

**Minutes of the June 2014 ANS Fusion Energy Division  
Executive Committee Meeting**

June 15, 2014, 3:00 to 5:00 pm PDT (Pacific Daylight Time)  
Grand Sierra Resort, Carson 3 Room, Reno, Nevada

**DETAILED MEETING MINUTES: (see Attachment 1 for Agenda)**

**In attendance:**

Susana Reyes (LLNL) – Vice chair  
Blair Bromley (AECL) – Newly elected executive committee member  
Kevin Kramer (LLNL) – Executive committee member  
Paul Dickman (ANL)– ANS Public Policy Committee chair  
Craig Piercy – ANS Washington  
Robert Addis (SRNL) – Tritium 2016 Chair  
Robert Duckworth (ORNL) – ANS new member  
Nermin Uckan (ORNL) – Editor Fusion Science and Technology Journal/Awards Chair  
Jean-Paul Allain (UIUC) – Executive committee member  
Catherine Perego and Matthew Wargon (PSU) – 2014 ANS Student Conference co-chairs  
Sarah Camba and Timothy Crook (TAMU) – 2015 ANS Student Conference co-chairs

**Phone:**

Minami Yoda (GIT) – Chair  
Stephen Combs (ORNL) – Secretary/Treasurer  
Paul Humrickhouse (INL) – Newly elected Secretary/Treasurer  
Lee Cadwallader (INL) – Past Chair  
Arnie Lumsdaine (ORNL) – Executive committee member  
Kelsey Tresemer (PPPL) – Executive committee member  
Neill Taylor (CCFE) – Newly elected executive committee member

**By Proxy Vote – arranged by Minami Yoda/Stephen Combs**

Yutai Katoh (ORNL) – Executive committee member  
Rene Raffray (ITER) – Executive committee member  
Jacob Leachman (WSU) – Executive committee member

**Item #1: Call to order (Reyes) at ~3:05 pm in Reno**

Since Susana was attending the meeting live and would be taking over as Chair after this ANS national meeting, she ran the meeting with assistance from the present Chair (Minami Yoda). After calling the meeting to order, she welcomed all attending live and by phone, including newly elected executive committee (ExCo) members and officers. She then welcomed Robert Duckworth of ORNL, a new ANS member attending his first ANS meeting. To accommodate attendees that had to leave early, Item #8 shown on the agenda (“Update on Public Policy Statement”) was addressed after the treasurer’s report below (Item #3); however, a brief summary of the status/history on this important topic is included under Item #8 to be consistent with the original agenda.

## **Item #2 – Winter/November Meeting Minutes (Combs)**

Minutes from the winter executive committee meeting (November 10, 2013, in Washington, D. C.) were sent out, approved by e-mail vote, then were sent to ANS headquarters on December 6, 2013, and also put on the division webpage by Mark Tillack (<http://fed.ans.org/minutes.shtml>).

## **Item #3 – Treasurer’s Report (Combs)**

### Current Status of 2014 budget

As of March 31, 2014, our division had a balance of \$56,152. Our initial balance at the beginning of 2014 was \$56,523. Our income for the first three months of 2013 was \$429 in member allocation, and this suggests a total allocation for the year of \$1716. The other source of income this year is proceeds from the 2014 TOFE that is estimated as ~\$4500. Thus, the total estimated income for 2014 is ~\$6216. The standard expenses for the first three months of 2013 were \$500 for support of the 2014 ANS student conference in University Park, Pennsylvania (hosted by Pennsylvania State University student section) and \$300 to assist student travel to the two national ANS meetings (June in Reno and November in Anaheim). Additional planned standard expenses for 2014 include \$500 for the ANS NEED scholarship fund, \$600 for conference phone lines during the two executive committee meetings (June in Reno and November in Anaheim– costs could be less), and \$500 for miscellaneous expenses (which is rarely used in full). We also have significant costs planned to support the 2014 TOFE, including \$1500 for awards (two professional and one student) and \$3000 for student travel assistantships. Thus, our total expenses planned for 2014 are \$6900, giving FED a projected balance of \$55,839 at the end of the year or a deficit for the year of \$684. The actual income and expenses for 2014 will vary somewhat from the estimates, and a surplus is possible.

## **Item #4 – FED Publications**

### 4.1 Newsletter (El-Guebaly)

Laila was not able to participate in the meeting; however, Minami reported that the latest FED Newsletter was almost complete. This proved to be the case, and the final Newsletter was distributed the day after this meeting (June 16, 2014) and archived on-line (<http://fti.neep.wisc.edu/fednews>).

### 4.2 *Fusion Science and Technology* journal (Uckan)

Nermin reported that she and her staff were very busy with the vast majority of publications on schedule. She did report that TRITIUM 2013 papers for a special journal issue were behind schedule for reasons outside the journal’s control. There will again be the option to submit TOFE 2014 papers this fall to the journal for consideration for publication in a special issue. As always, Nermin and her staff are doing a great job.

## **Item #5 – Student-related Items**

### 5.1 – Report on 2014 Student Conference (Penn State)

The two co-Chairs of the 2014 Student Conference, Catherine Perego and Matthew Wargon, were in attendance and reported on a very successful conference with the following highlights. Over 550 attendees were recorded with ~405 students and 150 professionals. Students presented 95 podium talks and 48 posters. There was a career fair with 34 corporate sponsors attending. A significant amount of funds (~\$50,000) from the conference proceeds went back to students in the form of travel assistance and presentation awards. Tours included Breazeale Nuclear Reactor, Three Mile Island, and Beaver Stadium. Workshops on many interesting topics were held (SNAP, COBRA, INMM OP-FOR, technical presentation skills, graduate school, FE/PE exams, and ATR-NSUF from INL). Six expert panel sessions were included with 26 industry members (Fusion, Medical Isotopes, SMR Designs, Current Plant Innovations, Impact of Accidents on the Industry, and Waste Management). The panel on Fusion Technologies was probably the first fusion related one at a student conference. Trey Gebhardt and Leigh Winfrey (Virginia Tech) organized this panel, and panelists included Ronald Gilgenbach (U. Michigan), Rob Goldston & Rajesh Maingi (both PPPL), and our own Susana Reyes (LLNL). With such fusion related topics, it helps justify the \$500 contribution that FED makes each year to support the ANS Student Conferences.

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

The two co-Chairs of the 2015 Student Conference, Sarah Camba and Timothy Crook, were also in attendance and reported on the planning activities/status of the next Student Conference. It will be hosted by the Texas A&M Nuclear Engineering Department from April 9 through April 11, 2015 in College Station, Texas. The conference location will be the newly renovated Memorial Student Center on Texas A&M campus. The conference will focus on the international community with the theme “Powering Tomorrow Together.” In keeping with the international theme, a number of special panels and presentations with global ties are planned. Panels and workshops on conducting business and research internationally are planned, as well as a session about various global reactor designs. It appears that the co-Chairs and their team are off to a great start and that the 2015 Student Conference should be an outstanding meeting.

## **Item #6 – Conferences**

### 6.1 – Update on 21<sup>st</sup> TOFE (Wirth)

Brian Wirth, the General Chair for the TOFE-2014, was not able to participate in the meeting. Minami gave us a brief report on the status, including the news that final approval for the meeting was given by ANS earlier in the day (before this meeting). Also, Brian had very recently provided a status report for the FED June 2014 Newsletter. Thus, some comments from that report will be included here. It will be an embedded topical meeting at the 2014 ANS Winter meeting. The meeting will be held in Anaheim, CA at the Disney Resort and Hotel from November 9-13. The final deadline for abstracts has already

passed (June 10, 2014), with ~200 abstracts submitted. The technical program committee, chaired by Dr. Rajesh Maingi (PPPL) and Dr. Vincent Chan (GA), has identified a strong technical program and are finalizing plans for the three plenary sessions, which will be on Tuesday, Wednesday and Thursday mornings of the meeting. Commitments for plenary lectures have been confirmed from Dr. Diedrie Boilson on the status of ITER, Dr. Giancarlo Federici on the technology pathway to DEMO, Prof. Hidetoshi Hashizume on fusion engineering in Japan, Dr. G.S. Lee on the Korean fusion roadmap, Dr. Yuanxi Wan on the Chinese CFETR status, Dr. Rick Kurtz on fusion materials, Dr. John Lindl with an update on the status of the National Ignition Facility and the path forward toward ignition. Work is ongoing to finalize the remaining plenary lectures. Arrangements have already been made for the conference proceedings (those papers submitted and accepted through the review process) to be published as two special issues of the journal Fusion Science and Technology, as in past TOFE meetings. The publication committee will be chaired by Prof. Jacob Leachman (WSU), with assistance from Lee Cadwallader (INL). It appears that everything is on track for an outstanding meeting in November.

### 6.2 – Update on TRITIUM 2016 (Addis)

Rob Addis gave a brief update on status of TRITIUM-2016 (11<sup>th</sup> 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. Publications have been approved with the option for papers to be published in Fusion Science and Technology (after submission and acceptance), as for TRITIUM 2013. Rob indicated that everything was on track for a successful meeting. We previously voted on and approved an action for FED to support Class IV sponsorship of TRITIUM-2016.

### 6.3 – Discussion on 22<sup>nd</sup> TOFE (Reyes)

PPPL has shown initial interest in hosting the 2016 TOFE. There is clear support from PPPL upper management; discussions are ongoing with the next level of management about details of the organization, ANS submittal process, logistics support, financial aspects, etc. A conference call was scheduled on Tuesday June 17 with PPPL staff to discuss these topics with the participation of Susana Reyes and of Arnie Lumsdaine, who is a great source of information due to his own experience putting together the very successful TOFE 2012.

### **Item #7 – Report on Elections (Cadwallader)**

The FED election was held in the spring of 2014, with voting being closed by mid-April. Our FED Chair, Dr. Minami Yoda (GIT), completes her term of office at the end of the ANS summer meeting and Dr. Susana Reyes (LLNL) becomes FED Chair. Dr. Arnold Lumsdaine (ORNL) was elected to the position of Vice-Chair/Chair-Elect. Mr. Stephen Combs (ORNL) completes his term as Secretary/Treasurer and Dr. Paul Humrickhouse (INL) was elected to that office. The persons elected to three-year terms on the FED executive committee are: Dr. Neill Taylor (CCFE), Dr. Blair Bromley (AECL), and Dr. Craig Taylor (LANL). We thank the outgoing committee members Dr. Yutai Katoh (ORNL), Dr. Arnold Lumsdaine (ORNL), and Dr. Rene Raffray (ITER) for their service

and look forward to working with the newly elected members. A detailed listing of all officers, executive committee members, and other key positions for FED during the next few years was provided by Lee Cadwallader and is included as Attachment 2.

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

A lively discussion on this topic was carried out, and Susana provided the following brief summary of the history/present status of this activity for these minutes.

FED provided ANS with a draft of its Policy Statement last year. After a few iterations, we got to what we thought was a final draft in March 2013. We didn't hear anything back from the Public Policy Committee until a few days before the ANS summer meeting in Reno (over a year after the last draft was submitted), where Paul Dickman contacted us with the remarks that our Policy Statement was not a Policy Statement but rather a list of nice things we support. Last week Minami took the lead in generating a new draft that incorporated Dr. Dickman's comments and circulated it for comments between the ExCo members. We produced a new draft that Susana presented at the Public Policy Committee meeting on June 18, 2014 at the summer ANS national meeting. No major comments were received at that meeting, but the Committee is expected to review and discuss it at a later occasion to send us any further comments. The goal would be to have a FED Policy Statement ready by the time that the 2014 FESAC SP Report is presented for public comments with the aim of having the ANS National President use the FED Policy Statement as appropriate in potential FES budget discussions on the Hill, letters to Congress, etc.

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

Nermin pointed out that many announcements have been sent out requesting nominations for FED awards this year. Professional recognition has traditionally been important to the TOFE meeting. The ANS-FED offers three awards to provide technical recognition in the fusion area. These are the “Best Student Paper Award,” the “Outstanding Technical Accomplishment Award,” and the “Outstanding Achievement Award.” The student award is given at each TOFE meeting; however, the two professional awards are not always given at each TOFE. The awards will be presented at the 21st TOFE later this year. A discussion was led by Nermin, in which the amounts of the cash accompanying the plaques for the professional awards were the main topic. Nermin pointed out that \$500 was not consistent with other organizations recognizing a lifetime achievement award. Further discussion on this issue is probably warranted, and both Nermin and our new Chair (Susana) would probably appreciate comments on this topic.

### **Item #10 – New Business (all)**

#### 10.1– Involving New and Young Members in Division Activities

Susana asked our new attending member, Robert Duckworth, if he had any advice on how to get new members more actively involved. Robert mentioned that inviting him to this

ExCo meeting was a great idea and that he was somewhat surprised that FED encouraged attendance at such meetings. It seems that we are doing something right. This will be an important topic that will need more attention in the future.

#### 10.2 – Other

Move for a vote on providing our usual \$500 contribution for the NEED scholarship this year (2014). Action was approved unanimously.  
It will be up to the new Secretary/Treasurer (Paul Humrickhouse) to disburse these funds.

Blair Bromley pointed out that there could be better co-operation between the Canada and U. S. in ANS events and other items of common interest.

Lee Cadwallader pointed out that he has served as the FED representative on the National ANS Program Committee for many years and that he was finding it increasingly difficult to find the funds and justify travel to all of the national meetings. Thus, Susana agreed to fill this role for the next two years (corresponding to her term as FED chair). Since Susana will be attending most of the national ANS meetings and can designate others to act in her place, this is a good solution for all.

#### **Item #11 – Close meeting (Reyes) at ~5 pm in Reno**

## Attachment 1

### Agenda:

1. Call to Order (Reyes/Yoda)
  - 1.1 Welcome and Introduce New Members
2. Discussion of Winter Meeting Minutes (Combs)
3. Treasurer's Report (Combs)
4. FED Publications
  - 4.1 Newsletter (El-Guebaly)
  - 4.2 *Fusion Science and Technology* journal (Uckan)
5. Student-related Items
  - 5.1 Report on 2014 Student Conference (Penn State)
  - 5.2 Update on 2015 Student Conference (Texas A&M)
6. Conferences
  - 6.1 Update on 21<sup>st</sup> TOFE (Wirth)
  - 6.2 Update on TRITIUM 2016 (Addis)
  - 6.3 Discussion on 22<sup>nd</sup> TOFE (Reyes)
7. Report on Elections (Cadwallader)
8. Update on Public Policy Statement (Yoda)
9. Honors & Awards Committee update (Uckan)
10. New Business (all)
  - 10.1 Involving New and Young Members in Division Activities
11. Close meeting (Reyes/Yoda)

## Attachment 2

### List of Officers and Executive Committee Members, Lee Cadwallader, Idaho National Laboratory, Idaho Falls, ID.

The FED election was held in the spring of 2014, with voting being closed by mid-April. Our FED Chair, Dr. Minami Yoda (GIT), completes her term of office at the end of the ANS summer meeting and Dr. Susana Reyes (LLNL) becomes FED Chair. Dr. Arnold Lumsdaine (ORNL) was elected to the position of Vice-Chair/Chair-Elect. Mr. Stephen Combs (ORNL) completes his term as Secretary/Treasurer and Dr. Paul Humrickhouse (INL) was elected to that office. The persons elected to three-year terms on the FED executive committee are: Dr. Neill Taylor (CCFE), Dr. Blair Bromley (AECL), and Dr. Craig Taylor (LANL). We thank the outgoing committee members Dr. Yutai Katoh (ORNL), Dr. Arnold Lumsdaine (ORNL), and Dr. Rene Raffray (ITER) for their service and look forward to working with the newly elected 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:

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

#### Past Chair:

Minami Yoda (GIT)	(14-16)
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#### 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: Minami Yoda (GIT)  
ANS Program Committee:  
Lance Snead (ORNL), Lee Cadwallader (INL), Minami Yoda (GIT)

#### 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)