborah Penchoff ([dpenchof@utk.edu](mailto:dpenchof@utk.edu)) and Charlie Peterson ([Charles.peterson@unt.edu](mailto:Charles.peterson@unt.edu))
- **General Topics in Radiochemistry**  
Organizer: Lynn Francesconi ([lfrances@hunter.cuny.edu](mailto:lfrances@hunter.cuny.edu))

**SPRING 2019 – Orlando, FL**

**March 31 – April 4, 2019**

*Theme: Chemistry for New Frontiers*

The 257th ACS National Meeting & Exposition will be held March 31 - April 4, 2019 in Orlando, Florida. Abstract submission for the Spring 2019 National Meeting will open on August 20, 2018 and close on October 29, 2018. Symposia are listed below. Please contact Amy Hixon ([ahixon@nd.edu](mailto:ahixon@nd.edu)) for more information.

- **Crosscutting Research in Environmental Radiochemistry and Nuclear Forensics**  
Organizers: Luther McDonald ([luther.mcdonald@utah.edu](mailto:luther.mcdonald@utah.edu)) and Amy Hixon ([ahixon@nd.edu](mailto:ahixon@nd.edu))
- **Young Investigators in Nuclear and Radiochemistry**  
Organizers: Alison Tamasi ([tamasi.alison@epa.gov](mailto:tamasi.alison@epa.gov)) and Melissa Deri ([Melissa.deri@lehman.cuny.edu](mailto:Melissa.deri@lehman.cuny.edu))
- **Seaborg Award Symposium (TBD)**
- **General Topics in Nuclear Chemistry and Technology**  
Organizers: Jenifer Shafer ([jshafer@mines.edu](mailto:jshafer@mines.edu))
- **Nuclear Chemistry and Technology for Materials Production**  
Organizers: Laetitia Delmau ([delmaulh@ornl.gov](mailto:delmaulh@ornl.gov))

## FALL 2019 – San Diego, CA

August 25 - 29, 2019

Theme: Chemistry of Water

The 258th ACS National Meeting & Exposition will be held August 25-29, 2019 in San Diego, CA. We are in the early planning stages for the Fall 2019 National Meeting. Tentative symposia are listed below. Please contact John Auxier, II ([jauxier@utk.edu](mailto:jauxier@utk.edu)) for more information or if you would like to volunteer to organize a symposium.

- **Celebration of the centennial of Rutherford's first nuclear reaction**

Organizers: Todd Bredeweg

([toddb@lanl.gov](mailto:toddb@lanl.gov)) and

Donivan Porterfield

([dporterfield@lanl.gov](mailto:dporterfield@lanl.gov))

- **Water Behavior in Concentrated Electrolytes**

Organizers: Sue Clark

([sue.clark@pnnl.gov](mailto:sue.clark@pnnl.gov)) and

Aurora Clark ([auclark@wsu.edu](mailto:auclark@wsu.edu))

- **Nuclear Forensics**

Organizers: John Auxier II

([jauxier@utk.edu](mailto:jauxier@utk.edu)) and Nicole Vanagas

([nv137@georgetown.edu](mailto:nv137@georgetown.edu))

- **General Topics in Nuclear Chemistry and Technology**

Organizers: Jenifer Shafer

([jshafer@mines.edu](mailto:jshafer@mines.edu))

- **Molten Salt Reactor Chemistry**

Organizers Needed

## SPRING 2020 – Philadelphia, PA

March 22 – 26, 2020 (Amy Hixon)

Theme: Macromolecular Chemistry: The Second Century

If you would like to organize a symposium for the Spring 2020 National Meeting, please contact Amy E. Hixon ([ahixon@nd.edu](mailto:ahixon@nd.edu)).

## NUCL MEMBER HIGHLIGHT

Alison Tamasi, Editor and Author



### Dr. Jack Burn

*National Analytical Radiation Environmental Laboratory, Physical Scientist*

Dr. Burn was originally a synthetic inorganic chemist working on making di-rhodium complexes, so his knowledge of environmental radiochemistry was gained through hard-won practical experience, and judiciously harnessing the knowledge of others. In particular, Jack is grateful for having had many opportunities over the last decade to learn from the “encyclopedic” radiochemistry knowledge of Dr. Bob Littman. After graduating from UT in Knoxville, Jack was able to secure a job working to investigate Manhattan Project legacy wastes at sites throughout Oak Ridge, where he embraced the learning curve of transitioning from a synthetic chemist to a radiochemist and even managed to save time and effort on the project by refurbishing and utilizing spare detectors to pre-screen field samples. After that, while working as a radiochemist in several capacities, from gamma spectroscopy of environmental samples to in situ leaching of uranium, Jack honed his skills. With a little help from fortuitous timing, Jack managed to land his dream job working in the counting room at EPA’s NAREL, where he is able to use his passion for knowing and understanding instrumentation to monitor the environment. When he isn’t working Jack keeps himself busy with his two adorable grandchildren (ages 2 and 4), and as the local branch president of his church.



## AWARDS NOMINATIONS COMMITTEE OF NUCL

*Paul Mantica*

Congratulations to Steve Yates, recipient of the 2018 W. Frank Kinard Distinguished Service Award. Steve will receive his award at the NUCL business meeting during the ACS Fall National Meeting in Boston.

The NUCL Awards Nominations Committee was formed to encourage and facilitate nominations for national ACS awards. The main activity of the committee is reaching out to members willing to serve as primary and second nominators for pre-identified nominees.

The next activity of the committee will be the ACS National Awards. The Awards Nominations Committee members will be approaching members of the division to encourage nominations for the 2020 Glenn T. Seaborg Award for Nuclear Chemistry. The nomination deadline is November 1, 2018.

Suggestions and questions regarding the award nomination process can be directed to Paul Mantica ([mantica@msu.edu](mailto:mantica@msu.edu); 517-908-7456), who chairs the Awards Nominations Committee. Walter Loveland, Kimberly Thomas, and Scott Wilbur also serve on this committee.

## *Coryell Award for Undergraduate Research in Nuclear Chemistry*

*Graham Peaslee*

Please remember to nominate undergraduate researchers for the annual Coryell award. Each year there is a \$1000 prize to be awarded to the successful nominee(s). Contributions are judged on the basis of ingenuity, novelty, and potential usefulness. To be eligible, a student must have been an undergraduate at some time during the 12-month period prior to the deadline date for submission of applications for the award. The student may be sponsored by a faculty member at the home institution or by a research director at another institution where the student performed the work. The nomination process involves a letter from the research mentor and a sample of the student's work, which is typically in the form of a report or a paper they have written, or significantly contributed towards. The annual deadline will be Sept. 14, 2018. Please contact Graham Peaslee ([gpeaslee@nd.edu](mailto:gpeaslee@nd.edu)) if you have any questions.

## **Faculty Position Opening – University of Iowa**

The Department of Chemistry at the University of Iowa solicits applications to fill a tenure-track Assistant Professor position in Radiochemistry broadly defined, effective August 2019. Applications are encouraged from researchers with programs focused on radioanalytical chemistry, environmental monitoring, nuclear forensics, actinide chemistry, radioisotope development, radiopharmaceuticals/therapies, or energy applications. Applicants should clearly demonstrate potential to develop and lead a nationally-prominent, externally-funded research program and commitment to excellence in teaching chemistry to a diverse student body at both the graduate and undergraduate levels. Candidates must have a doctoral degree in chemistry or a closely related field and a promising record of scholarship and productivity in hand by August 21, 2019. Postdoctoral experience in an academic, government, national laboratory, or industrial setting is highly desired. Candidates with advanced Assistant Professor level experience are also encouraged to apply.

The Radiochemistry program at the University of Iowa was established in 2012 and is quickly developing into a renowned area of strength on campus. The Chemistry Building has state-of-the-arts facilities for teaching and research, including a shared radiochemistry facility. Faculty within the Department of Chemistry have established ties with national laboratories, state facilities, and industrial partners and there are opportunities for collaborations with the highly-ranked University of Iowa Hospitals and Clinics.

Application materials must include a cover letter describing their academic qualifications and professional experience, CV, and academic transcripts. Applicants should also provide documents that 1) describes their current expertise and future goals for an independent research program in radiochemistry; 2) states their beliefs, practices, and interests in teaching, and 3) should detail how their teaching, service, and/or scholarship has supported the success of students from backgrounds that are underrepresented in chemistry or how they would like to further the University of Iowa's commitment to diversity. Please arrange for three letters of recommendation to be sent directly to [chem-facsearch@uiowa.edu](mailto:chem-facsearch@uiowa.edu).

To apply, please go to [jobs.uiowa.edu](http://jobs.uiowa.edu) and refer to requisition number 73167. Application review will begin by October 15, 2018 and will continue until the position is filled.

The University of Iowa is an equal opportunity/affirmative action employer. All qualified applicants are encouraged to apply and will receive consideration for employment free from discrimination on the basis of race, creed, color, national origin, age, sex, pregnancy, sexual orientation, gender identity, genetic information, religion, associational preference, status as a qualified individual with a disability, or status as a protected veteran. The Department of Chemistry and the College of Liberal Arts and Sciences are strongly committed to recruiting and retaining the most talented and diverse faculty. The Department values diversity and is committed to maintaining a supportive and inclusive climate. We value diversity in all forms. We conduct all departmental activities, including recruitment, retention, and personal and professional development for a diverse group of faculty, postdoctoral fellows, staff, and graduate and undergraduate students in a manner consistent with these values. The strategic plans of the University and College of Liberal Arts and Sciences reflect this commitment. The University also proudly supports work/life resources, including dual-career support; for more information please see <https://worklife.uiowa.edu/>.