

ISSUE 04 Fall 2015

# A Message from the Chair

By Susan Pickering, Sandia Laboratories, November 2015

# Your NISD Leadership Team

We all thank you for being a part of the NIS Division and look forward to working with all of you. Please don't hesitate to reach out to anyone on the leadership team with suggestions or if you'd like to get involved.

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Greetings, Nuclear Installation Safety Division,

Having been involved in NISD governance for only a couple of years, drafting our ANS 60th Birthday Card for our Division turned out to be an unexpected opportunity. I was struck by the deep and important role nuclear safety has played in the history of nuclear energy. From Browns

Ferry, to Three Mile Island, to Chernobyl, and Fukushima; you and your colleagues in nuclear safety have worked to understand important phenomena and how they interact in the powerful systems we call nuclear reactors. Because of your efforts, nuclear energy is an important contributor to our energy independence and by extension our national security.

I see an equally compelling future. We know our nation's energy needs are massive and not likely to decrease. Advances in understanding and predicting the performance of materials is establishing the technical basis to continue to operate the existing fleet safely. New designs are actually under construction! Small modular reactors are advancing and there is renewed interest in other next generation designs. (The patience of advocates of HTGR, SFR, and other designs may be rewarded yet!) The back-end of the fuel cycle is experiencing exciting developments, too. There are concrete steps to demonstrate the deep-borehole nuclear waste disposal concept; commercial entities are seriously exploring regional, interim storage sites for spent nuclear fuel; and interest in the permanent geologic disposal of spent nuclear fuel is rising.

The global nuclear energy future is equally, if not more, exciting. Depending on your source of data, as many as 68 reactors are under construction in 15 countries, another 162 reactors are planned, and 316 are in some stage of proposal. Countries and multi-national vendors see nuclear as a key component in the international energy portfolio and are aggressively pursuing it.

Given this promising activity in nuclear energy, I would like to offer that now is a good time for our Division to revisit our vision and strategy. What should be our focus areas? What are our priorities? I think all of us agree ensuring a strong pipeline of excellent engineers and scientists is critical to any future scenario. What role should NISD have? What outreach opportunities should we pursue? Are there partnerships with other entities to establish? Are there things we should stop doing?

So many questions! I look forward to working with you over the next year to uncover the answers, tackling the challenges, and making opportunities.

Susan Pickering, Director, Nuclear Energy Fuel Cycle Programs, Sandia National Laboratories

### Honors and Awards

By Phillip Ellison and Charles Martin

The Tommy Thompson was awarded to Professor Theo Theofanus for 2014. Additionally, the Tommy Thompson award goes to George Flanagan for 2015.

The NISD did not issue the 2014 award at the Annual Meeting, so both 2014 and 2015 awards will be presented at the Winter Meeting.

NISD members are encouraged to submit candidates for consideration for these two awards. Nominations should be sent to Phillip Ellison phillip.ellison@ge.com.

Saul Levine and Raymond DiSalvo Memorial Scholarships award winners have been recognized. This year Derek Man Hon Hung from University of Michigan was awarded the Levine award. Travis Ty Willis from North Carolina State University was awarded the DiSalvo Award.

# 2016 Student Conference

The 2016 ANS Student Conference will be hosted by to University of Wisconsin (UW) on March 31 - April 3, 2016. The theme of this program is "Being a Critical Member of the Nuclear Industry," inspired by the classic Four-Factor formula taught in undergraduate reactor physics ( $k = nfp\varepsilon$ ):

- η Nuclear opportunities
- f Forming our public image
- p Professional development
- $\epsilon$  Entrepreneurship

Each of these factors will be explored through various technical sessions, hands-on workshops, panels, and dinners that individually target one of the four factors.

The event will include tours, socials, and technical presentations. Based on past student conferences, they are expecting 400 - 500 attendees. Unique to the UW-hosted student conference will be an innovation competition. Entrepreneurial ideas will be submitted prior to the conference; submissions/presentations will be judged. Logistics for how an award might support the vision are being investigated. A formal request for both monetary and judge support will be forthcoming at the November 2015 ANS meeting. More information is available at their website:

http://www.ansstudentconference2016.com.

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Currently Vacant – Secretary email

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# Student Scholarships Sponsored By NISD

The Saul Levine and Raymond DiSalvo Memorial Scholarships are fully funded. Descriptions of these scholarships can be accessed at the NISD Website at http://nisd.ans.org/scholarships. Undergraduate students interested in applying for these scholarships can access the Eligibility Requirements and Application Form at http://www.ans.org/honors/scholarships.

### 2015 Division Financial Report By Robert P. Martin

By Robert P. Martin

Fall 2015 Secretary-Treasurer Report

By NISD bylaws, the administrative roles of Secretary and Treasurer are served by one individual with the obvious title "Secretary-Treasurer." I've been proud to serve the NISD for the past three years under the chairmanships of Tony Baratta, John Lee, Ron Knief and this year with Susan Pickering at the helm. While taking meeting minutes at our semi-annual division meetings, proposing budgets, and authorizing expenditures may not seem too exciting, it's far from a "thankless job". Our chairs often say "Thank You!" By the way, if you every want to see the details of what goes on at division meetings, all meeting minutes are available on our website.

The principal division income comes from topical meetings. The PSA meeting is our flagship program and reoccurs every other year, including this year. With the books recently closed, we know that this was spectacularly successful meeting with division proceeds topping \$31000. In addition to topical meetings, the ANS allocates income to division based on total membership. Nominally, the NISD, like all professional divisions, receives \$2 per member. With nearly 1600 NISD members, that equates to about \$3200.

At this year's Winter Meeting, the NISD Executive Committee will be considering how best to apply the PSA 2015 proceeds. Last year, we learned that our Levine and DiSalvo endowments were unsustainable without significant new contributions. An option on the table is to take a portion of the PSA 2015 proceeds to begin repairing these accounts. Regardless, repairing the endowments, while continuing their mission, will require several years of commitment.

Remember, it's your participation in NISD-sponsored programs that sustains these missions. Noteworthy expenditures during the past year included \$2750 to the Texas A&M student chapter for operation of the 2014 ANS Student Conference and \$3000 for conference travel support (administered by ANS National). In addition, another \$2000 was spent to stabilize our Levine and De Salvo awards. Based on the best information available, the NISD holds a total balance of nearly \$60000. As such, the NISD is very much able to support its missions related to scholarship, student programs and meritorious recognitions.

#### Bob Martin NISD Secretary/Treasurer 2014-2016

# Scheduled NISD Meetings

The NISD will be holding the following meetings at the upcoming National ANS meeting to be held in Washington DC November 8-12.

Program Committee Meeting: Sunday, 4:00-5:30 p.m. Madison A

Executive Committee Meeting: Sunday, 7:30-9:00 p.m. Madison A

Additionally, the NISD will be sponsoring two technical sessions Both sessions will be held on Tuesday:

- Current Topics in Probabilistic Risk Analysis, Tues. a.m.
- General Topics on Nuclear Installation Safety, Tues. p.m.

Both sessions will take place in the Delaware B room. A full list of papers can be found in the program for the national meeting.

The Program for the ANS Winter Meeting can be accessed through an ANS Website at:

http://answinter.org/program-2/official-program/.

# NISD Program Committee

The NISD Program Committee is looking for volunteers for the Secretary postition. Parties interested are to contact Virginia D. Cleary-Ivanoff at: vdcleary@gmail.com.

Looking ahead to the 2016 Annual Meeting to be held in New Orleans, LA on June 12-16, 2016. The NISD has a call for paper out for submittals. More information is available here: http://www.ans.org/meetings/file/590.

The NISD has proposed 5 sessions:

- •12a. Current Topics in Probabilistic Risk Analysis
- •12b. Emergent Topics in Consensus Standards
- •12c. Nuclear Safety and Quality Culture: Long Term Management
- •12d. Nuclear Installations Safety: General
- •12e. Emerging Issues with Digital in Nuclear Plant Safety System

## **NISD Website**

The NISD Website is in the process of being revamped in accordance with the latest theme, formats, and design criteria specified by ANS National. The website may be accessed at the same address as before: http://nisd.ans.org.





Liaison and Coordination Carol L. Berrigan (Board of Directors Liaison) clb@nei.org

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# **NISD** Communications

In an effort to further evolve and expand the capabilities of the NISD to communicate outside the bounds of the division, and to create a larger social media presence for ANS, there is now a new Facebook page for the division.

If you have a Facebook account, please "Like" the page at: https://www.facebook.com/ans.nisd.

If you do not have a Facebook account, and would like to join, there will be prompts on the screen at the web address provided above to join and create an account. A user must have a personal Facebook profile in order to access this online social media platform. Due to the limited access since not all members of the NISD will join Facebook, no pertinent division specific information will be shared at this outlet at this time.

Any questions, comments, or suggestions for further improvements, additional content, or expansion of our growing communications platform are welcome and may be emailed directed to Eric Harvey at: elharvey@berkeley.edu.