Chair, 2015
Program Chair, 2015
DAVID E. HOBART
123 Big Oak Lane
Santa Rosa Beach FL 32459
Phone: (505) 227-4728
dhobart15@gmail.com

Chair-Elect, 2015
Program Chair, 2016
PAUL BENNY
Washington State University
Department of Chemistry
Pullman, WA 99164
Phone: (509) 335-3858
bennyp@wsu.edu

Vice-Chair, 2015
Program Chair, 2017
LÆTITIA DELMAU
Oak Ridge National Laboratory
Nuclear Material Processing Group
Oak Ridge, TN 37830
Phone: (865) 576-2093
delmaulh@ornl.gov

Secretary, 2014-2016
LUTHER McDONALD
110 S Central Campus Dr
Salt Lake City, UT 84112
Phone: (509) 595-1101
luther.mcdonald@utah.edu

Treasurer, 2014-2016
ALICE MURRAY
Savannah River National Laboratory
Aiken, SC 29808
Phone: (803) 725-0440
alice.murray@srnl.doe.gov

Councilors
GRAHAM F. PEASLEE, 2015-2017
peaslee@hope.edu

SILVIA JURISSON, 2014-2016
jurissons@missouri.edu

Alternate Councilor
DAWN A. SHAUGHNESSY, 2015-2017

Members-at-Large, Executive Committee
SUZANNE LAPI, 2015-2017
RICHARD ROBERTS, 2013-2015

Division of Nuclear Chemistry and Technology
American Chemical Society

NUCL WWW Home Page – http://www.nucl-acs.org

NEWSLETTER
January 2015

Newsletter Editor: Lætitia Delmau
Email: delmaulh@ornl.gov

Topics

> FROM THE CHAIR
> ELECTION RESULTS
> 2015 SPRING MEETING
> UPCOMING PROGRAMMING
> PACIFICHEM 2015
> TREASURER'S REPORT
> COUNCILORS' REPORT
> AWARD NOMINATIONS COMMITTEE OF NUCL
> JOB OPENING

FROM THE CHAIR – *Dave Hobart*

I wish everyone a Happy New Year and best wishes for 2015. It is with great expectations that I begin my term as your Division Chair. I am sure that I share with the entire Division the appreciation and special thanks extended to Paul Mantica for his outstanding service and hard work as 2014 Chair. Paul has officially earned the prestigious and coveted title of Immediate Past Chair. This year we celebrate the 50th Anniversary of the Division of Nuclear Chemistry and Technology by Honoring the Past, Celebrating the Present and Shaping the Future. We have many challenges and opportunities ahead. We do however have a path forward thanks to the diligent efforts of the Division Executive Committee in creating the NUCL Division Strategic Plan for 2015 through 2020. The Strategic Plan was fashioned in near final form at the fall 2014 San Francisco ACS meeting and open for comment to the entire Division. The final form was approved by the Executive Committee in December.

The Strategic Plan is posted on the division website www.nucl-acs.org and will be presented at the 50th Anniversary Symposium. The 2015 Spring National ACS meeting is to be held in Denver, Colorado March 22-26 with the theme "Chemistry of Natural Resources." In addition to the 50th Anniversary symposium, the Denver ACS meeting will feature The Seaborg Award Symposium Honoring the late Heino Nitsche, The Nuclear Forensics Symposium and The Convergence of Theory and Experiment in Heavy Elements Symposium. These symposia include a total of more than 140 oral presentations. Additionally NUCL is co-sponsoring the Uranium in Seawater symposium with I&EC Division. The NUCL Executive Committee will meet in Denver on Sunday afternoon March 22nd from 5 to 7 pm MST. The Division Business Meeting will be Monday evening March 23rd starting at 5:30 pm followed by the NUCL Division Social Hour at 6:30 pm. In all likelihood, these meetings will be held at the Embassy Suites at the Convention Center. Please double check in the program though.

The Fall National ACS meeting is to be held in Boston, Massachusetts August 16-20, 2015 with the theme, "Innovation from Discovery to Application." The proposed NUCL symposia for Boston are: Analytical Chemistry in Nuclear Technology; General Topics in Nuclear and radiochemistry; The Physics and Chemistry of the Heaviest Elements; Transformation and Transport of Radionuclides in the Environment; and radiopharmaceutical Design and Applications. The new Program Chair for the Boston meeting is Jeff Terry who replaces Jen Braley after her years of dedicated service as Program Chair. A special thank you is extended to Jen for her service to the Division. The start date for abstract submission is January 19th and the deadline is March 16th. Note that the deadline for ACS Boston abstracts is one week before the Denver ACS meeting.

The 2016 Spring National ACS meeting will be held in San Diego, California March 13-17. If you are interested in organizing a symposium for this meeting please contact Dave Hobart (dhobart15@gmail.com) or Paul Blenny (bennyp@wsu.edu). The Program Chair for the San Diego meeting is Amy Hixon (amy.hixon.2@nd.edu) who can assist with programming questions as well.

NSAC Updates

The Nuclear Science Advisory Committee (NSAC) met in Rockville, MD on Monday, November 17 to hear reports from the nuclear science federal funding agencies (U.S. Department of Energy and National Science Foundation) and operating facilities. Also, the committee discussed the Long Range Plan (LRP) and the activities of the Writing Group. Representatives from the five town meetings that were held throughout the fall made short presentations to the LRP Writing Group. The plan is for the LRP Writing Group to complete its work by spring 2015, with submission of the final LRP document by the October 2015 deadline. Paul Mantica is serving on the LRP Writing Group as the NUCL Division representative. Updates on the LRP process will be provided on the American Physical Society's Division of Nuclear Physics website: www.aps.org/units/dnp/.

The U.S. Department of Energy Isotopes Subcommittee is also working to prepare a Long Range Plan. The subcommittee solicited input on the use of Isotopes in the broader nuclear science community. A survey was distributed to NUCL members in November, and the feedback received was transmitted to the subcommittee chair, Larry Cardman (cardman@jlab.org). The subcommittee will

meet January 20-21, 2015 in the Washington, DC area to review the community input. Paul Mantica will make a presentation to the subcommittee on behalf of the division. Several NUCL members are participating on this subcommittee, including Suzanne Lapi, Dave Robertson, Mark Stoyer, and Scott Wilbur.

Volunteers Needed

The Division has many for service opportunities for members to serve on committees. These include positions outlined in the Division Strategic Plan and on other subcommittees. If you are interested in learning more about ACS governance and playing an active role in your division this is an excellent way to expand your network and raise awareness on issues important to NUCL members. Please contact Dave Hobart (dhobart15@gmail.com) to volunteer.

ELECTION RESULTS – *Dave Hobart*

The Division members voted electronically in November for four positions on the 2015 NUCL Executive Committee. The elections are completed and the results were close. Please join me in congratulating the following winning candidates:

Vice Chair: Lætitia Delmau
Counselor: Graham Peaslee
Alternate Counselor: Dawn Shaughnessy
Member-at-large: Suzanne Lapi

Thank you to all of the candidates who volunteered to run.

UPCOMING PROGRAMMING- *Dave Hobart, Jenifer Braley, Jeff Terry, Amy Hixon*

As a resident of the Denver suburbs, let me say that I'm excited to have the Spring ACS National Meeting return to the area after just a few short years. Organizational efforts and technical contributions for this meeting were spectacular, with 146 papers planned for the NUCL division. This represents the largest showing of the NUCL division since the spring 2012 New Orleans national meeting. See you in the Mile High City!

Dave did an excellent job of highlighting upcoming programming for Denver and the 250th National Meeting in Boston. If you have interest in programming further out, please don't hesitate to contact future program chairs Jeff Terry (terryj@iit.edu) or Amy Hixon (Amy.Hixon.2@nd.edu), or 2016 NUCL division chair, Paul Benny.

Thanks to all current and future organizers for their programming contributions.!

Spring 2015 – Denver, CO – March 22-26, 2015 - Chemical Resources: Extraction, Refining and Conservation

At a glance:

Division of Nuclear Chemistry & Technology NUCL

J. Braley, D. Hobart, Program Chairs

Embassy Suites Denver – Downtown Convention Center	S	M	Tu	W	Th
Glenn T. Seaborg Award for Nuclear Chemistry: Honoring Heino Nitsche	D	D			
Nuclear Forensics	P	D			
50th Anniversary of the NUCL Division			D	D	
Convergence of Theory & Experiment in Heavy Element Chemistry				D	A
Uranium in Seawater* (I&EC)	D	D			
Chemical Tales of Success: Helpful Tips for Younger Chemists* (YCC)			A		

– Seaborg Award Symposium: In Honor of Heino Nitsche. Organizers: Richard

Wilson, ANL, Christoph Duellmann (University of Mainz), Thomas Fanghaenel (ITU, Karlsruhe), Annie Kersting (LLNL), David Hobart(LANL/FSU)

– 50th Anniversary of the NUCL Division (Organizers: David Hobart, LANL/FSU, David Shuh, LBNL, Jon Auxier II, Tennessee, Dawn Shaughnessy, LLNL, Thomas Albrecht-Schmitt (FSU); PNNL, Dominic Peterson, LANL, Jenifer Braley, CSM)

– Convergence of Theory and Experiment in Heavy Element Chemistry (Organizers: Alfred Sattleberger, ANL, asattelberger@anl.gov; David Shuh, LBNL, dkshuh@lbl.gov; Lynda Soderholm, ANL, soderholm@anl.gov; David Clark, LANL, dlclark@lanl.gov)

– Nuclear Forensics (Organizers: Robert Rundberg, LANL, rundberg@lanl.gov; Amanda Klingensmith; Todd Bredeweg, LANL, toddb@lanl.gov)

– Uranium from Seawater, NUCL nominal co-sponsor (Robin Rogers, Alabama, rdrogers@ua.edu)

Fall 2015 – Boston, MA – August 16-20, 2015. A History of Innovation: From Discovery to Application

– General Topics in Nuclear & Radiochemistry (Jenifer Braley, CSM, jbraley@mines.edu)

– Analytical Chemistry in Nuclear Technology (Organizers: Dave Hobart, dhobart15@gmail.com; Charles Coleman, SRNL, charles02.coleman@srnl.doe.gov, David Hobbs, SRNL, David.Hobbs@srnl.doe.gov; Herman Cho, PNNL, HM.Cho@PNL.gov, PNNL; Dominic Peterson, LANL, dominicp@lanl.gov)

– The Physics and Chemistry of the Heaviest Elements – Walter Loveland ORST, lovelanw@onid.orst.edu

– Transformation and Transport of Radionuclides in the Environment– Maxim Boyanov, ANL, mboyanov@anl.gov; Ken Kemner, ANL, kemner@anl.gov; Edward O'Loughlin, ANL, OLoughlin@anl.gov.

– Radiopharmaceutical Design and Applications– Alan Packard, Harvard Univ, Alan.Packard@childrens.harvard.edu

Spring 2016 – San Diego, CA – March 13-17, 2015

General Topics in Nuclear & Radiochemistry (Organizer TBD)

Challenges in Modeling Actinide Chemistry (Organizers: Aurora Clark and Enrique Batista)

Young Investigators (Organizers TBD)

Several other concepts in development

Radiochemistry Infrastructure – cooperative with the Health Physics Society

Archaeometry (contact Dave Robertson)

PACIFICHEM 2015 – *Dave Hobart*

The 2015 International Congress of Pacific Basin Societies (PACIFICHEM) will take place in Honolulu, Hawaii December 15-20, 2015. The Call for Abstracts for 2015 PACIFICHEM Congress will be from January 1 – March 1, 2015. The preliminary program for the congress is available at: www.pacifichem.org/symposiadesc2015/ Housing reservations will open by February 2, 2015, and Registration will start on June 25, 2015. For complete information about the

PACIFICHEM Program please visit: www.pacifichem.org.

TREASURER'S REPORT – *Alice Murray*

The NUCL Division closed 2014 with $81,254 in its checking account and $76,922 in its savings account. The 2014 Income was $83,034 and the 2014 Expenses were $58,664. The major expenses were: $12,994 to support the Edelstein Symposium, and $10,000 sent to the ACS Office of Development for the Glenn T. Seaborg Award. The NUCL Division received $34,509 from the ACS for its allotments, dues, and councilor travel. The NUCL Division received $33,000 in donations for several symposia at the ACS 2014 and 2015 Spring National Meetings as well as to support the ACS Glenn T. Seaborg Award.

AWARD NOMINATIONS COMMITTEE OF NUCL – *Steve Yates*

The Awards Nominations Committee of the Division was formed to encourage and facilitate nominations for national ACS awards. Please nominate a colleague for one of the awards given below or another ACS award (http://www.acs.org/content/acs/en/funding-and-awards/awards/national.html).

ACS Fellows
(http://www.acs.org/content/acs/en/funding-and-awards/fellows.html) --
Nominations can be initiated by individuals; however, the Division can nominate up to four individuals as ACS Fellows annually. Nominations for the 2015 class of Fellows are scheduled to open February 1, 2015 and close April 1, 2015.

W. Frank Kinard Distinguished Service Award, established in 2014, recognizes NUCL members for outstanding service to the Division and the field of nuclear science -- Nomination procedures are given on the NUCL website (http://www.nucl-acs.org/?page_id=611) and the next deadline is **July 1, 2015**.

Glenn T. Seaborg Award for Nuclear Chemistry
(http://www.acs.org/content/acs/en/funding-and-awards/awards/national/bytopic/glenn-t-seaborg-award-for-nuclear-chemistry.html) -- Nominations are initiated by individuals and the procedures are given on the ACS website. The next deadline is **November 1, 2015**.

Suggestions and questions should be addressed to Steve Yates (yates@uky.edu; 859-257-4005).

JOB OPENING

PHYSICAL SCIENCES DIRECTORATE POSITION DESCRIPTION

PURPOSE: The Chemical Separations Group in the Chemical Sciences Division (CSD) at Oak Ridge National Laboratory (ORNL) is seeking **an early career chemist** with a strong background in separations and radiochemistry to perform research in separations chemistry in a variety of projects ranging from fundamental research on novel molecular-recognition chemistry to applied efforts dealing with such problems as recovery of critical materials, recycle of used nuclear fuel, treatment of waste, and sensing of trace contaminants.

MAJOR DUTIES/RESPONSIBILITIES:

- **Work with a diverse team of scientists seeking both to advance scientific understanding of chemical recognition and separation phenomena, as well as use this understanding to solve real world applications**
- **Design and perform hands-on separations experiments utilizing solvent extraction and ion exchange methods to meet project goals**
- **Responsible for operation of a radiochemical laboratory and training of staff in radiochemical methods**
- **Independently formulate research problems and design research strategies, and work with both computational chemists and experimentalists to guide the design of new receptors and characterize their separation properties**
- Train group postdocs, students, and visiting scholars in separations methods and radiochemical methodologies developed in the group
- **Participate in the initiation of new research directions and development of research proposals to compete for internal and external funding**
- **Responsible for presenting and reporting research results and publishing scientific results in peer-reviewed journals in a timely manner**
- **Ensure compliance with environment, safety, health and quality program requirements**
- Maintain strong commitment to the implementation and perpetuation of values and ethics

QUALIFICATIONS REQUIRED:

- PhD in Chemistry or a closely related science discipline and up to five years of subsequent research experience involving separations chemistry and radiochemical methods
- Strong background in solvent extraction or ion exchange, dealing with actinides, lanthanides, or fission products
- A solid foundation in inorganic, physical, and analytical chemistry with a demonstrated working knowledge of thermodynamics and kinetics
- A strong record of productive and creative research demonstrated by publications in peer-reviewed journals and presentations at scientific conferences
- Excellent interpersonal skills and oral and written communication skills in order to have effective interaction with technical peers, program managers, and sponsors
- Self-motivated, safety conscious and capable of innovative, independent research resulting in peer-reviewed publications
- Ability to work collaboratively in a team environment and interact effectively with a broad range of colleagues

QUALIFICATIONS DESIRED:

- Expertise in coordination and supramolecular chemistry and various spectroscopic methods, including application of X-ray or neutron-scattering techniques for structural analysis

Three letters of reference are required and can be uploaded to your profile or emailed directly to **PSDrecruit@ornl.gov**. Please include the title of the position in the subject line.

WORK DIRECTION AND INTERFACES: Position reports to the Group Leader, Chemical Separations Group in the Chemical Sciences Division. Interface with administrative staff, managers and visitors to ORNL.

MEASURES OF EFFECTIVENESS: Extract from annual performance measures.

PHYSICAL SCIENCES DIRECTORATE POSITION DESCRIPTION

PURPOSE: The Chemical Separations Group in the Chemical Sciences Division (CSD) at Oak Ridge National Laboratory (ORNL) is seeking **a midcareer chemist** with a strong background in separations and radiochemistry to perform research in separations chemistry in a variety of projects ranging from fundamental research on novel molecular-recognition chemistry to applied efforts dealing with such problems as recovery of critical materials, recycle of used nuclear fuel, treatment of waste, and sensing of trace contaminants.

MAJOR DUTIES/RESPONSIBILITIES:

- **Work with a diverse team of scientists seeking both to advance scientific understanding of chemical recognition and separation phenomena, as well as to put this understanding to use in solving real world applications**
- **Design and perform hands-on separations experiments utilizing solvent extraction and ion exchange methods to meet project goals**
- **Responsible for operation of a radiochemical laboratory and training of staff in radiochemical methods**
- **Independently formulate research problems and design research strategies, and work with both computational chemists and experimentalists to guide the design of new receptors and characterize their separation properties**
- **Develop and lead new research directions and research proposals to compete for internal and external funding**
- Train group postdocs, students, and visiting scholars in separations methods and radiochemical methodologies developed in the group
- **Responsible for presenting and reporting research results and publishing scientific results in peer-reviewed journals in a timely manner**
- **Ensure compliance with environment, safety, health and quality program requirements**
- Maintain strong commitment to the implementation and perpetuation of values and ethics

QUALIFICATIONS REQUIRED:

- PhD in Chemistry or a closely related science discipline and more than five years of subsequent research experience involving separations chemistry and radiochemical methods
- Strong background in solvent extraction or ion exchange, dealing with actinides, lanthanides, or fission products
- A solid foundation in inorganic, physical, and analytical chemistry with a demonstrated working knowledge of thermodynamics and kinetics
- Strong record of productive and creative research demonstrated by publications in peer-reviewed journals and presentations at scientific conferences
- Demonstrated experience in proposal development and leading research projects
- Excellent interpersonal skills and oral and written communication skills in order to have effective interaction with technical peers, program managers, and sponsors
- Self-motivated, safety conscious, and capable of innovative, independent research resulting in peer-reviewed publications
- Ability to work collaboratively in a team environment and interact effectively with a broad range of colleagues

QUALIFICATIONS DESIRED:

- Expertise in coordination and supramolecular chemistry and various spectroscopic, including application of X-ray or neutron-scattering techniques for structural analysis

Three letters of reference are required and can be uploaded to your profile or emailed directly to **PSDrecruit@ornl.gov**. Please include the title of the position in the subject line.

WORK DIRECTION AND INTERFACES: Position reports to the Group Leader, Chemical Separations Group in the Chemical Sciences Division. Interface with administrative staff, managers and visitors to ORNL.

MEASURES OF EFFECTIVENESS: Extract from annual performance measures.

Scientific productivity as measured by peer-reviewed publications, reports, invention disclosures, and recognition by the community.

Contributes to proposal writing or may lead a small proposal effort.
Project performance mostly as contributor or co-PI, but may lead small projects or tasks.
ES&H compliance.
Community service such as reviewing journal articles or serving as an officer of a technical society.

The International Chemical Congress of Pacific Basin Societies
Honolulu, Hawaii, USA December 15 - 20, 2015

Call for Abstracts

Symposium # 42

Experimental and Theoretical Actinide Chemistry: From Fundamental Systems to Practical Applications

A broad range of research is needed for predicting the fate and controlling the behavior of actinides in the ecosystem, as well as for developing advanced applications. The actinides present opportunities, and challenges, to explore chemistry of heavy elements in which the 5f electrons can play a crucial role. This symposium will provide a forum for leading and emerging scientists in different branches of actinide chemistry, ranging from fundamental studies to new applications. Collaborations between experiment and theory enhance understanding of experimental results, and provide assessments of theory for heavy elements, which exhibit substantial correlation and relativistic effects. Also, bridging the gap between basic and applied actinide chemistry is crucial to incorporate the latest chemical insights and achieve the most effective solutions to problems. Diverse topics in inorganic and physical chemistry of the 5f actinide elements will be covered.
Confirmed speakers: R. Abergel; T. Albrecht-Schmitt; P. Arnold; J. Autschbach; P. Burns; A. Clark; W. de Jong; M. Denecke; D. Dixon; L. Gagliardi; Y. Haga; M. Heaven; Y. Ikeda; N. Kaltsoyannis; K. Konashi; W. Shi; D. Shuh; L. Soderholm; J. Su; S. Suzuki; S. Tsushima; V. Vallet; L.-S. Wang; S. Wang.

Abstract Submission: January 1 – April 3, 2015
http://www.pacifichem.org/congress-details/abstracts/

Symposium Organizers: John Gibson (LBNL, jkgibson@lbl.gov); Jun Li (Tsinghua U.); Georg Schreckenbach (U. Manitoba); Tsuyoshi Yaita (JAEA); Ping Yang (PNNL)

Symposium Celebrating the 50th Anniversary of the ACS Division of Nuclear Chemistry and Technology

The Division of Nuclear Chemistry and Technology (NUCL) was first established in 1957 as a subdivision of the Division of Industrial and Engineering Chemistry. In 1965 the ACS approved lifting the probationary status and created the new division. The NUCL Division held its first symposium, "Production Technology of Neptunium-237 and Plutonium-238" at a meeting in Denver, Colorado. It is fitting that we celebrate the 50th Anniversary of the Division at the 249th ACS National Meeting and Exposition in Denver, CO, March 22-26, 2015. The final schedule for the symposium includes two full days, Tuesday and Wednesday, with 47 oral presentations. Presently listed as a small ACS Division with only about 1,000 members and in a supposedly narrow field, NUCL's impact over the past fifty years has been remarkable. The 50th Anniversary Symposium will "Honor the Past, Celebrate the Present and Shape the Future." We look forward to a memorable and inspiring symposium and celebration.

Symposium Co-organizers:

David E. Hobart (LANL/FSU)
2015 NUCL Division Chair
dhobart15@gmail.com

Jenifer Braley (CSM)
2015 NUCL Division Program Chair
jenifer.braley@gmail.com

Dawn Shaughnessy (LLNL)
50th Co-organizer
shaughnessy2@llnl.gov

David Shuh (LBNL)
50th Co-organizer
dkshuh@lbl.gov

Thomas Albrecht Schmitt (FSU)
50th Co-organizer
talbrechtschmitt@gmail.com

Dominic Peterson (LANL)
50th Co-organizer
dominicp@lanl.gov

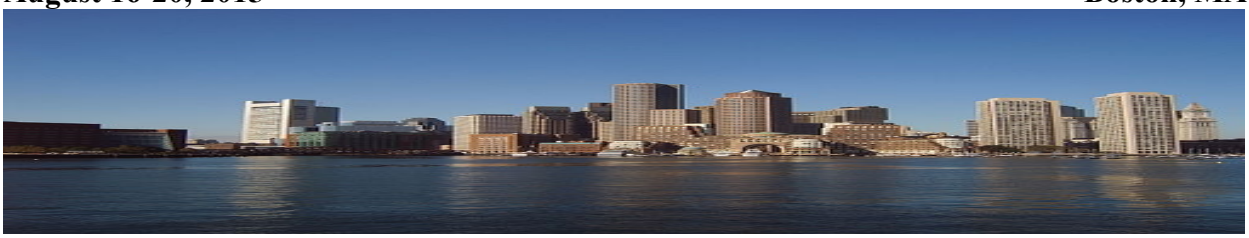
John Auxier II (UT-K/ORNL)
50th Co-organizer
jauxier@utk.edu

CALL FOR ABSTRACTS

Analytical Chemistry in Nuclear Technology Symposium

American Chemical Society National Meeting-Fall 2015

August 16-20, 2015 **Boston, MA**



Nature of the Symposium

***Analytical Chemistry in Nuclear Technology* is held under the auspices of the Division of Nuclear Chemistry & Technology. The symposium is intended to provide focused sessions on several analytical technologies related to radiological and other hazardous materials and processes. Previous symposia have drawn a diverse mix of papers from laboratories associated with the Department of Energy and other government agencies and from academic, international, and commercial institutions. Papers consisting of 20-minute oral presentations on research, development, and/or interesting applications are solicited in all aspects of analytical chemistry related to the focused session topics. Please contact one of the session or general organizers for more information if needed.**

Deadline for Abstracts

150-word abstracts describing the paper will be due **March 16, 2015.** Please consult the ACS web page ACS.org/Meetings/Fall 2015 for instructions on submitting abstracts electronically via the web starting January 19, 2015. The Symposium is listed within the technical program of the Division of Nuclear Chemistry and Technology.

Focused Sessions

- **Developments in Radiochemistry and Nuclear Counting Techniques -**Co-organizers: **Dominic Peterson**, dominicp@lanl.gov, (505) 665-3320**,** Los Alamos National Laboratory, **David DiPrete**, david.diprete@srnl.doe.gov, (803) 725-8045, Savannah River National Laboratory.

- **Applications of Analytical Chemistry in Nuclear Forensics-**Co-organizers: **Joe Giaquinto**, giaquintojm@ornl.gov, (865) 574-4886 ,Oak Ridge National Laboratory; **Cole Hexel,** hexelcr@ornl.gov, (865) 574-2449, Oak Ridge National Laboratory; **John D. Auxier II**, jdauxier2@yahoo.com, (303) 514-6515, University of Tennessee, Knoxville/Oak Ridge National Laboratory; **Jon M. Schwantes**, Jon.Schwantes@pnnl.gov, (509) 375-7378, Pacific Northwest National Laboratory.

- **Advances in Nuclear Magnetic Resonance Methods Applied to Nuclear Materials** - Organizer: Herman Cho, HM.Cho@pnnl.gov, (509) 372-6046, Pacific Northwest National Laboratory.

- **Novel Sensors for Use in Radiological and Harsh Environments**-Co-organizers: **Sam Bryan**, sam.bryan@pnnl.gov, (509) 376-6949**; Zheming Wang**, zheming.wang@pnnl.gov, (509) 371-6349, Pacific Northwest National Laboratory; **Robert Lascola**, Robert.Lascola@SRNL.doe.gov**,** (803) 507-6320, Savannah River National Laboratory.

General Organizers

Chuck Coleman, Charles02.Coleman@srnl.doe.gov, (803) 725-1160, SRNL; **David Hobbs**, David.Hobbs@srnl.doe.gov, (803) 725-2838, SRNL; **Herman Cho**, PNNL, HM.Cho@pnnl.gov, (509) 372-6046, PNNL; **Dominic Peterson**, dominicp@lanl.gov, (505) 665-3320, LANL.