

2024 ANS Winter Meeting

D. Shaver and I. Gutowska

A total of 83 submissions are included in the sessions sponsored and organized by the Thermal Hydraulics Division at the ANS 2024 Winter Meeting and Embedded ATH '24. This exceeds the number submitted to ATH 2022 and is in line with long term trends showing a slight increase in submitted papers. In ATH '24 we will host a total of 16 standard sessions, 5 panel sessions and 6 keynote sessions with 11 keynote presentations. Note that the standard presentations are 15 minutes + 5 minutes Q&A and some afternoon sessions include 6 presentations. The figures below present the historical submission statistics for ATH in Fig. 1, the raw 10-year winter meeting statistics, including the overall number of summaries submitted to the ANS winter meeting by all divisions in Fig. 2, and the normalized values for THD in Fig. 3.

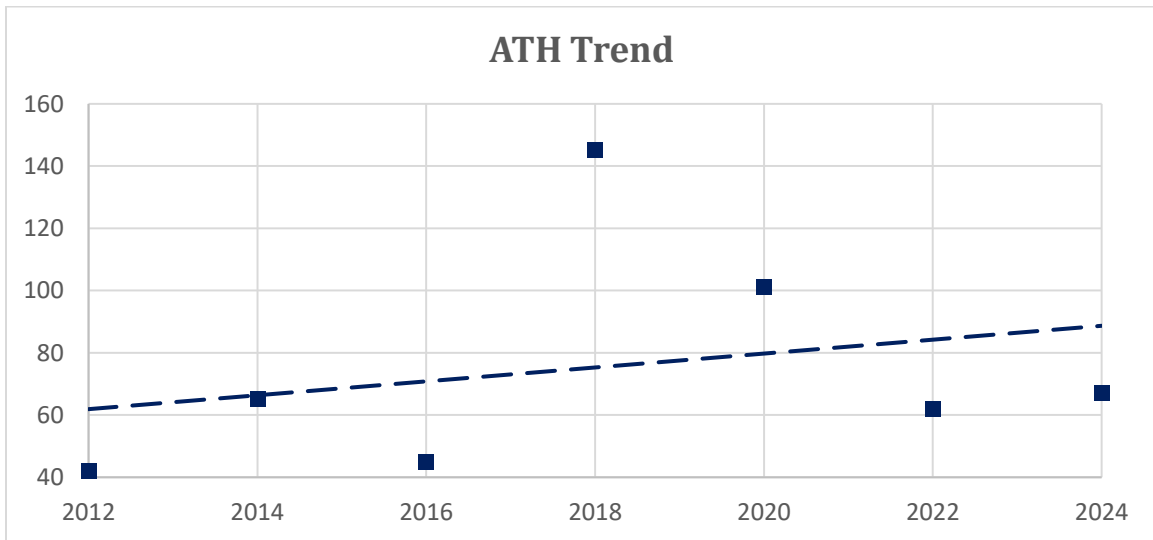


Fig. 1: ATH submission statistics

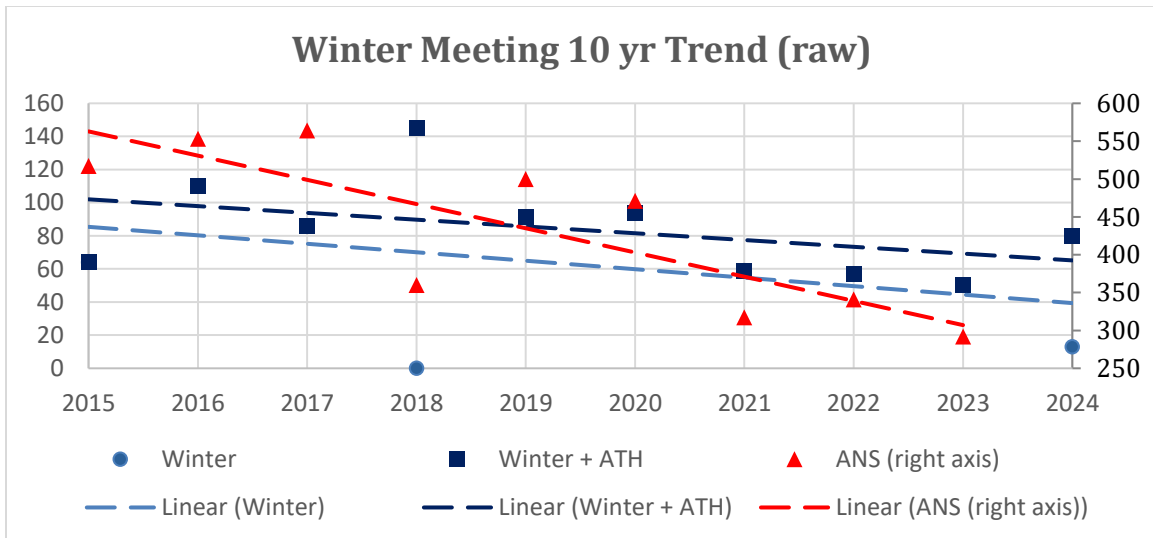


Fig. 2: Raw submission statistics for THD and ANS overall

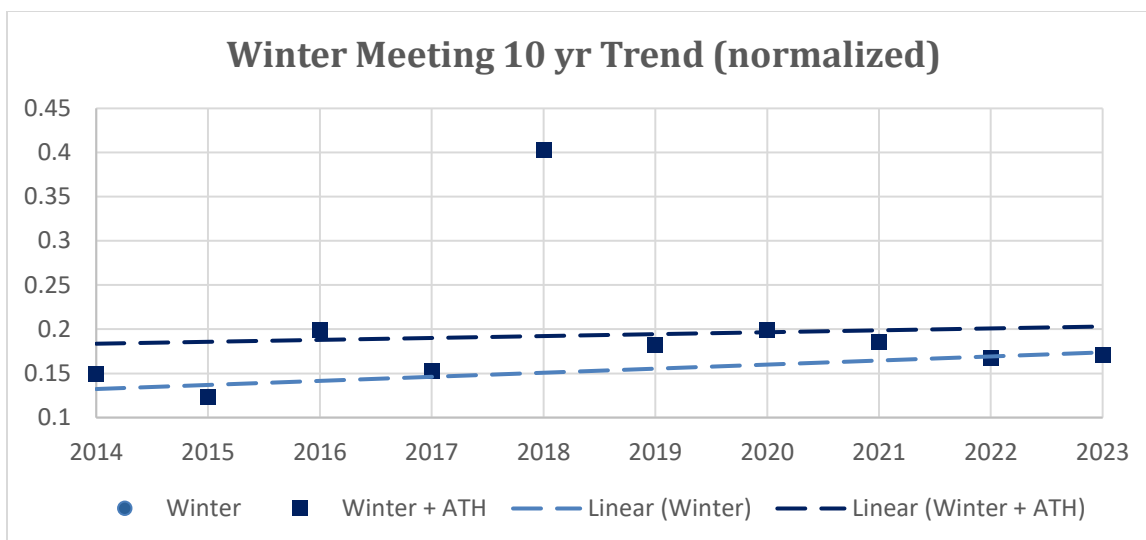


Fig. 3: Submission statistics for THD normalized to the total number of ANS summary submissions

In terms of raw numbers, the trend continues downward. However, we also see a significant downward trend in the total ANS submissions. When looking at the normalized statistics there is a very slight upward trend, which indicates that proportionally, submission from THD are likely remaining steady.

Reconciled review recommendations for the submissions are as follows:

	83	Accept
	2	Reject
Total	85	

Two submissions were rejected after two rounds of reviews, which is expected. The trend for rejection rates ($R/(A+R)$) is historically at roughly 15% but has been lower in recent years, it is currently at 2.4%. We encourage the authors to respect the process and the time that the reviewers dedicate to evaluating the summaries and to strictly follow the ANS template and submit summaries with all the required sections.

Overall, the review participation was sufficient. All the papers received adequate review on a timely basis. *Many thanks to our dedicated reviewers!* The distribution is as follows:

There were 186 review recommendations that were coordinated from 58 reviewers for an average of 3.2 reviews per reviewer. The average number of reviews per paper was 2.2, which is lower than average. We had about 18% of the reviewers participating in the process, which is on par with our typical average of around 20% participation. The reviewers' support is much appreciated!

Reviewer participation over the last decade is as follows:

Year	Location	Number of Reviews	Number of reviewers
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:

Roelofs, Ferry	19	Marcum, Wade	3	Breijder, Paul	1
Qin, Sunming	13	Panicker, Nithin	3	Cheung, Fan-Bill	1
Liu, Xiaojing	9	Popov, Emilian	3	Guillen, Donna	1
Shaver, Dillon	8	Wang, Guanyi	3	Gutowska, Izabela	1
Ji, Wei	7	Baglietto, Emilio	2	Habiyaremye, Victor	1
Zou, Ling	7	Cammi, Antonio	2	Hu, Rui	1
Liao, Jun	6	Carasik, Lane	2	Komen, Everardus	1
Ryan, Drew	6	Dix, Adam	2	Koren, Chaï	1
Yang, Bao-Wen	6	Iskhakov, Arsen	2	Merzari, Elia	1
Bolotnov, Igor	5	Jeong, Yeongshin	2	Oder, Jure	1
Shirvan, Koroush	5	Keijers, Steven	2	Pangukir, Fajar Sri	
Tiselj, Iztok	5	Lomperski, Stephen	2	Lestari	1
Cervi, Eric	4	Pucciarelli, Andrea	2	Sharma, Subash	1
Howard, Trevor Kent	4	Ramey, Kyle	2	Song, Chul-Hwa	1
Huang, Xiaoxue	4	Saini, Nadish	2	Thomas, Justin	1
Ortiz, Marcos	4	Stempniewicz, M.	2	Visser, D.	1
Petrov, Victor	4	Villanueva, Walter	2	Xu, Yiban	1
Raverdy, Bruno	4	Yilgor, Ilyas	2	Yu, Yiqi	1
Angeli, Diego	3	Arcilesi, David	1	Zwijssen, Kevin	1
Iskhakova, Anna	3	Batta, Abdalla	1		

The final technical session schedule, including panels and keynotes, is shown below. Note that for number of papers given in n+m format, n indicates full 20 minute presentations and m indicates lightning talks.

Session	Chairs	# papers	Time Slot (EDT)
Plenary	Yang, Pointer	--	Monday 1:00pm
Molten Salt Reactor TH	Frederix, Bae	6	Monday 3:15pm
Small Modular Reactor TH	Yang, Liao	6	Monday 3:15pm
General TH	Roelofs, Angele	5+1	Monday 3:15pm
Advancing Molten Salt Technology for the Next Generation of Nuclear Reactors	Busco	panel	Tuesday 8:00am
AI and ML for Thermal Hydraulics: General	Sharma	3	Tuesday 8:00am
Industrial Panel on the Development of Liquid Metal Reactor	Delgado	panel	Tuesday 8:00am
AI and ML Based Reduced Order Modeling	Merzari, Wong	4	Tuesday 10:00am
Computational Fluid Dynamics: I	Bolotnov, Habiyaemye	5	Tuesday 10:00am
Young Professional Thermal Hydraulics Research Competition: I	Zhao, Xu	4	Tuesday 10:00am
Keynotes: I	Pointer, Zou	2	Tuesday 1:00pm
Keynotes: II	Petrov, Busco	2	Tuesday 1:00pm
Keynotes: III	Sarikaya, Liao	1	Tuesday 1:00pm
Computational Fluid Dynamics: II	Benhamadouche, Fang	5+1	Tuesday 3:15pm
Young Professional Thermal Hydraulics Research Competition: II	Zhao, Xu	3	Tuesday 3:15pm
Thermal Hydraulics Challenges and Opportunities for LWR Initiatives	Sarikaya, Muftuoglu	panel	Tuesday 3:15pm
T/H Phenomena Testing Related to High Temperature Gas-Cooled Reactors	Martin, Delgado	panel	Wednesday 8:00am
Scaling for Small Modular Reactors	Bajorek, Liao	panel	Wednesday 8:00am
Verification and Validation Methods for Thermal Hydraulics Analyses	Kile, Dai	5	Wednesday 8:00am
System Thermal Hydraulics	Hu, Verdonschot	5	Wednesday 10:00am
Two-Phase Flow and Heat Transfer: I	Frederix, Petrov	3+2	Wednesday 10:00am

Gas-Cooled Reactor Thermal Hydraulics	Gutowska, Jasica	5	Wednesday 10:00am
Keynotes: IV	Yang	2	Wednesday 1:00pm
Keynotes: V	Petrov, Sharma	2	Wednesday 1:00pm
Keynotes: VI	Roelofs, Pointer	2	Wednesday 1:00pm
Liquid Metal Cooled Fast Reactor Thermal Hydraulics	Yoon, Habiyaemye	5+1	Wednesday 3:15pm
Multiphysics-Coupled and Microreactor Thermal Hydraulics	Howard, Petrov	5+1	Wednesday 3:15pm
Two-Phase Flow and Heat Transfer: II	Saini, Dix	4+1	Wednesday 3:15pm

Finally, our next meeting will be held June 15-18 in Chicago, IL. The EPSR will close at midnight February 7th for submissions.

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.