



# NSUF Users Organization

NSUO Executive Committee

Peng Xu, Yong Yang, David Senior, Jessika Rojas, Matthew Swenson, Peter Hosemann, and Ron Ballinger



# History and Missions

- Started in 2010
- Defined in UO Charter – updated Oct 2013
  - Provide a formal and clear channel for the exchange of information, advice and best practices between the investigators and the NSUF management
  - Serve as an advocacy group for the experimental activities at the NSUF
  - Facilitate communications among NSUF users, partner facilities, and ATR
  - Charter will be updated this year to enhance user engagement

# Membership

- Membership **open to anyone** interested in the ATR NSUF



- Users
- Potential users
- Past users
- Scientists and engineers engaged in operation and development of ATR NSUF facilities (including partner facilities)

# Leadership

- Executive Committee
  - Seven members, including one student member, nominated and elected by UO membership plus immediate past char as member ex-officio
  - Four-year terms (one-year term for student member)
  - Chair and Secretary/Chair-Elect selected by Executive Committee members
  - Proposed changes in the new charter: adding two more regular members and one more student member
  - Proposed Extension of student membership from one-year to two-year

# Executive Committee

- Current Members
  - Chair – **Peng Xu, Westinghouse** (since 2013)
  - Secretary/Chair-Elect – **Yong Yang, University of Florida** (since 2013)
  - **Ron Ballinger, MIT** (since 2014)
  - **Jessika Rojas, VCU** (since 2015)
  - **Peter Hosemann, UCB** (since 2015)
  - Student Member - **Matthew Swenson, BSU** (since 2015)
  - Immediate Past Chair – **David Senor, PNNL** (since 2012)
- UO Executive Committee 2016 Spring Election
  - Two regular members and one student member

2013 Executive Committee	
<b>CHAIR</b> Dave Senor Pacific Northwest National Laboratory <a href="mailto:david.senor@pnnl.gov">david.senor@pnnl.gov</a>	<b>SECRETARY</b> Peng Xu Westinghouse Electric Company <a href="mailto:xup@westinghouse.com">xup@westinghouse.com</a> 803-647-1819
<b>STUDENT MEMBER</b> Dan LaBrier Idaho State University <a href="mailto:labrdani@isu.edu">labrdani@isu.edu</a>	<b>MEMBER</b> Jim Tulenko (2nd Term) University of Florida <a href="mailto:tulenko@ufl.edu">tulenko@ufl.edu</a> 352-392-1427
<b>MEMBER</b> Yong Yang University of Florida <a href="mailto:yongyang@ufl.edu">yongyang@ufl.edu</a>	<b>MEMBER</b> Mitra Taheri Drexel University <a href="mailto:mtaheri@coe.drexel.edu">mtaheri@coe.drexel.edu</a>

2012 Executive Committee	
<b>CHAIR</b> Jeff Terry Illinois Institute of Technology <a href="mailto:terryj@iit.edu">terryj@iit.edu</a> 630-252-9708	<b>SECRETARY</b> Dave Senor Pacific Northwest National Laboratory <a href="mailto:david.senor@pnl.gov">david.senor@pnl.gov</a>
<b>STUDENT MEMBER</b> Peter Wells University of California, Santa Barbara <a href="mailto:well7765@gmail.com">well7765@gmail.com</a>	<b>MEMBER</b> Denis Beller University of Nevada, Las Vegas <a href="mailto:beller@unlv.nevada.edu">beller@unlv.nevada.edu</a> 702-895-1452
<b>MEMBER</b> K.L. Murty North Carolina State University <a href="mailto:murty@ncsu.edu">murty@ncsu.edu</a> 919-515-3657	<b>MEMBER</b> Jim Tulenko University of Florida <a href="mailto:tulenko@ufl.edu">tulenko@ufl.edu</a> 352-392-1427

Past Members
Sean McDeavitt Texas A&M <a href="mailto:mcdeavitt@ne.tamu.edu">mcdeavitt@ne.tamu.edu</a> 979-862-1745

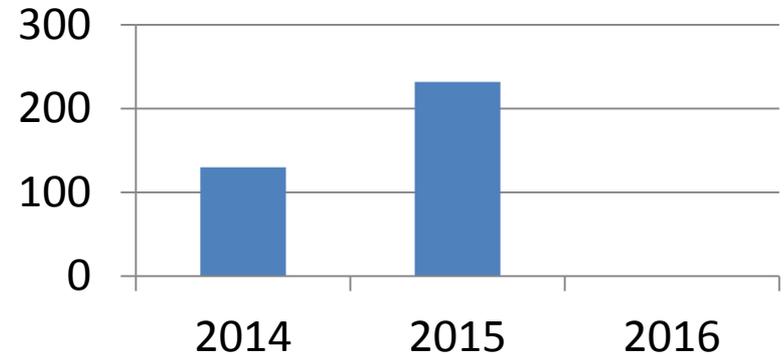
# Executive Committee Led Activities

- Provided input/feedback to ATR NSUF management on a variety of topics (mostly driven by comments received from users)
  - Proposal process
  - User engagement
  - Sample library policy
  - Utilization of partner facilities
  - User week meeting
  - Experiment planning, scheduling, and executing
- Created three committees to address specific topics
  - User Week
  - Education and Outreach
  - Capabilities and Infrastructure
  - Membership in committees is open to any UO member and broad participation is encouraged
- Participated in ATR NSUF booth at various national meetings, i.e. ANS Meeting in 2013, TMS meeting in 2014 and 2015

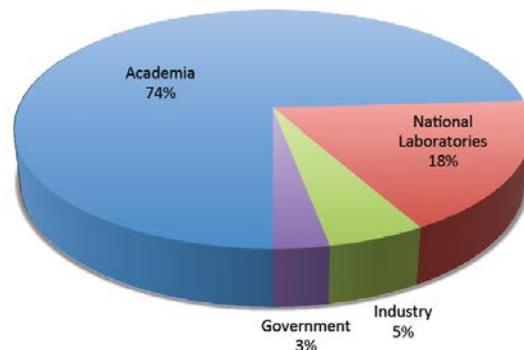
# Member Demographics and Status

- NSUO is still young and in his early stage
- Significant growth in 2015
- More members from national labs and industry participated in 2015
- Another strong growth is projected in 2016

### Member Growth

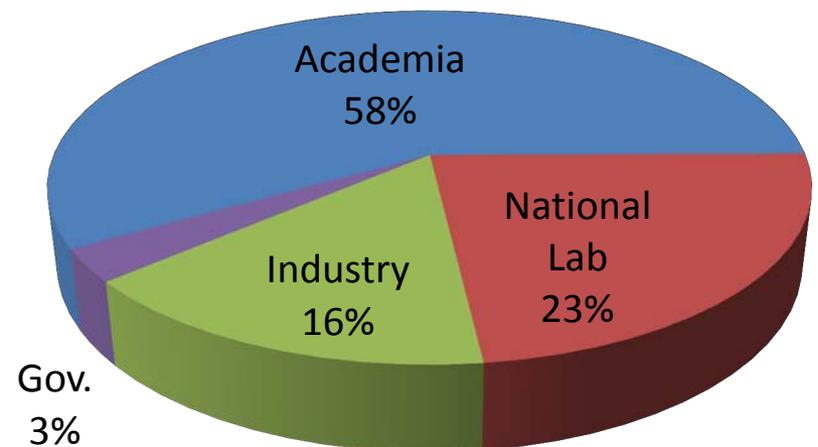


### Member Affiliation



2014

### Member Affiliation



2015

# Meetings

- Annual User Week in June at INL
  - The most important event and communication avenue for UO
- Sponsored technical meetings at national conferences
  - 2016 TMS led by Peter and Jim
  - 2016 ANS led by Yong and Keith
- Executive Committee meetings
  - User Week
  - Teleconference as needed, but at least once per quarter
  - National meetings such as TMS and winter ANS
  - Partner facility [site meeting](#) is suggested



# User Week Committee

- Matthew Swenson and Dave Senior, Chair
- Provides input on timing, format, content, location and other aspects of User Week
  - Matthew has been leading the effort and put together a draft of User Week Meeting Agenda for 2016 with comments from the rest of committee members
- User Week is the annual meeting of the UO – strong participation and input from members during planning is critical
  - A survey was sent out to all the users to solicit user feedbacks on the user week meeting experience and suggestions on improvement
- Vision for User Week
  - User Week should be “go-to” meeting for users to share experiences and ideas on ATR NSUF projects
    - Helps build a vibrant and interactive user base
    - Fosters communication between users and ATR NSUF staff
  - Transitioning from mostly educational format to mostly technical exchange (will retain some educational component to benefit new users)
  - User week meeting has always been hosted at INL
    - Live conferencing is a great approach to reach out to partner facilities

# Education and Outreach Committee

- Jessica Rojas, Chair
- Focuses on growing the UO membership and improving communication with stakeholders
  - Important component to the vision of growing NSUF beyond irradiation testing to embrace the wider nuclear materials and fuels community
    - Tough goal to achieve since NSUF needs to support NE missions
  - Strong university representation in UO, reflecting early focus of ATR NSUF on university-led research
  - Opportunities now exist to grow industry and national laboratory participation in the ATR NSUF and UO
    - **Good accomplishment in 2015**
- Current activities
  - Developing NSUO brochure
  - Developing NSUO website



# NSUO Website

<https://atrnsof.inl.gov/default.aspx?Page=Users Organization&id=230>

- NSUO website is available from NSUF homepage
- Currently working on information update to be ready for the NSUF website upgrade

**NSUF** Nuclear Science User Facilities

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*The Energy of Collaboration*

About Us | Research Capabilities | Projects | User Resources | Outreach | e-Library

Outreach / Users Organization

### Outreach : Users Organization

[Join the UOI](#)

#### National Scientific Users Organization (NSUO)

The purpose of the Users Organization is to:

1. Provide a formal and clear channel for the exchange of information and advice between the investigators who perform reactor-based nuclear technology experiments and the NSUF management.
2. Serve as an advocacy group for the experimental activities at the NSUF.
3. Provide a communication channel among users of the NSUF.
4. Educate the public and decision-makers on the benefits of the use of nuclear energy for energy generation.

Membership in the UO is open to all users and potential users of the various NSUF facilities and scientists and engineers engaged in the operation and development of these facilities. Potential members can join by self-nomination.

The Users Organization has up to seven members consisting of the chair, a secretary, chair ex-officio, student member and up to three regular members.

If you have any questions about the NSUO, contact the chair, David Senor, at [david\\_senor@pnl.gov](mailto:david_senor@pnl.gov).

Follow the Users Organization on Twitter! [@ATRNSUOchair](#)

Visit the [Users Organization blog and forum](#) on the Nuclear Street website.

**Calendar**

INL Idaho National Laboratory

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# Suggestions on Membership and Engagement Improvement

- Need member growth
  - PIs of funded experiments automatically become UO members
  - Attendees at User Week or other ATR NSUF workshops automatically become UO members?
  - Ask people to sign up during professional meetings
  - Ask current users to provide referrals
  - Diversification
- Improve member engagement
  - Suggest to increase rapid turnaround awards
  - Suggest to boost partner facility usage
  - Suggest to sponsor or host technical sessions at professional meetings
    - 2016 TMS Meeting: Accelerated Materials Evaluation for Nuclear Application Utilizing Test Reactors, Ion Beam Facilities and Integrated Modeling — Ion Beam Irradiation and In-situ TEM, organized by James Cole and Peter Hosemann
    - 2016 ANS Meeting: Nuclear Fuels and Structural Materials (NFSM-2016) organized by Yong Yang, and etc.

# Capabilities and Infrastructure Committee

- Yong Yang, Chair
- Work closely with Brenden Heidrich to support the NEID development
  - Participated in database survey and trial runs
  - Collected and Provided comments to the NEID
  - Participated in NEID Database Review Panel
- Will continue to support future efforts in NEID
  - Ion Beam Workshop

# 2015 NSUF User Week Meeting Survey

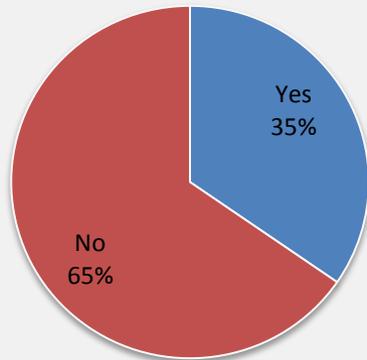
- Statistics
  - Opened: August 25, 2015
  - Closed: September 10, 2015
  - Invited participants: 82
  - Started, but did not complete: 3
  - Completed survey: 26



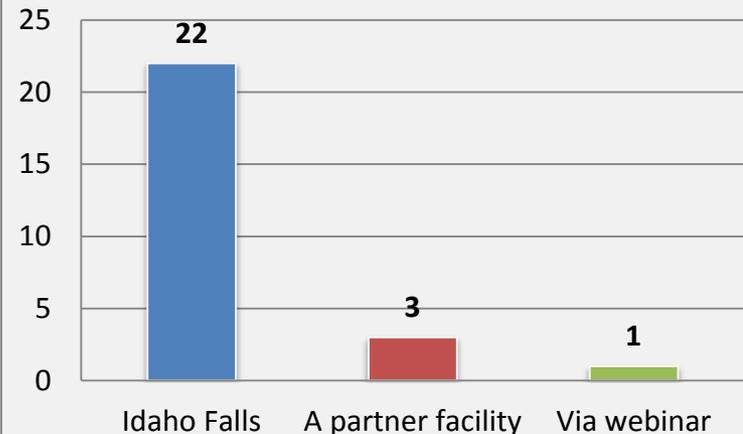
# Survey Results

- Two thirds of the users are new to the user meeting
- Majority attended on site at INL

**Participated in User Meeting  
prior 2015**



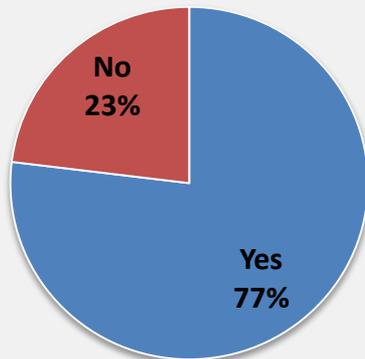
**Where did you attend the  
User's Meeting this year?**



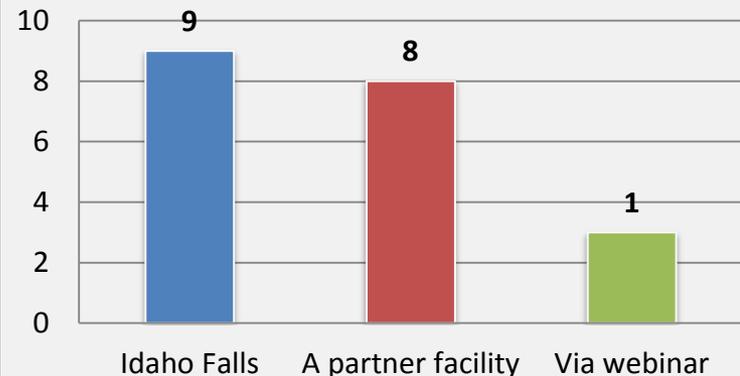
# Survey Results

- Users would like to return to the User Meeting, but prefer to attend the meeting at different site, i.e. partner facility
- Users prefer **face-to-face meeting** over webinar

Do you plan to attend a User's Meeting in the future?

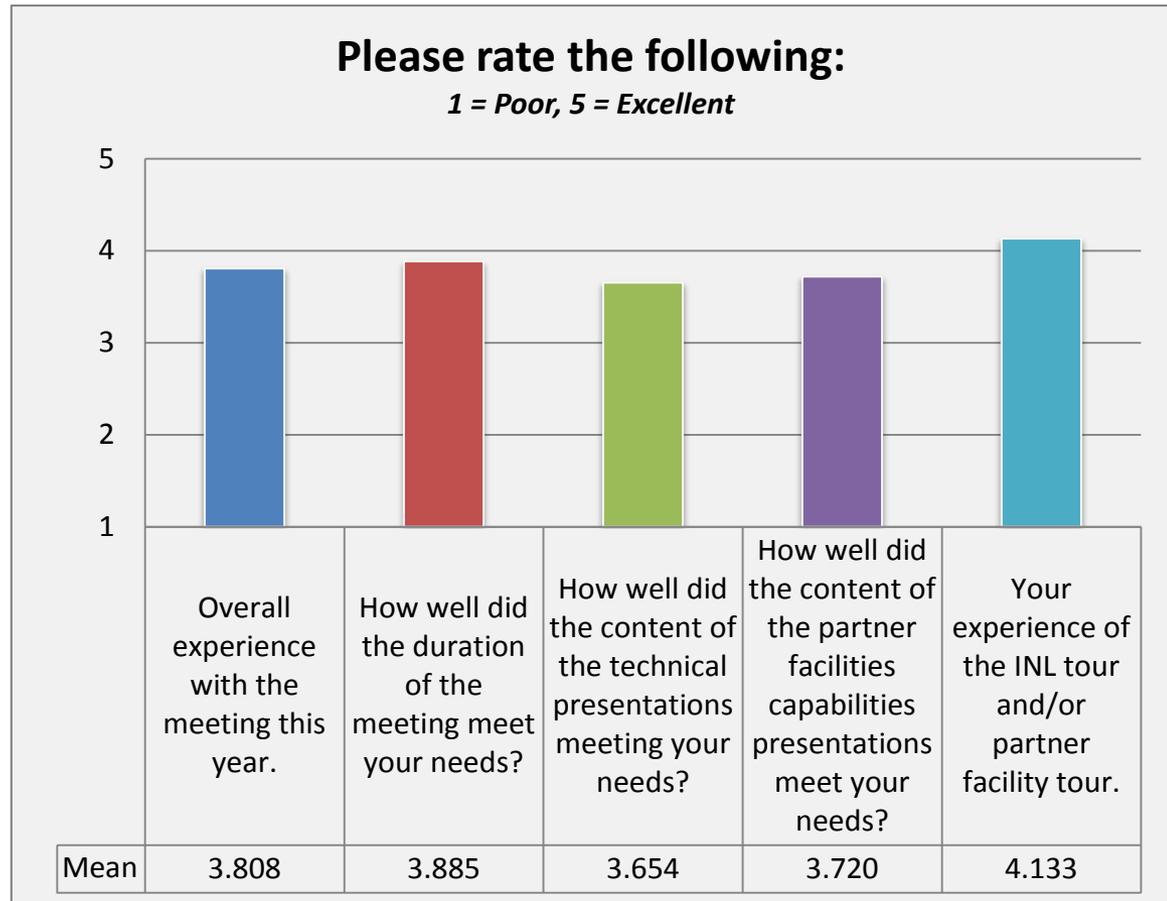


Where do you plan to attend a User's Meeting in the future?



# Survey Results

- Overall, very positive feedback
  - Participates highly rated the facilities tour
  - The technical presentations can be expended more on NSUF supported projects.



# Selected Comments from the Survey

- Good interactions and **networking**
- Prefer **more technical presentations** on NSUF project updates
- Prefer less partner facility overview. Suggest to combine it with NSUF project conducted at these facilities
- Great experience for first time users
- **Webinar went really well** especially for the first time
- Users are extremely interested in **details in partner facilities capabilities**, i.e. sample handling limitations (e.g. sample size, dose limits, fissile material inventory), inspection and measurement equipment
- **New users prefer to keep education and training contents** in the user week
- Some users like **hands-on demo** that were done in the past, like at the instrumentation lab
- Like to see **more industry participation** and collaboration between industry and academic people



# Summary

- NSUO is on the right path to become a very vibrant and interactive user group
- NSUO is a fast growing user group
  - NSUO gained tremendous support from NSUF management
  - Significant improvement on funding
  - Focus of the executive committee
  - There is still significant room to grow the user base and engagement
- Your suggestions and comments are appreciated
- Lastly, sign up NSUO if you haven't done so