

ANS – THD Division

Program Committee Virtual Meeting

November 5, 2023

Attendees (36):

Dillon Shaver (ANL, Chair)	Guillaume Mignot (OSU)	Baris Sarikaya (Constellation)
Izabella Gutowski (OrSU, Assist. Chair)	Hisashi Ninokata (POLIMI)	Emre Tatli (WEC)
Igor Bolotnov (NCSU)	Hyoung Kyu Cho (SNU)	Fan-Bill Cheung (PSU)
Bao-Wen Yang (Delta)	Victor Coppo Leite (PSU)	Guanyi Wang (ANL)
Robert Martin (BWXT)	Andrew Morreale (CNL)	Hitesh Bindra (Purdue)
Annalisa Manera (ETH)	Katrien van Tichelen (SCKCEN)	Jun Liao (Westinghouse),
Caleb Brooks (UIUC)	Yang Liu (ANL)	Steve Bajorek (NRC),
Drew Ryan (Bettis)	Musa Moussaoui (OSU)	Subash Sharma (UMass-L),
Elia Merzari (PSU)	Victor Petrov (UM)	Trevor Howard (OrSU)
Saya Lee (PSU)	Marilyn Delgado (BWXT)	Xiaodong Sun (UM),
Chaube Anshman (UIUC)	Lander Ibarra (ANL)	Yassin Hassan (TAMU),
Rui Hu (ANL)	Lane Carasik (VCU)	Yue Jin (U-Missouri)

1. Opening

The meeting was opened by Dr. Shaver at 9:00 am. A draft agenda was provided prior to the meeting, with the objective to discuss technical sessions for the upcoming ANS meeting in addition to other future ANS-sponsored meetings with thermal-hydraulics.

2. Approval of Meeting Agenda

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

MOTION to approve: Steve Bajorek

SECOND by: Bao-Wen Yang

NO DISCUSSION

APPROVED UNANIMOUSLY

3. Approval of Minutes from 2023 Summer Meeting

Draft minutes from 2023 summer meeting were made available prior to the meeting. Dr. Shaver requested comments and discussion.

MOTION to approve: Bob Martin

SECOND by: Xiaodong Sun

NO DISCUSSION

APPROVED UNANIMOUSLY

4. Update on THD session for ANS 2023 Winter Meeting

Dr. Shaver provided an update on thermal-hydraulic sessions for the ANS 2023 Winter Meeting.

He noted that the meeting session chairs had been identified and all sessions were covered. There are expected to be 15 technical sessions and 3 panels. There were only 50 submissions which may be one of the lowest numbers in years. In general THD sessions occupy two conference rooms throughout the meeting, but for this year it will be closer to one and a half. For this winter meeting THD has 9 sessions (including panels). The continuing trend on submissions is downward.

DISCUSSION:

The cause of this downward trend prompted significant discussion. A suggestion was made to check with ANS to see if this downward trend is the case in other divisions.

Steve Bajorek (and others) voiced the concern that there are many conferences that are relevant to thermal-hydraulics and this is causing submittals to be spread around. NURETH-19 and NURETH-20 were only 18 months apart due to Covid, and we are coming up on the ANS winter & summer meetings, NUTHOS-14 and the embedded ATH.

Bao-Wen Yang: Asked if we have statistics by country and if the international participation is decreasing.

Lane Carasik: Asked if it is possible to send a questionnaire to THD members to survey reasons for attending or not attending certain conferences.

Bob Martin and Yassin Hassan: Commented that with the current number of conferences it is difficult to obtain travel support for all of them. People have to be selective since funding will not support attendance at all of the conferences they might wish to attend.

Yassin Hassan: Noted that cost is major factor. It's expensive to stay in Washington, DC. This makes it difficult to send students.

Bao-Wen Yang: Suggested working with industry to gain the interest of more of the younger professionals.

Lane Carasik: Noted that another problem is that industry does not strongly support involvement by young professionals. He also noted that only about 30% of students continue to register with THD as they enter industry.

Action Items from this discussion were (1) Dillon Shaver to obtain additional data from ANS and (2) Annalisa Manera to include a discussion on the downward trend in the next Executive Committee meeting.

5. Update on THD Program for the 2023 Annual Meeting

The 2023 Annual Meeting will be held June 9 – 12, 2024 in Las Vegas, NV. Dr. Shaver reported on the summer annual meeting The deadline for summary and abstract submittal is February 2, 2024.

DISCUSSION:

Dillon Shaver: Please encourage submissions to your sessions. The deadline is strict.

Steve Bajorek: Noted that at the 2024 summer annual meeting there is an embedded topical meeting on Advanced Reactor Safety (ARS) and this is in direct conflict with some of the planned THD sessions.

Yassin Hassan: Collaboration with other organizations should be pursued. He mentioned ICAPP as one such meeting where collaboration is needed.

Bob Martin: Suggested we use the National Program Committee (NPC) to help coordinate sessions at meetings where there may be some overlap. We should look for opportunities when there are embedded meetings when thermal-hydraulics is part of that meeting. We need to be more proactive at the NPC meetings.

6. NURETH-20 Closeout

NURETH-20 was held August 20-25, 2023 in Washington, DC. Steve Bajorek gave a brief report on NURETH and its organization. Some highlights were:

- Roughly 850 abstracts were submitted with approximately 650 resulting in full length papers that were reviewed and accepted. At the meeting there were 563 registered participants and approximately 500 papers presented.
- The meeting was in-person without any direct virtual connection due to expense. Pre-recorded presentations were permitted for authors unable to travel due to Covid related restrictions and these were played during the session. This was not satisfactory and not recommended for future meetings unless the audio can be improved. Without an actual speaker some of the audience left the session.
- The meeting was complicated because of the difficulty in getting visas for our Chinese colleagues. This significantly limited their attendance and contributed to a lower than desired number of registrants.
- The meeting was a financial success for THD. We had planned on a contribution to THD of roughly \$24k, but the proceeds to THD will exceed \$40k.

7. NUTHOS-14 update

The NUTHOS-14 conference is being planned for August 25-28, 2024 in Vancouver, Canada. An update on progress was provided by Dr. Andrew Morreale. This will be the first NUTHOS conference held in North America. Of note are:

- The Call of Abstracts is open, and as of early November approximately 110 abstracts have been received so far.
- The organization team is in place and periodic meetings are being held to support planning. The Technical Program Committee will next meet on November 17.
- There will be additional efforts to gain better Chinese participation, and the organizers are hoping to help expedite the visa process to allow more time.

DISCUSSION:

Baris Sarikaya suggested that there be more emphasis on the operations part of NUTHOS, and requested that the deadline for abstract submittal be moved back to mid-December. This is because (Oct-Nov) is outage season and those involved in plant operations are extremely busy.

9. ATH'24 Update

The 2024 winter ANS meeting will include the embedded ATH topical meeting. The meeting is scheduled for November 17-21, 2024 and will be held in Orlando, FL. Dr. Shaver gave an update about the conference. Of note:

- The proposed draft call has been sent to ANS, and it is expected to be posted in December.
- Papers will be due next August.

DISCUSSION:

There was discussion among several members on the track "9. General Thermal-Hydraulics." For this track it is being proposed that summaries rather than full papers are acceptable.

10. NURETH-21 Update

The next NURETH will be NURETH-21 in Busan, Korea and planned for August 31 to September 5, 2025. An update was provided by Dr. Hyong Kyu Cho (Appendix 2). Of note:

- Busan is a major city in Korea and there are numerous options for transportation.
- The Call for Papers is being prepared and should be available for the 2023 ANS winter meeting. Abstracts will be due in October 2024 and draft papers in January 2025 with reviews completed in March 2025.
- The NURETH-21 web site is expected to be operational in March 2024.
- A new Track will be part of NURETH-21 entitled "Digital Technology for Thermal-Hydraulics."

11. Old business

None.

12. New business:

Dr. Shaver requested and encouraged nominations for the PC committee. He noted that there is room for more members.

No other new business.

Dr. Shaver asked for a motion to adjourn, which was made by Bao-Wen Yand and seconded by Jun Liao.

Meeting was adjourned at 11:01 am.

Appendix 1: PC Agenda

PROPOSED AGENDA
American Nuclear Society – Thermal Hydraulics Division
Program Committee Virtual Meeting
2023 ANS Winter Meeting
9:00 AM US Eastern Standard Time (EST), Sunday, November 5th, 2023
Zoom:
<https://oregonstate.zoom.us/j/96861070154?pwd=VIBMRIFrUjRSQWxZQmxad29tK0pGQT09>
09 Password: THDPC2023

1. **Opening (Shaver/Gutowska)**
2. **Approval of Meeting Agenda (All)**
3. **Approval of Minutes from 2023 Annual Meeting (All)**
4. **Update on THD Sessions for the ANS 2023 Winter Meeting (Shaver/Gutowska)**
 - a. General Meeting: Submission Statistics, Reviews, and Session Assignments
5. **Update on THD Program for the 2023 Annual Meeting (Shaver/Gutowska)**

June 9 – 12, 2024, Las Vegas, NV

 - a. General meeting: Announced Sessions, Deadlines/Submittal Status
6. **NURETH-20 Closeout (Bajorek)**
7. **NUTHOS-14 Update (Novog/Morreale)**

August 25 – 28, 2024, Vancouver, BC, Canada
8. **ATH'24 Update (Shaver/Yang/Pointer)**

November 17 – 21, 2024, Orlando, FL
9. **NURETH-21 Update (Cho)**

August 31 – September 5, 2025, Busan, Korea
10. **Old Business (All)**
11. **New Business (All)**

Appendix 2: NURETH-21 update



The poster features a dark blue background with a city skyline at night and a bridge over water. A diagonal banner in the top right corner reads "SAVE the DATE". The main title "NURETH-21" is in large white letters, with the subtitle "21st International Topical Meeting on Nuclear Reactor Thermal Hydraulics" below it. The dates "August 31 (Sun) - September 5 (Fri), 2025" and location "BEXCO · Busan, Korea" are listed. A section titled "Invitation to *BUSAN, Korea*" contains a paragraph about the event. Two boxes list "Conference Organizers" and "Important Dates". The bottom section includes "Contact Us" information and logos for the host and sponsors.

www.nureth-21.org

SAVE the DATE

NURETH-21

21st International Topical Meeting on Nuclear Reactor Thermal Hydraulics

August 31 (Sun) - September 5 (Fri), 2025
BEXCO · Busan, Korea

Invitation to *BUSAN, Korea*

The Thermal Hydraulic Division of Korean Nuclear Society invites you to NURETH-21, which will be held in Busan in 2025, where about half of nuclear power plants and leading universities are located.

Conference Organizers

- General Chair *Dr. Chul-Hwa Song, KAERI*
- Technical Program Chair *Dr. Ki Yong Choi, KAERI*
- Organizing Comm. Chair *Prof. Byoung Jo Yun, Pusan National University*

Important Dates

- Abstract submission due *October 25, 2024*
- Full paper submission due *January 31, 2025*
- Final paper submission due *May 2, 2025*

Contact Us

If you have any inquiries, voluntary suggestions or possible sponsorship opportunities, please contact info@nureth-21.org.

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