



AMERICAN  
NUCLEAR  
SOCIETY:  
YOUNG  
MEMBERS  
GROUP

# YMG Newsletter

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## Inside this issue:

Message from the Chair:	1
Meet Your Elected Members	1
ANS Standards Board Approves YMG Associate Proposal!	2
Young Member Spotlight	3
ANS Fun Run Challenge	3
Call for Volunteers	3
Program Committee Update	4
Make Plans to Attend IYNC2008!	4
2007 ANS/NA-YGN YPC	5
Division Spotlight	5
MIT OpenCourseWare	6
Best Productivity Tips of 2007	6
Climate Change Committee Update	6
2009 YPC Update	7
NA-YGN Update	7

## MESSAGE FROM THE CHAIR

The ANS Young Members Group (YMG) was established in 2005 to encourage and enable all young professional members to be actively involved in the efforts and endeavors of the Society at all levels of leadership and participation, as they transition from the role of a student to the role of a professional. The YMG sponsors non-technical workshops, meetings, and panel sessions that provide professional development, collaborates with other related groups and organizations, and works with ANS to further develop the young generation of nuclear professionals. In addition, YMG co-sponsors numerous technical sessions at conferences to help funnel young members into ANS technical division activities.

Continued focus on young generation development resulted in the conduct of the 2nd ANS Young Professionals Workshop on November 10, 2007 (see article on page 5), in conjunction with the 2007 ANS/European Nuclear Society International Meeting in Washington, D.C. Over 50 enthusiastic young members participated at this workshop event, which was co-sponsored by YMG and the North American

## Continuing to Grow Communities...

Young Generation in Nuclear (NA-YGN). The emphasis of the workshop program, "Grow Strong Communities - Break Ground on Your Future," was on creating and maintaining effective, long-term relationships. Specific topics were: knowledge conservation, employee retention, industry awareness, networking with peers, mentoring, and increasing access to leadership and career development opportunities. YMG and NA-YGN would like to express their sincerest thanks to event sponsors Bechtel Power Corporation, Exelon Nuclear, General Electric, and Omaha Public Power District and to the many speakers.

In 2008, YMG plans include organizing an Embedded Topical focusing on professional development with the technical divisions of ANS at the 2009 ANS Winter meeting in Washington, DC (see article on page 7). Approval for the Embedded Topical was received by the National Program Screening Committee in February 2008. Additional YMG plans include co-sponsoring 10 technical sessions at the 2008 Annual

*(Continued on page 2)*

## Meet Your Elected Members

The group of officers elected by YMG members has been named. As of the close of the June meeting, the YMG members listed below will have officially assumed the duties and responsibilities of their elected positions.

### Chair

Shana Helton - (Past Vice Chair)

### Vice Chair / Chair Elect

George Tsakanikas

### Secretary

Jennifer Butler

### Treasurer

Darby S. Kimball

### Executive Committee

#### Existing Members:

Shannon Bragg-Sitton

Peter F. Caracappa

A. Nichole Ellis

Meghan E. Goldman

Heather J. MacLean

Lisa A. Stiles

Andrew J. Zillmer

#### Newly Elected Members:

Lauren Killian

Jesse Klingensmith

Eric Young

# MESSAGE FROM THE CHAIR

(Continued from page 1)

ANS Meeting in Anaheim, CA (see article on page 4), continuing the YMG/NA-YGN knowledge management and climate change strategic initiatives (see article on page 6), and helping divisions engage young members in technical aspects of the society (e.g., publishing papers, chairing and organizing technical sessions, reviewing summaries, etc.).

YMG membership continues to grow as new plant construction steams ahead. Today, right now, young nuclear professionals, and the industry in general, face several unique challenges such as knowledge transfer and leadership development. Too many times highly experienced employees retire and organizations do nothing or very little to retain their

best practices and/or lessons learned. In these situations, young professionals are routinely thrust forward to fill leadership gaps and in many cases, do so without any formal training. Can we really afford this ad-hoc approach and expect success? In an attempt to control collateral damage from this lack of management, YMG and NA-YGN are working together on a knowledge management initiative to help spread awareness. Knowledge management (or lack thereof) in many organizations is one of the greatest obstacles facing the nuclear industry today. It is the belief of YMG that knowledge management efforts not only need to be started by every organization involved in the nuclear life cycle, but accelerated. A large number of organizations have started talking about knowledge management, but still do very little actually managing knowledge. In 2008, YMG and NA-YGN will develop a knowledge management toolkit for young professionals to

help them take charge of their own development and start their own knowledge management initiatives in their respective organizations or to help better support existing ones.

As a group, YMG will continue to reach out to ANS and strategic partners to facilitate young member involvement in all areas of the society and industry. Young professionals face a wide range of challenges in the coming years. To overcome these challenges, we must rely on our strength as a community. Growing strong communities is not just a tag line for a workshop, it is a real and tangible goal. It is something that YMG will continue to promote as the life blood of the nuclear industry.

Kent B. Welter  
2007-2008 YMG Chair



## ANS Standards Board Approves YMG Associate Proposal!

The process to produce an American National Standard requires much time, patience, most of all dedication from several contributors. There are literally hundreds of ANS standards related to every aspect of nuclear power plant design and construction. Right now development of ANS standards face two unique challenges: loss of knowledge as experts retire and need for revised or new standards to support new reactor construction.

Therefore, the ANS Young Members Group and the ANS Standards Committee created an associate membership for standards committees. The goal of the associate membership program is to enable and expand Young Member participation in the standards development process, with the following stipulations:

- The associate membership program would not impact the status of existing Young Members on standards committees
- Each standards committee may have two associate members
- The term of the associate membership will be for 2 years

The associate membership is geared towards Young Members who are interested in standards development, but who may not yet possess the knowledge, experience, and/or expertise that would naturally result in the Young Member participating in the standards committee as a regular committee member.

For example, the associate membership would enable a Young Member to become involved with a standard that may not directly relate to their field of work. The associate membership would not be appropriate for a Young Member who already possesses the skills to be of value as a full member of the standards committee. The associate member would fully participate in all standards committee activities with the exception of voting. However, the standards committee chair may grant voting privileges to the associate member if the committee chair deems that the knowledge and/or contributions of the associate member are significant enough to warrant voting status.

*If you are interested in becoming an associate member on any standards committee, please contact*

**Shana Helton,**

[shana.helton@nrc.gov](mailto:shana.helton@nrc.gov) or

**Prasad Kadambi,**

[prasad.kadambi@nrc.gov](mailto:prasad.kadambi@nrc.gov).

# Young Member Spotlight: New Ex-Com Members

*Dr. Eric P. Young*



Eric works as a Safety Analyst Engineer at NuScale Power, completing preliminary design calculations for the NuScale Power Reactor module. He previously worked as a Realistic Large Break LOCA Safety Engineer for AREVA in Lynchburg VA. Eric received his M.S. and Ph.D. in Nuclear Engineering from Oregon State University.

*Jesse Klingensmith*



Jesse works as a criticality engineer at AREVA Federal Services in Lynchburg, VA. He joined AREVA after receiving his M.S. from Penn State and now spends his time transporting neutrons and campaigning against the abuse of nuclear data.

*Lauren Killian*



Lauren is a Reliability and Risk Engineer at the U.S. Nuclear Regulatory Commission and just finished a term as Membership Chair for North American Young Generation in Nuclear. Prior to those, she attended MIT for her B.S. and M.S. in Mechanical Engineering. Lauren enjoys helping people build strong foundations for their careers, so she really looks forward to working with YMG members through the YMG Executive Committee!

## ANS Fun Run Challenge

You may have read in a recent Nuclear News article a challenge made to young members regarding the ANS fun run. The article was written by the author in good humor and intended to kick start YMG to help organize the ANS fun run again, which is held on Tuesday morning at every ANS national meeting.

The reason for the article was that YMG did not organize the last fun run at the ANS Winter meeting in DC last year, due to lack of interest from runners.

However, the recent Nuclear News article has spurred us back into gear and we are hoping for a big turnout in Anaheim.

So if you are attending the June Annual meeting in Cali, make sure to pack your running shoes and shorts!

Fun run details can be found in the front part of the conference program. Hope to see you there!

## Call for Volunteers...

Thinking about getting more involved? No better way to start than pitching in on the following committees and activities for YMG.....

- Website – Create the “new face” of YMG. (Kent Welter, [kentwelter@gmail.com](mailto:kentwelter@gmail.com))
- Awards Committee – Establish YMG sponsored awards and nominees. (Darby Kimball, [dskimball@gmail.com](mailto:dskimball@gmail.com))
- Membership Committee – Lead the charge in attracting and keeping ANS young professional membership. (Meghan Goldman, [Meghan.Goldman@constellation.com](mailto:Meghan.Goldman@constellation.com))
- Finance Committee – Help establish our operating budget. (Brad Rearden, [reardenb@ornl.gov](mailto:reardenb@ornl.gov))
- Newsletter/Publications Committee - Help compile and check the newsletter and other YMG publications. (George Tsakanikas, [gatsakan@bechtel.com](mailto:gatsakan@bechtel.com))

If interested, please contact the committee or activity lead directly.

# Program Committee Update

## Upcoming Sessions:

These are the following sessions that the YMG is co-sponsoring at the 2008 ANS Annual Meeting in Anaheim CA:

- Data, Analysis, and Operations for Nuclear Criticality Safety—I, Mon. p.m.
- Data, Analysis, and Operations for Nuclear Criticality Safety—II, Wed. p.m.
- Data, Analysis, and Operations for Nuclear Criticality Safety—III, Thurs. p.m.
- Core Design Development: Current Issues and Their Impacts—Panel, Mon. p.m.
- Research by U.S. Department of Energy – Sponsored Students, Tues. p.m.
- Focus on Communications—II: Pro-nuclear Activism—Panel, Tues. p.m.

- Introduction to Monte Carlo – Tutorial, Thurs. a.m.
- Root Cause Analysis for the Fleet, the Legacy, and the Renaissance – Tutorial - I, Thurs. a.m.
- Root Cause Analysis for the Fleet, the Legacy, and the Renaissance – Tutorial - II, Thurs. p.m.

## Building on Past Successes: Embedded Topical in the Works!

Prior to the 2007 ANS Winter Meeting, YMG held a Workshop on Professional Development “Grow Strong Communities – Break Ground on Your Future”. This Workshop was a great success and in order to carry this success on and try to integrate more technical aspects of

the American Nuclear Society into the Professional Development Goals of the Young Members Group, the YMG submitted a proposal to the ANS to make this Workshop, which is traditionally held on Saturday’s prior to the meetings, to be an Embedded Topical from this point forward. The National Program Committee (NPC) of the ANS reviewed and approved this proposal at the February 2008 NPC meeting.

So now the Young Members Group can move forward with making the Professional Development efforts of the group available to more individuals and expand the Workshop to contain more technical content as well as integrate more with other divisions. This Topical will be held at the 2009 ANS Winter Meeting in Washington, D.C. Hopefully we will see you there!

## Make Plans Now To Attend IYNC2008!

The International Youth Nuclear Congress (IYNC) is a network of young professionals with representatives from over 50 countries. The goals of IYNC are to:

- Develop new approaches to communicate the benefits of nuclear power as part of a balanced energy mix
- Promote further peaceful use of nuclear science and technology for the welfare of mankind
- Transfer knowledge from the current generation of leading scientists to the next generation

IYNC has held four successful conferences around the globe – with delegates convening in Slovakia (2000), South Korea (2002), Canada (2004) and Sweden/Finland (2006). The most recent Congress attracted 400 participants from 52 countries!

IYNC2008 will be held in Interlaken, Switzerland September 20-26. In addition to a comprehensive technical program, a number of social and cultural events are arranged that will enable young nuclear professionals from around the world to network and share experiences.

IYNC2008 will take place the week directly after PHYSOR 2008 and there will be joint activities during the intervening weekend.

The registration fee includes the technical program, social and cultural events, a technical tour and most meals. Early registration ends June 30, 2008 and the fees are:

	<u>early/late</u>
Students	€175/€225
Young Professionals	€325/€375
Experienced Professionals	€650/€750

For more information and to register visit [www.iync.org](http://www.iync.org)

See you in Interlaken!

Lisa Stiles  
IYNC President



## 2007 ANS/NA-YGN Young Professionals Congress

### “Grow Strong Communities - Break Ground on Your Future”

During the Young Professionals Congress – a day dedicated to the growth and professional development of young professionals in the nuclear industry, young professionals from across the country came together to learn about creating effective working relationships and to explore how they can form synergies to address emerging industry issues.

This was the 2nd biennial conference co-organized by the Young Members Group (YMG) of the American Nuclear Society (ANS) and the North American Young Generation in Nuclear (NA-YGN) and was held on Saturday, November 10th in Washington, D.C. as a part of the week-long ANS International Conference. Representation at the conference was diverse, as attendees came from various utilities, national laboratories, government agencies, vendors, universities and consultants.

The Young Professionals Congress provided a unique opportunity for YMG and NA-YGN to further establish their *raison d'être*, to provide members with leadership and professional development avenues.

Nichole Ellis, conference co-chair, commenced the day with an overview of activities and presentations. Introductions to the ANS YMG and NA-YGN followed;

key initiatives and involvement opportunities in each organization were presented.

Commissioner Peter Lyons, Nuclear Regulatory Commission (NRC), delivered the keynote speech on the importance of communications today. Commissioner Lyons highlighted the importance of communicating the benefits of nuclear power and promoting careers in engineering and the sciences.

Marvin Fertel, Nuclear Energy Institute (NEI) Chief Nuclear Officer, presented a talk on dispelling myths about the global nuclear energy partnership. Marvin gave examples of how easily information can be misleading if is not carefully examined with consideration to the source, context and motives. Marvin highlighted that in an overwhelming sea of information through television, radio, print media and the internet, the ability to separate fact from fiction and sound science from elaborate marketing is crucial to being able to use information effectively.

David Czufin, Work Control Director at Exelon Nuclear, spoke about the importance of networking with peers. David gave a brief overview of his career and detailed the critical role that peer networks played in his advancement. He described the unique opportunity that peers have to demonstrate their talents and build trust.

YMG and NA-YGN members also made presentations throughout the day that focused on critical issues in the nuclear industry; these topics included, employee retention, how to expand networks, knowledge transfer and leadership influences. During the conference, attendees interacted with one-another through various activities and networking recesses. One of the sessions had the attendees develop elevator speeches to practice effectively communicating to peers and leaders in a precise and timely fashion. The session delved into the key points of a successful personal campaign that may promote an idea, goal or desired career transition.

The conference was concluded by closing remarks delivered by Sarfraz Taj, conference co-chair. The conference was tremendously successful with much praise for the presentations, organization and activities. As the *pièce de résistance*, the ANS President, Donald Hintz, stopped in to welcome the attendees and congratulate YMG and NA-YGN for organizing a successful event that promotes the continued success of the nuclear industry.

Audio Files of YPC:

[www.atomicinsights.com/AEI\\_Audio.html](http://www.atomicinsights.com/AEI_Audio.html)

Special thanks to Rod Adams from Atomic Insights for recording and posting the audio files!



## Division Spotlight: Nuclear Criticality Safety

The Nuclear Criticality Safety Division provides communication among nuclear criticality safety professionals through the development of standards, the evolution of training methods and materials, the presentation of technical data and procedures, and the creation of specialty publications.

In these ways, the division furthers the

exchange of technical information on nuclear criticality safety with the ultimate goal of promoting the safe handling of fissionable materials outside reactors.

The division also works to develop professional positions on national programs that offer community-wide benefits. Such activities include a sup-

port letter which contributed to a favorable decision for a U.S. community-wide criticality training program at the Los Alamos Critical Experiments Facility and another in-progress letter to encourage the Department of Energy to maintain and enhance programs required for assured capability to predict critical conditions.

## MIT OpenCourseWare: Free Online Courses

MIT OpenCourseWare (MIT OCW) is an initiative of the Massachusetts Institute of Technology (MIT) to put all of the educational materials from its undergraduate- and graduate-level courses online, free and openly available to anyone, anywhere.

As of November 2007, over 1800 courses were available online, about 40 of which are Nuclear Science and Technology. While a few of these are limited to chronological reading lists and

discussion topics, a majority provided homework problems and exams (often with solutions) and lecture notes. Some courses also include interactive web demonstrations in Java or Matlab, complete textbooks written by MIT professors, and streaming video lectures.

Here is a small sample of some of the more interesting nuclear courses:

- Seminar: Fusion and Plasma Physics (#22.012)

- Neutron Science and Reactor Physics (#22.05)
- Applied Nuclear Physics (#22.101)
- Nuclear Power Plant Dynamics and Control (#22.921)
- Sustainable Energy (#22.811J)

MIT also offers a large selection of management and leadership courses under the Sloan School of Management. For more information and a full listing of courses, please visit [ocw.mit.edu](http://ocw.mit.edu).

## Useful Commute: Best Productivity Tips of 2007

Want to get things done more efficiently? In this podcast, BNET's Business Hacks blogger Rick Broida shares some of the last year's most popular productivity tricks — from Jott's voice-to-text email reminder service to desktop search software like Copernic — to free up your time. Podcast: <http://blogs.bnet.com/intercom/?p=1436>

## Climate Change Committee Update

In May 2007 The ANS Environmental Sciences Division (ESD) created the brand new Special Committee on Climate Change. The committee was born with a main goal: the development of a unified vision and an implementation plan for ANS activities and messages related to Climate Change and the role of Nuclear Science and Technology.

The charter of the ESD Special Committee on Climate Change (ESD-SCCC) includes:

- gather the most up-to-date information about climate change and the role of nuclear
- develop a vision and an implementation plan for ANS activities and messages related to climate change
- coordinate with all other ANS entities (divisions, technical groups, committees) working in the area of climate change.

While ESD is the obvious host for this committee, it was recognized that many

other ANS divisions and committees also have close ties and interests in the area of Climate Change. For that reason, during the ANS Annual Meeting in Boston, ESD respectfully requested all ANS divisions and committees to evaluate whether or not they needed to have a permanent member serving in the ESD-SCCC to ensure that their area of interest is appropriately covered by the committee. The committee currently includes representatives from BMD, ETD, FED, MCD, YMG, NPHWG, IC, PIC and PPC.

After a few email exchanges, the ESD-SCCC had its first conference call on October 2007 and met face to face during the ANS Winter Meeting in DC. In a world where the challenges of Climate Change have very quickly bubbled up to the awareness of the mainstream public, it is fair to say that the committee feels a little bit overwhelmed by the size and ramifications of the task in front of them. And, of course, there are dissenting opinions within the group as far as what

should be the immediate course of action. In any case, the ESD-SCCC agreed that its first job is to prepare an information piece on nuclear and Climate Change focused on educating the general public and the average congressional staffer. Since more and more groups and organizations are starting to come out and recognize the positive role that nuclear could play in dealing with Climate Change and its consequences, the ESD-SCCC is looking for strategic partnerships with other organizations and groups that already have some sort of synergy with ANS and are interested in Climate Change to help distribute our message.

The ESD-SCCC continues working on this initial task, while starting to set up a longer term strategy and implementation plan for future activities. Certainly, given the size and the relevance of the issue of Climate Change in our society, the group is gearing up for a lot of exciting work. But the ESD-SCCC is ready for the challenge!

Sama Bilbao y Leon, ESD-SCCC Chair

For more information or to get involved, please visit the ESD website at [esd.ans.org](http://esd.ans.org).

# 2009 Young Professionals Congress Update

Mark your calendars for November 15-19, 2009 and make plans to join us in Washington, DC!

The American Nuclear Society Young Members Group and the North American Young Generation in Nuclear will jointly host the 2009 Young Professionals Congress as an embedded topical meeting at the 2009 ANS Winter Meeting.

The expanded 3rd Congress will provide

increased opportunities for member participation through contributed paper sessions, more diverse professional development sessions and expanded opportunities for networking and group discussion.

Watch for the initial call-for-papers, coming soon to an email inbox near you!

Help us build upon the success of the first two Congresses! Volunteers are needed to support the development of the

technical, professional development and social programs for the meeting.

If you would like to join the planning committee, serve as a session organizer or have a great idea for a professional development session, contact the meeting co-chairs, Dave Pointer ([dpointer@anl.gov](mailto:dpointer@anl.gov)) or Amy Buu ([buu@na-ygn.org](mailto:buu@na-ygn.org)).

## NA-YGN Update

### Recent NA-YGN Publications

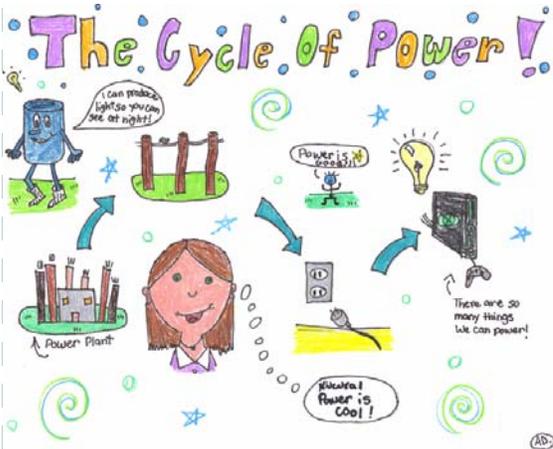
NA-YGN End of Year Report:

<http://www.na-ygn.org/aboutus2/leftdocs/NA-YGN%20End%20of%20Year%20Report%20May%202007%20to%20April%202008%20r1.pdf>

2007 NA-YGN Recruiting and Retention Benchmarking Report: [http://www.na-ygn.org/voiceofygn/docs/2007\\_Benchmarking\\_Report.pdf](http://www.na-ygn.org/voiceofygn/docs/2007_Benchmarking_Report.pdf)

2007 NA-YGN Critical to Success Reports: [http://www.na-ygn.org/voiceofygn/docs/NA-YGN%20CTS%20Results\\_April%202008\\_finalr0.pdf](http://www.na-ygn.org/voiceofygn/docs/NA-YGN%20CTS%20Results_April%202008_finalr0.pdf)

Spring 2008 Conserving Tomorrow: <http://www.na-ygn.org/publicinfo/leftdocs/Conserving%20Tomorrow%20Spring%202008.pdf>

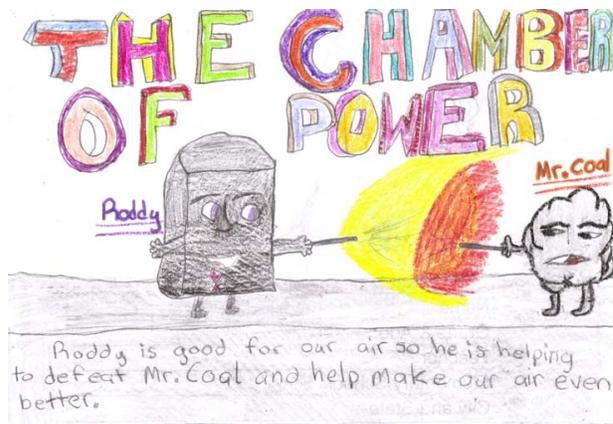


### Winners of NA-YGN Drawing Contest

Here are the winning drawings from the 2007 Drawing Contest as voted on at the ANS Winter Meeting! Each year, NA-YGN members from across the continent volunteer to give educational presentations at local schools. Students are encouraged to submit drawings inspired by the presentation. This past year over 1500 drawings were received!

Each of the winners receives a collection of books and reference materials on nuclear science and technology for their school's library. In addition to this, the first place recipient receives a \$100 USD Savings Bond, NA-YGN T-Shirt, and Honorary NA YGN Membership and the second and third place winners each receive a \$50 USD Savings Bond, NA-YGN T-Shirt, and Honorary NA YGN Membership. Check out the "NA-YGN Poster Contest" section on the NA-YGN website ([www.na-ygn.org](http://www.na-ygn.org)) for more information.

1<sup>st</sup> Place – Allison DiPofi (Westinghouse – PA)



2<sup>nd</sup> Place – Madison Severtsgaard (Quad Cities)



3<sup>rd</sup> Place – Nicole LaPenta (Oyster Creek)