

2025 ANS Annual Meeting ANS THD PC Report

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A total of 76 submissions have been accepted for sessions sponsored and organized by the Thermal Hydraulics Division (THD) at the ANS 2025 Annual Meeting. This represents a 41% increase (an additional 31 papers) compared to the ANS Annual Meeting 2024, and aligns with the upward trend in THD submissions observed since 2022.

At the upcoming meeting, we will host 18 standard sessions and 5 panel sessions. Standard presentations are allotted 15 minutes, followed by a 5-minute Q&A period. Some afternoon sessions will include up to six presentations.

Figures 1 and 2 illustrate the historical submission trends: Figure 1 provides the raw 10-year submission data for all divisions at the ANS Annual Meeting, while Figure 2 shows the normalized submission statistics specific to the Thermal Hydraulics Division.

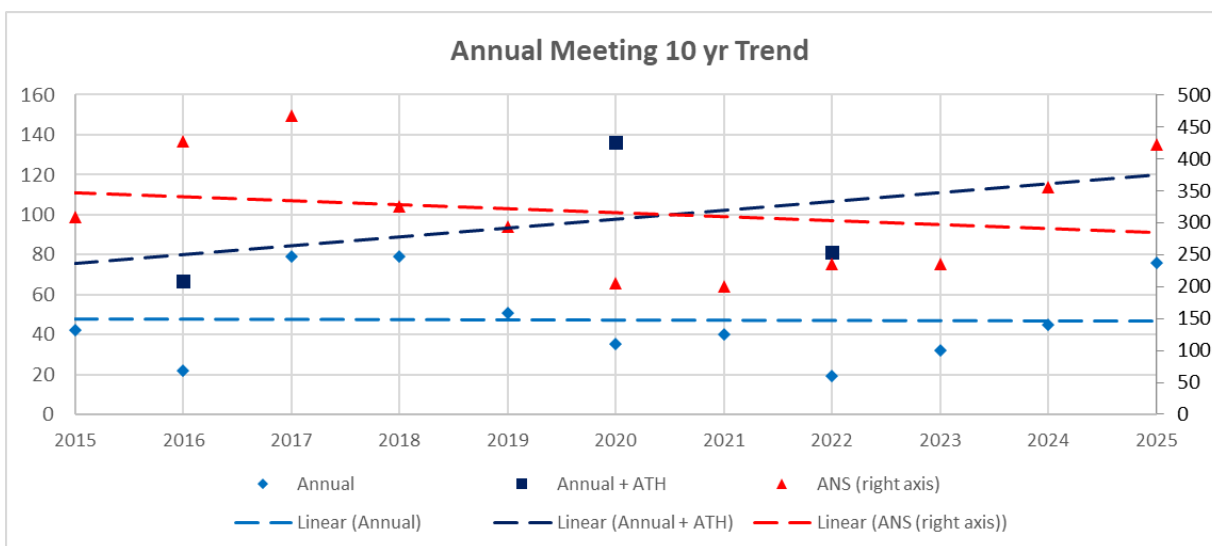


Fig. 1: Raw submission statistics for THD and ANS overall

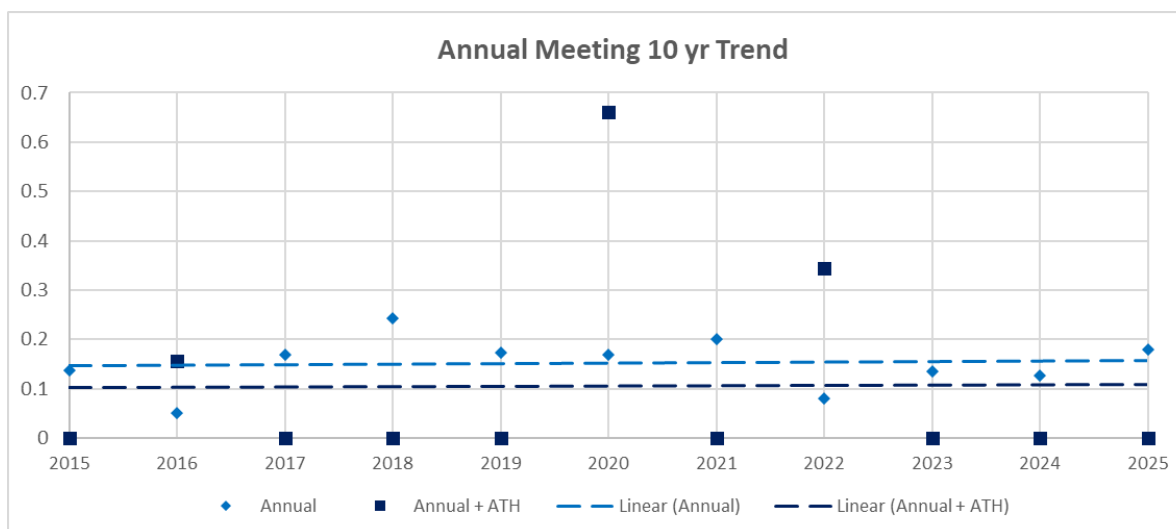


Fig. 2: Submission statistics for THD normalized to the total number of ANS summary submissions

In terms of raw numbers, the upward trend continues (with 76 accepted submissions compared to 45 last year). We also observe an increase in total ANS submissions, with 422 this year compared to 356 in 2024. When looking at normalized statistics, there is a slight upward trend, suggesting that the proportion of submissions from THD has remained relatively stable.

Reconciled review recommendations for the submissions are as follows:

| | | |
|-------|----|--------|
| | 76 | Accept |
| | 2 | Reject |
| Total | 78 | |

Two submissions were declined following two rounds of peer review, which is consistent with expectations. Historically, the rejection rate (calculated as $R / (A + R)$) has been approximately 15%, although in recent years it has trended lower. For this cycle, the rejection rate stands at 1.0%. We continue to encourage authors to respect the peer review process and the time and effort contributed by reviewers. It is essential that all submissions adhere strictly to the ANS summary template and include all required sections.

Overall, reviewer participation was sufficient, and all submissions received timely and appropriate evaluations. We are sincerely grateful to our dedicated reviewers for their efforts.

In total, 215 review recommendations were submitted by 44 reviewers, yielding an average of 4.9 reviews per reviewer. The average number of reviews per paper was 2.75, exceeding the target of two reviews per paper. Approximately 21% of the reviewer pool participated in the process, which aligns well with our historical average of around 20%. We deeply appreciate the continued support and commitment of our reviewers.

Reviewer participation over the last decade is as follows:

| Year | Location | Number of Reviews | Number of reviewers |
|------|---------------------------|--------------------------------|---------------------|
| 2025 | Chicago | 215 | 44 |
| 2024 | Orlando (inc. ATH) | 178 | 57 |
| 2024 | Las Vegas | 121 | 29 |
| 2023 | D.C. | 133 | 42 |
| 2023 | Indianapolis | 112 | 34 |
| 2022 | Phoenix | 185 | 44 |
| 2022 | Anaheim (inc. ATH) | 217 | 54 |
| 2021 | D.C.(Hybrid) | 164 | 38 |
| 2021 | Providence, R.I. (Online) | 136 | 37 |
| 2020 | Chicago (Online) | 278 | 43 |
| 2020 | Phoenix (Online) | 85 | 21 |
| 2019 | D.C. | 258 | 40 |
| 2019 | Minneapolis | 127 | 24 |
| 2018 | Orlando | No general sessions (ATH only) | |
| 2018 | Philadelphia | 188 | 32 |
| 2017 | D.C. | 222 | 28 |
| 2017 | San Francisco | 264 | 39 |
| 2016 | Las Vegas | 337 | 45 |
| 2016 | New Orleans | 87 | 20 |
| 2015 | San Antonio | 135 | 28 |
| 2015 | Anaheim | 212 | 33 |

The review process was made possible by valuable contributions from:

| Name | Reviews | Name | Reviews | Name | Reviews |
|---------------------|---------|------------------|---------|--------------------|---------|
| Howard, Trevor Kent | 24 | Shaver, Dillon | 16 | Ryan, Drew | 12 |
| Zou, Ling | 12 | Wu, Xu | 9 | Liao, Jun | 9 |
| Sun, Xiaodong | 8 | Iskhakova, Anna | 7 | Rao, Vivek | 7 |
| Jeong, Yeongshin | 6 | Bolotnov, Igor | 6 | Delgado, Marilyn | 6 |
| Guanyi, Wang | 6 | Guillen, Donna | 6 | Roelofs, Ferry | 5 |
| Carasik, Lane | 5 | Yoon, Su-Jong | 5 | Shi, Shanbin | 5 |
| Gutowska, Izabela | 5 | Bajorek, Stephen | 4 | Watson, Justin | 4 |
| Dix, Adam | 4 | Mecham, Nicholas | 4 | Petrov, Victor | 3 |
| Revankar, Shripad | 3 | Sharma, Subash | 3 | Wang, Yu-Jou | 3 |
| Yang, Bao-Wen | 3 | Mui, Travis | 3 | Merzari, Elia | 2 |
| Sinha, Vaibhav | 2 | Ji, Wei | 2 | O'Grady, Daniel | 2 |
| Okay, Sinan | 2 | Grubbs, Taylor | 2 | Lomperski, Stephen | 2 |
| Hu, Rui | 1 | Iskhakov, Arsen | 1 | Shirvan, Koroush | 1 |
| Cervi, Eric | 1 | Cheung, Fan-Bill | 1 | Diaconeasa, Mihai | 1 |
| Mao, Jiaxin | 1 | Wharry, Janelle | 1 | | |

The final technical session schedule, including panels (P), is shown below.

| Session | Time | Chair | Co-Chair |
|------------------------------------------------------------------------------------|-------------------|-----------------|----------------|
| Memorial Panel – John Kelly (P) | Monday, 1pm | Bao-Wen Yang | Yassin Hassan |
| High Fidelity CFD | Monday, 1pm | Dillon Shaver | Carolina Dutra |
| Lightning Talks | Monday, 1pm | Haomin Yuan | Nadish Saini |
| Research Reactors with LEU Fuel: I | Monday, 1pm | Erik Wilson | Co Sponsored |
| TH for SMRs and LWRs | Monday, 3:15pm | Prashant Jain | Jun Liao |
| Thermal-hydraulic Education: Opportunities with AI (P) | Monday, 3:15pm | Elia Merzari | OPEN |
| Research Reactors with LEU Fuel: II | Monday, 3:15pm | Lin-Wen Hu | Co Sponsored |
| TH for the High Temp. Test Facility | Tuesday, 10am | Donna Guillen | Saya Lee |
| Thermal Hydraulics Challenges and Opportunities for LWR Initiatives (P) | Tuesday, 10am | Baris Sarikaya | OPEN |
| AI/ML for TH | Tuesday, 1pm | Xu Wu | Subash Sharma |
| TH testing for advanced reactors (P) | Tuesday, 1pm | Jon McWhirter | Bao-Wen Yang |
| Research Reactors with LEU Fuel: III | Tuesday, 1pm | Erik Wilson | Co Sponsored |
| Enabling Deployment of Fast Reactors | Tuesday, 3:15pm | Bo Fang | OPEN |
| Thermal-hydraulics Issues and Opportunities of Non-traditional Uses of Nuclear (P) | Tuesday, 3:15pm | Subash Sharma | Elia Merzari |
| Experimental TH: I | Wednesday, 8am | Saya Lee | Adam Dix |
| General TH | Wednesday, 8am | Yue Jin | OPEN |
| TH and Multiphysics | Wednesday, 8am | Yang Liu (TAMU) | OPEN |
| Experimental TH: II | Wednesday, 10am | Guanyi Wang | Adam Dix |
| Computational TH | Wednesday, 10am | Igor Bolotnov | SuJong Yoon |
| Advanced Reactor TH: I | Wednesday, 1pm | Subash Sharma | OPEN |
| Experimental Multiphase Flow: I | Wednesday, 1pm | Drew Ryan | OPEN |
| Advanced Reactor TH: II | Wednesday, 3:15pm | Elia Merzari | OPEN |
| Experimental Multiphase Flow: II | Wednesday, 3:15pm | Yue Jin | OPEN |

Papers, summaries, and lightning talk abstracts are solicited for the [2025 ANS Winter Conference](#) on November 9-12, 2025, in Washington, DC. We expect to have an exciting program with summaries and panel sessions on the following subject areas:

- Nuclear Technology 60th anniversary,
- AI/ML applications in thermal hydraulics,
- Thermal hydraulics challenges in multiphysics simulations,
- Thermal hydraulics challenges and opportunities in microreactors,
- Thermal hydraulics research and challenges in advanced fuels,
- OECD/NEA AI/ML benchmark on CHF,
- General thermal hydraulics,
- Advanced reactors thermal hydraulics,
- Experimental thermal hydraulics,
- Computational thermal hydraulics,
- Computational multiphase Flow,
- Experimental multiphase Flow,
- Young professionals competition,
- Increase enrichment, high burnup, power update (Panel),
- Thermal hydraulics of Small Modular Reactors,
- Thermal hydraulics of micro reactors.

Full papers, summaries, and abstracts are due: June 24, 2025. The full call for papers can be found [here](#).

The program committee thanks everyone who volunteered to organize or chair a session for this meeting. As a reminder, session organizers are responsible for stimulating summary submissions, assisting with reviews, and coordinating session chairs.

Additional Notes:

- All paper presentations are **20 minutes each** (15-minute talk + 5-minute Q&A and transition to the next speaker). Session chairs are responsible for keeping speakers on time.
- If you are chairing a session, coordinate with your co-chair prior to the start on which speakers each will introduce and collect a brief bio for each speaker for their introduction.
- In the event of a no-show, do NOT skip to the next presenter. Try to keep attendees engaged with discussion or offer a 20 minute break in order to keep with the program schedule.