

**Minutes of the November 2014 ANS Fusion Energy Division
Executive Committee Meeting**
November 9, 2014, 3:00 to 5:00 pm PST (Pacific Standard Time)
Disneyland Hotel, Oasis Room, Anaheim, CA

DETAILED MEETING MINUTES: (see Attachment 1 for Agenda)

In attendance:

Susana Reyes (LLNL) – Chair
Arnie Lumsdaine (ORNL) – Vice Chair
Kelsey Tresemer (PPPL) – Executive committee member
Neill Taylor (CCFE) – Executive committee member
Blair Bromley (CNL) – Executive committee member
Satoshi Konishi (Kyoto U.) – Executive committee member
Nermin Uckan (ORNL) – Editor Fusion Science and Technology Journal/Awards Chair
Robert Addis (SRNL) – Tritium 2016 Chair
Jim Klein (SRNL) – Tritium 2016 Technical Program Chair
Ahmad Ibrahim (ORNL) – YMG Liason/New member chair
Sarah Camba (TAMU) – 2015 ANS Student Conference co-chair
Timothy Crook (TAMU) – 2015 ANS Student Conference co-chair
Natalie Galegar (TAMU) – 2015 ANS student Conference marketing director
Andy Klein (OR St.)
Phil Ferguson (ORNL)
Stephanie Thomson (CNL)
Amanda Lewis (RPI)
Paul Humrickhouse (INL) – Secretary/Treasurer

Phone:

Minami Yoda (GIT) – Past chair
Kevin Kramer (Terrapower) – Executive committee member
Jacob Leachman (WSU) – Executive committee member
Craig Taylor (LANL) – Executive committee member
Juergen Rapp (ORNL) – Executive committee member

Item #1: Call to order (Reyes)

Chair Susana Reyes called the meeting to order, and welcomed all attending live and by phone, including new members. Ahmad Ibrahim, liaison to the Young Members Group (YMG), announced that the Mathematics and Computation (M&C) division will hold a meeting in Nashville in April, which will include a special session on plasma physics and fusion neutronics.

Item #2 – Discussion of June Meeting Minutes (Humrickhouse)

Minutes from the June executive committee meeting (June 15, 2014) in Reno, NV were prepared by Secretary Steve Combs and transferred to incoming secretary on June 25. These were approved unanimously by email vote and subsequently transmitted to Valerie

Vasilievas at ANS headquarters on July 14. They may be retrieved from the division website at (<http://fed.ans.org/minutes.shtml>).

Item #3 – Treasurer’s Report (Humrickhouse)

Current Status of 2014 budget

As of September 30, 2014 (the end of the third quarter), our division had a balance of \$57,974, up from \$56,523 at the beginning of the calendar year. Revenues this year include a \$1,287 allocation from member dues (~3/4 of the expected annual total), and a \$1,500 annual meeting payout from ANS for the embedded TOFE, 1/3 of the expected total (budgeted) profit for the meeting of \$4,500. Expenses paid this year are \$500 to the 2014 ANS student conference hosted by Penn State, \$300 for student travel assistance to the ANS national meetings in Reno and Anaheim (one each), \$500 for the NEED scholarship, and \$36 in miscellaneous expenses. Anticipated income for the final quarter of 2014 includes the remaining ¼ of member dues (~\$429) and the remaining 2/3 (\$3,000) of the expected TOFE proceeds. Expenses for the remainder of the year will include \$1,500 for professional awards, \$3,000 in student travel support for the TOFE, and ~\$275 for the telephone used in this meeting. Taking these into account, the projected year end balance is \$56,628.

The 2015 budget was approved by unanimous email vote in September and submitted to Toni Bishop and Staci Levy at ANS headquarters On September 30. As there are no TOFE expenses associated with the 2015 budget, we expect only ~\$1,712 in member dues; budgeted expenses are the usual \$500 for the ANS student conference, \$300 for student travel to national meetings, \$500 for the NEED scholarship, \$500 to cover “other expenses” (rarely exhausted), and \$800 to cover national meeting costs, primarily telephones for the Executive Committee meetings. All members remain interested in avoiding this exorbitant cost in the future if at all possible.

Item #4 – FED Publications

4.1 Newsletter (El-Guebaly)

Laila is compiling articles for the December newsletter. She still needs a summary of the TOFE meeting and FS&T journal, which Nermin will provide. The newsletter will appear online at (<http://fti.neep.wisc.edu/fednews>).

4.2 Fusion Science and Technology journal (Uckan)

Nermin gave an update on the Fusion Science and Technology (FS&T) journal and upcoming conference proceedings and journal special issues. The FST full journal report and statistics are given in attachment 3.

Item #5 – Student-related Items

5.1 – Update on 2015 Student Conference (Texas A&M)

Texas A&M University students Timothy Crook, Sarah Camba, and Natalie Galegar were present to discuss the upcoming ANS student conference, which will be held at that university on April 9-11, 2015. Registration for the conference was set to open the following day (Nov. 10), and they noted that the participation of judges was particularly needed. There is typically a session devoted to fusion at these conferences, though historically it is lightly attended (the previous conference at Penn State had three papers). They therefore asked the committee for any suggestions as to who to reach out to in an effort to boost attendance at this session. Kelsey Tresemer suggested that national laboratory intern programs may be a fruitful source, and also noted that funding for students to attend APS meetings has dropped, and this might help spur attendance at ANS meetings instead. Ahmad Ibrahim noted that the three universities with the largest fusion programs are the University of Wisconsin, UCLA, and UCSD, and that these are likely sources of attendees for the fusion session.

5.2 – Student Travel Support for TOFE (Reyes)

A total of \$3000 has been allocated for student travel support to the TOFE; typically each award is \$500. Preference is given to US students at US universities, and ANS members. There were nine applicants this year, only two of which met any of the above criteria. Since one of the other seven was selected for an oral presentation, it was decided to give preference in light of this fact, and give three \$500 awards and six \$250 awards. One of the \$250 awardees did not attend the conference, and so could not receive the award. Awards in the amount of \$500 were given to:

Juliusz Kruszelnicki (University of Florida)
Brian Sims (Purdue University)
Amrita Bhattacharya (Indian Institute of Technology)

Awards in the amount of \$250 were given to:
Dario Carloni (Karlsruhe Institute of Technology)
Carlos Velasquez (Universidade Federal de Minas Gerais, Brazil)
Hiroki Shishido (Tohoku University)
Makoto Fukada (Tohoku University)
Yasuko Kawamoto (Kyushu University)

5.3 – Outstanding Student Paper Award Selection Process (Reyes)

Students who were lead authors of papers presented at the TOFE were eligible for a \$500 award for best paper. Potential candidates were notified of the need to submit a draft for consideration by November 4. These were evaluated by the award committee (Susana Reyes, Arnie Lumsdaine, and Kelsey Tresemer) and, subsequent to this meeting, the award was given to Juliusz Kruszelnicki (University of Florida) for his paper titled “Impact of Focusing Grid Electrodes and Pulsed Power on Modified IEC Fusion Device”.

Item #6 – Conferences

6.1 – Update on 21st TOFE (Reyes)

The 21st TOFE began with the present meeting. Approximately 200 attendees (including 38 students) and 166 presentations and posters were expected. Jim Klein asked a question about the submission date for full papers (to Fusion Science and Technology), presently set at November 30; this was not expected to slip.

6.2 – Update on TRITIUM 2016 (Addis)

Rob Addis gave an update on status of TRITIUM-2016 (11th International Conference on Tritium Science and Technology). TRITIUM-2016 is scheduled for April 17–22, 2016, and is to be hosted by the Savannah River National Laboratory (SRNL) in Charleston. Papers will be published in Fusion Science and Technology (after review and acceptance), as for TRITIUM 2013. The organizers are well aware of the issues and lack of communication between the TRITIUM 2013 organizers and the Fusion Science and Technology journal, and are working diligently to ensure no such problems arise this time.

Rob noted that budget approval for this meeting was given at the June meeting in Reno, but that this was never documented, so he is going to remind the committee of this fact. A contract is now in place with the hotel in Charleston to host the meeting.

Jim Klein gave an update on the planned technical program. A conference website and first announcement will be out soon, as it is important for potential attendees to have at least a year notice of these events. Numerous parallel sessions are planned in order to give more attendees the chance to speak (and not just present a poster), and it is hoped that this will help potential attendees in obtaining permission to attend, and thereby increase attendance at the meeting.

Arnie asked a question about the usual attendance at these meetings, and Jim indicated it was typically around 300.

6.3 – Update on 22nd TOFE (Reyes)

It is now confirmed that Princeton Plasma Physics Laboratory will host the 22nd TOFE. The dates (August 22-25, 2016) were formally approved in another meeting preceding this one. An NSTX-Upgrade tour is planned, and it is hoped that the conference will attract ~225 attendees and 150 papers.

6.4 – Update on other Co-sponsored Sessions (Reyes)

Three sessions at this ANS meeting are sponsored or co-sponsored by FED: 1) U.S. Department of Energy Light Water Reactor Sustainability Program (Organized by Kathy McCarthy of INL, Tuesday AM), 2) Physics and Engineering Analysis of Sub-Critical Driven Systems – I (Organized by our own Blair Bromley of CNL, Tuesday PM), and 3) Physics and Engineering Analysis of Sub-Critical Driven Systems – II (Also organized by Blair Bromley, Wednesday AM). It was noted the Young Members Group is looking for co-sponsors of their sessions as well.

Ahmad Ibrahim discussed his efforts to organize a fusion neutronics session in non-TOFE years in conjunction with the Radiation Protection and Shielding Division (RPSD). All

were in agreement that FED should become an official co-sponsor of these sessions, and Ahmad will take this up with the chair of RPSD.

Item #7 – Report on Ex-Comm Candidates (Yoda)

Minami Yoda identified four willing candidates for the next FED election:

Ahmad Ibrahim (ORNL)
Takeo Muroga (NIFS)
Keith Rule (PPPL)
Chase Taylor (INL)

Yutai Katoh had identified to Arnie another potential candidate, but it was decided to save this for the subsequent round of elections as the nomination period had closed, and enough candidates have already been identified for the next one.

It was noted that Takeo Muroga and Keith Rule are not presently members of ANS, and will need to join in order to be candidates for the FED ExCo.

The slate of candidates was unanimously approved by the committee.

Item #8 – Update on Public Policy Statement (Reyes)

The FED ExCo and the ANS Public Policy Committee (PPC) continue to iterate on the public policy statement. Susana noted that the PPC disliked the mention of specific facilities (such as ITER, NIF, and FNSF) in the current draft of the statement, but expressed her concern that these are essential for it to have any meaning, and without them it would be too generic in nature to be impactful. Considerable discussion followed, especially regarding the current view of ITER in the senate. Arnie Lumsdaine noted that there is concern even in the wider nuclear community about the impact of ITER expenditures on the larger program. Phil Ferguson suggested that terms like “burning plasma experiment” might be used in place of “ITER” to convey a similar meaning. Arnie noted that this terminology (and also “FNSF” for that matter) may not be meaningful to the target audience (e.g. congress). It was noted that, regardless of our preferences, that the statement must be approved by ANS to be released and therefore to be of any use at all, and so some modification of wording may be unavoidable. Regarding ITER, an attendee on the telephone noted that the recent elections had changed the complexion of the Senate, and that their attitude toward ITER may change as a result. Satoshi Konishi noted that a potential US withdrawal from ITER would significantly concern other nations, and that our international sister organizations would be supportive of a statement from us.

Susana and Arnie will meet with the PPC again tomorrow (Nov. 11), after which a revised draft will be circulated.

Item #9 (A) – Update on Tactical and Succession Plans (Lumsdaine)

Arnie Lumsdaine distributed a revised Tactical and Succession Plan for discussion. It has been updated to reflect the current membership of the committee, and liaisons to other

committees and organizations. Ahmad Ibrahim will continue as liaison to the membership committee; Andy Klein will also continue as liaison to the ANS board. Mark Tillack's tenure as IEEE liaison is coming to an end, and a replacement will need to be identified. Blair Bromley asked a question regarding liaisons to other fusion-related societies (e.g. internationally). The Canadian Nuclear Society (CNS) and the Atomic Energy Society of Japan (AESJ) are possibilities. Arnie noted that we have a particularly close relationship with AESJ, as our own ExCo typically includes a Japanese member, and Japanese participation in the TOFE has always been very strong.

The Tactical and Succession Plan was unanimously approved.

Item #9 (B) – Honors & Awards Committee update (Uckan)

Nermin Uckan gave an update on the Honors and Awards committee. It consists of seven members (five from the US, one from the EU, and one from Japan). Three recipients (previously identified by the committee and approved by the ExCo) will receive their awards at this TOFE- Brad Merrill (INL) for Outstanding Achievement, and Larry Baylor (ORNL) and erstwhile FED ExCo secretary Steve Combs (ORNL) for Outstanding Technical Accomplishment. Susana has the plaques to present to them Wednesday morning, and the ExCo has allocated a monetary award of \$500 for each (the co-recipients of the Technical Accomplishment award will split this and each receive \$250). Nermin noted that we also have the Teller award upcoming; The Teller award committee will select a recipient, and forward this to the ExCo for our approval, and we will in turn pass this on to ANS HQ for approval.

Item #10 – New Business (all)

10.1– Involving New and Young Members in Division Activities

Strategies for involving young members in fusion and in the division were discussed. Ahmad noted that involving students in the TOFE is a good way to do this. Kelsey will be assisting with the 2016 TOFE in Philadelphia and will help facilitate this. It was noted that a presence at the YMG meeting (to be held the day following this meeting) would be helpful, and both Arnie and Kelsey additionally planned to attend the mentor program meeting beginning immediately after this one.

Kelsey mentioned a need to follow up with interested students. One such student, Amanda Lewis from RPI, was in attendance earlier in this meeting, and Kelsey indicated she would contact her. Jim Klein noted the need to have small volunteer opportunities available for students. Nermin found that the student volunteers at the Knoxville TOFE were particularly helpful. Blair noted that another way to get students involved is in paper reviews; as non-experts, students can have a useful and unique perspective on conducting such reviews. Susana indicated that contacts and other new member information will be added to the website to facilitate more student interaction with the ExCo and the division.

10.2 – Compliance with other ANS Division Metrics

Increased co-sponsorship of technical sessions was discussed; there is usually not a strong fusion presence at ANS meetings without an embedded TOFE. As discussed earlier in the

meeting, co-sponsorship of RPSD sessions at these meetings is already being organized. Sponsorship of sessions at the Mathematics and Computation Division meeting in Nashville in June is also under consideration.

Susana noted that a request for sponsorship of the 2015 ICENES (to be held in Turkey) was received earlier this day. Class four sponsorship (logo only, no financial support or FS&T publication) has traditionally been given by the FED to this conference, and this was unanimously approved by the ExCo.

10.3 – Other

Blair noted that the 2nd Canadian Workshop on Fusion Technology will be held next year; he will draft a notice that we can distribute at a later date.

Item #11 – Close meeting (Reyes)

The meeting was adjourned at ~5pm. A group photo was taken by Blair and will be posted to the FED website.

Attachment 1

Agenda:

1. Call to Order (Reyes)
 - 1.1 Welcome and New Members Introduction
2. Discussion of Winter Meeting Minutes (Humrickhouse)
3. Treasurer's Report (Humrickhouse)
4. FED Publications
 - 4.1 Newsletter (El-Guebaly)
 - 4.2 *Fusion Science and Technology* Journal (Uckan)
5. Student-related Items
 - 5.1 Update on 2015 Student Conference (Texas A&M)
 - 5.2 Student Travel Support for TOFE (Reyes)
 - 5.3 Outstanding Student Paper Award Selection Process (Reyes)
6. Conferences
 - 6.1 Update on 21st TOFE (Reyes)
 - 6.2 Update on TRITIUM 2016 (Addis)
 - 6.3 Update on 22nd TOFE (Reyes)
 - 6.4 Update on other Co-sponsored Sessions (Reyes)
7. Report on Ex-Comm Candidates (Yoda)
8. Update on Public Policy Statement (Reyes)
9. Update on Tactical and Succession Plans (Lumsdaine)
9. Honors & Awards Committee Update (Uckan)
10. New Business (all)
 - 10.1 Involving New and Young Members in Division Activities
 - 10.2 Compliance with other ANS Division Metrics
 - 10.3 Other
11. Close meeting (Reyes)

Attachment 2

List of Officers and Executive Committee Members

FED Officers:

Susana Reyes (LLNL)	Chair (14-16)
Arnold Lumsdaine (ORNL)	Vice Chair/Chair-elect (14-16)
Paul Humrickhouse (INL)	Secretary/Treasurer (14-16)

Executive Committee:

Satoshi Konishi (U.Kyoto)	(12-15)
Jacob Leachman (WSU)	(12-15)
Juergen Rapp (ORNL)	(12-15)
Kelsey Tresemer (PPPL)	(13-16)
Jean Paul Allain (UIUC)	(13-16)
Kevin Kramer (Terrapower)	(13-16)
Blair Bromley (CNL)	(14-17)
Craig Taylor (LANL)	(14-17)
Neill Taylor (CCFE)	(14-17)

Past Chair:

Minami Yoda (GIT)	(14-16)
-------------------	---------

FED Standing Committee Chairs:

Nominating: Minami Yoda (GIT) - Chair
Honors and Awards: Nermin Uckan (ORNL) - Chair
Program Committee: Arnold Lumsdaine (ORNL) - Chair

FED Representatives on National Committees:

ANS Publications: Nermin Uckan (ORNL)
ANS Public Policy: Susana Reyes (LLNL)
ANS Program Committee: Susana Reyes (LLNL)

Editors:

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

Liaisons to other organizations and ANS divisions:

ANS Board: Andrew Klein (OSU)
MS&T: Lance Snead (ORNL)
IEEE: Mark Tillack (UCSD)
RPS: Paul Wilson (UW)
YMG: Ahmad Ibrahim (ORNL)

Webmasters:

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

Attachment 3 - Fusion Science and Technology (FS&T) Journal Report

Nermin A. Uckan, FS&T Editor

During the period October 1, 2013 to September 30, 2014, FS&T received a total of 136 regular issue manuscripts; plus 118 camera-ready papers accepted from the Tritium2013 – a total of 254. Online submission/processing of about 60 papers from Open Systems & Plasma Materials Interactions (OS/PMI2014) has been deferred to Oct2014, and not included in statistics of this period.

Statistics for *FS&T* regular issue manuscripts (136): 35 from North America, 31 from Europe (including Russia), 62 from Asia, and 8 from Others, with the following breakdown: 77 have been accepted, 19 are under review/revision, and 40 have been rejected/withdrawn.

Statistics for camera-ready special issue papers accepted from Tritium2013 (118): accurate statistics are not available for papers rejected/withdrawn from pre-review/pre-selection of papers - status and regional breakdowns will be sorted during the publication process in early 2015.

Following special issues/Proceedings were published during the period 10/1/13 to 9/30/14:

- Selected lectures from 6th Int. ITER School 2013 – FS&T Jan 2014
- Selected papers from 2nd IAEA-ITER Materials Technol. – FS&T Mar/Apr 2014
- Selected papers from 2013 ICFRM-16 – FS&T Jul/Aug 2014

Following special issues/Proceedings are scheduled for 2015:

- ARIES-ACT Power Plant Study – FS&T Jan 2015
- Selected papers from Tritium2013 (camera-ready) – FS&T (early 2015)
- Selected papers from OS/PMI2014 – FS&T Mid 2015)
- NIF-NIC Special Issue – FS&T (mid 2015)
- Selected papers from TOFE 2014 – FS&T (mid-late 2015)

Following special issues/Proceedings are being scheduled for 2016-17:

- Target Fabrication 2015 special issue – FS&T (early/mid 2016)
- Selected papers from ICFRM2015 – FS&T (2016)
- Selected papers from Tritium2016 – FS&T (2017)
- Selected papers from TOFE2016 – FS&T (2017)

New with FS&T in 2014/2015: ANS start assigning DOI numbers to articles starting with the January 2014 issue. There is no timetable yet for historical/back issue DOI assignments. Also, ANS will be introducing ‘first-look’ article-based publishing in 2015. In preparation for ‘first look,’ during the second-half of 2014, ANS start testing the online posting of ‘preprint’ copies well ahead of the formal print copies.

As noted before, ANS has completed scans/upload of historical pre-1997 back issues and electronic access to FS&T is now available from 1981-to-current. As always, tables of contents and abstracts of papers can be accessed at <http://www.ans.org/pubs/journals/fst/>. Individual and library subscribers can access the full text articles at <http://epubs.ans.org/>.