



Newsletter 1

What is the ETHC?

The European Thermal Hydraulics Community is established under the umbrella of the Sustainable Nuclear Energy Technology Platform (SNETP), which unites all nuclear R&D stakeholders in Europe. The mission of the ETHC is:

***To establish, stimulate, share and maintain high-level knowledge and expertise
in all areas of Nuclear Thermal Hydraulics***

This mission is to be accomplished by:

- Bringing together experts, students and young professionals
- Stimulating networking and mobility
- Sharing resources and setting up collaborations
- Facilitating knowledge management, expansion, and development
- Connecting students and (young) professionals with SNETP and other international organizations (e.g. ANS THD)

ETHC Organization

The initiative of setting up a European Thermal Hydraulics Community was taken by Katrien van Tichelen (SCK CEN) and Ferry Roelofs (NRG) in 2023. The ETHC is a community under the umbrella of SNETP. Communities are typically organized by a council. Therefore, also the ETHC will be organized by councils. We foresee three councils. The most prominent one will be the ETHC Council which will be responsible for the day to day business in the community. For the founding Council we looked for renowned experts in the field, with different backgrounds with respect to organizations, countries, gender and thermal hydraulic expertise.

ETHC Council:

The ETHC Council (5 members) will be responsible for the day to day governance of the community and will lead and initiate activities.

Name	Company	Country
Ferry Roelofs	NRG	Netherlands
Katrien van Tichelen	SCK CEN	Belgium
Sanjeev Gupta	Becker Technologies	Germany
Pierre Ruyer	IRSN	France
Stefano Lorenzi	Polimi	Italy



Steering Council:

The Steering council (3-5 members) will ensure the link with SNETP and will consist of SNETP experts, preferably members of the SNETP Governing Board or Secretariat, who will provide guidance on the selection of activities to be undertaken by the ETHC. They will also support the ETHC Council in organizational matters. The Steering Council will meet with the ETHC Council at least once per year, but more frequent if needed. The current steering council has met for the first time on 3 July and consists of:

Name	Company	Country
Marco Cherubini	NINE	Italy
Luis Herranz	CIEMAT	Spain
Pavel Kral	UJV	Czech Republic
Christophe Schneidesch	ENGIE	Belgium

Advisory Council:

The Advisory council (3-5 members) will provide advice on the implementation of activities to be undertaken by the ETHC and will support connecting to other relevant communities like e.g. Thermal Hydraulic Divisions of national nuclear societies. The Advisory Council will meet with the ETHC Council at least once per year, but more frequent if needed. The current advisory council met for the first time on 26 June and consists of:

Name	Company	Country
Walter Ambrosini	UniPi	Italy
Sofiane Benhamadouche	EDF	France
Jean-Marie LeCorre	WEC	Sweden
Graham McPherson	FNC	UK

Activities

The activities to be developed within the frame of the ETHC are still to be decided upon. However, activities can be foreseen like:

- Issuing a newsletter once or twice per year sharing information on conferences, new collaborative projects, collaboration or mobility opportunities, grants, scholarships, and presentation of highlights in the field of thermal hydraulics.
- Organizing webinars on various topics of interest for the community.
- Organizing topical workshops and (informal) network events alongside major conferences and meeting (e.g. the SNETP Forum, NURETH, NUTHOS, ERMSAR...).
- Connecting to the young generation, e.g. through the EYGN.
- Serving as entry point for dissemination activities in future European collaborative projects.

Lunchinar on Passive Safety

As one of the first initiatives of the ETHC, a lunch webinar (or lunchinar) will be organized in Autumn 2024 with an excellent line-up of speakers:

- Frank David (EDF, France)
- Juhani Hyvärinen (LUT, Finland)
- Andreas Wielenberg (GRS, Germany)

More details on the date, time (probably a 1.5hr time slot between 12:00 and 13:30hrs) and organization of the lunchinar will be communicated later.

New Collaborative Projects

The ETHC would like to facilitate it's members in disseminating information on new collaborative projects or actions from e.g. the European Commission and international organizations like the OECD and IAEA. In this first newsletter, the results of the Euratom work program 2023-2025 which were announced earlier this year will be communicated. The following projects which have been funded deal at least partly with thermal hydraulics:

Acronym	Topic	Coordinator
EASI-SMR	Small Modular Reactor	EDF
ENDURANCE	Molten Salt Reactor	PoliMi
LESTO	Lead Fast Reactor	ENEA
SANE	Non-electric Small Modular Reactor	VTT
SOCRATES	Severe accident	VTT
TREASURE	Gas Fast Reactor	VUJE
TRANSPARANT	Partitioning & Transmutation	SCK CEN

E-Mails & LinkedIn

We wish to keep our European community together in a straightforward and easy way. For this, we intend to maintain a mailing list which will only contain name and e-mail address. If you receive this message directly from us, you are already on our mailing list. For the time being, subscription or unsubscription is managed by sending a message with a request to this address (ETHC@snetp.eu).

We have created a special LinkedIn group for our community. Please, connect to us on LinkedIn by joining our group: <https://www.linkedin.com/groups/13007321/>

International Workshop on SMR Safety for a Sustainable Short-Term Deployment

We are excited to announce the **International Workshop on SMR Safety for a Sustainable Short-Term Deployment**, scheduled for October 17-18, 2024, at the IRSN Headquarters in Fontenay-aux-Roses, France. This workshop, organized under the Horizon Euratom SASPAM-SA project, will be a pivotal event for the SMR safety community in Europe.

Key Thermal-Hydraulic Topics:

- Accident scenarios and related phenomenology in LW-SMRs
- Capabilities of safety computer codes for predicting LW-SMR transient conditions
- Applicability of experimental databases for LW-SMR steady and transient conditions
- Computer code guidelines and best practices for LW-SMR simulation

Target Audience:

Participants from Regulators, TSOs, Universities, Research Centers, Industries, Operators, International Agencies, Emergency Responders, Code Developers, Code Users, Severe Accident Analysts, iPWR Analysts, Experimentalists, and Young Researchers.

Call for Contributions:

We seek contributions in the form of poster sessions and presentations. Submit extended abstracts in English to SASPAM_WS_SMR_SAFETY@irsn.fr by **May 31, 2024**.

Financial Support:

Financial support is available for M.Sc. and Ph.D. students, and early career professionals through the ENEN2+ Group Mobility Application. Twenty individuals will receive funding to attend the workshop.

Registration and Contact Information:

Extended abstract submission deadline: May 31, 2024. Registration deadline: September 30, 2024. For details and registration, visit <https://www.saspam-sa.eu/open-workshop/>

Contact:

- **Ahmed Bentaib (IRSN):** ahmed.bentaib@irsn.fr
- **Fulvio Mascari (ENEA):** fulvio.mascari@enea.it
- **Fabio Giannetti (UNIROMA1):** fabio.giannetti@uniroma1.it

20th Multiphase Flow Workshop- Conference and Short Course

The goal of the 20th Multiphase flow workshop is to bring together experimental and numerical practitioners and to foster discussion and exchange of knowledge. The workshop is divided into two parts: starting with two days of Short Course, two more days of Conference follow. The workshop language is English.

The Short Course will address the interests of engineers, chemists, physicists and technicians active in research and design, who want to be informed about modern design methods and tools for multiphase flows. The numerical part of the Short Course will focus on finite-volume methods for Euler-Euler and Euler-Lagrange multiphase flow predictions, and on associated mathematical models. The experimental part will provide knowledge of the selection, installation and usage of modern gas-liquid measurement techniques and instruments.

Key Thermal-Hydraulic Topics:

For the conference part experts are called upon to present their research and application results to a worldwide audience. Topics of interest include:

- Simulation technology for multiphase flows
 - o Phase interaction models
 - o Turbulence models
 - o Solution algorithms
 - o Multi-scale modelling techniques
- Application of simulation methods to multiphase flow problems
- Experimental investigations of multiphase and magnetohydrodynamic flows
- Measurement methods for multiphase and magneto-hydrodynamic flows

Target Audience:

PhD students, Postdocs, and senior experts from the fields mentioned above

Call for Contributions:

Abstracts are welcome until August 15 (sharp deadline, no prolongation). For more details visit www.hzdr.de/multiphase

Financial Support:

None through the conference organizer.

Registration and Contact Information:

Early bird registrations end on September 30, and general registrations will end when the participant limit is reached.

Contact:

multiphase@hzdr.de

NURETH-21

NURETH is the premier gathering for experts in nuclear reactor thermal hydraulics related topical areas. This meeting is held every two years.

The Thermal-Hydraulics Division of the Korean Nuclear Society is pleased to host NURETH-21 in Busan, Republic of Korea. Busan is an ideal location for the NURETH-21 participants for their dedicated discussion of the future of nuclear thermal-hydraulics and their relaxation with cultural experience on the world-famous seashore area.

We are excited and looking forward to welcome participants to NURETH-21 from around the world to a world-famous nuclear city.

Online Abstract Submission is Now Available

NURETH-21 invites paper submissions to share the latest research findings in nuclear thermal hydraulics on the technical topics. Selected papers will be presented at NURETH-21 as an oral session or poster.

Contact

For any inquires related to NURETH-21, please visit the website <https://www.nureth-21.org/> or contact at info@nureth-21.org.



The poster features a night view of the Busan skyline with illuminated skyscrapers and a bridge over the water. The text is overlaid on a dark blue background at the top.


NURETH-21
21st International Topical Meeting on Nuclear Reactor Thermal Hydraulics

NURETH-21
21st International Topical Meeting on Nuclear Reactor Thermal Hydraulics

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

www.nureth-21.org



Relevant Upcoming Events

Schools & Lectures	Location	Dates	Deadlines
SASPAM open workshop	Fontenay-aux-Roses (France)	17-18 Oct 2024	Abstract deadline passed
20th Multiphase Flow Conference and Short Course	Dresden (Germany)	11-15 Nov 2024	15 Aug 2024
Winter School boiling phenomena	Aussois (France)	15-20 Dec 2024	n.a.

Workshops & Conferences	Location	Dates	Deadlines
NUTHOS-14	Vancouver (Canada)	25-28 Aug 2024	Passed
NENE	Portoroz (Slovenia)	9-12 Sep 2024	Passed
Global	Tokyo (Japan)	6-10 Oct 2024	Passed
PBNC	Idaho Falls (USA)	7-10 Oct 2024	Passed
SNA + MC 2024	Paris (France)	20-24 Oct 2024	Passed
ANS Winter / ATH	Orlando (USA)	17-21 Nov 2024	Passed
ISSCWR	Pisa (Italy)	3-7 Feb 2025	Passed
M&C 2024	Denver (USA)	27-30 Apr 2025	1 Nov 2024
ANS Annual	Chicago (USA)	15-18 Jun 2025	t.b.d.
NURETH-21	Busan (South Korea)	31 Aug – 5 Sep 2025	25 Oct 2024
ANS Winter	Washington DC (USA)	9-12 Nov 2025	t.b.d.
ANS Annual	Denver (USA)	31 May – 3 Jun 2026	t.b.d.
ANS Winter	Phoenix (USA)	15-18 Nov 2026	t.b.d.

Do you have a related event: do not hesitate to send us an announcement through ETHC@snetp.eu.