



American Nuclear Society

Thermal Hydraulics Division

2022 Young Professional Thermal Hydraulics Research Competition

June 12-16, 2022, Anaheim, CA

A special session entitled “Young Professional Thermal Hydraulics Research Competition” hosted by the Thermal Hydraulics Division (THD) and co-sponsored by the Young Member Group (YMG) of the American Nuclear Society will be held at the 2022 International Topical Meeting on Advanced Thermal Hydraulics (ATH-22) following a tradition started in 2006. This session received high interest in recent years of ANS Winter Meetings.

The professional development session is designed to enhance the technical writing and presentation skills of young professionals working in the area of Thermal Hydraulics through preparation and presentation of a summary related to the Thermal Hydraulics profession. Accepted summaries and presentations will be critiqued by a panel of judges that will provide constructive feedback. The participants will be evaluated on the *originality of research, the overall contributions, the quality of the summary, and the quality of the presentation.*

A plaque and monetary award will be presented to the participant selected by the judging panel that scores the highest in the session.

Participation Criteria

Participants must be less than 36 years old **or** have less than 5 years of Thermal Hydraulics research or application experience (YMG membership criteria). While student summaries will be considered, preference will be given to submissions from recent graduates and professionals with limited experience. This preference is based on the opportunities already provided to students to participate in ANS Student Conferences, where similar judging and feedback are available. Co-

authors are permitted for the summaries. However, the first author who is the participant in this competition must also make the presentation and meet the participant criteria.

Summary Content and Submission

Summaries are to be submitted to the ANS ATH Meeting 2022 (Session 9a, Young Professional Thermal Hydraulics Research Competition) through the EPSR system (<http://epsr.ans.org>). The deadline is the same with ATH 2022. Please see [Call for Papers – ANS ATH 2022](#).

All summaries are to adhere to the guidelines for Transactions summary preparation as set forth on the ANS web site. For more information:

(<http://www.ans.org/pubs/transactions/>).

Submitted summaries are to put forth recent research in the realm of heat transfer and fluid mechanics involved in the utilization of nuclear energy, including theoretical, computational, and experimental research on basic phenomena and application of thermal hydraulic principles to nuclear system design and analysis.

Contact

For more information about this session, contact:

Matt Zimmer (mdzimmer@ncsu.edu)

Xu Wu (xwu27@ncsu.edu)



American Nuclear Society

Thermal Hydraulics Division

Q/As for the YPTHRC

1. Who can participate in the competition?

The participant must be less than 36 years old or have less than 5 years of Thermal Hydraulics post-graduate research experience (YMG membership criteria). We welcome junior faculty members, research scientists, postdocs, graduate students, and undergraduate students to join the competition.

2. Can I participate multiple times?

You are allowed to participate multiple times, as long as (1) you meet the criteria above, (2) you have **NOT** won the YPTHRC before.

3. What is the prize?

The winner who scores the highest will receive a plaque and monetary award of \$500. Based on the number of papers received, we may also have up to two honorable mentions, each will receive a certificate.

4. I have won a best paper award or young professional award in other ANS-THD meetings (e.g., NURETH, ATH), can I still participate in the YPTHRC?

You are allowed to participate in YPTHRC as long as you have **NOT** won it before. Winning other THD best paper awards will **NOT** make you ineligible for YPTHRC. However, your paper and presentation in YPTHRC should be significantly different from the work based on which you won those best paper awards.

5. The YPTHRC-2022 is part of ATH-2022 (session 9), since ATH requires a full conference paper, do I need to submit a full paper?

No, you only need to submit a summary following the ANS template and formatting.

6. Who will be the judges?

The judges are experienced researchers in the Thermal Hydraulics area, selected by the organizers. They are usually faculty members and national lab research scientists that are members of the THD program/executive committees. We normally have 5-6 judges.

7. What is the evaluation criteria?

(1) Quality of the summary and the presentation, (2) technical content, (3) impact, (4) ability to answer questions, and (5) timing. The weights are determined by the judges.

8. How many papers do you accept for the competition? Can I submit more than 1 paper?

We will try to limit the number of summaries in YPTHRC to less than 20, so we can have max 4 sessions, with 5 papers in each session. You can submit more than 1 summaries as the first author as long as the materials are significantly different. However, note that the first author must be the presenter to be considered for an award.