

ANS Fusion Energy Division
Executive Committee Meeting Minutes
Sunday, June 8, 2008, 3:00-5:00 pm PDT
Disneyland Hotel, Disney Exhibit Hall Room H, Anaheim, CA

Members attending: Farrokh Najmabadi (Vice Chair), Patrick Calderoni, Paul Wilson, Nermin Uckan (FS&T journal), Alice Ying (incoming committee member)

Members attending by telephone: Lee Cadwallader (Sec/Treas), Jeff Latkowski (Past Chair), Neil Morley, John Sethian, Brian Wirth, Art Nobile (incoming committee member)

Members not attending: Roger Stoller (Chair), Mark Anderson, Brad Nelson, Mohamed Sawan, Minami Yoda, Laila El-Guebaly (newsletter)

Other attendees: Adam Sheppard (TAMU), Jacob DeWitte (University of Florida)

1. Farrokh Najmabadi opened the meeting at 3:05 pm. Roger Stoller could not attend and Farrokh chaired the meeting in Roger's place. The meeting agenda is included as Attachment 1 to these minutes.
2. Lee Cadwallader noted that the meeting minutes from the November 2007 FED meeting had been approved by the FED via e-mail and had been submitted to ANS HQ on December 6, 2007. The minutes have also been posted to the FED web site.
3. Lee Cadwallader gave a brief treasurer's report. No funds have been spent thus far in 2008, the treasury holds \$19,846. A written report is attached as Attachment 2. He will send the report out electronically and request that members vote on approval of the treasurer's report via e-mail replies. It was noted that the initially budgeted items may be altered – there should be two annual contributions of \$150 each for student travel to national meetings and the 3 cash prizes of \$500 each are one student and two professional prizes. (the budget was approved by e-mail after the meeting).
- 4.1 Lee Cadwallader reported for Laila El-Guebaly on the FED newsletter. She had received Jeff Latkowski's article and several minor corrections to other articles. The June 2008 newsletter is in good shape and ready for distribution after the FED meeting. (the newsletter was distributed on June 12, 2008).
- 4.2. Nermin Uckan gave a brief summary of the *Fusion Science and Technology* journal status. The journal is doing well, it has healthy submissions, has shown a profit, and consequently at this time is enjoying the good countenance of ANS HQ. An important aspect of journal health is that the journal impact factor was 0.19 in 2003 and now it has risen to 0.9. Jeff Latkowski pointed out that the present *FS&T* impact factor value is higher than any of the other ANS-sponsored journals and it is rivaling other well-known fusion journals. Nermin's report is attached to these minutes as Attachment 3.

5.1 Adam Sheppard (Texas A&M University) gave the FED a briefing on the 2008 ANS Student Conference that they hosted in March of this year. There were 375 student attendees, and 175 nuclear professionals attended. There were 154 student presentations. Forty companies were represented at a Job Fair and 16 universities advertised at a school fair to attract prospective students. Dr. Mohamed El-Baradei (Director General of the IAEA) spoke at the plenary meeting via satellite video link, and Dr. Patrick Moore (an original founder of the Greenpeace organization in 1971 and in this century an advocate of nuclear power) also spoke. The meeting was a great success and Mr. Sheppard thanked us for our financial contribution. Our \$500 was used for student travel assistance and for cash prize money for good papers given at the conference.

Jacob DeWitte (University of Florida, jdgtors@ufl.edu) addressed the committee about the next student conference. He is the General Co-Chair of the 2009 ANS Student Conference committee and he asked for an increase in our participation. Their goal is to have 400 students attend, a full 25% of all nuclear students enrolled in the US. They will celebrate the 50th Anniversary of their campus Argonaut-type reactor during the conference by dedicating a new digital control system for the reactor during the conference. Mr DeWitte would like to make 2 student paper sessions on fusion topics with 5 to 10 fusion papers total and while he acknowledged our past support of student conference at a level of \$500, he would like to receive \$1,500 from the FED for this meeting. There would be two \$300 prizes for best papers, one prize at each session, and other funding needs. He would like to invite at least 5 students to speak on fusion and also have professional speakers at sessions, and an FED speech at the conference as well. He needs professionals to attend and support the meeting, such as by paper judging, company booths, and any other support we can lend. Farrokh thanked him for his briefing. Farrokh moved to thank TAMU for their work in making the 2008 ANS Student Conference a success. The committee agreed. A motion was made to keep FED funding at the \$500 level. Farrokh asked to defer the motion until other budgetary matters regarding students were discussed.

5.2 A disbursement of two \$150 contributions for general nuclear student travel to ANS national meetings was mentioned during the Treasurer's report.

6. Jeff Latkowski gave a briefing on the upcoming 18th Topical Meeting on the Technology of Fusion Energy (TOFE) conference. There were 293 abstracts received, only two were rejected. About 60% of the total papers are from outside the US, with Japan having the majority and the EU sending the remaining papers from abroad. There will be 4 plenary sessions and 3 parallel oral sessions each day. On Wednesday afternoon there will be a tour of the National Ignition Facility (NIF), with groups of tourees leaving on the hour for three hours. Upon tour completion the tourees will be bussed to the Wente Sparkling Cellar winery for the conference banquet. Jeff expects to realize a fairly high profit from the meeting, an overall value of between \$22 and 40k. There will be a workshop on Tuesday evening to discuss use of the NIF for scientific studies.

A discussion was held about stand-alone TOFE profits and the possibility of forming an Endowment with TOFE profits. The Endowment would fund an annual scholarship for a graduate student. If \$10,000 can be realized for this, then an annual \$500 scholarship could be put in place. The FED could add funds to the endowment over time to increase the annual scholarship funding level. Jeff suggested if the 18th TOFE profits were high, he could set aside \$10k directly from meeting profits before disbursing the profits (ANS HQ, 50%; ANS NORCAL section, 25%; and ANS FED, 25%), so that the \$10k could be placed directly into an Endowment that would allow creation of a scholarship fund. He will investigate the legality of that action since there is an approved meeting budget on file with ANS HQ.

Farrokh asked for a motion to have the TOFE pay whatever it could to relieve the FED treasury, which in this case was the three \$500 cash prize awards to be handed out at the TOFE banquet (Best Student paper award, Technical Accomplishment award, and Outstanding Achievement award). A motion was made and seconded, and unanimously approved by voice vote. Farrokh asked for another motion to have the Chair pursue an Endowment to form a graduate or undergraduate student annual scholarship. A motion was made and seconded, and unanimously approved by voice vote. Farrokh stated he would find out how the International Conference on Inertial Fusion Sciences and Applications (IFSA) set up their endowment for the cash prize for the Teller Medal award, if it was through donations and conference budget instead of through conference profits. Farrokh will discuss this scholarship idea with the ANS HQ Honors & Awards committee. The process is that the Division would select a student and give that person's name to the ANS HQ H&A committee for approval.

7. Jeff Latkowski discussed the FED election results from this spring. Those elected are Lance Snead (ORNL) to Vice-Chair/Chair-Elect, and Art Nobile (LANL), Wayne Reiersen (ORNL), and Alice Ying (UCLA) to committee seats. The outgoing persons are Jeff Latkowski, the Past Chair, who retires to division member, Roger Stoller, who becomes Past Chair, and Neil Morley, Paul Wilson, and Minami Yoda are concluding their terms as committee members. Farrokh Najmabadi assumes the Chair, and Lee Cadwallader continues his term as Secretary/Treasurer. The list of committee members and positions is given as Attachment 4.

8. Neil Morley spoke about FED awards. He has received three nominations for an Outstanding Achievement Award, and he believes he will receive at least one nomination for a Technical Achievement Award. Nermin Uckan urged FED committee members to encourage Technical Accomplishment award nominations; fusion has many good technical accomplishments and some years the FED does not give out this award. The nomination deadline is July 1, this is stated in the FED newsletter and on the FED web site. The FED Honors & Awards committee is composed of the FED Vice-Chair (now to be Lance Snead), Neil Morley (committee chair), David Petti, Don Steiner, and John Sethian. Neil thanked Farrokh Najmabadi for his work on the FED H&A committee.

The topic of student papers, Best Student Paper award, and paper judging was discussed. Student paper judging has been 'ad hoc' at past TOFEs, sometimes the judges simply

attended student presentations, sometimes they read drafts of the student papers. Nermin Uckan volunteered to pass along the comments of paper reviewers (for FS&T journal publication) to the Best Student Paper judges to support them on paper reviews. Neil Morley will lead the student paper judging activity with the support of the TOFE committee and FED committee members. Neil requested information about student paper judging from previous TOFEs to form a documented approach to this task.

9. Farrokh Najmabadi stated that the only decision made “off-line” was the update to the FED Public Policy Statement. Roger sent out a request to the committee for update comments. He incorporated all comments that he received and he submitted the updated statement to ANS HQ.

10.1 Farrokh Najmabadi noted that the increase in member allocation from \$1/member to \$2/member was mentioned in the Treasurer’s report.

10.2 Farrokh Najmabadi stated that there was nothing new to discuss about the ANS Standard Bylaws. This activity began about 3 years ago. ANS held a workshop yesterday to discuss how to make standardized division bylaws.

10.3 Farrokh Najmabadi stated that the topic of an FED student scholarship was already discussed under other topics in the agenda.

10.4 Farrokh Najmabadi discussed the issue of FED nominated Fellows to ANS. This issue arose in the list of metrics that ANS HQ uses to grade the health of the Division. Roger Stoller and Farrokh will present FED health metrics to the ANS Board and committee during the Annual Meeting later in the week. Dr. Sawan (April 2000) and Dr. Clement Wong (June 2001) are our most recent Fellows, but their titles were conferred some time ago. Other FED members have had the title of Fellow conferred more recently, but these were nominated by other Divisions. Attachment 5 is a list of ANS FED Fellows from 2001. Two or three years ago, Said Abdel-Khalik had presented nomination packages for two Fellow candidates to the ANS HQ Honors & Awards committee, but the committee refused the packages since the packages were not in the committee’s proper format. The committee has a two-year exclusion time before a candidate can be resubmitted, and Farrokh believes that these two candidates have not been resubmitted to date. Farrokh stated that fusion research has much technical talent and the FED should have more Fellows, 22 Fellows/805 members is a lower percentage than other Divisions. He asked for a committee to perform Fellow submittals to the ANS HQ. Nermin Uckan stated that several years ago she, George Miley (UI-Urbana), and Gerald Kulcinski (UW-Madison) offered to help with proper recommendation letters and packages to send to the ANS HQ committee. She had helped with the nomination of the two people from 2-3 years ago, but it was rushed to meet the deadline and it was not in proper form. She said that it is important to not mix leadership discussions with descriptions of technical accomplishments; those two key attributes of a Fellow candidate must be made separately. Nermin, George and Gerry are still available to help with Fellow nominations. Farrokh stated that he would ask Said Abdel-Khalik to work on Fellow submissions, because Said is an ANS Fellow and a senior researcher, a past chair

of the FED. Farrokh will ask Past Chair Roger Stoller to serve on the ANS Public Policy committee in place of Said to free Said's time to work on this issue.

The next FED meeting will be held at the 18th TOFE in September instead of at the ANS Winter meeting in November. Farrokh asked Lee Cadwallader to query the committee members to determine if Sunday afternoon or Monday evening was preferred as a meeting time.

Lee Cadwallader announced that the ANS Globe newsletter, May 2008 edition, was distributed to Division secretaries by Mike Diekman (mdiekman@ans.org) of the International Committee at ANS HQ. Anyone interested can request a pdf copy from Lee or visit the web site www.ans.org/const/international to download the pdf newsletter.

Farrokh thanked the outgoing committee members for their service.

The meeting was adjourned at 4:45 pm.

Attachment 1

ANS Fusion Energy Division
Executive Committee Meeting Agenda
Sunday, June 8, 2008, 3:00-5:00 pm PDT
Disneyland Hotel, Disney Exhibit Hall Room H
Anaheim, CA

1. Call to Order – R. Stoller
2. November 2007 FED Exec. Comm. meeting minutes – L. Cadwallader
3. Treasurer’s Report and Budget – L. Cadwallader
4. FED Publications:
 - 4.1 Report on FED Newsletter – L. El-Guebaly
 - 4.2 FS&T Update – N. Uckan
5. Student-related items:
 - 5.1 Report on the 2008 ANS Student Conference update – M. Gidden, TAMU
or designee
 - 5.2 Approval of budgeted support for students at ANS meetings – R. Stoller
6. Update on the 18th TOFE – J. Latkowski or designee
7. Election results for the 2008 election – J. Latkowski or designee
8. FED awards update – N. Morley
9. Summary of FED decisions made “on-line” since last meeting – R. Stoller
10. Other business
 - 10.1 Task force on member compensation to divisions – R. Stoller
 - 10.2 Standard Bylaws update – R. Stoller
 - 10.3 Potential for a fusion student scholarship – R. Stoller
 - 10.4 Miscellaneous business items – R. Stoller
11. Adjournment

Attachment 2

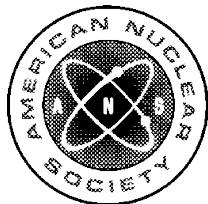
Treasurer's Report, Lee Cadwallader, Idaho National Laboratory, Idaho Falls, ID

As of December 31, 2007, the Fusion Energy Division had a balance of \$18,236.00. Expenses in 2007 included \$350 to support a teacher education workshop at the 2007 ANS summer meeting (which was credited by ANS headquarters as a Landis Challenge II contribution), \$150 in general nuclear student travel support to ANS national meetings, a \$500 cash prize for the Best Student paper from the 17th TOFE held in November 2006, a \$500 contribution to the Nuclear Engineering Education for the Disadvantaged (NEED) fund, a \$500 contribution to the 2008 ANS Student Conference that was held at TAMU in March 2008, and \$512 in telephone costs for conference calls during division meetings. Income in 2007 included \$801 from the typical \$1/division member allocation from ANS headquarters.

As of March 31, 2008, the division balance is \$19,846. Projected expenses in 2008 include \$3,000 in student travel assistance to the 18th TOFE, \$500 contribution to the upcoming 2009 ANS Student Conference, \$150 in general nuclear student support for travel to ANS national meetings, \$600 for telephone charges at two division meetings held during national ANS meetings, \$500 contribution to the NEED fund, and up to \$1,500 in cash prizes for up to three professional awards to be conferred at the 18th TOFE. Income in 2008 includes an increased member allocation from ANS HQ to \$2/division member, for a total of \$1,610. Income in the form of division profits from the 18th TOFE, to be held at the end of September 2008, will not be realized until 2009.

The committee pointed out that the \$150 in general nuclear student support for travel to ANS meetings should be two times per year (the Annual meeting and the Winter meeting), and the \$1,500 in cash prizes should be two professional awards and one student award rather than 3 professional awards. The TOFE meeting will pay for the three cash prizes to be awarded this fall rather than the FED treasury.

Attachment 3 – *Fusion Science and Technology* Journal Status Report



FUSION SCIENCE AND TECHNOLOGY

A Publication of the
American Nuclear Society

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June 2008

To: Dimitrios Cokinos, Chair, ANS Technical Journals Committee

From: Nermin A. Uckan, Editor, *Fusion Science and Technology*

Subject: Editor's Report for the Period May 1, 2007 to April 30, 2008

The following is a summary of paper statistics and editorial activities for *Fusion Science and Technology*, submitted jointly by the Editor and the Associate Editors for Asia and Europe.

During the period May 1, 2007 to April 30, 2008, we have received 265 manuscripts and 47 camera-ready lectures from the 2007 Carolus Magnus Summer School (CMSS2007).

Of the 265 manuscripts, 89 are from North America, 62 from Asia, 97 from Europe (including Russia), and 17 from Others, with the following breakdown: 166 have been accepted/scheduled, 20 are under review/revision, and 79 have been rejected/withdrawn.

Forty-seven (47) lectures from CMSS2007 have been published in *FS&T Transactions* (Feb 2008).

CMSS2007 papers are not included in (265) paper counts.

FS&T issues for 2008 are assigned and/or committed.

Following special (dedicated) issues have been published during the period 5/1/07 to 4/30/08:

- Selected papers from 17th IFE Target Fab. – FS&T May07 (49 papers, 300 pages)
- EC Wave Physics, Technology and Applications
 - Part 1 – FS&T Aug07 (23 papers, 230 pages)
 - Part 2 – FS&T Jan08 (24 papers, 280 pages)
- TOFE06 Proc. (parts 1 & 2) – FS&T Oct07 & Nov07 (~135 papers, 800 pages)
- MFE Diagnostics (EU, JA, RF, US) – FS&T Feb08 (12 papers, 480 pages)
- 8th Carolus Magnus Summer School– FS&T Transactions Feb08 (47 lectures, 480 pages)

Following special (dedicated) issues are scheduled for the remainder of 2008:

- JET Tokamak (Culham, England) – FS&T May08 (11 papers, 380 pages)
- Tritium07 Proc. (parts 1 & 2) – FS&T Jul/Aug 2008 (147 papers, in production)
- ARIES Compact Stellarator Study – FS&T Oct08 (12 papers, in production)

Following issues are confirmed for 2009:

- ECH/ECE – FS&T regular issue (papers due June08 - some already received/under review)
- Tore Supra Tokamak – FS&T regular issue (papers due mid/late 2008)
- IFE Target Fabrication – FS&T regular issue (papers due late 2008/early 2009)
- TOFE08 Proceedings – FS&T camera-ready (2 issues, papers due early 2009)

Following issues are in planning for 2009 and beyond:

- JT-60SA (part of JA-EU ITER Broader Approach) – FS&T regular issue
- DEMO and IFMIF (EU, JA, US) – FS&T regular issue(s)
- KSTAR (Korea) – FS&T regular issue
- W7-X (Germany) – FS&T regular issue
- ITER Test Blankets (EU, JA, RF, US) – FS&T regular issue

FS&T has been offering color printing for special issues for the past 7 years. Starting in Jan'08, all (regular/special) issues are offered color printing (with fee) and color online figures for b&w print issues (without fee).

Summary of paper statistics during this and previous periods are summarized in below tables and in attached charts.

FS&T Manuscripts by Regions [05/01 – thru – 04/30]					
Year	Total Ms Received	North America	Asia	Europe	Others*
2007/08	265	89	62	97	17*
2006/07	403	211	94	94	4
2005/06	388	129	109	147	3
2004/05	314	211	65	36	2
2003/04	250	93	52	64	41*
2002/03	140	69	35	26	10*
2001/02	122	48	47	25	2
<i>Reference 00/01</i>	<i>63</i>	<i>29</i>	<i>23</i>	<i>8</i>	<i>3</i>

* For 2002/03-2003/04 and 2007/08: some of the papers from TOFE02 and Tritium07 are included under Others – regions not sorted out in the ANS/FS&T database.

FS&T Manuscripts in Progress [05/01 – thru – 04/30]				
Year	Total Ms Received	Accepted/ Scheduled	Rejected/ Withdrawn	Review/ Revision
2007/08	265	166	79	20
2006/07	403	263	140	0
2005/06	388	331	57	0
2004/05	314	242	72	0
2003/04	250	197	53	0
2002/03	140	101	39	0
2001/02	122	98	24	0
<i>Reference 00/01</i>	<i>63</i>	<i>41</i>	<i>22</i>	<i>0</i>

* Papers rejected/withdrawn from pre-review/pre-selection of papers from many of the special issues are not included in paper counts and rejected/withdrawn numbers

Looking forward to seeing you in Anaheim.

Best regards,

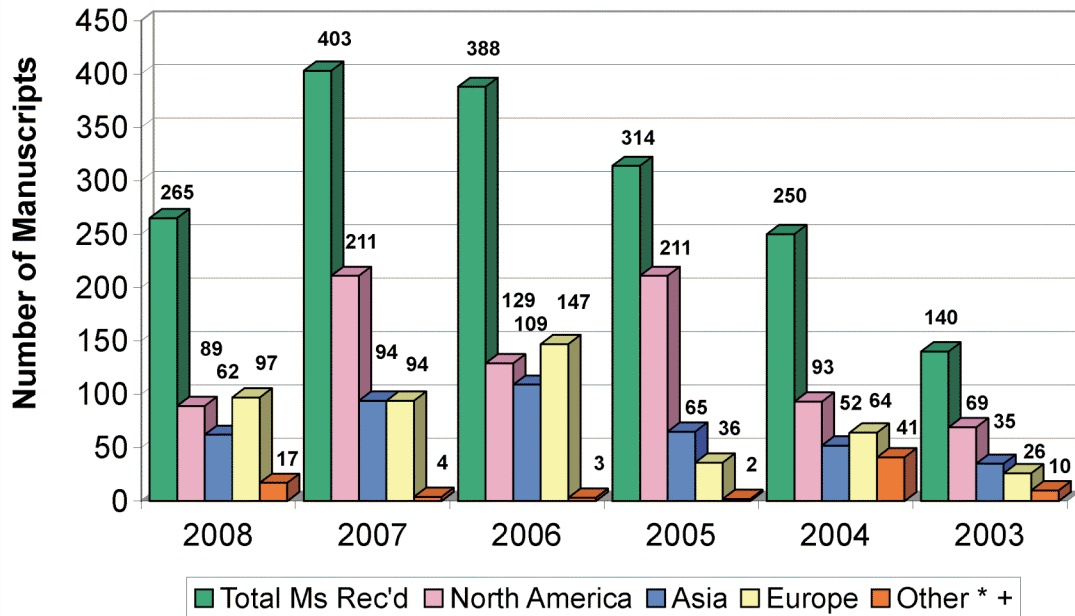
Nermin A. Uckan

Nermin A. Uckan, Editor

Fusion Science & Technology

Manuscript Submissions by Region

05/01/__ thru 04/30/__



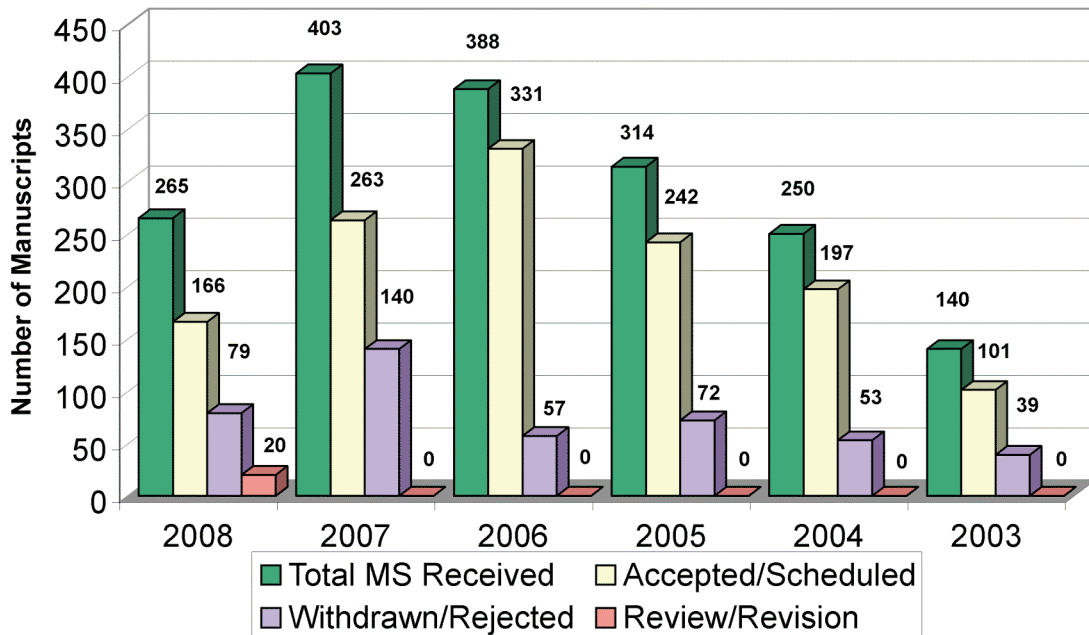
* Other includes countries from the Middle East, South America, Africa, and Australia

+ For 2003, 2004 2008: Other includes rejected/withdrawn papers from TOFE02 and TRITIUM 8 - regions not sorted out

Fusion Science & Technology

Manuscripts Currently in Progress

05/01__ thru 04/30__



Attachment 4

FED Executive Committee for June 2008-June 2009

FED Officers:

Farrokh Najmabadi (UCSD)	(08-09)	fnajmabadi@ucsd.edu	Chair
Lance Snead (ORNL)	(08-09)	sneadll@ornl.gov	VC/Chair-Elect
Lee Cadwallader (INL)	(07-09)	lee.cadwallader@inl.gov	Secy./Treas.

Executive Committee Members:

Mark Anderson (UW)	(06-09)	manderson@engr.wisc.edu
Patrick Calderoni (INL)	(07-10)	Patrick.Calderoni@inl.gov
Brad Nelson (ORNL)	(06-09)	nelsonbe@ornl.gov
Art Nobile, Jr. (LANL)	(08-11)	anobile@lanl.gov
Wayne Reiersen (ORNL)	(08-11)	reiersenwt@ornl.gov
Mohamed Sawan (UW)	(07-10)	sawan@engr.wisc.edu
John Sethian (NRL)	(07-10)	John.Sethian@nrl.navy.mil
Brian Wirth (UC-Berk.)	(06-09)	bdwirth@nuc.berkeley.edu
Alice Ying (UCLA)	(08-11)	ying@fusion.ucla.edu

Past Chair:

Roger Stoller (ORNL)	stollerre@ornl.gov
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FED Standing Committee Chairs:

Nominating: Roger Stoller (ORNL) - Chair
Honors and Awards: Neil Morley (UCLA) - Chair
Program Committee: Jake Blanchard (UW) - Chair

FED Representatives on National Committees:

ANS Publications: Ken Schultz (GA)
ANS Public Policy: Said Abdel-Khalik (Georgia Tech)

Editors:

Newsletter: Laila El-Guebaly (UW), Dennis Bruggink (UW)
Fusion Science and Technology Journal: Nermin Uckan (ORNL)

Liaisons to other organizations and ANS divisions:

ANS Board: Kathryn McCarthy (INL)
MS&T: Ken Schultz (GA)
IEEE: George Miley (UIUC)
RPS: Ham Hunter (ORNL)
ANS Young Members Group: Patrick Calderoni (INL)

FED Webmasters:

Mark Tillack (UCSD) - FED Website
Dennis Bruggink (UW) - UW Website

Attachment 5

List of ANS FED Fellows from 2001

Dr. Mohamed A. Abdou,
University of California- Los Angeles

Dr. George H. Miley,
University of Illinois-Champaign-Urbana

Dr. Charles C. Baker,
University of California-San Diego

Dr. Ralph W. Moir,
LLNL

Dr. James D. Callen,
University of Wisconsin

Dr. Gregory A. Moses,
University of Wisconsin-Madison

Dr. Stephen O. Dean,
Fusion Power Associates

Dr. Douglass E. Post,
LANL

Dr. Donald J. Dudziak,
North Carolina State University

Dr. Richard F. Post,
LLNL

Dr. Harold K. Forsen,
Kirkland, Washington

Dr. Mohamed E. Sawan,
University of Wisconsin-Madison

Dr. Samuel D. Harkness,
Pittsburgh, Pennsylvania

Dr. John Sheffield,
ORNL

Dr. Carl D. Henning,
LLNL

Dr. Weston M. Stacey, Jr.,
Georgia Institute of Technology

Dr. Terry Kammash,
University of Michigan

Dr. Don Steiner,
Rensselaer Polytechnic Institute

Dr. Gunther Kessler,
University of Karlsruhe

Dr. Nermin A. Uckan,
ORNL

Prof. Gerald L. Kulcinski,
University of Wisconsin-Madison

Dr. Clement Wong,
General Atomics