ETHC
European
Thermal Hydraulics
Community

Newsletter 6 – June 2026

Contents

Word from the council

Bridging Continents: ETHC Representation at the ANS THD

The American Nuclear Society (ANS) Thermal Hydraulics Division (THD) brings together thermal hydraulics colleagues not only in the USA but also internationally. **ETHC council member Ferry Roelofs is the acting chair of the THD for the year 2026-2027.**

At the Executive Committee meeting of the Division at the end of May 2026, the importance of international collaboration was once again confirmed. ANS and THD are open to include international colleagues in their activities and committees, even in the boards.

We would like to encourage European colleagues, not only to be a part of our ETHC, but also to become active within the ANS THD. It allows to enlarge your network, become integrated in the organization of international conferences like NURETH and ATH, and meet many of the US experts and colleagues. Do not hesitate to reach out to us (ethc@snetp.eu) if you would need support.

ETHC Activities

ETHC get-together at the SNETP Forum

At the SNETP Forum in Madrid, the ETHC organized its **second in-person meeting**. The meeting took place late in the afternoon of the day before the SNETP Forum started. In total about 20 colleagues joined our in-person meeting.

During the meeting we mainly discussed the idea of organizing an **ETHC Summer camp**. This idea was born at the first in-person meeting in Warsaw. Since that meeting a small Task Force has been brainstorming on this idea and first plans were shared and discussed with the audience. On the one hand, this gave confirmation on the basic idea of the Summer camp, namely, to make students aware of the **strong link between experiments and simulations** and secondly to show them the **strength and importance of system thermal hydraulics simulations**. The idea of having students work on an experimental set-up which they will also have to simulate with a system thermal hydraulics code as well as a CFD code was well appreciated. And to put the cherry on top, we also envisage to let them enter the **field of AI** and have them create a simple **digital twin of the experiment**. From the colleagues present, we also received some good ideas on how to proceed. We now intend to aim at **summer 2028** for the first Summer camp, allowing us to apply for the necessary funding through European and/or national calls.

The in-person meeting was followed by a **nice informal dinner** arranged for us by Luis Herranz in a restaurant in Madrid. While enjoying a beer, wine, or soda, the discussions proceeded and the colleagues present bonded as should be the case in a community like ours.

3rd Lunchinar: Thermal Hydraulics Experiments for Fuel Research and Development

Due to very busy schedules, we have to postpone our third **ETHC Lunchinar** to autumn this year. The exact date will be fixed soon but we are happy to already announce our three speakers for the session:

- **Julio Pacio** from SCK CEN (Belgium) will share his expertise on experiments for liquid metal fast reactor fuel development.
- **Jean-Marie LeCorre** from Westinghouse (Sweden) will speak about innovations in thermal hydraulic testing of boiling water reactor fuel.
- **Lambert Fick** from Kairos Power (USA) will provide us with information on cooling aspects of TRISO fuel.

Look out for the official announcement in your mailbox!

Announcements

ATH 2028

Mark your calendars for the **Advances in Thermal Hydraulics (ATH) 2028** topical meeting.

Organised by the ANS Thermal Hydraulics Division, this biennial event is the gold standard for peer-reviewed research in the field and **it's coming to Europe** !

- **When:** 12 – 15 June 2028
- **Where:** Portorož, Slovenia
- **Host:** Nuclear Society of Slovenia

As a standalone meeting, ATH 2028 will offer an intensive focus on the latest full-length technical publications and innovations in nuclear thermal hydraulics.

Journal of Nuclear Engineering and Design

Special Issue: The History of Nuclear Technology through protagonists and their achievements

Since its birth, nuclear fission technology for energy production has been on the edge of exponential growth or ending up into the museum of discoveries. Despite this, nuclear electricity production contributed to technological progress and economic stability all over the world, avoiding huge amounts of polluting materials in the environment. Today, nuclear electricity production is declining in the countries that contributed to the technology development and growing in countries needing the adjustment of social welfare.

Key motivations to propose the **History of Nuclear Technology through protagonists** (or prominent scientists and technologists) and their achievements after the first quarter of the 21st century are:

- The prominent scientists and technologists who contributed to the development of the present technology are at the end of their active life, or recently overpassed this boundary, but the memory of their achievements is still alive.
- Technology innovations (i.e. small and micro reactors, transmutation, materials different from water for cooling and moderation, thermo-ionic generators, nuclear thermal propulsion) have the potential to put the expertise for design of current reactors in a grave.

Nuclear Engineering and Design will devote a **series of six virtual special issues** to the History of Nuclear Technology. The sixth virtual special issue will be completely devoted to thermal hydraulics. Several prominent thermal hydraulics colleagues have been invited to contribute. Publication is expected at the end of 2026 or beginning of 2027. Something to look out for!

Guest editors: Piero Ravetto, Chul-Hwa Song, Mohammad Modarres, Hamid Sadegh-Azar, Arno Heeren Oliveira, Elia Merzari

Special Issue: CFD4NRS

Computational Fluid Dynamics (CFD) plays a key role in the analysis and assessment of thermal–hydraulic phenomena relevant to nuclear reactor safety. Continuous advances in numerical methods, physical modeling, uncertainty quantification, and rigorous verification and validation (V&V) based on high-quality experimental data are expanding the applicability and reliability of CFD.

The Virtual Special Issue of Nuclear Engineering and Design is based on contributions from the 10th **CFD4NRS workshop** (CFD4NRS-10), held in Mito, Japan and organized under the auspices of OECD/NEA. The CFD4NRS workshop series provides an international platform for sharing user expertise in the application of CFD to nuclear reactor safety through the exchange of recent progress, challenges, and benchmark activities, while fostering seeds for future international collaboration. The special issue focuses on high-quality papers presented at CFD4NRS-10 and aims to showcase recent advances in CFD methodologies, V&V, and practical applications related to nuclear reactor safety.

Call for papers - Nuclear Engineering and Design | ScienceDirect.com by Elsevier

Upcoming Events

Overview

Workshops & Conferences	Location	Dates	Deadlines
NENE	Portoroz, Slovenia	7 – 10 Sep 2026	⌛
NUTHOS-15	Kashiwa-no-ha, Japan	28 Sep – 1 Oct 2026	⌛
22nd Multiphase Flow Conference and Short Course	Dresden, Germany	2 – 6 Nov 2026	15 Aug 2026
ANS Winter & ATH2026	Phoenix, USA	15 – 18 Nov 2026	26 Jun 2026
DTPF 2026	Chatou, France	23 – 25 Nov 2026	31 Jul 2026
Winter School on Phase Change	Aussois, France	13 – 18 Dec 2026	
NURETH-22	Denver, USA	22 – 29 Aug 2027	1 Nov 2026
ATH 2028	Portorož, Slovenia	12 – 15 Jun 2028	

NENE2026

The **New Energy for New Europe conference** of the Nuclear Society of Slovenia is an international annual meeting of professionals dealing with different aspects of nuclear energy from all around Europe and worldwide. The primary objective of the meeting is to foster international cooperation amongst professionals active in nuclear research and educational institutions, nuclear vendors, utilities, and regulatory bodies.

The NENE 2026 conference venue is located between the towns of Portorož and Piran.

The 35th Nuclear Energy for New Europe - NENE2026 conference will be held in Grand Hotel Bernardin in Portorož, Slovenia, from September 7 to 10, 2026.

The year 2026 marks the 60th anniversary of the JSI TRIGA Mark II research reactor, highlighting the enduring role of research reactors in advancing nuclear science, technology, and education.

NUTHOS-15

The **15th International Topical Meeting on Nuclear Reactor Thermal-Hydraulics, Operation and Safety** (NUTHOS-15) will take place in Kashiwa-no-ha, Japan from September 27-30, 2026. The meeting will be hosted by the Japan Society of Atomic Energy (AESJ) and co-hosted by the American Nuclear Society (ANS), the European Nuclear Society (ENS), the Korean Nuclear Society (KNS) and Canadian Nuclear Society (CNS).

With more than 300 draft papers received, the conference promises to be a success. For details on the program and updates, please visit www.nuthos.org.

22nd Multiphase Flow Conference and Short Course

The **22nd Multiphase Flow Conference and Short Course on Modelling, Simulation, Experiment and Application**, organized by Helmholtz-Zentrum Dresden – Rossendorf, takes place November 2 - 6, 2026, at Hotel Penck in the city centre of Dresden.

More information about the conference, important dates, participation fees, abstract submission and registration is available at https://www.hzdr.de/multiphase.

ATH 2026

The **Advances in Thermal Hydraulics conference (ATH 2026)**, hosted by the ANS Thermal Hydraulics Division, will take place November 15 - 18, 2026, in Phoenix, Arizona embedded in the ANS Winter Meeting. ATH2026 brings together researchers, engineers, and industry leaders to share the latest advances in nuclear thermal hydraulics. As part of a growing series of topical meetings, ATH 2026 will feature peer-reviewed technical papers and presentations highlighting new developments across reactor analysis, modeling, and system performance.

We encourage the submission of original, high-impact work that advances the state of the art in thermal-hydraulics, with contributions spanning computational methods, experimental studies, and applications to current and advanced reactor systems. For ATH 2026 we have added technical tracks focused on fusion energy and AI/ML methods compared to previous years. We will accept full (10-page) papers, standard 4-page summaries, and 1-page abstracts for inclusion in the technical program. Any young member lead author and presenter is strongly encouraged to submit a full paper to our Young Professionals Thermal Hydraulics Research competition. See the attached call for papers for details.

In addition to the expanded technical tracks, ATH 2026 will feature an opening plenary session that sets the stage for the meeting's major themes and will be complemented by the keynote presentations. Planned panels sessions will further engage participants in discussions on timely issues relevant to the nuclear industry, encouraging dialogue between academia, national laboratories, and industry stakeholders on the future of nuclear technology and safety.

SUBMIT A PAPER, SUMMARY, OR ABSTRACT
https://apps.ans.org/esr/event-ath2026/

Through ATH, the Thermal Hydraulics Division aims to foster collaboration and knowledge exchange across organizations, creating opportunities for attendees to build partnerships and address pressing challenges facing the nuclear energy sector. We sincerely hope you will join us in Phoenix!

DTPF 2026

The objective of the **Dispersed Two-Phase Flow conference (6th edition)** is to bring together researchers from different communities (academics and researchers from industrial research institutes in fluid mechanics, chemical engineering, …) working on fundamental problems involving dispersed flows. In many industrial or environmental situations, particles, drops or bubbles are dispersed in a carrier fluid. Understanding and modeling dispersed flows is therefore a major issue for many applications including nuclear industry (boiling in steam generators, containment spray systems, aso).

Experimental, numerical and theoretical studies will be presented on the following topics:

- Dynamics and transfer around isolated particles
- Interfacial dynamics (deformation, coalescence and rupture)
- Hydrodynamics of dispersed flows (turbulence, dispersion, two-way coupling)
- Mixing, transfers and phase-change in dispersed flows
- Transport in dispersed flows at high volume fraction
- Complex dispersed flows: density/viscosity stratification, granular & non-Newtonian flows
- Development of experimental methods

- Development of numerical methods
- Multiscale, multiphysics modeling
- Deep-learning and multiphase flow

This event, organized by Société Hydrotechnique de France and hosted by EDF R&D Chatou, France will last three days (November 23 - 25th, 2026) and will consist in selected oral presentations and poster sessions, with several thematic sessions in series. Extra time outside the formal session will be dedicated to discussions between participants.

For more information, visit the conference's official page:

https://www.shf-hydro.org/colloques/dispersed-two-phase-flows-2026/

Winter School on Phase Change

The CNRS network "GDR Transinter (Phase DEUX)" and the project Impact "DeNAMISE" organize a winter school on phase change. This event will be held from 13 to 18 December 2026 at the CNRS Paul Langevin Centre in Aussois (France). The emphasis will be on modelling the underlying physical phenomena and characterizing them. The courses will be given in English by French and foreign experts in the fields.

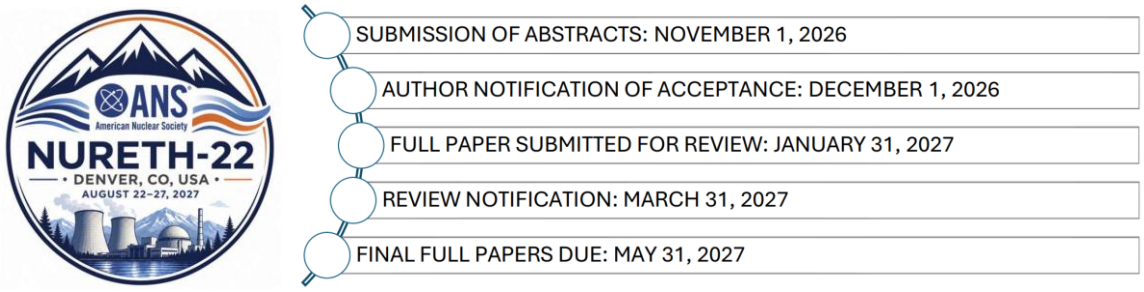
Participants will be invited to present their research and questions related to the topics of the winter school in poster sessions to foster interactivity between lecturers and participants.

Program (to be consolidate) will cover following topics:

- Thermodynamics of Phase Change
- Classical Nucleation Theory
- Basics of Boiling
- Basics of Condensation
- Basics of Solidification
- Numerical Methods
- Experimental Methods

https://www.phase-change-winter-school.com/

NURETH-22



Find us!

More information on the ETHC is available at https://snetp.eu/european-thermal-hydraulics-community-ethc/. We prefer to keep our community together in a straightforward and easy way. For this, we use a mailing list that only contains names and email addresses. If you want to (un)subscribe, please send a message to ethc@snetp.eu .

For updates on future ETHC Lunchinars and other activities, follow the ETHC LinkedIn page at https://www.linkedin.com/groups/13007321 or by using the QR code:

SNETP European Thermal Hydraulics Community
LinkedIn Group