

ANS – THD Division

Program Committee Virtual Meeting

June 6, 2025

Attendees (49):

Dillon Shaver (ANL, Chair)	Jeong Ik Lee (KAIST)	Sierra Tutwiler (VCW)
Izabela Gutowska (OSU, Assist. Chair)	Jon McWhirther (TP)	Sinan Okyay (INL)
Anna Iskhakova (KSU)	Jun Liao (WEC)	Steve Bajorek (NRC)
Arsen Iskhakov (KSU)	Katarzyna Borowiec (ORNL)	Subash Sharma (UMass-L)
Bao-Wen Yang (Delta)	Kurshad Muftuoglu (EPRI)	SuJong Yoon (TP)
Carolina Dutra (PSU)	Lane Carasik (VCW)	Sunming Qin (INL)
David Reger (INL)	Ling Zou (ANL)	Trevor Howard (OSU)
Donna Guillen (INL)	Luiz Carlos Aldeia Machado (PSU)	Victor Coppo Leite (INL)
Drew Ryan (Bettis)	Marco Delchini (ORNL)	Victor Petrov (ETH)
Elia Merzari (PSU)	Marilyn Delgado (BWXT)	Wei Ji (RPI)
Emre Tatli (WEC)	Piyush Sabharwall (INL)	Xingang Zhao (UTK)
Fan-Bill Cheung (PSU)	Prashant Jain (ORNL)	Xu Wu (NCSU)
Ferry Roelofs (NRG PALLAS)	Robby Kile (INL)	Yang Liu (TAMU)
Guanyi Wang (ANL)	Robert Martin (NRC)	Yassin Hassan (TAMU)
Guillaume Mignot (OSU)	Saya Lee (PSU)	Yue Jin (U-Missouri)
Hisashi Ninokata (PoliMi)	Sean Bistany (PSU)	
Hitesh Bindra (Purdue)		

1. Opening

The meeting was opened by Prof. Gutowska and Dr. Shaver. A draft agenda was provided prior to the meeting.

2. Approval of Meeting Agenda

The draft meeting agenda was provided to the meeting participants (Appendix 1). Dr. Shaver requested comments and discussion.

3. Approval of Minutes from 2024 Winter Meeting

Draft minutes from 2024 summer meeting were made available prior to the meeting. Dr. Shaver requested comments and discussion. There were none. The minutes are approved.

DISCUSSION

Prof. Merzari proposed to add a short update on NUTHOS-15 to the agenda which was added as last topic before old and new business.

4. NURETH-21 Update

Jeong Ik Lee reports on behalf of the organizing committee. The meetings preparations are in good progress. 2 plenaries have been defined, the 9 keynotes have been confirmed, and 10 panel sessions are being organized. 929 abstracts were received, leading to 673 full paper submissions, of which 656 are accepted and 17 rejected. The number of posters will allow one poster session to obtain more exposure for the posters. Authors cover 35 countries. To date, 218 participants have registered from 26 countries.

NO DISCUSSION

5. Update on the ATH'24, November 17–21, 2024, Orlando, FL: best papers, statistics (Shaver)

Dr. Shaver summarized ATH'24 as an excellent conference with 80 submissions resulting in 67 full papers. 18 papers were invited for journal publication. Although the deadline for submission already expired, some authors requested a small extension. Therefore, final papers are still being received.

NO DISCUSSION

6. Update on the THD Program for the 2025 Annual Meeting June 15 – 18, 2025, Chicago, IL: submission statistics, reviews, and session assignments (Shaver/Gutowska)

Dr. Shaver and Prof. Gutowska have provided an extensive report available as appendix 2 to the minutes. 76 submissions were accepted with a low rejection rate, which is a 40% increase compared to the last annual meeting. The papers were reviewed by 44 reviewers providing 215 reviews. 5 panel sessions are being organized.

Prof. Merzari mentions that the meeting will have more than 1250 participants.

DISCUSSION

There are still open slots for co-chairing sessions. Dr. Sharma, Borowiec, and Tutwiler offer support.

7. Update on the THD Program for the 2025 Winter Meeting November 9-12, 2025, Washington, DC: call for papers & submission deadlines (Shaver/Gutowska)

The deadline for paper submission is 24 June.

DISCUSSION

Jun Liao mentions that the panels should be identified correctly in the report.

8. Planning for the future 2026 Annual Meeting, May 31–June 3, 2026, Denver, CO (Shaver/Gutowska/All)

Dr. Shaver and Prof. Gutowska lead the discussion on the preparation of the ANS Winter Meeting in Washington DC and solicit for ideas on panels, special sessions and track chairs.

DISCUSSION

The following special sessions were proposed with track chairs identified:

- AI/ML for TH (Subash Sharma, Arsen Iskhakov)
- TH in Maritime applications (Ferry Roelofs / Bao-Wen Yang) with possible co-sponsoring from OPD

- FSI in Flow Stratification (Jon McWhirter / Donna Guillen)
- FIV (Elia Merzari / Kevin Zwijssen – Angel Papukchiev) European chair to be checked by Ferry Roelofs
- Multi-phase modeling in MSRs (Yuan?? / Nadish Saini)

In addition, a session on TH for fusion applications to be organized by (Katarzyna Borowiec / Lane Carasik) was proposed. However, the annual meeting in Denver will also have TOFE embedded. Prof. Carasik offers to coordinate with TOFE and decide on this session. Possibly, the session will be moved to either the winter meeting 2026 and/or NURETH-22.

For the following standard sessions track chairs have been identified:

- General TH (Drew Ryan / Katarzyna Borowiec)
- Advanced Reactor TH (Robby Kile / Steve Bajorek)
- Experimental TH (Yue Jin / Saya Lee)
- Experimental Multiphase TH (Drew Ryan / Subash Sharma)
- Computational TH (Dillon Shaver / Arsen Iskhakov)
- Computational Multiphase TH (Guanyi Wang / Anna Iskhakova)

The following panels were proposed:

- Strengthening the role of TH for future nuclear engineering: Retaining talent (Anna Iskhakova / Lane Carasik)
- TH for upcoming advanced reactor demonstrations (Robby Kile / Ferry Roelofs / Yassin Hassan)
- TH of LWR high burnup fuel (LEU+) (Kurshad Muftuoglu / Bob Martin)
- TH of Energy storage system (Jon McWhirter / Jun Liao)

9. Update on the ATH'26, November 15 – 18, 2026, Phoenix, AZ (Shaver)

Dr. Shaver reports that the organization of ATH'26 will be coordinated with the ICAPP and other embedded meetings. Dr. Bolotnov will be the general chair and Dr. Shaver and Prof. Gutowska will be the Technical Program Chairs.

NO DISCUSSION

10. Update on the NURETH-22 status of the request for proposal (Sabharwall)

Dr. Sabharwall reports that NURETH-22 is scheduled to take place from August 22 to 27 2027 in Denver. The various committees are almost filled, potential sessions and workshops are identified. More information is available in the appendix 3.

NO DISCUSSION

11. NUTHOS15

Prof. Merzari asks attention for NUTHOS-15 to be organized in Kashiwa-no-ha in Japan from 27 to 30 September 2026. More information is available in the appendix 4.

NO DISCUSSION

12. Old Business (All)

None

13. New Business (All)

- a. All meeting participants are reminded on the Networking Mixer in Chicago, The flyer is available in Appendix 5.
- b. A discussion was re-initiated by Dr. Iskhakova on the creation of open datasets which can feed AI/ML. Everybody recognizes the importance of such activity. However, Dr. Ryan and Yang remind everyone that this is a major undertaking costing a huge effort. IN the past DOE tried to launch a similar effort but this was not successful. Now OECD CSNI has defined an activity as mentioned by Dr. Bajorek and Prof. Hassan. Prof. Merzari, Bajorek and Liao also remind the colleagues that there are major difficulties in releasing data (due to IP and dual use regulations). It was suggested by Prof. Merzari, Martin and Prof. Hassan to discuss within the EC to draft a position paper. Dr. Martin brings to memory the existence of data.gov which has a similar purpose and Dr. Liao mentions that he is leading a WEC internal effort from which he learned that a suitable format is a necessity.
- c. Prof. Carasik reminds the audience of the 2025 NEK user group meeting meeting which will be organized from 5 to 7 August at VCW in Richmond. The registration fee will be \$100. More information is available from <https://sites.google.com/view/nek2025>
- d. Prof. Gutowska puts forward that the Friday timeframe seems to work well. Next PC meetings might be scheduled same time. Prof. Merzari brings forward that this may have been the case for the annual meeting. However, the situation for the winter meeting might be different because of teaching classes.
- e. Prof. Gutowska thanks to Dr. Shaver for 6 years of excellent PC leadership.
- f. Prof Merzari and Dr. Shaver remind the audience of the THD award ceremony which will take place during the ANS annual meeting on Monday afternoon after the session 'THD of SMRs and LWRs', which should be approximately at 5pm in the Chicago Ballroom A.

14. Adjourn

MOTION to adjourn: Dr. McWhirter

SECOND: Prof. Merzari

NO DISCUSSION

APPROVED UNANIMOUSLY

Appendix 1: PC Agenda

Appendix 2: PC report

Appendix 3: NURETH-22 slides

Appendix 4: NUTHOS-15 information

Appendix 5: Flyer Networking Mixer