



Message From the Chair By Alan E. Levin

It is hard to believe, as I write this, that nearly a year has gone by since I became NISD Chair, and in less than 4 weeks I will be handing the gavel (figuratively speaking) to Tony Baratta. It has been a busy year for those of us in the nuclear safety community; I am sure that a sizable percentage of NISD's membership has been engaged in some aspect of the follow-up to Fukushima, an effort that is likely to continue for several years. I have no doubt that our community will fulfill its obligation to those who were most affected by the accident: to learn from it, and to use what we have learned to make nuclear power plants—both those currently operating and those yet to be deployed—even safer and more robust than they already are.

However, as the industry has worked to recover from the impacts of Fukushima, it is also important to recognize that the past year has had its share of successes, as well. The NRC issued the first combined construction permits and operating licenses for Vogtle and Summer, and continues to review the applications for several more COLs. There continues to be strong interest in small and modular reactors, as well. A steady stream of license renewals—more than 70 reactors have received 20-year extensions—means that the current U.S. fleet will continue to operate well into this century. And the demand for nuclear professionals continues to grow, both in the U.S. and abroad. While we confront today's challenges, and others undoubtedly will arise, there is reason to be optimistic about the future.

In view of the fact that this is my final column as NISD Chair, I think it is also appropriate to reflect on the state of the Division. Overall, I believe that NISD is a strong division, and that we are poised to grow even stronger over the next several years. After hitting a low around 2006, NISD membership has grown by nearly 5%. What is really impressive, though, is that our student membership has grown over the past two years from about 60 to nearly 100, an increase of more than 60%. It is good to see that these young people recognize the value of the ANS and of our Division, and I encourage not only their membership, but also their active participation in the Society's and NISD's activities. NISD's topical meetings, both "stand-alone" and embedded, continue to do well, and our participation in the national meetings is strong. In the Society, NISD's leadership role is conspicuous. Our past chair, Mike Corradini, co-chaired the Special Committee on Fukushima, and—of course—will be assuming the ANS presidency in a few weeks. Several of our members are on the Standards Board, and others serve on a variety of ANS committees. And while I have not done a survey, I know from personal experience that many of our members take an active role in ANS local sections. It is my hope—and expectation—that NISD will continue to set an example as a leading Professional Division in the ANS. I encourage all of our members to get involved: join an NISD or ANS committee; volunteer to organize or chair a national meeting technical session; mentor a student or a young member. I am sure you will find that the few hours that it takes are well worth it.

Finally, I would like to take this opportunity to recognize and express my appreciation to the people who work diligently behind the scenes to make NISD as successful as it is. Thanks to

Vice Chair Tony Baratta for his support over the past year and his efforts in updating the Division's Strategic Plan, and to Secretary/Treasurer Virginia Cleary for keeping up with both meeting minutes and the NISD budget. Thanks to Gary Wilson, for making sure that these newsletters get put together to keep our members informed and for overseeing the website, and to Matt Denman for improving our use of social media. Thanks to Kevin O'Kula and the Program Committee for their efforts in organizing and coordinating NISD sessions at national meetings, and for their management and oversight of the Division's topical meetings. Thanks to Phil Ellison and the Honors and Awards Committee for administering NISD's Thompson and Laurence awards and the Saul Levine Memorial Scholarship. And last, but by no means least, thanks to my friends and colleagues on the NISD Executive Committee for their help and support. I can truly say that it has been a pleasure to serve with them.

Program Committee By Kevin O'Kula Summer Meeting in Chicago (June 24-28, 2012)

The NISD will sponsor six sessions at the Spring 2012 meeting, as follows:

- Emerging Issues in Nuclear Facility Safety, Mon. p.m.
- Current Fire Research Activities: Strengthening Safety Through Research, Tues. a.m.
- Nuclear Installations Safety: General, Tues. p.m.
- Irradiation Assisted Degradation of Reactor Vessel Intervals/NRC Sponsored Environmentally Assisted Fatigue Research Activities, Tues. p.m.
- Generic Issue 199, "Implications of Updated Probabilistic Seismic Hazard Estimates in Central and Eastern United States on Existing Plants"—Panel, Wed. a.m.
- Update on NQA-1: Quality Assurance Requirements for Nuclear Facility Applications—Panel, Wed. p.m.

The Preliminary Program for the Annual Meeting can be accessed through the ANS Website at http://www.new.ans.org/meetings/m_78

Winter Meeting and Nuclear Technology Expo in San Diego (November 11-15, 2012)

There are still opportunities to submit papers in three sessions of the regular meeting:

- 14a. Containment Degradation Research and Implications
- 14b. Nuclear Installations Safety: General
- 14c. State-of-the-Art Reactor Consequence Analyses (SOARCA) Project: Overview, Insights, and Path Forward.

The last session (14.c) will cover primary information concerning improved understanding of severe accident progression in U.S. plants from the recently completed Sandia National Laboratories – NRC SOARCA Project in a panel format. However, stimulated and contributed papers are also sought.

Topical Meetings By Charles Martin and Kevin O'Kula Embedded Topical Meeting on Lessons Learned from Fukushima Dai-ichi

During the 2012 ANS Winter Meeting (San Diego), the NISD will sponsor the International Meeting on Severe Accident Assessment and Management: Lessons Learned from Fukushima



Dai-ichi. This embedded topical meeting is the first of its kind hosted by ANS and will provide a forum for those concerned and interested in severe accident phenomena and mitigation actions. General Chairs are Dr. Michael Corradini (University of Wisconsin) and Dr. Dale Klein (University of Texas, Austin). The Technical Program Chairs are Dr. Jacopo Buongiorno (MIT) and Dr. Akira Tokuhiro (University of Idaho). Provisionally, ANS is the primary sponsor.



Planned Technical Tracks can be viewed at
<http://www.new.ans.org/meetings/file/299>.

PSA Topical Meetings

NISD will move to a biennial cycle with its Probabilistic Safety Assessment and Analysis Topical Meeting series. After the very successful PSA 2011 in Wilmington, NC, the next meeting, PSA 2013 (September 22-26, 2013) will stay in the southeastern U.S. in and be based in Columbia, South Carolina. The topical will be hosted by both the Columbia and Savannah River Sections. The Honorary Chair will be Dr. Shunsuke Kondo, Chairman of the Japan Atomic Energy Commission, with General Chair Gerald Loignon of SCANA, and Dr. Robert Bari of BNL, as the Technical Program Chair. A Call for Papers for PSA 2013 is found elsewhere in this Newsletter.

At the paper review meeting at ANS headquarters in February, the ANS National Program Committee gave calendar placement to NISD's PSA 2015. This standalone topical will be organized by the Idaho Section and held April 26-30, 2015 in Sun Valley, Idaho. Dr. Timothy Leahy (Idaho National Laboratory) will serve as the General Chair, and Dr. Martin Sattison, also of INL will be the Technical Program Chair.

Honors and Awards By Phillip Ellison

There is a change occurring at ANS on how the ANS awards are being presented. ANS will no longer have an Honors and Awards Banquet, but will provide the awards during the opening plenary session.

In this regards ANS/NISD will present the 2012 George C. Laurence Pioneering award at the Chicago Opening Plenary to Dr. Hans Fauske for his lifelong efforts in promoting the safety of nuclear facilities.

NISD is currently accepting nominations for the Tommy Thompson Award and will make the presentation of the award at the San Diego Meeting. If you have someone you would like to nominate for the Tommy Thompson Award, as soon as possible, please contact the Committee chair (Phillip Ellison) through E-mail at Phillip.Ellison@ge.com

2012 Student Conference By Vanessa Sanders

The American Nuclear Society student section at the University of Nevada, Las Vegas is proud to report that the 2012 ANS Student Conference was a success! A total of 516 guests attended including 382 students and 134 professionals. Student attendees represented 39 universities including 26 international students from 16 countries. A total of 118 podium presentations and 40 poster presentations were given by over 40% of the student attendees.

The conference opened early Thursday morning with a highly successful tour of the Nevada National Security Site. Students and professionals were able to view Nevada's nuclear history on the day long tour which was narrated by veteran volunteers that were former employees at the Site during the testing era. The career fair was also a huge success with 43 exhibitors representing companies, national laboratories and universities. On Saturday, an aerial monitoring helicopter was flown out from the DOE Remote Sensing Laboratory in North Las Vegas. The helicopter is typically used for aerial monitoring in Las Vegas and other parts of the country and was also flown to Japan for monitoring after the event at Fukushima Dai-ichi. The conference concluded with an awards banquet held at UNLV's Cox Pavilion and featuring a cirque du soleil style show by novelty entertainment and guest speaker Mike Anness from Westinghouse.

We would like to thank everyone who helped to make this year's conference a success!

Scheduled NISD Meetings

All NISD members are welcome to attend the following NISD committee meetings at the June 2012 Meeting in Chicago, IL:

- Executive Committee: Sunday, 7:30 P.M. – 9:30 P.M.
LOCATION: New Orleans (Gold Level, West Tower)
- Program Committee: Sunday, 4:00 P.M. – 6:00 P.M.
LOCATION: New Orleans (Gold Level, West Tower)

The Executive and Program Committees invite NISD members to express their interest in serving on those committees, particularly by participation in one or both of the indicated meetings.

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 (see below for address). Undergraduate students interested in applying for these scholarships can access the Eligibility Requirements and Application Form at <http://www.ans.org/honors/scholarships>.

NISD Website

NISD sponsored Panel Discussion at the annual meetings can be viewed on the Website by clicking on the "Panel Presentations" button. The NISD Website may be accessed directly at <http://nisd.ans.org> or indirectly at <http://www.ans.org>.



CALL FOR PAPERS

**2013 International Topical Meeting on
Probabilistic Safety Assessment and Analysis (PSA 2013)
September 22-26, 2013**

**Marriott Columbia ♦ Columbia, South Carolina USA
(www.psa2013.org)**

NISD's Probabilistic Safety Assessment and Analysis Topical Meeting series will take place in September 2013 and be based in Columbia, SC, and co-organized by Columbia and Savannah River Sections. The key chairpersons include: Honorary Chair Dr. Shunsuke Kondo Chairman of the Japan Atomic Energy Commission, General Chair Gerald Loignon (SCANA), and Technical Program Chair Dr. Robert Bari (BNL). PSA 2013's primary objective is to be a major international technical forum for communication of major probabilistic risk and safety topics worldwide, including issues, methods, applications, insights, policy and risk-informed regulation experience. The PSA 2013 meeting will be of interest to traditional applications including nuclear reactor facilities, nonreactor installations, processing, decontamination & decommissioning, and storage, as well as other nontraditional areas where probabilistic safety approaches are applied. Also, the meeting will continue to follow lessons learned from the Fukushima Dai-ichi event through the perspectives from international representatives. Invited and contributed paper sessions will be planned in addition to invited speakers and panel sessions.

Authors should submit summaries of between 300 and 600 words in English. The summary should contain:

- 1) Paper title and body
- 2) Three to five keywords, referring to "Suggested Paper Topics". (While suggested paper topics are provided, authors may suggest an alternative technical subject if an appropriate match is not found.)
- 3) Authors' names, affiliations and full addresses, and
- 4) Name, address, phone number, and email contact information of the author to whom subsequent correspondence should be addressed.
- 5) Email as an attachment to: Hanna Shapira at hshapira@techno-info.com

The summary should clearly state the objectives, methodology, results and conclusion of the paper. One or two figures or tables may be included to convey the essence of the work being reported, but will not be included in the word count. PSA 2013 Proceedings will be issued in CD-ROM format.

Important PSA 2013 Milestones	Date
Summaries Due	1 February 2013
Authors/Papers Selected	4 March 2013
Full Papers Due	3 May 2013
Final Full Papers Due	19 June 2013
Proceedings CD Available	22 - 26 September 2013

Suggested Topics for PSA 2013 Paper Submittal:

- Accident Analysis
 - Severe Accident methods and insights, Extended sequences
- Advanced Nuclear Reactor Systems
- Advances in Information Technology Supporting Risk-Informed Decision-Making
- Aging Management

- ASME/ANS Standards and Peer Reviews
 - Level 2/Level 3 PRA
 - Low Power/Shutdown PRA, Non-LWR, Fire PRA, Advanced Reactor
- Common Cause Failures
- Computer Code Development and Methods
- Configuration Risk Management
- Cyber Risk
- Databases (Component Reliability & Human Error Probability)
- Digital Instrumentation & Control
- Dynamic PRA
- Emergency Preparedness and Response
- Environmental Impact Analysis
- External Events (Flooding, Natural Phenomena Hazards (Tornado, Hurricane, High Wind), Seismic Events, Tsunamis)
- Fukushima Event Impacts & Lessons Learned
- Flooding PRA
- Full-Scope Level 3 PRA Advances
- Human Reliability and Human Factors
- IAEA, IEC, & IEEE Nuclear PRA Standards
- Interface Between PRA and the Deterministic Safety
- Small Modular Reactors
- SOARCA Program Insights to PRAs
- Software Reliability and Data Analysis
- Small Modular Reactors
- Standardized Plant Analysis Risk (SPAR) Models
- Level 1 PRA Developments
- Internal Fire Risk
 - Implementation of NFPA 805
- Level 2 & 3 PRA Developments
- Low-Power and Shutdown PRA
- Mitigating Systems Performance Index (MSPI) Issues
- Space Nuclear Risk Applications
- Natural Hazard Phenomena and External Events
- Non-LWR PRA
- Non-Nuclear PRA
- Next-Generation NPPs
- Nuclear Nonreactor Methods and PRA Applications
 - Beyond Design Basis Events
 - Fuel Cycle and Waste Processing
- Passive System Safety
- Plant Security
- Proliferation Risk
- PRA Human Resource Needs
- PRA Training & Education
- Quantitative Risk Analysis (QRA) in DOE Facilities
- Reliability Centered Maintenance
 - Reliability, Accessibility, Maintainability and Inspectability (RAMI) Programs
- Relicensing of Current Plants
 - Severe Accident Mitigation Alternatives (SAMA) Analysis
- Risk-Informing Regulation and Licensing
- Risk & PRA knowledge management
- Risk Metrics and Safety Goals
- Risk Perception and Communication
- Safety Culture and Organizational Factors
- Safety Margins and PSA
- Significance Determination Process (SDP) Issues
- Seismic PSA and Applications (Generic Issue 199, Seismic Margin) Analysis
- Structural Reliability Methods
- Transportation Risks
- Waste Management & Decommissioning Status



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