IRD & BMD Summer Newsletter

Welcome to the combined Newsletter of the Isotopes and Radiation Division and Biology and Medicine Division of the American Nuclear Society! The following pages provide an overview of upcoming activities and other areas of potential interest to members of both Divisions. We also are working to update the website. Your feedback is greatly appreciated. Please contact Jung Rim (jrim@lanl.gov) and Jim Bowen (james.bowen@pnnl.gov) with any questions or comments.

We hope you find the information useful and we encourage you to get involved. There are many opportunities for involvement including the executive committees, developing ANS position papers, review of papers for the national meetings, and participation at national meetings by giving papers or helping to organize technical sessions.

INSIDE THIS ISSUE

IRD and BMD Executive Committee

IRD

Chair: Igor Jovanovic
Vice Chair: Sam Glover
Secretary: Kimberly A. Burns
Treasurer: R. Gregory Downing

Executive Committee Members:

Kimberly A. Burns
L. Raymond Cao
Gregory Downing
Sam Glover
Derek A. Haas
Michael D. Heibel
Brenden J. Heidrich
Lin-Wen Hu
Igor Jovanovic
Stephen P. LaMont
Hyoung K. Lee
Donna O'Kelly
Jung Rim
Robert E. Steiner
Bryan E. Tomlin
Danyal J Turkoglu
Kenan Ünlü

Staff Liaison: Valerie A Vasilievas
Board Liaison: Dorothy R. Davidson
Ex Officio:
Hyoung K. Lee

BMD

Chair: Gregory Downing
Vice Chair: Stephen P. LaMont
Secretary/Treasurer : Bryan P. Bednarz

Executive Committee Members:

Bryan P. Bednarz
Steven R. Biegalski
James M. Bowen
Gregory Downing
Elisabete De Nadai Fernandes
Stephen P. LaMont
Matthew Millie
Robert F. Penn
Robert E. Steiner
George Steinhauser
Rui Zhang

Staff Liaison: Valerie Vasilievas
Board Liaison: Eleodor Nichita
Ex Officio:
Sam Glover
Hans D. Gougar

Isotopes & Radiation Division
Igor Jovanovic
ijov@umich.edu
(734) 647-4989

DIVISION SNAPSHOT

- 846 members
- 180 early career
- 8% of the total ANS membership

ISOTOPES & RADIATION DIVISION CHAIR MESSAGE

I am delighted to serve the Isotopes and Radiation Division as its new Chair. Through my involvement with the Division in several functions over the past years I have developed a considerable appreciation for the value of its mission and for its pivotal role in the organization and activities of the American Nuclear Society.

The IRD membership remains stable and strong at 846 members, out of which 130 are in the early stages of their career (students or recent graduates). IRD constitutes approximately 8% of the ANS membership. I would like to recognize the recent efforts of my predecessors that contributed to our strong standing.

Our Division's current efforts coincide with a precarious period for the field of nuclear science and engineering. We are witnessing a diminished enthusiasm for large-scale adoption of nuclear power despite its proven record and potential, especially in this tumultuous time in which we seek to tackle the issue of human effect on global climate. Even in this challenging present environment, the importance of the activities at the core of IRD's mission remains indisputable. There is an lasting need to provide a stable, secure, and economical source of radionuclides for diverse applications such as medicine, industry, security, and fundamental research. Our modern societies demand continued innovations in nuclear analytical techniques, radiochemistry, and radiation measurements.

Recently we received another recognition of the central role of the IRD's mission and technical focus, when two issues we identified and submitted for consideration to the entire ANS constituency were adopted in the list of nine ANS Nuclear Grand Challenges. They include establishing the scientific basis for modern low-dose regulation and ensuring continuous availability of radioisotopes. With 11 subcommittees that were recently established to supplant the efforts of the Program Committee, we are offering an immediate opportunity to our members to get involved in shaping our Division's technical future. I would also like to recognize our Executive Committee member Kim Burns for serving as a liason to the Standards Board, where we seek a greater involvement in defining future technical standards in our field.

"There is an lasting need to provide a stable, secure, and economical source of radionuclides for diverse applications such as medicine, industry, security, and fundamental research. "

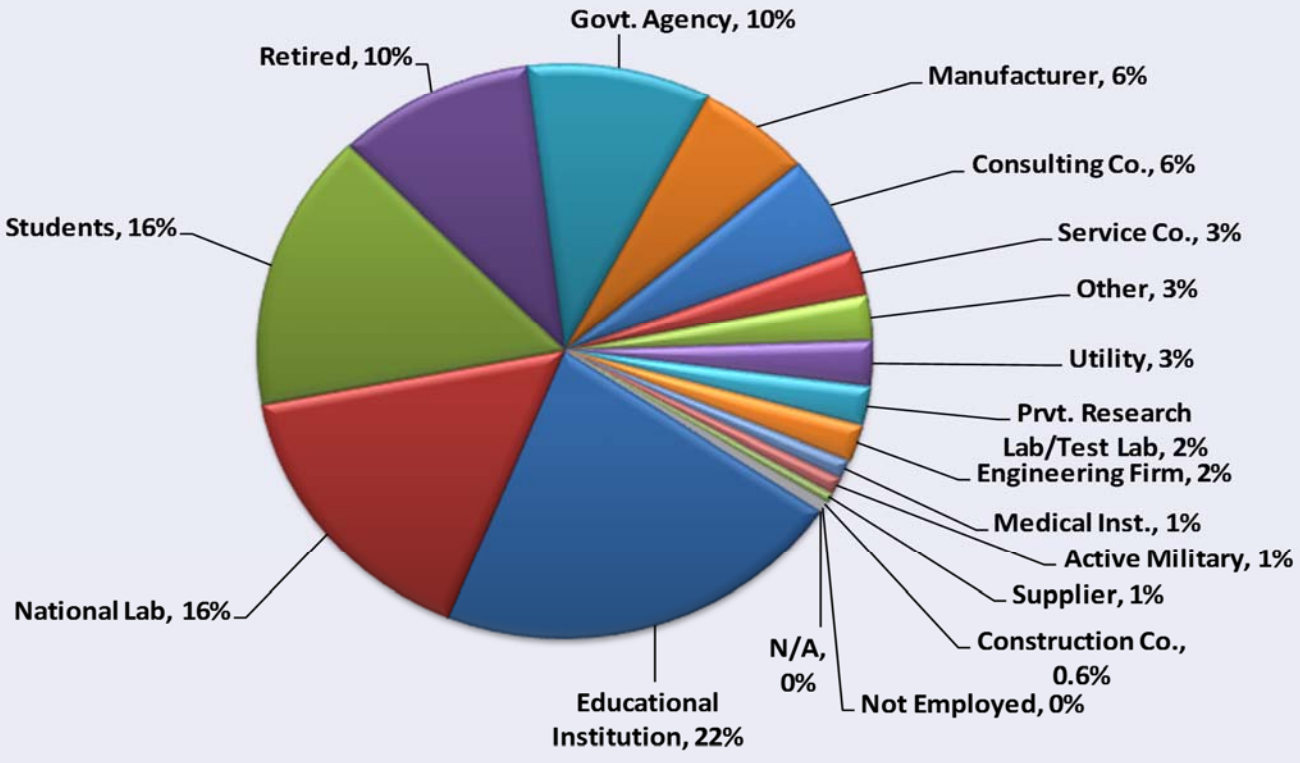
We continue to recognize our outstanding members, with special focus on our student and early career members. I would like to take this opportunity to recognize the Vogt Radiochemistry Scholarship award winner Hayden Daugherty and invite suggestions for our Radiation Sciences & Technology Award. We have also been working to establish a regular IRD student travel award, which will further help to stimulate student involvement. Especially relevant to our student members, we consistently support the annual ANS Student Meeting, the next one taking place at the University of Florida.

The upcoming year will be busy with technical meetings that our Division organizes or co-sponsors. In addition to the regular ANS Winter and Annual meetings that will take place in Washington, DC and Philadelphia, PA, respectively, there are two major topical meeting highlights: the 9th International Conference on Isotopes, ICI-9, to be held in Doha, Qatar in 2017, and the International Conference on Methods and Applications of Radioanalytical Chemistry (MARC), to be held in Kailua-Kona, Hawaii in 2018. In addition to our exisiting close relationship with the Biology and Medicine Division, we have significantly increased our technical interactions with the Nuclear Nonproliferation Policy Division and the Fuel Cycle and Waste Management Division in the areas of common technical focus.

I would like to close by thanking all IRD members for their continued efforts in supporting our mission. Simultaneously, I would like to emphasize the numerous opportunities we offer to our young members and invite them to contact me at ijov@umich.edu if they need more information on how to get involved. The future success and continued high relevance of our Division's activities especially depend on the fresh perspective and leadership of our young members. I challenge the entire Division's constituency to take all opportunities to impart this spirit of openness to new members and their new ideas, which will help to keep our pace in technical innovation to the benefit of IRD and entire ANS.

Sincerely yours,

Igor Jovanovic



2017 Election Results

Igor Jovanovic
Chair
Professor of Nuclear Engineering and Radiological Sciences, University of Michigan

Samuel E. Glover
Vice Chair
Chief, Biomonitoring and Health Assessment Branch, Research Health Scientist, National Institute for Occupational Safety and Health

Kimberly A. Burns Secretary

Technical Team Lead, Nuclear Safety and Analysis Team at Pacific Northwest National Laboratory

Robert Gregory Downing
Treasurer

Research Chemist, National Institute of Standards and Technology (NIST)

Lei R. Cao
Executive Committee

Associate Professor, Nuclear Engineering Program, The Ohio State University

Derek Anderson Haas
Executive Committee
Assistant Professor, University of Texas at Austin

Lin-wen Hu
Executive Committee

Director for Research and Services/Principal Research Scientist, MIT Nuclear Reactor Laboratory

Robert E. Steiner
Executive Committee

Clean Chemistry Team Leader, Nuclear & Radiochemistry Group, Los Alamos National Laboratory

BIOLOGY & MEDICINE DIVISION CHAIR MESSAGE

Thanks to the 2016-2017 officers, the board, and the membership as well as the previous leaders in the division for their contributions in support of the Biology and Medicine Division. The time and effort they have given in supporting not only the ANS but the broadening of our field of expertise and education of the public is much appreciated.

To put the BMD's constituency in perspective, radiation has long played an important role in supporting the field of health and biological research for public good. Radiation diagnostics and treatments are so integrated into our daily lives that it is expected to be available as much as electricity and safe food sources. Likewise, radiation is integral to biological research, including mapping chemical pathways in biological functionality, nutrition, toxicology, and establishing analytical standards to name just a few areas. The future role of radiation in supporting our wellbeing and for understanding of the biological world remains strong. All the newly published literature in our respective fields is almost overwhelming. The challenge is great for those who teach. The next generation of medical and biological researchers and future radiation practitioners require more than traditional historical highlights and BMD serves a role in disseminating new research and applications. Furthermore, our sessions and scientific meetings connect us.

Greg Downing
Biology & Medicine Division
downing@nist.gov
301-975-3782

"It is an exciting time to be involve in BMD, and there is much to be done. So I encourage you to get involved."

Now, perhaps more than in the recent past, the Biology and Medicine Division is being called upon for support by the ANS at large. During the last ANS National Meeting, held in San Francisco, Andy Klein, the ANS president, rolled out 9 Grand Challenges. Two of those challenges are closely tied to BMD: (1) Establish the scientific basis for modern low-dose radiation regulation, and (2) Ensure the continuous availability of radioisotopes. In fact, to support the first Grand Challenge, BMD is specifically called upon to update ANS Position Statement 41, "Health Effects of Low Level Radiation" that we submitted some years ago. In the same theme, we organized a session in the Winter ANS meeting entitled, "Radiation Therapy, Standards, and Effects."

As you can see, it is an exciting time to be involve in BMD, and there is much to be done. So I encourage you to get involved. BMD supports and encourages involvement by students and young professional. And we need involvement of our scientists, managers, and staff from industry, academia, government agency, as well as retired professionals. Talk to us and each other about how to get involved. Do not hesitate to contact BMD officers or any of the board. I hope you find the information in this newsletter useful and look forward to hearing from you soon and seeing you.

Best wishes for an exciting year,
Greg Downing, Chair.

DIVISION SNAPSHOT

- 422 members
- 102 student members

The process of seeking the 2018-2019 officers and board members has begun. As outgoing division chair, Sam Glover assumes the roll of chair for our nomination committee and will be looking for committee members and potential officer and board nominees.

ANS has rolled out 9 Grand Challenges to the membership. I encourage you to take a few minutes of time to review them at http://www.ans.org/challenges/ Especially those related to BMD mission.

The ANS Position Statements can be found here: http://www.ans.org/pi/ps/

Specifically, BMD's has the primary role for:

PS 28: Food Irradiation

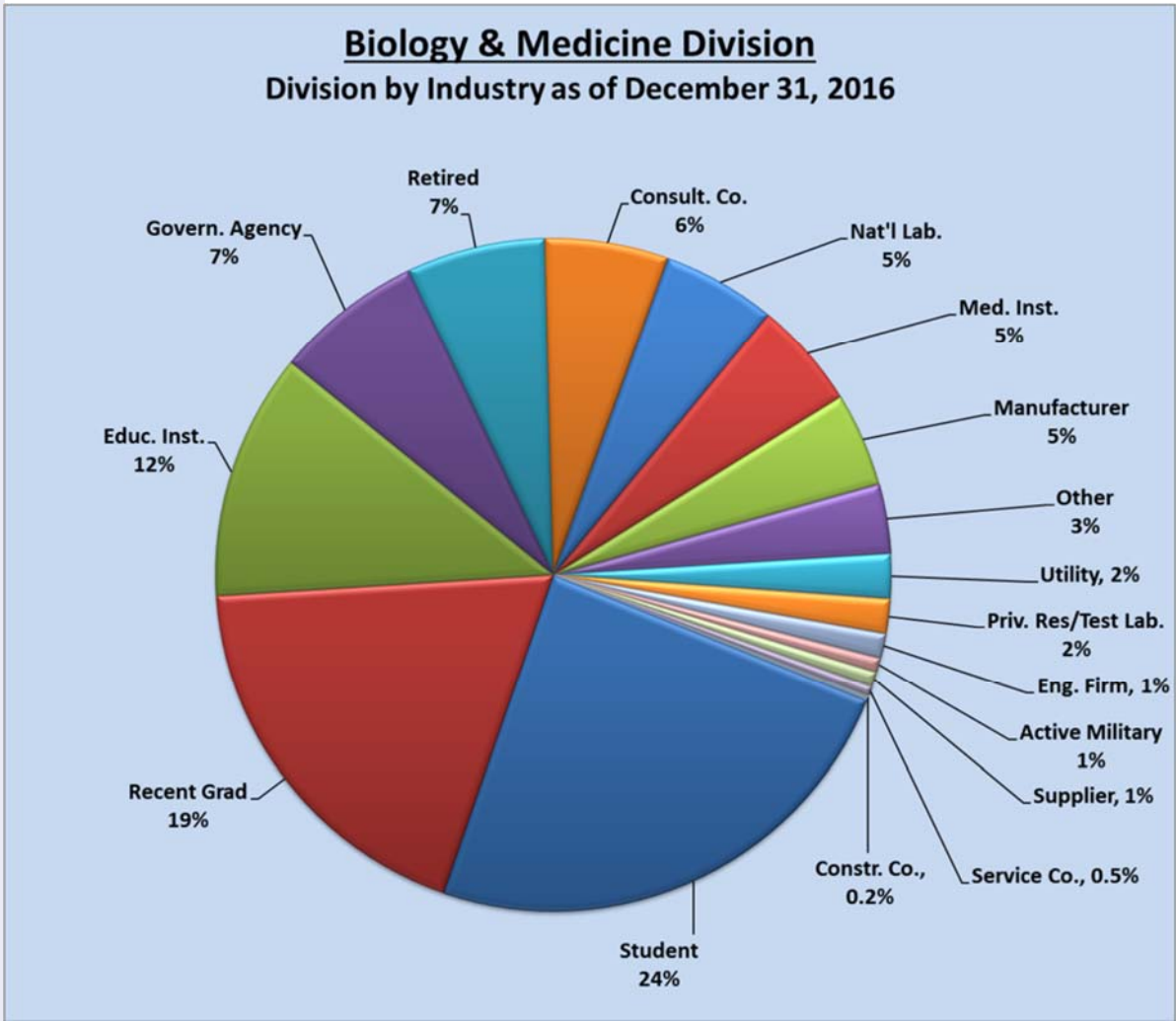
PS 30: US Radioisotope Supply

PS 41: Health Effects of Low Level Radiation

PS 72: Use of HEU for the Production of Medical Isotopes

The ANS Position Statement 41 is due for an update

- Position statement: http://cdn.ans.org/pi/ps/docs/ps41.pdf
- Background Information: http://cdn.ans.org/pi/ps/docs/ps41-bi.pdf
- Technical Brief: http://cdn.ans.org/pi/ps/docs/ps41-tb.pdf



2017 Election Results

Robert Gregory Downing, Chair

Research Chemist, National Institute of Standards and Technology (NIST)

Stephen P. LaMont, Vice Chair

Project Leader for Treaty Monitoring and Nuclear Forensics, Los Alamos National Laboratory

Bryan P. Bednarz, Secretary/ Treasurer

Assistant Professor, Department of Medical Physics, University of Wisconsin

James M. Bowen Executive Committee

Scientist, Pacific Northwest National Laboratory

Robert E. Steiner Executive Committee

Clean Chemistry Team Leader, Nuclear & Radiochemistry Group, Los Alamos National Laboratory

DOHA 2017
9ICI قطر
9th international conference on isotopes & expo Doha 2017

9 ICI Host Organization Contacts:

Prof. Ilham Al-Qaradawi, PhD, FInstP, CPhys Professor of Physics, Qatar University President, Qatar Physics Society

Ilham@9ici.org

Registration Information:

Conference Manager Mr. Alexander Sommerauer, fischerAppelt Marketing

alexander.sommerauer@9ici.org

General information:

Conference Secretary Amany El-Saeed
amany@qatarphysics.org

info@9ici.org

The ICI conferences are organized by the World Council on Isotopes (WCI) and a participating organization to highlight the importance of nuclear science, medicine, and isotope technology in advancing human health and protection of the environment. The first ICI conference was in 1995 in Beijing, China and have since been held on nearly every major continent—in Sydney, Australia; Vancouver, Canada; Cape Town, South Africa; Brussels, Belgium; Seoul, Korea; Moscow, Russia, and Chicago, United States.

In November 2017, the ICI will be held in Doha, Qatar and is being organized by the Qatar Physics Society. It is the first time the ICI has been held in the Middle East, an area with a rapidly growing nuclear power industry and need for medical and industrial isotopes.

November 12-16, 2017

The Marriott Marquis City Center Doha Hotel

Conference Topics:

- Policy, Economics, and Global Impact of Isotope Production and Use
- Design, Construction, Operation and Decommissioning of Production Facilities
- Security of Supply, Safety, and Transportation
- Quality Assurance and Quality Control
- Isotope Research and Applications
- Isotope Production and Devices
- Isotopes in the Environment

MARC XI-METHODS AND APPLICATIONS OF RADIOANALYTICAL CHEMISTRY

The Biology and Medicine Division along with the Isotopes and Radiation Division and Northern California section of the ANS will host the 11th International Conference on Methods and Applications of Radioanalytical Chemistry (MARC XI) April 8 – 13, 2018 at the Sheraton in Kailua - Kona, HI. MARC has grown into the premier international conference on radioanalytical chemistry, drawing scientists and students from about 30 countries. The technical program covers a diverse set of topics from fundamental research in radiometric and mass spectrometry measurements of radionuclides, to applications of these techniques to environmental studies, nonproliferation, safeguards, nuclear forensics, nuclear chemistry and isotope production. It is anticipated about 400 scientists, engineers, and students will present an estimated 300 oral presentations and 200 posters. Approximately 200 of the best papers will be published in the peer reviewed Journal of Radioanalytical and Nuclear Chemistry in early 2019.

The organizers are also very pleased to announce that the MARC conference will again host the presentation of the 2018 Hevesy Medal Award. Additional details of the conference and proceedings may be found at the conference website: http://www.marcconference.org.

The MARC Conference organizing committee would like to thank in advance the session organizers, presenters, and attendees who contribute to MARC IX. It is their hard work that has resulted in the 30 year successful history of the MARC Conference series.

Please contact the Program Chair, Sam Glover (sam.glover@uc.edu) or Conference Chair, Steve LaMont (lamont@lanl.gov) with any questions regarding the MARC XI conference.

Mahalo,

MARC X Organizing Committee

MARC XI
METHODS & APPLICATIONS OF RADIOANALYTICAL CHEMISTRY
KAILUA-KONA, HAWAII, USA • APRIL 8-13, 2018

Contact Information
General Chair:
Steve LaMont
lamont@lanl.gov

Program Chair:
Sam Glover
sam.glover@uc.edu

Abstracts are due December 15, 2017
(www.marcconference.org)

The deadline for receipt of nominations is August 1st.

Application

VOGT RADIOCHEMISTRY SCHOLARSHIP

Description

The Radiation Science and Technology Award consists of a plaque and a monetary award of $2,000. The award is normally presented during the Winter National Meeting of ANS to the nominee who is judged to have made the most outstanding creative application of radiation sciences and engineering principles.

Background

This award was established in 1967 to recognize meritorious research or basic development from which there is particularly significant industrial application. The work may have been performed at any time in the past; it must have been fully published in an established scientific journal, and the results of the efforts must have been practically established although not necessarily in widespread use at the time the award is given.

Selection Method

Nominations for candidates for the award are invited by announcement in ANS News and by mail to the ANS Board of Directors, various ANS Division and Committee Chairs, and other appropriate individuals. Nominees need not be ANS members, and any ANS member can nominate a worthy candidate.

The Honors and Awards Committee of the Isotope and Radiation Division administers this award. That committee establishes the selection criteria and selects the recipient. It is anticipated that the number of individual recipients each year should be one, but special circumstances and considerations may result in no award or more than one. The National Honors and Awards Committee is available for consultation and support as appropriate.

How to apply:

Nominations must include the completed nomination form accompanied by the following supporting documents:

- A letter of recommendation
- A narrative summary of about 1,000 words, including accomplishments, period of activity, and significance of achievements
- A list of publications
- A brief chronological resume
- Letters of support (support letters recommended but not required, no more than five)

GEORGE HEVESY MEDAL AWARD 2017

Professor RNDr. Pavel P. POVINEC

The Hevesy Medal Award Selection Panel 2017 (HMASP-17) is pleased to announce that **Professor RNDr. Pavel P. POVINEC, DrSc.** (povinec@fmph.uniba.sk) of the Faculty of Mathematics, Physics and Informatics, Comenius University, Bratislava, Slovakia, has been selected to receive the Hevesy Medal Award 2017 (HMA-17) in recognition of his work in the development of ultra-sensitive radioanalytical technologies and their applications in large-scale environmental research studies, investigation of rare nuclear processes, and development of high-sensitivity accelerator technologies for isotope analysis.

The Hevesy Medal and a Scroll will be presented to Professor POVINEC at the 6th Asia -Pacific Symposium on Radiochemistry (APSORC 17) to be held in Jeju Island, Korea during 2017 September 17-22.

The HMASP-17 consisted of Professor Amares CHATT (Canada, also Chair of JRNC Board of the Hevesy Award and Chair of HMASP-17), Professor Tibor BRAUN (JRNC Board of the Hevesy Award), Professor Zhifang CHAI (China), Professor Yong Hee CHUNG (Korea, also representing APSORC 17), Professor Sue CLARK (U.S.A.), Dr. Yuichiro NAGAME (Japan), Professor Syed QAIM (Germany), Dr. Zsolt RÉVAY (Germany, also JRNC Board of the Hevesy Award), and Dr. Rolf ZEISLER (U.S.A.). In accordance with the rules of the Award, a secret vote was conducted.

The George Hevesy Medal Award is the premier international award of excellence in radioanalytical and nuclear chemistry. It is named after George de HEVESY (1885-1966) who received the Nobel Prize for Chemistry in 1943 for his work on the use of isotopes as tracers in the study of chemical processes. The George Hevesy Medal is awarded to an individual in recognition of excellence through outstanding, sustained career achievements in the fields of pure as well as applied nuclear and radiochemistry, in particular applications to nuclear analytical chemistry. Established originally in 1968 by Professor Tibor BRAUN, Editor-in-Chief of the Journal of Radioanalytical and Nuclear Chemistry (JRNC), the Hevesy Medal Award was given 19 times during 1968-86. This Award was reactivated in 2000 by Professors BRAUN and CHATT. It is sponsored by JRNC, administered as well as adjudicated by the JRNC Board of the Hevesy Award. The Award has no monetary value. The George Hevesy Medal Award comprises an engraved bronze medal in a presentation case and an ornamental scroll, which are presented at a major international radiochemical conference being held in the year of the award.

George Hevesy Medal Award 2018: call for nomination: https://link.springer.com/content/pdf/10.1007%2Fs10967-017-5280-4.pdf

ANS Winter Meeting & Nuclear Technology Expo

October 29—November 2, 2017

Washington, D.C.

Marriott Wardman Park

http://answinter.org

Division Sponsored Technical Sessions

ISOTOPES AND RADIATION (IRD)

Advancements in Radiation Measurement and Imaging Technology

Production and Applications of Isotopes and Radiation

BIOLOGY AND MEDICINE (BMD)

Radiation Therapy, Standards, and Effects

Embedded Topical Meeting:

Embedded Topical 2017 Young Professionals Congress - October 28, 2017

DIVISION VOLUNTEER OPPORTUNITIES

Division Program Committee Chair: The National Program Committee is responsible for the general character of all technical meetings of which the Society is the sponsor or a major co-sponsor, shall solicit and receive technical papers, approve special technical sessions or discussions, and establish standards, schedules, and procedures for selection and presentation at these meetings. A member and an alternate to represent each Professional Division and Technical Group shall be designated by the respective Division or Group Chair for a term not exceeding three (3) years. The member should be the Division or Group Program Committee Chair, while the alternate should be the chair-elect of the Division or Group Program Committee. The alternate shall vote only in the absence of the respective Division or Group Member.

Division Honors and Awards Chair: The Honors and Awards Chair shall administer a program for advancement of qualified candidates in our division to Fellow grade, encourage and assist individuals and groups undertaking to sponsor candidates, and supervise the preparation of diplomas for presentation. The Chair shall also be responsible for establishing and granting other awards described in the procedures in recognition of accomplishments within the field of nuclear science or engineering, or allied fields, and of meritorious service to the Society.

Please contact Robert Gregory Downing or Igor Jovanovic for more information

downing@nist.gov

301-975-3782

ijov@umich.edu

(734) 647-4989

American Nuclear Society Student Conference 2018

The 2018 American Nuclear Society Student Conference

Being a Critical Member of the Nuclear Industry

University of Florida

March 5—April 7, 2018

J. Wayne Reitz Union

Gainesville, FL

The ANS Student Conference is an annual event where hundreds of students within nuclear science and technology gather to present research, network, and participate in dozens of other activities relevant to the field. The 2018 ANS Student Conference will be held from April 5-7 of 2018 within the newly renovated J. Wayne Reitz Union located on the University of Florida's Gainesville campus.

The theme of the 2018 Student Conference is "Nuclear Equality in Policy, Energy Access, & Within the Engineering Community". In addition to several technical activities and presentation of research, attendees will also have the unique opportunity of participating in a variety of workshops, panels, and special events that center around equality in energy policy, equal energy access, and being a successful engineer in an increasingly diverse nuclear community.(η) nuclear opportunities

Each of these factors will be realized through many series of technical sessions, hand-on workshops, panels, and dinners that individually target one of the four factors.

For more information please visit http://www.ansstudentconference2018.com

General questions: chair@ansstudentconference2018.com

Mailing address: 3A Nuclear Field Building Gainesville, FL 32611

Phone: 386-785-3726