



In the area of safety of nuclear installations, the PIACE project is devoted to support the technology transfer from the research to industry by focusing on an innovative, passive and self-regulating Isolation Cooling System (ICS) for Decay Heat Removal (DHR) system.

The innovative ICS, patented by ANSALDO NUCLEARE, is a versatile concept based on an isolation condenser, revolutionarily improved by the use of non-condensable gases that will allow its implementation to the following nuclear technologies envisaged within the scope of PIACE:

- Generation IV Lead-cooled Fast Reactors (LFRs);
- Accelerator Driven Subcritical systems (ADSs);
- Pressurized Water Reactors (PWRs);
- Boiling Water Reactors (BWRs);
- Pressurized Heavy Water Reactors (PHWRs).

The key asset of PIACE is the existing experimental facility SIRIO that was conceived to study and completely characterize the innovative, passive and self-regulating ICS, up to the demonstration and qualification of its design at an industrial scale. SIRIO is capable of reproducing the broad range of operating conditions representative of all the reactor technologies encompassed in PIACE project.

This series of ten webinars proposed by PIACE project partners will introduce audience on the relevant aspects of the Isolation Condenser Cooling System design based on non-condensable gases and its implementation in both currently operating nuclear power plants (PWR, BWR, CANDU) and innovative energy systems (including LFRs and ADSs).

OBJECTIVE

Improving the competences and developing new skills through Education&Training of the young scientists on the key aspects regarding the innovative passive systems with a focus on the relevant aspects of Isolation Condenser Cooling System design based on noncondensable gases (safety requirements, phenomenology, system analysis, test matrix, etc.) and its application to various reactor technologies envisages in project.

Moreover, the webinars are intended to raise the young scientists interest on new, innovative topics that could represent the core of their future Master or PhD thesis.



TARGET AUDIENCE

The webinars are open for students, young scientists and stakeholders from research organizations, industry, technology and engineering centers, utilities or regulatory bodies having a keen interest on investigating the challenges of the fast evolving nuclear technologies and particularly, on the main aspects of passive systems conceptualization and implementation in nuclear power plants.

SCHEDULE

The **webinars** (lasting around 45 minutes each) are prepared and presented by the PIACE partners from Italy, Belgium, Slovenia, Spain and Romania, **being uploaded weekly**.

All webinars are accesible online (<http://piace.brasimone.enea.it/>) according to the following timetable:

Title	Speaker	Institution / Country	E-mail address	Available online
PIACE Project Overview	Francesco Saverio Nitti	ENEA / Italy	francesco.nitti@enea.it	17th Jan
ALFRED Overview and Isolation Condenser upgrade	Marco Caramello	ANN /Italy	Marco.Caramello@ann.ansaldoenergia.com	24th Jan
MYRRHA Overview and Isolation Condenser upgrade	Tewfik Hamidouche	SCK-CEN / Belgium	tewfik.hamidouche@sckcen.be	31th Jan
PWR Overview and Isolation Condenser upgrade	Ivo Kljenak	JSI / Slovenia	Ivo.Kljenak@ijs.si	7th Feb
BWR Overview and Isolation Condenser upgrade	Gonzalo Jimenez	UPM / Spain	gonzalo.jimenez@upm.es	14th Feb
CANDU Overview and Isolation Condenser upgrade	Iulian Pavel Nita	RATEN CITON / Romania	nitai@router.citon.ro	21th Feb
SIRIO Facility Overview	Marco Tudor Cauzzi	SIET / Italy	cauzzi@siet.it	28th Feb
SIRIO Experiment Overview	Andrea Achilli	SIET / Italy	achilli@siet.it	7th Mar
Post-Test Analysis by STH code	Pierdomenico Lorusso	ENEA / Italy	pierdomenico.lorusso@enea.it	14th Mar
PIACE Project Exploitation	Gabriele Firpo	ANN / Italy	Gabriele.Firpo@ann.ansaldoenergia.com	21th Mar