



Fuel Cycle & Waste Management Division

Fall 2008 Newsletter

Message from the Chair

Our industry, the American Nuclear Society (ANS), and the Fuel Cycle and Waste Management (FCWM) Division are all experiencing the renaissance and it is time to remind everyone of the FCWM activities and how you can support them. So I apologize for a newsletter that is more about who we are and what we do rather than “newsy”.

During my direct involvement in the FCWM governance for the last six years I have witnessed increased diversity in the FCWM activities and the Executive Committee. In recent years we have expanded participation in the leadership roles to include the younger generation and representatives of a wider range of industries such as the “front end” of the fuel cycle and utilities.

Now is the time to be more active as FCWM has relevant roles in all aspects of the nuclear fuel cycle: mining, enrichment, fuel fabrication, fuel design, reprocessing, storage, geologic repositories, waste processing, waste form testing, advanced fuel cycle evaluations, fissile material management, and national fuel cycle policies. We are also the home division for the Special Committee for Nuclear Nonproliferation.

So, please contact me directly to discuss ways you can expand your participation and support in the areas described later. Your participation will also enhance your effectiveness in the industry. As a consultant I can attest that broader participation in these activities provide valuable opportunities for networking, awareness, and expanding contacts.

There are many FCWM members that perform key roles in supporting nuclear power and receive various awards and honors for their work. The problem is it is hard for us to hear about these actions to give credit where credit is due so please let me know of your outreach. FCWM has budget line items to support outreach and other activities so please let me know if you need assistance.

For younger members, it is never too early to begin support of our activities. For students, check out the discussion of how you can participate in FCWM activities described in the most recent student newsletter. We recognize that budgets are tight for the young generation participation and FCWM provides

support for meeting attendance and outreach.

Of course, our ability for outreach is enhanced by bringing more people into ANS and FCWM. If your colleagues are not members of ANS and FCWM please encourage them to join by visiting the ANS website. Surveys show that most members believe that the subscription to *Nuclear News* is worth the annual membership fee but there is much more to gain in networking and career growth. Personal benefits and gratification are in proportion to your participation.

I remind all members that you are welcome to attend the FCWM Executive and Program Committee meetings on Sunday at all national meetings. This is a good time to understand the FCWM activities and we even feed you lunch. Check the national meeting programs for the times and locations.

As we progress in our outreach actions contact me on your successes and needs. Maybe the next newsletter can be a bit more newsy on the accomplishments of the FCWM members.

Steve Turner
FCWM Chair
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Executive Committee

The members of the executive committee for June 2008 to June 2009 are:

Chair: Stephen L. Turner
Vice Chair: Terry Todd
Secretary/Treasurer: Barry B. Spencer
Program Chair: Jim Hardeman
Deputy Program chair: Mary Lou Dunzik-Gougar

Members:

Guillermo DelCul	Ruth F. Weiner
Alan S. Icenhour	Dominique Greneche
Maryanne E. Stasko	Alan D. Pasternak
Thomas J. Hirons	Jeffery R. Brault

Nominees for the Executive Committee positions are developed in the fall of each year primarily using suggestions from members of the Executive Committee that form the Nominating Committee. You may contact



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the FCWM Chair if you would like to run. Typically all suggestions are included on the ballot.

The transition to an officer begins with the Executive Committee appointment of the Deputy Program Chair that can be any member of FCWM. The succession of officers is from Deputy Program Chair to Program Chair to Secretary-Treasurer to Vice Chair to Chair. It is a long but rewarding process to serve as an officer of FCWM so contact the Chair if you are interested in division leadership.

FCWM Contributions

FCWM has a long history of sponsoring successful Topical Meetings and is one of the largest Divisions in ANS. As such, we generate income that is used to support ANS causes. The focus of our philanthropy is education and outreach that include support for:

- the NEED program for direct educational and professional assistance to the culturally and economically disadvantaged to encourage educational endeavors in nuclear science and technology,
- the Glenn T. Seaborg Congressional Science and Engineering Fellowship that is a stipend for an ANS member to work in a Congressional office for a year to provide advice on science and engineering matters,
- the John Randall Scholarship for graduate studies in the areas of science and engineering related to the nuclear fuel cycle and radioactive waste management,
- the John and Muriel Landis Scholarships for disadvantaged undergraduate and graduate students,
- student travel to attend national meetings including travel for the Randall Scholarship winner,
- student and Young Members Group conferences and student workshops,
- teacher workshops, and
- *Radwaste Solutions* magazine.

Meetings

Much of our energy and effort goes into technical program development in support of national ANS meetings and the topical meetings. The FCWM Program Chair guides the membership to set the topics and sessions for the national meetings and coordinates

support for topical meetings.

ANS National Meetings

For the National Meetings in June and Winter Meeting in November we need to know what topics are of interest to your business or study for paper sessions or panel sessions. If you would like to help organize sessions for national or topical meetings, provide your ideas to the Chair or the Program Chair prior to our Program Committee meeting. The reviews of technical papers are done electronically and we can always use more reviewers for the submitted papers.

We support student travel to the national meetings and to the ANS student conferences. Student Registrations for the national meetings do not include the Presidents Reception on Sunday night so we often pay for tickets to the reception so you can enjoy networking. We usually coordinate outlays for the national meetings with your professor or advisor but this is not required. You may contact the Chair directly.

Topical Meetings

We also support topical meetings. Serving on the Organizing Committee of an ANS topical meeting helps build your network of professional contacts throughout the nuclear industry and running a meeting is a great exercise in developing personnel management, time management, negotiation, and organizational skills. Start out by volunteering for a topical in your local area or one you already plan on attending and assisting the local chapter. The ANS meeting page contains contact information on all of the meetings.

The topical meetings we currently sponsor include:

- **GLOBAL:** A series of international conferences that cover future nuclear energy systems with emphasis on their associated advanced fuel cycles. The conferences focus on new nuclear systems that are in various stages of conceptualization, research and development, demonstration, and early application. Reviews and discussion of significant national decisions and policies affecting the future of nuclear energy are a recurring theme.
- **International High-Level Radioactive Waste Management Conference:** These are biannual conferences that focus on international geologic repository science perspective programs.



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- International Conference on LWR Fuel Performance: This meeting alternates years with the European Top Fuel conference and covers the latest developments in LWR fuel performance, including improved fuel designs and in-core management schemes.
- International Meeting on Facilities Operations - Safeguards Interface: The purpose of the conference is to foster a better understanding of the relationship of operations in nuclear facilities and the application of safeguards under national and international regimes.

Public Outreach

With nuclear energy in the news, there is more public interest in the topic and a stronger need for continued support of the ANS public information activities. FCWM supports the Public Information Committee (PIC) to mobilize and expand communications efforts. Funding for the PIC and public outreach has become a critical need because the U.S. Department of Energy (DOE) discontinued funding to the ANS due to changes in the DOE's university program support. So, FCWM is planning to add the PIC to the list of financial assistance we provide.

FCWM provides funding to support the national ANS Public Information Program. This funding is used to organize and facilitate teacher workshops, prepare materials for teacher/student/general public use, to purchase supplies for workshop attendees, provide materials for Boy Scout and Girl Scout merit badge programs, and more. Working with one teacher has a multiplication effect of reaching about 25-200 students per year, depending on the number of classes they teach.

These efforts support ANS President Bill Burchill's "Getting The Word Out" initiative and you can also actively participate in these areas:

- Planning outreach events with high school students and scouting organizations at:
<http://www.ans.org/goto/nad.cgi?id=1223355600-6>
- Volunteering as speakers to various audiences on nuclear-related topics. This could be through telephone/e-mail discussions and face-to-face. The audiences may range from classrooms to policy makers. You can also volunteer for the ANS Speakers Bureau at:
<http://www.ans.org/goto/nad.cgi?id=1223355600-7>
- Organizing local outreach events (presentations to local

groups, collaborate with other organizations). The PIC has developed informational "how-to" products to assist with typical outreach events. The ANS online slide library to assist with presentations is at:

<http://www.ans.org/goto/nad.cgi?id=1223355600-5> .

- Preparing and reviewing information or FCWM position statements or information PIC has created Focused Messages on topics to help with the explanations. Contact the FCWM chair to volunteer.

Public outreach is a key activity for FCWM members and specific examples from some of our members include:

- Jim Hardeman gave several presentations, including a couple of guest lectures at Georgia State University, and a presentation at the (Georgia) Governor's Emergency Management Conference on waste management.
- Ruth Weiner made a presentation on transportation of radioactive materials to the Nevada Test Site Citizens Advisory Board, discussed in-situ leach extraction of uranium to a selected workshop group, and supports a class of 16 students on radioactive waste management at the University of Michigan.
- Tom Hirons gave a seminar to the University of New Mexico ANS Student Chapter on Yucca Mountain & Nuclear Waste and gave a talk to the Society of Young Professional Engineers on Nuclear Power and Nuclear Waste.
- Terry Todd gave a 1/2 day presentation to the NRC on reprocessing history and fundamentals, a reprocessing seminar to the Idaho ANS section, and course at University of Idaho/Idaho State University.

Please email the FCWM chair to inform us of your activities.

Other Activities

Position Statements

ANS prepares position statements to define our consensus position on topics of interest to public officials, interested groups, and the public. This is an area of FCWM focus and you can find the current Position Statements at www.ans.org/pi/ps. Papers need continuous update and we also generate a new paper every two years to keep up with the nuclear renaissance and public interest. The papers that are posted and in process include:



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- 11. Disposal of Low-Level Radioactive Waste
- 18. Safety of Transporting Radioactive Materials
- 42. Protection and Management of Pu
- 45. Nuclear Fuel Recycling
- 47. Disposition of Surplus Weapons Plutonium Using Mixed Oxide Fuel
- 50. Release of Radioactively Contaminated Materials
- 71. Transmutation of Nuclear Wastes
- 76. Interim Storage of Spent Nuclear Fuel
- 80. Opening Yucca Mountain as a Geological Repository for Spent Fuel Storage
- 81. The EPA Radiation Standard for Spent-Fuel Storage in a Geological Repository

If you have interest in preparing or reviewing any of these Position Statements contact the FCWM Chair.

Scholarship Committee

The FCWM Division is fortunate to have endowed the John Randall Scholarship for a worthy student in the nuclear field. The scholarship currently pays a \$3000 stipend each year. We need volunteers to evaluate the proposals and recommend the recipient. This assignment is typically made to two or more people at the Winter Meeting so please contact the FCWM chair if you are interested. ANS handles the contacts with the applicants and the paperwork; the FCWM only needs to evaluate the applicants.

Honors & Awards

Saying thanks for a job well done is crucial to our industry! By nominating candidates for ANS Fellow or honorary awards, we are recognizing those whose contribution to the Society and Division has been above

and beyond the norm. If you know someone who has contributed to our industry in a significant way and deserves recognition, contact a member of the Executive Committee or the FCWM Chair so the nomination can be submitted.

Teacher Workshops

Our Division has a long history of supporting the dissemination of basic knowledge – it's one of the cornerstones of our Society. If you think your local area would benefit from a Teacher Workshop or other form of Public Information, our Division can help with the finances and other support. Contact the FCWM chair with your ideas.

Mentoring

The ANS Mentor Program matches students and new members with active ANS members to share technical, professional, and general ANS interests during national meetings. Mentor activities may include inviting a student or new member to a division or committee meeting, attending a technical session together, talking about how ANS works and how to get involved, and talking about each others' technical and professional interests. By being a mentor, you can add a personal touch to a students' and new members' memories of the meeting, help them get involved with ANS, and encourage them to continue to attend meetings and participate in ANS. By extending a welcoming hand to students and new members at the meetings, you will encourage them to continue to attend meetings and to get involved with ANS. Please register online at: <http://www.ans.org/meetings/winter/mentor/>