



The Neutrino

American Nuclear Society - Savannah River Section
Newsletter - July 2011

<http://www.ans-sr.org> and <http://local.ans.org/savriv/>

2011 – 2012 ANS-SR Leadership

Executive Committee (EC)

EC Section Officers:

Chair

Amanda Bryson, MOX Services

Vice-Chair

James Bazley, MOX Services/SRNS

Treasurer

Sid Keener, URS

Secretary

Tinh Tran, SMS

Additional EC Members:

Education Outreach Chair

Bob Eble, MOX Services

Publications Chair

Jay Bilyeu, Retired DOE/SR

Programs Chair

John Dewes, SRNS

Scholarship Chair

Stephanie Zejewski, MOX Services

At Large Member

Phil Cupp, Southern Company

Past Section Chair

Bill Wabbersen, SRNS

Other Committee Chairs

Arrangements Chair

Brian Lenz, MOX Services

Membership Chair

Open Position

Topical Chair

Open Position (see page 3)

Retiree Liaison Chair

Open Position

Administrative Assistant

Diane Shelton, Retired SRS

ans.savannahriver@gmail.com

MESSAGES FROM THE CHAIRS

Past Chair Bill Wabbersen:

This issue of the Neutrino serves two purposes. First, it is a celebration of the good work from last year. Second, it welcomes the potential for an even better year ahead. I was very lucky to have been the chair for the 2010-2011 term. Jim Bazley, the Chair for 2009-2010, set the stage wonderfully. Amanda Bryson, the incoming Chair, supported me in every aspect this year and has already hit the ground running for the upcoming year. She has a good plan and it will be fun to support her as she takes our entire section in new directions. I'll try and give a short list of the things I'm most proud of this past year. My heart always points to our amazing outreach program first. Bob Eble led a diverse group of ANS members in reaching well over 6,000 students, teachers and adults during the year. Our longstanding tradition of outreach served us well in the Savannah River area in the aftermath of the Fukushima tsunami. People in our region were open to healthy dialog. Our technical programs were also as strong as ever and we enjoyed great speakers all year. We acknowledged our history with the neutrino celebration and 25-year member awards, and we embraced the future with a meeting at Plant Vogtle's construction site and the relocation of the Interactive Nucleus. I am also happy to say that we were selected to co-host the 2013 Probabilistic Safety Analysis (PSA) topical in Columbia. It was a busy year in which we all pulled together. Let's all pull a little harder for Amanda. She deserves our best. Thank you all so much for a great year. *Bill Wabbersen*

Current Chair Amanda Bryson:

I am very honored and excited to be taking up the position of Executive Committee Chair of ANS-SR for the 2011-2012 year. I would like to reiterate Bill's statement that we had a great 2010-2011 year.

... continued on page 2

The American
Nuclear Society –
Savannah River
Section covers 46
counties in Georgia
and South Carolina.



MESSAGES FROM THE CHAIRS (continued)

In addition to the highlights Bill mentions, we increased membership in our section by over 10 percent, presented 15 scholarships to area high school students, and worked in cooperation with other local professional societies on technical meetings and special events.

These could be viewed as things that should and do happen every year, but that doesn't make them less valuable. It makes them more valuable.

A steady heartbeat makes the body run, and the steady presence of ANS-SR's Outreach program made ANS-SR a trusted resource following the post-earthquake events at Fukushima. In the same way, the steady activity of all our membership establishes ANS-SR as a gathering place for professionals in the nuclear industry and a way for its members to give back to the community as a whole. Thank you for being part of that.

In 2011-2012, we will have the opportunity to build on last year's successes. We will continue to seek out interesting technical programs for dinner meetings. We will continue to collaborate with other professional societies to provide a broader view of what is going on in the CSRA and how we can be part of those initiatives. We will continue to be active in classrooms, science fairs, career fairs, and other venues through our Outreach program.

In addition, we are exploring ways to be more involved with college students and recent graduates. We will add new breadth to meeting topics. Finally, and importantly, we will develop our involvement with the Columbia Section in support of the PSA 2013 topical meeting.

Please consider how you will make ANS-SR part of your year in 2011-2012. Your involvement could be through attendance at dinner meetings, participation in Outreach events, sharing in the preparation for the PSA 2013 topical meeting (please see page 3), offering up fresh ideas on meeting topics, or connecting with new or retired membership. Every member's participation is needed to make ANS-SR a success. Again, thank you for your interest so far, and thank you in advance for making 2011-2012 a great year. *Amanda Bryson*

Event Calendar

CSRA College Night

Thursday, September 8, 2011
James Brown Arena (*see page 3*)

S.E.E.D.

October 15, 2011
University of South Carolina-Aiken
(in cooperation with the Health Physics Society)

Dinner Meeting

October 06 (tentative), 2011
“Trinity and Beyond' Movie Night at
Aiken Brewing Company”

CNTA Teller Lecture

TBD
Doubletree Hotel, Augusta GA

Annual ANS Wine and Food Tasting

TBD, 2011
North Augusta Community Center
(in cooperation with the Health Physics Society)

“Four short words sum up what has lifted most successful individuals above the crowd: a little bit more. They did all that was expected of them, and a little bit more.” *A. Lou Vickery*

“The secret of getting ahead is getting started. The secret of getting started is breaking your complex overwhelming tasks into small manageable tasks, and then start on the first one.” *Mark Twain*

ANS-SR Co-Sponsoring a 2013 Topical – Planning Starts Now!

ANS-SR, in partnership with the ANS Columbia Section, was selected to host the September 2013 Probabilistic Safety Analysis (PSA) Topical. The Columbia Section is taking the leadership role and the topical will be held in Columbia, South Carolina. The Columbia Section has recent experience in hosting topicals and ANS-SR is using this opportunity to re-gain our proficiency in hosting large national meetings.

The ANS Nuclear Installations Safety Division (NISD) partners with local chapters to sponsor the PSA Topical Meeting. Overseas nuclear societies are often cosponsors as well. The first PSA Topical was held in California in 1978, and had about 325 attendees and 100 papers presented. Detailed information on PSA 2011, which was held in Wilmington, North Carolina, is available at <http://meetingsandconferences.com/psa2011/>.

Openings are available for interested volunteers to support this important and prominent initiative. Planning for the topical began in February 2011. Please contact ans.savannahriver@gmail.com or contact Amanda Bryson at (803) 819-2913 or abryson@moxproject.com to join the volunteers supporting these exciting events!



ANS-SR joins ANS National in recognizing the following local section members for **25 Years of Continuous Membership** :

- Anatia Whittenburg
- Jolene Seitz
- Dr. Raymond Sigg

CSRA COLLEGE NIGHT - Thursday, September 8, 2011
James Brown Arena, 5:00 – 8:30 p.m.

CSRA College Night provides an opportunity for students, parents and guidance counselors to learn about college and university educational opportunities. The program is a cooperative effort involving DOE, Savannah River Nuclear Solutions, LLC and its partners, local private schools, businesses and industry, local government, and professional societies. Over a dozen professional societies, including ANS-SR, participate and contribute to the scholarship fund and help provide career information. In past years approximately 8,000 students, parents and educators have attended this event.

If you can join the ANS-SR volunteer team at this event contact Bob Eble, Outreach Chair, at RGEble@moxproject.com

JOIN ANS-SR on Facebook, Twitter and YouTube

FACEBOOK: <http://www.facebook.com/pages/ANS-SavannahRiver/143771258995015>

TWITTER: http://www.twitter.com/ANS_SR (note the underline between ANS and SR)

YouTube: <http://www.youtube.com/user/ANSSavannahRiver>

Questions? Contact James.Bazley@srs.gov

FEBRUARY TECHNICAL MEETING

T.A. KEYS - “TENNESSEE VALLEY AUTHORITY/SRS PROJECTS”

ANS-SR partnered with the CSRA Society of Women Engineers to co-host the monthly dinner meeting Thursday, February 17, 2011, at the Houndslake Country Club in Aiken, South Carolina.

The featured speaker was TA Keys, a nuclear engineer from the Tennessee Valley Authority (TVA). Mr. Keys is TVA’s Manager for Nuclear Fuel Supply, directing the procurement and effective utilization of enriched uranium for TVA reactors. He is also involved in discussions relative to TVA providing irradiation services to MOX Services for utilizing MOX fuel in the Browns Ferry and Sequoyah nuclear power generating facilities. Mr. Keys has over thirty years of nuclear engineering experience.



MARCH TECHNICAL MEETING

MICHAEL NAVETTA - “DOE ASSET REVIATLIZATION INITIATIVE FOR ENERGY PARK PROGRAMS”

ANS-SR held a monthly technical dinner meeting on March 24, 2011, at Ryan’s Restaurant in North Augusta, South Carolina. The featured speaker was Mike Navetta, Manager of Energy Park Initiatives for Savannah River Nuclear Solutions (SRNS), LLC. His responsibilities include conceptualizing and promoting, in conjunction with the community and private industry, energy parks which solve pressing national energy security problems while beneficially reusing surplus SRS assets and stimulating economic growth.



Mike has over 30 years of diverse R&D, design engineering, construction, operations, clean-up, and business development experience, including experience at numerous DOE sites. Prior to joining SRNS, he was Vice President of Construction Management Services for Hill International in Washington, DC.

Mr. Navetta holds a B.S in chemical engineering from Michigan Tech and an M.S. in industrial engineering from the University of Tennessee. He is a registered professional engineer in three states.

APRIL TECHNICAL MEETING

WILLIAM ELLIE DANIEL – “UPDATE ON PLANT VOGTLE”

ANS-SR partnered with the CSRA Section of the Association for the Advancement of Cost Engineering International (AACE-I) for a joint dinner meeting Thursday, April 28, at the North Augusta Community Center. The keynote speaker was William Ellie Daniel from Plant Vogtle.

Mr. Daniel is Plant Vogtle’s Communications Supervisor at the Vogtle Visitor Center, for Southern Nuclear Public Affairs. He has over 30 years experience in nuclear constructions and operations, with much of his career involving Plant Vogtle public affairs. Prior to working at Plant Vogtle, he worked at Plant Hatch near Baxley, Georgia, and Plant Scherer near Macon, Georgia. He is a graduate of Augusta State University with a Bachelors of Business Administration.



APRIL SOCIAL



ANS-SR also held a social hour get-together Wednesday, April 13, at the Hotel Aiken Polo Tavern, in downtown Aiken, South Carolina. The current Chair and future Chair (Bill Wabbersen and Amanda Bryson, respectively) were there to answer questions and gather input for the new term.

MAY TECHNICAL MEETING

DR. DAVID MOODY – “STATE OF THE SITE AND THE SRS VISION AHEAD”

ANS-SR partnered with the Citizens for Nuclear Technology Awareness (CNTA) for the technical dinner meeting held May 5, at Newberry Hall in Aiken, South Carolina. The featured speaker for the evening was Dr. David Moody, DOE-Savannah River Site Manager. Dr. Moody is both a local and national ANS member. He shared with the audience the "State of the Site and the SRS Vision Ahead."

Dr. David C. Moody was appointed Manager of the DOE Savannah River Operations Office in September 2010. In this role he is responsible for the site's Environmental Management mission, Savannah River National Laboratory, prime contractors and other integrated activities.

Dr. Moody has more than 35 years of experience in the fields of environmental science and nuclear chemistry. Before coming to SRS, he served as Manager of DOE's Carlsbad Field Office from December 2005 – September 2010, in which he led the national effort to optimize TRU waste disposition through directing the administration of the Waste Isolation Pilot Plant (WIPP) and the National Transuranic Waste Program. Under his leadership, WIPP obtained regulatory approval for the management and disposal of remote-handled TRU waste in 2007; received the U.S. Transport Council's transportation safety award for the WIPP transportation system; and completed legacy TRU waste cleanup at five TRU waste sites. Dr. Moody led American Recovery and Reinvestment efforts to accelerate TRU waste characterization in multiple states, and headed up regulatory efforts to renew the ten-year WIPP Hazardous Waste Facility Permit and WIPP compliance recertification from the Environmental Protection Agency.

In his early career, Dr. Moody served in several capacities at Los Alamos National Laboratory including Senior Technical Advisor to Rocky Flats for nuclear waste management and co-leader for the environmental restoration program at Rocky Flats.

Dr. Moody has a doctorate in Inorganic Chemistry from Indiana University and a Bachelor's degree in Chemistry from the University of South Carolina.



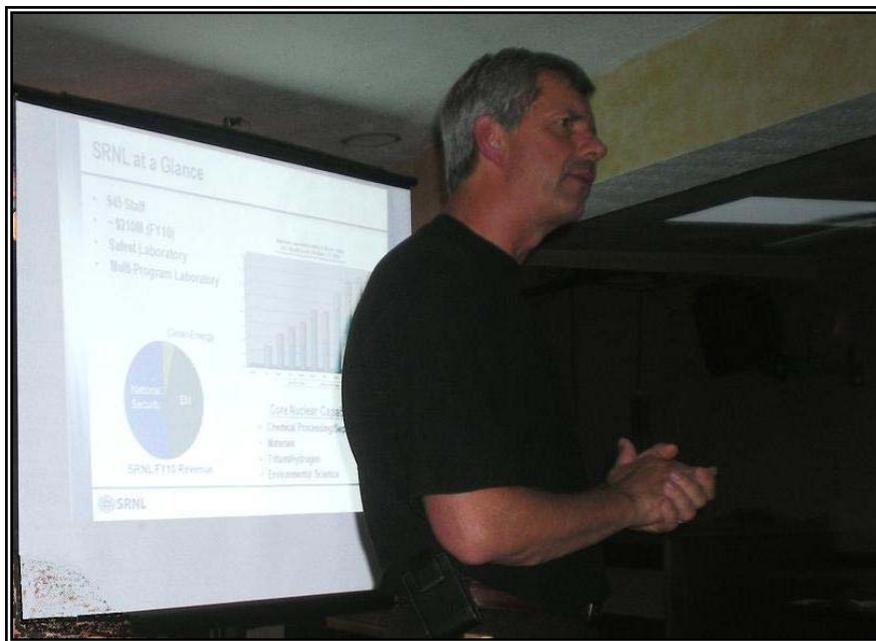
JUNE TECHNICAL MEETING

DR. TERRY A. MICHALSKE, DIRECTOR, SAVANNAH RIVER NATIONAL LABORATORY, “SRNL UPDATES”

ANS-SR held a monthly dinner meeting June 21, 2011, at the Mi Rancho Restaurant on Jefferson Davis Highway in South Carolina.

Dr. Terry A. Michalske is director of DOE’s Savannah River National Laboratory (SRNL), operated by Savannah River Nuclear Solutions (SRNS), LLC. In this position, he is responsible for the management, operations and planned growth of the laboratory. Currently, the laboratory has approximately 900 employees and conducts research and development (R&D) on a diversified portfolio of projects in the areas of Environmental Management, National Security and Energy Security.

Dr. Michalske has more than 30 years of experience in the fields of energy science, solar energy, nanotechnology and biomolecular analysis, principally for Sandia National Laboratories. Most recently at Sandia, he was the Director of Energy and Security Systems, focusing on energy science and technology, systems modeling and optimization, and vulnerability and consequence management for major DOE,



Department of Homeland Security and Department of Defense programs. Dr. Michalske held a number of key positions at Sandia including Director for Biological and Energy Sciences, Director for the DOE Combustion Research Facility, and founding Director of the DOE Center for Integrated Nanotechnologies.

Dr. Michalske has testified before the U.S. Senate and the state legislatures of California and New Mexico, serves as a Trustee of Alfred University, and served as

Chairman of the Board of Directors for the Joint BioEnergy Institute. He is a Fellow of the American Ceramic Society and of the American Vacuum Society.

Dr. Michalske has a Ph.D. in Ceramic Science from Alfred University. He holds seven patents, has authored 90 journal publications, and has been a collaborator on several books. He is a member of several technical societies, panels, and advisory boards and has chaired numerous technical workshops and symposia. His research awards include the Orton Lecture Award; an R&D 100 award (Interfacial Force Microscope); the Woldemar A. Weyl International Glass Science Award from the International Congress on Glass; and the Ross Coffin Purdy Award from the American Ceramic Society. He is also a two-time winner of the DOE/BES Materials Science Award for Outstanding Technological Accomplishment.

OUTREACH HIGHLIGHTS

ANS-SR continued its highly active and vibrant outreach program during the first half of 2011. Here are some highlights:

Future City. ANS-SR continued its support of the annual Future City competition. This year, 36 teams participated at the event on Saturday, January 22. ANS-SR members Stephanie Zejewski, Tinh Tran, and Bob Eble served as judges. ANS-SR was also a gold sponsor, contributing \$500 to for the “Best Energy System” based on innovation, realism, environmental sensitivity and cost effectiveness.



The Langley Bath Clearwater Middle School Spartans team received the award for Best Energy System. They used a combination of conventional nuclear, solar and wind as their power sources. Their radioactive waste was "reformed" into individual elements that were then recycled back as a resource. They had a large waste filter system that would be used to process effluents for all visiting ships. Their population was around 150,000 and they produced about 3000 MW of power. Second place went to the New Ellenton Middle school REACH team; third place went to the New Ellenton City of Life team; fourth place was awarded to Blythewood Middle school (the overall winners of the competition), and fifth place went to the St. Mary on the Hill Cyber City team.

St. Mary's Tech Day.

ANS-SR had three tables and six volunteers participating in this event on February 3, and were the largest volunteer group at the event. Bob Eble, Derrick Faunce, Thomas Jackson, Heather Velasco, Diane Braselman, and John Merrick explained and demonstrated basic radiation science and uses of radioactive materials in our society for the 4th, 5th and 6th grade students. They used local ANS-SR section materials (including a great selection of naturally-occurring radioactive materials) as well as materials from ANS National such as flyers, stickers, and bookmarks.



Aiken Middle School. ANS-SR volunteers Bob Eble, Derrick Faunce, Fred Willis, and Martin Washington presented “Radiation Science and Nuclear Power” to four 6th grade classes on February 23. The team used ANS-SR materials and materials provided by ANS National as part of their presentations to about 100 students and staff.



material and responding to good questions from the students.

Edgewood Middle School. Bob Eble and Derrick Faunce presented information on radiation science and nuclear power to two 8th grade classes on March 2. The classes were combined, which allowed the presenters to spend more time going over the



North Augusta Optimist Club. Bill Wabbersen was invited to speak to the North Augusta Optimist Club on March 22. He discussed ANS-SR and the section’s outreach activities, basics of radiation, and answered the group’s questions about Japan’s Fukushima reactors.

Aiken Technical College. Bill Wabbersen presented “Risks and Rewards of Nuclear Technologies” to two sociology classes on March 29. He also answered student questions about nuclear activities in the local area as well as questions about Fukushima.



The Interactive Nucleus

The nuclear exhibit sponsored by ANS-SR has been under testing and use at the University of South Carolina Aiken Ruth Patrick Science Education Center (RPSEC). In June, Southern Custom Exhibits, Inc. completed hardware modifications reflecting ANS-SR’s experience with the exhibit over the past year. Logic flow and software changes have been specified and are being developed. New audio recordings were made for the modified sections.



Volunteer voices for the updated Interactive Nucleus audio recordings

Lakeside Middle School. On May 13, Bill Wabbersen presented “Risks and Rewards of Nuclear Technologies” to four classes totaling 250 students. He also answered questions about Fukushima.

MOX Lunch & Learn Series. Jim and Conne Bazley continued their well-received series of monthly Lunch & Learn sessions at the Mixed Oxide Fuel Fabrication Facility under construction at SRS. Many of their sessions are filled to capacity and include “standing room only” participants. A sampling of the varied topics includes: showing of 30-min version of “Displaced” (a film made in 2009 to document the local impacts of the establishment of SRS - the SRS Heritage Foundation was the presenter - there were 5 separate showings of this film); presentation by SRNL’s Atmospheric Technology Group; discussion of the origins of SRS by the SRS Heritage Foundation; Ecology of SRS presented by the Savannah River Ecology Laboratory; showing of ANS-SR’s Tom Reed Presentation “A History of the Cold War You Never Knew”; showing and discussion of “The Neutrino”; showing of ANS-SR’s Tom Reed Presentation of “A Political History of Nuclear Weapons, 1938 – 2008”; discussion of the environmental compliance challenges related to closing High-Level Waste tanks; an introduction DOE’s National Nuclear Security Administration; and a discussion of the Fukushima Daiichi Nuclear Accident Update and Perspective.

Joint Teacher’s Workshop

ANS-SR partnered with CNTA, RPSEC, and Energy Solutions to plan and conduct the 8—hour teacher’s



workshop, “Bringing Nuclear into the Classroom.” Mel Buckner and Bill Wabbersen were members of the core planning and development team and also presented sessions at the workshop, which was filled to capacity with 25 local area teachers. ANS-SR Chair Amanda Bryson presented the Half Life interactive demonstration and ANS-SR Vice-Chair Jim Bazley recorded the event (and is in the process of professionally editing the tapes for ANS-SR YouTube page).

Sessions included Atomic Fundamentals, Power Generation Fundamentals, Nuclear Fundamentals, Nuclear Technologies, Relative Risks, and Regional Nuclear Technology Uses and Opportunities. Based on teacher feedback from last year, the workshop featured more hands-on and interactive activities (this year, Mel Buckner’s discussion of Nuclear Technologies included a visit to the “Interactive Nucleus” exhibit in the RPSEC lobby). Feedback from the teachers was very positive.



American Nuclear Society – Savannah River Section Local Section Five Year Membership Application (2011 – 2015)

Directory Information:

Last Name: ___ First Name: ___ M.I.: ___ Suffix: ___

Mailing Address: ___

City: ___ State: ___ Zip: ___

Email Address: ___ (used only for newsletter distribution, notification of meetings, and requests for local activity support)

Phone: ___

Occupation: ___ Employer: ___

Location: ___

Job Title: ___

Education Completed: Degree Year Graduated Course of Study

- | | | | |
|--------------------------|-----|-----|-----|
| <input type="checkbox"/> | BS | ___ | ___ |
| <input type="checkbox"/> | MS | ___ | ___ |
| <input type="checkbox"/> | PhD | ___ | ___ |
-

Section Information:

Are you a National ANS Member? Yes No

If Yes: To what do you belong?

- | | | |
|--|--|---|
| <input type="checkbox"/> Accelerator Applications | <input type="checkbox"/> Biology & Medicine | <input type="checkbox"/> DD&R |
| <input type="checkbox"/> Education & Training | <input type="checkbox"/> Environmental Sciences | <input type="checkbox"/> Fuel Cycle & Waste Mgmt |
| <input type="checkbox"/> Fusion Energy | <input type="checkbox"/> Human Factors | <input type="checkbox"/> Isotopes & Radiation |
| <input type="checkbox"/> Material Science & Tech | <input type="checkbox"/> Mathematics & Computation | <input type="checkbox"/> Criticality Safety |
| <input type="checkbox"/> Nuclear Installation Safety | <input type="checkbox"/> Operations & Power | <input type="checkbox"/> Radiation Prot & Shielding |
| <input type="checkbox"/> Reactor Physics | <input type="checkbox"/> Robotics & Remote Systems | <input type="checkbox"/> Thermal Hydraulics |
| <input type="checkbox"/> Aerospace | <input type="checkbox"/> Young Members | <input type="checkbox"/> Comp Medical Physics |
| <input type="checkbox"/> Nuclear H2 Production | <input type="checkbox"/> Nuclear Nonproliferation | |

Are you a National Committee Member? Yes No

Are you interested in working on a local committee? Yes No

(e.g.: Executive Committee, Membership Committee, Scholarship Committee, Topical Committee, Outreach Committee...)

Interests: ___

Comments: ___

Membership is free, and you do not have to be an ANS National member
Please forward completed application to ans.savannahriver@gmail.com
