Innovative systems for safety functions – including passive systems, on Gen III+, Gen IV, SMRs, floating power plants and other new designs

Summer Workshop 2019

2nd – 6th September 2019

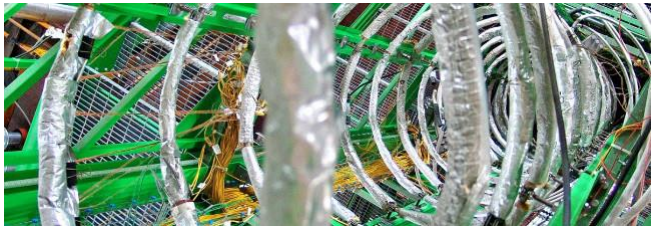
Italian National Agency for New Technologies, Energy and Sustainable Economic Development

The ETSON JSP Summer Workshop is an annual networking event of young professionals from Technical Safety Organizations. Technical program comprises presentations given by participants, interactive group work and moderated workshops on a specific topic. The workshop encourages inter-cultural interaction, exchange of expert knowledge and good practices and provides to participants a good opportunity to widen their professional network.

Participation to the workshop is free of charge. Participants must be nominated by ETSON member organizations and should have basic knowledge of nuclear safety concepts and methodologies. Candidates are encouraged to contact local ETSON members (information available at: http://www.etson.eu/jsp).

Technical Tours

A technical visit of experimental facilities at SIET S.p.A. in Piacenza is foreseen.



Venue

The Workshop will be held at ENEA Bologna, located in via Martiri di Monte Sole 4.
The office is located inside the city and can be reached with the bus line 11C or 27.

Accommodation

Recommended hotels in Bologna:

Zanhotel Tre Vecchi
Via dell'Indipendenza 47, +39 051 231991
www.zanhotel.it/hotel-tre-vecchi-bologna
I Portici
Via dell'Indipendenza 69, +39 051 42185
www.iporticihotel.com/en
Zanhotel Regina
Via dell'Indipendenza 51, +39 051 248878
www.zanhotel.it/hotel-regina-bologna
Hotel Donatello
Via dell'Indipendenza 65, +39 051 248174
www.hoteldonatello.com
HC3 Hotel
Via dell'Arcoveggio 46/4, +39 051 373632
www.hc3.it

For further information, please contact:
Antonio Cervone (antonio.cervone@enea.it)

	Monday	Tuesday	Wednesday	Thursday	Friday
09.30–10.30		**SEVERE ACCIDENTS** ***Chair: Gennady Arbaev (SEC-NRS)*** Fast running tool for source term evaluation for VVER reactors in the frame of technical support of Analytical (Emergency) Center of Russian Regulatory Authority *Alisher Kurbonmamadov (SEC-NRS)* Severe accident calculation within the framework of Analytical (Emergency) Center of Russion Regulatory Authority Support *Gennady Arbaev (SEC-NRS)*	**PASSIVE SYSTEMS** ***Chair: Antonio Cervone (ENEA)*** Independent benchmarks for the concept of a passive heat removal system from SG for VVER-1000/V-320 *Maksym Vyshemirskyi (SSTC)* RELAP5-3D qualification for passive system phenomena *Andrea Bersano (ENEA)*	**TECHNICAL VISIT AT SIET**	**THERMAL-HYDRAULICS** ***Chair: Abdelaziz Lazaar (GRS)*** Numerical investigation of two-phase natural convection and thermal stratification phenomena in rectangular enclosures with conjugate heat transfer *Andrius Graževičius (LEI)* Accident mitigation solely with passive safety systems and validation calculations for ATHLET using reflooding experiments *Norman Dünne (GRS)*
10.30–11.00	**Coffee break**	**Coffee break**	**Coffee break**		**Coffee break**
11.00–13.00	**OPENING SESSION** Welcome speech *Paride Meloni, ENEA* ETSON organization and activities *Nicolas Jenner, IRSN* **General presentations** ***by ETSON Members*** *All organizations*	FCVS for existing Belgian NPPs *Federica Russo (Bel V)* Software tools and methodologies available at IRSN for the development of Level 2 probabilistic safety assessment *Guillaume Kioseyian (IRSN)* Challenges and strategies for simulation of innovative safety features and designs *Dimitar Iliev (GRS)*	ASTEC modelling of Innovative SMR design with passive features *Pietro Maccari (ENEA)* Safety topics related to Natural circulation phenomena *Bousbia Salah Anis (Bel V)* **GENERATION IV & ADS** STH-CFD Coupling approach *Daniele Martelli (ENEA)*		Thermal-hydraulics assessment of passive systems' performances with the CATHARE code *Ludovic Lembezat (IRSN)* Use of a simulator in terms of support for safety assessment and for training and communication *Ines Daoud (IRSN)* **CLOSING SESSION**
13.00–14.00	**Lunch**	**Lunch**	**Lunch**	**Lunch**	**Lunch**
14.00–15.30	**GENERATION IV & ADS** ***Chair: Mirela Nitoi (RATEN-ICN)*** Safety of GEN IV reactors from reactor physics point of view *Bálint Batki (MTA EK)* Development outlooks to guide the safety assessment of Accelerator Driven Systems *Olivier Destin (Bel V)* Passive safety features in advanced nuclear reactors *Elena Stoica (RATEN ICN)*	**REGULATORY REQUIREMENTS FOR NEW DESIGNS** ***Chair: Olivier Destin (Bel V)*** Regulatory requirements applicable to the Licensing of new reactors in Romania *Andreea Cristina Ungureanu and Madalina Georgiana Ionita (CNCAN)* Challenges in licensing of New Reactors, SMR, passive safety systems *Holger Schmidt (GRS)* The potential challenges of design assessment and licencing for SMR and AMRs, within a non-prescriptive regulatory regime *Thomas Blaxall (Wood Plc)*	**PASSIVE SYSTEMS WORKSHOP**		
15.30–16.00	**Coffee break**	**Coffee break**	**Coffee break**		
16.00–17.00	**JSP REPRESENTATIVE MEETING**	Common approaches to the new generation WWER safety systems modeling by using of best estimated codes *Alexey Samokhin (SEC-NRS)* **SEVERE ACCIDENTS WORKSHOP**			
Evening	**Free**	**Free**	**Free**	**Dinner**	