



# AMERICAN NUCLEAR SOCIETY EDUCATION & TRAINING DIVISION

## MESSAGE FROM THE CHAIR

Greetings to all. This is my first newsletter message as the chair.

First of all, let me say how enthused and honored I am to be serving in this capacity. I believe the ANS Education and Training Division is in an unprecedented position to contribute to our nuclear discipline – both in the academic and industrial areas – given the demographics of the workforce currently involved in the support of nuclear technology. As a former Naval Nuclear Officer and a long time nuclear utility employee, I have spent considerable time discussing with my sons what I believe to be the relative advantages of selecting some branch of engineering as a college major. I never mentioned nuclear engineering specifically, due to my past views on the uncertainties associated with the future of our craft. I'm delighted to say that over the past 18 months, my message to them has changed, and I now tell them that a degree in nuclear engineering will certainly be a great foundation for future opportunities and career satisfaction.

Secondly, let me say thank you to the ETD officers who have preceded me in the past few years. I have watched them work diligently to bring back the division from a period of relative inactivity to one of great enthusiasm and direction. Particularly, I would like to thank Bob Busch, outgoing ETD chair, for the efforts he put forth during his term and the turnover he gave me in preparation for this position.

As I look forward to my term, I want to build on the progress we have made as a division. We have steadily rebuilt ourselves, and while this was absolutely appropriate, we have done so through the efforts of a few individuals who have really stepped up and given much more of themselves than would have been required in an organization that was functioning in a routine and established manner.

Based on this observation, a major portion of the efforts of my term will be devoted to making the workings of our division more systematic and automatic. Two examples of this will be in the areas of programs and awards. Rather than working in a "just in time" mode in these areas, we will attempt to move the notifications and communications associated with these areas a full six months further into the

future. Thus, rather than be working to establish the programs for the next ANS national meeting, it is my vision that we will be working on the programs for the meeting nine months in the future, rather than the one just three months away. This will reduce our reliance on "heroes and heroines" in the workings of our division and make us more able to deal with unexpected personnel turnover or last minute changes. A similar initiative will be undertaken in the area of the awards that our division oversees.

In closing, I again recognize the great works of the past few executive teams in bringing ETD back into robust activity. I look forward to building upon their efforts to make the workings of our division more systematic.

If you have any suggestions for me or the ETD executive team, please do not hesitate to contact us. I can be emailed at [jkowalski17@comcast.net](mailto:jkowalski17@comcast.net).

I look forward to the next year.

Joe Kowalski

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**AMERICAN NUCLEAR SOCIETY  
EDUCATION AND TRAINING DIVISION 2003  
TRAINING EXCELLENCE AWARDS**

Joseph D. Kowalski, Chair of the Education and Training Division (ETD) of the American Nuclear Society (ANS) announces the 2003 Training Excellence recognition program.

The awards are made to individuals and groups who currently work in the field of nuclear training and education, and are intended to recognize outstanding, innovative, unique, and cost effective contributions to the field.

Training and Education are those activities related to the training and qualification of personnel working in the nuclear field. Current practitioners in International and US commercial, government/contractor, university and union nuclear training and education fields are eligible for nomination. Nominations by a sponsor are preferred but self-nomination will be accepted.

An additional category (Pioneer) is intended to recognize the efforts of a distinguished individual who was instrumental in the design, development, implementation and management of nuclear training and education. A nominee may still be active in the field.

Nominations, which are valid for the year submitted, must include:

- Category for award - individual, group, Pioneer
- Complete nominee information with address and contact information

**ELIZABETH BOGUE RECEIVES TRAINING  
EXCELLENCE AT AWARD 2002 WINTER MEETING**

Elizabeth Bogue, Manager of Plant Training at the Palisades Nuclear Power Station, will be awarded an ANS-ETD Training Excellence Award for 2002. Joseph Kowalski, Chair of the Education and Training Division, will present the award at the 2002 ANS Winter Meeting in Washington, DC. Ms. Bogue was selected for the award for her contribution as a training manager, her role as a domestic/international training consultant, and her tireless support to nuclear training. In addition to recognition at the ETD Executive Committee Meeting, Ms. Bogue also will receive the award and make a presentation at 1:00 on Monday afternoon.

- Complete sponsor information with address and contact information
- Brief summary of reason for nomination (will serve as basis for citation for successful nominees)
- Detailed description of activity/individual to be recognized. Attach appropriate related and supporting information.

Nomination packages must be of sufficient detail to fully inform the selection committee of the nominee's qualification for the award.

***NOMINATION-AWARD SCHEDULE:***

- Nomination deadline May 16, 2003
- Selection and announcement – July 2003
- Presentation of awards at the 2003 ANS Winter Meeting

The winners will be invited to receive their awards and present a paper at the meeting. Attendance to receive the award is not mandatory.

Requests for information and completed nomination packages are to be sent to:

Dr. Richard P. Coe, Chair - Selection Committee  
ANS-ETD Training Excellence Awards  
School of Business Studies  
The Richard Stockton College of New Jersey  
Jim Leeds Road  
Pomona, NJ 08240-0195  
609-652-4466  
[coer@stockton.edu](mailto:coer@stockton.edu)

**ABET TRAINING WORKSHOP TO BE  
PRESENTED AT 2002 WINTER MEETING**

The ANS Accreditation Policy and Procedures Committee will conduct an all day training session for ABET Program Evaluators on Saturday, Nov. 16, 2002. The training session is required for qualification as a future Program Evaluator for ABET (Accreditation Board for Engineering and Technology). The training will introduce the participant to ABET, the responsibilities of a program evaluator, technology Criteria 2000, outcomes assessment terminology, and the process of assessing and evaluating a program.

The content is appropriate for prospective program evaluators, and others interested in the philosophy and mechanics of ABET outcomes-based accreditation. The training will be limited to the first 25 individuals who register. There is no charge for the materials and instruction. If you wish to reserve a seat in this workshop, please contact Mike Robinson at **412-476-5809** or [robinsma@capslock.net](mailto:robinsma@capslock.net).

**NEW ORLEANS - FULL PAPER SESSION PLANNED -  
PLAN NOW**

**2003 ANS/ENS International Winter Meeting,  
Nov. 16-20, 2003, Hyatt Regency, New Orleans, La**

As noted in the last ETD Newsletter, the ETD Program Committee is planning to have a base set of sessions in each National ANS Conference. These will be augmented by additional sessions depending on events and current interest. Thus, you can now plan your presentations at least a full year in advance. One of the base sessions for the fall meetings is *Innovations in Nuclear Engineering Education, Training, and Distance Learning*. For the New Orleans meeting, this session is planned to be a full-paper session.

The plan includes publishing the papers in a Special Session Proceedings, and also submitting papers as a package to a National journal. The objective going forward is to provide a respectable forum for trainers and educators to publish their significant work. Details for organizing, planning, and successfully executing this session should be available shortly after the Washington meeting this fall

Other sessions to plan for include (1) the Annual Student Design Contest, and (2) a session on Training, Human Performance, and Work Force Development.

**Papers by USDOE Supported Students at ANS  
Meeting in Hollywood, FL, June, 2002**

At the ANS Annual Meeting in Hollywood, FL this past June, ETD embarked on sponsorship of special sessions for DOE sponsored students. Twenty-four papers were divided into three sessions, and best paper awards were presented for each session. These sessions provided the students with an opportunity to present their undergraduate and graduate research in a venue integrated into a National meeting, rather than in a separate student-only conference. All presentations were excellent, and provided the judges with a real challenge to select individual best papers/session. In fact, co-winners were selected for one session. The winners of the \$100 best paper awards, with paper titles and co-authors, are:

**Session I:**

Todd R. Smith, Purdue

**Measurement of Local Two-Phase Flow Parameters in 4" and 6" Pipe**, *T. R. Smith, M. Ishii (Purdue Univ), J. Uhle (NRC)*

**Session II:**

Ralf Hinderer, U of Wisconsin and Bryndol A. Sones, RPI

**Development of Multielement Detector System for Megavoltage Photons**, *R. Hinderer (Univ of Wisconsin, Madison), J. Kapatoes (Tomotherapy), H. Keller, R. Jeraj (Univ of Wisconsin, Madison), R. Schmidt, K. Ruchala (Tomotherapy), T. Mackie, M. Corradini (Univ of Wisconsin, Madison)*

**Optimization of Parametric X-Ray Production**, *B. A. Sones, Y. Danon, R. C. Block (RPI)*

**Session III:**

Gianluca Longoni, University of Florida

**Development of the Regional Angular Refinement and Its Application to the CT-Scan Device**, *Gianluca Longoni, Alireza Haghghat (Univ of Florida)*

While only a few were monetary winners, all participants were winners. The sessions were well-received by all, and your Program Committee has received very positive comments. Thus similar sessions are planned for the San Diego meeting. See Session 4G in the Call for Papers.

**2002 Winter Meeting: Washington D.C**

Again, ETD's renewed vitality will prevail at this year's ANS winter meeting. The division is sponsoring five sessions with over 25 presentations. The sessions have been scheduled so that they do not overlap. The following is a listing of ETD sponsored sessions, chairs, and scheduled times.

- Session 4c**, Training Excellence Awards, Mon PM  
Chair: Brian Hajek 1 award winner
- Session 4d**, Student Design Competition, Mon PM  
Chair: Lee Dodds 4 finalists
- Session 4f**, ABET Accreditation: Constituency Perspectives on Process and Program Improvement, Tues AM,  
Chair: Mike Robinson 7 papers
- Session 4b**, Training Human Performance and Work Force Development, Tues PM  
Chair: Jane LeClair 7 papers
- Session 4e**, Innovations in NE Education, Training and Distance Learning, Wed AM  
Chair: Brian Hajek 6 papers

Of particular note at this meeting is Session 4f, a Panel to Discuss Outcomes-Based Accreditation of Nuclear Programs. The Accreditation Director of ABET will join a panel of experts for a discussion of the new outcomes-based accreditation and its effects on nuclear programs. In what ways have outcomes-based criteria improved the accreditation process, and nuclear and health physics programs? How can the outcomes-based processes be improved? Contributions from evaluators, team chairs, and representatives of industry and education will provide varying perspectives. The panel, entitled "ABET Accreditation: Constituency Perspectives on Process and Program Improvement" will be held at 8:30am Tuesday, November 19<sup>th</sup>, at the ANS Winter meeting.

Many thanks to all of you who have helped make the upcoming sessions a success.

**2003 Annual Meeting: San Diego, CA**

The 2003 ANS annual meeting, entitled "The Nuclear Technology Expansion: Unlimited Opportunities", will be held in San Diego, California, from June 1 to June 5, at the Town and Country Convention Center. This is the same venue as the 2000 Annual meeting, and for those who attended, you will remember it to be an excellent property.

1. "Education and Training: General" organized by Wes Hines, [jhines2@utk.edu](mailto:jhines2@utk.edu)
2. "Training, Human Performance, and Work Force Development" organized by Jane LeClair,
3. "Research by U.S. Department of Energy Sponsored Students" organized by Brian Hajek, [hajek.1@osu.edu](mailto:hajek.1@osu.edu)

Summaries are due by January 17, 2002, authors will be notified of acceptance by February 18<sup>th</sup>, and revised summaries are due March 18<sup>th</sup>. We are excited to hear about your new projects, successes, and lessons learned; and welcome your submissions.

The complete call for papers can be found at <http://www.ans.org/meetings/pdfs/2003/am2003-cfp.pdf>

**CONTE 2002: CONFERENCE SUMMARY**

A gathering of professionals from higher education, technical training, and human performance technology assembled in Orlando, Florida in August 2002 to explore the latest programs and methods for use in the nuclear electricity generating industry. The reason for calling this conference was a recognition that the nuclear utility workforce needs to grow in numbers in the near future, and the industry must achieve continuous performance improvement. The demand for new people is driven by an aging workforce, an increase in plant license extensions, and the prospect of new plants. CONTE, The Conference on Nuclear Training and Education, was a recreation of the previous Symposia for the Training of Nuclear Facility Personnel, popularly known as the Gatlinburg Conference. It was sponsored by ANS, IAEA, NEI, and INPO. Major supporters included Exelon Energy, TVA Nuclear, Dominion Energy, Westinghouse, Framatome ANP, CAE, and Exitech.

The conference themes were tied to achieving excellence in human performance through leadership, education, and training. Accordingly, conference sessions focused on *Cultivating the Education/Industry Relationship*,

*Optimizing Training--Leveraging Technology, Optimizing Human Performance, and Leadership for Performance Improvement.* U. S. and Canadian organizations played a large part in the conference. A special session covered the latest developments in nuclear training in other IAEA member countries. Twenty representatives from nine European and Asian countries participated.

The conference keynote address was a challenge to the participating utilities, by W. George Hairston, III, Chief Executive Officer of the Southern Nuclear Company, to work harder at recruiting the best people to operate and maintain their plants. He encouraged the more than 175 attendees to start with the junior high schools, providing teachers and students with information about nuclear power; to work with two-year and four-year colleges to find and develop the brightest engineers; and to look for knowledge, hard work, and people skills in candidates. Mr. Hairston spends more than half his time recruiting and developing personnel.

The conference organizers promised "take-homes"--proven good practices. Mr. Hairston asked all utility representatives to make at least one improvement as soon as they got back to their plants. He also advised them to put the "fun" back into training. Today's students respond best to more stimulating learning conditions.

Other keynoters included Dr. Thomas Meredith, Chancellor, University System of Georgia; Dr. Richard G. Carpenter, President and State Director, Wisconsin Technical College System; Dr. Robert L. Long, Nuclear Stewardship, LLC; Karl Singer, Senior Vice President, Nuclear Operations, TVA; Harry Bernhard, former member of the Accrediting Board of the National Academy for Nuclear Training; Angelina S. Howard, Executive Vice President, Nuclear Energy Institute; Dr. Philip N. McCullough, Executive Director of the National Academy for Nuclear Training, and Mr. David A. Christian, Senior Vice President and Chief Nuclear Officer, Dominion Energy.

Two special presentations were provided by training industry consultants. Carolyn Corbin, author and consultant, opened a session on leadership, managing change, and creating the culture for human performance improvement. As luncheon speaker, James Robinson, co-author of the new book "Zap the Gaps" provided a practical illustration of the human performance improvement process.

The international nuclear community provided several examples of good training programs. Twenty attendees from nine countries participated in three sessions organized by Dr. Andrei Kossilov from IAEA.

In addition to the keynoters and special presentations, more than 25 presentations were made by representatives from the nuclear training and education communities in the US and Canada. These presentations offered glimpses and insight into programs of excellence and offered numerous challenges for all attendees to take back to their own work places.

A unique aspect of CONTE is that all presentations were organized in a continuous stream of Power Point modules. These were all provided to the attendees on a CD. These full proceedings of the conference are available on CD-ROM. See details at [www.conteonline.org](http://www.conteonline.org).

Feedback from attendees was very positive and encouraging of future conferences. Therefore, another conference is being planned for the summer of 2004.

#### MESSAGE FROM THE NEW ETD SECRETARY

Greetings!

I'm Jane LeClair, ETD secretary for 2002-2003. Since I recently joined the ANS Education and Training Division, I wanted to take this opportunity to introduce myself and tell you a little bit about myself.

I consider education to be a cornerstone of excellence and hold a Bachelors degree in Nuclear Technology, a Masters in Business Administration, and a Doctorate in Education from Syracuse University. As a member of the Training and Human Resources departments at the Nine Mile Point Nuclear Station for the past 15 years, it has been my pleasure to be part of a professional team that strives to generate nuclear energy with great regard for safety, reliability, and efficiency. During this time, I have been heavily involved with the training and development of our personnel. I have delivered numerous workshops and seminars throughout the country expounding the benefits of training and education within our industry, as well as to organizations outside the field of nuclear electricity generation. I have also had numerous benchmarking opportunities, served on numerous industry committees, and now, with great pleasure, I find myself involved in the ANS Education and Training Division.

I look forward to working with ETD in my new capacity as well as in helping to shape future workshops and programs during this dynamic and exciting time in our industry.

I can be contacted at [Jane.LeClair@nmp.cn.com](mailto:Jane.LeClair@nmp.cn.com)

Best Regards,  
Jane LeClair

**EDUCATION AND TRAINING DIVISION OFFICER  
AND MEMBER CONTACT INFORMATION**

**OFFICERS**

Chair

**Mr. Joseph D. Kowalski**  
Silver Fox Synergies, LLC  
Phone# 732-929-2578  
E-Mail: [jkowalski17@comcast.net](mailto:jkowalski17@comcast.net)

Vice Chair

**Mr. Brian K. Hajek**  
The Ohio State University  
Phone# 614-292-5405  
E-Mail: [hajek.1@osu.edu](mailto:hajek.1@osu.edu)

Secretary

**Dr. Jane A. LeClair**  
Constellation Nuclear  
Phone# 315-349-4174  
E-Mail: [Jane.Leclair@nmp.cn.com](mailto:Jane.Leclair@nmp.cn.com)

Treasurer

**Mr. Pierre Tremblay**  
Ontario Power Generation  
Phone# 905-837-4828  
E-Mail: [pierre.tremblay@opg.com](mailto:pierre.tremblay@opg.com)

**EXECUTIVE COMMITTEE MEMBERS**

**Dr. Freddie J. Davis, Jr.**  
Phone# 806-651-2450  
E-Mail: [fdavis@mail.wtamu.edu](mailto:fdavis@mail.wtamu.edu)

**Dr. Harry E. Fetterman**  
Susquehanna Steam Electric Station  
Phone# 570-542-3860  
E-Mail: [hfetterm@ptd.net](mailto:hfetterm@ptd.net)

**Dr. J. Wesley Hines**  
University of Tennessee  
Phone# 865-974-6561  
E-Mail: [hines@utkux.utcc.utk.edu](mailto:hines@utkux.utcc.utk.edu)

**Mr. Jean-Pierre Le Roux**  
INSTN-CEA  
Phone# 331 690 82788  
E-Mail: [jean-pierre.le-roux@cea.fr](mailto:jean-pierre.le-roux@cea.fr)

**Dr. Todd S. Palmer**  
Oregon State University  
Phone# 541-737-7064  
E-Mail: [palmerts@ne.orst.edu](mailto:palmerts@ne.orst.edu)

**Dr. Michael A. Robinson**  
Phone# 412-476-5809  
E-Mail: [robinsma@capslock.net](mailto:robinsma@capslock.net)

**Mr. Robert L. Sandstrom**  
Phone# 949-368-8387  
E-Mail: [sandstrl@songs.sce.com](mailto:sandstrl@songs.sce.com)

**Mr. James S. Tulenko**  
University of Florida  
Phone# 352-392-1401 x 314  
E-Mail: [tulenko@ufl.edu](mailto:tulenko@ufl.edu)

**Ms. Ann D. Winters**  
INPO  
Phone# 770-644-8595  
E-Mail: [wintersad@inpo.org](mailto:wintersad@inpo.org)

**EX OFFICIO MEMBERS**

**Dr. Robert D. Busch**  
University of New Mexico  
Phone# 505-277-8027  
E-Mail: [busch@unm.edu](mailto:busch@unm.edu)

**Mr. Donald R. Hoffman**  
EXCEL Services Corporation  
Phone# 301-984-4400  
E-Mail: [donaldh@excelservices.com](mailto:donaldh@excelservices.com)

**ANS STAFF LIAISON**

**Ms. Sharon S. Kerrick**  
American Nuclear Society  
Phone# 708-579-8230  
E-Mail: [skerrick@ans.org](mailto:skerrick@ans.org)

**ANS BOARD LIAISON**

**Dr. Andrew C. Klein**  
Oregon State University  
Phone# 541-737-7061  
E-Mail: [kleina@engr.orst.edu](mailto:kleina@engr.orst.edu)