JOŽEF STEFAN INSTITUTE



MEET JOŽEF STEFAN INSTITUTE

The **mission** of the Jožef Stefan Institute is the accumulation – and dissemination – of knowledge at the frontiers of natural and life science and technology to the benefit of society at large through the pursuit of education, learning, research, and development of high technology at the highest international levels of excellence.

The staff of about 1.200 specializes in the following fields:

- production and control technologies,
- communication and computer technologies,
- · knowledge technologies,
- biotechnologies,
- · new materials,
- environmental technologies,
- nano- and quantum technologies, and
- nuclear engineering.





JOŽEF STEFAN INSTITUTE AND SMRS

Jožef Stefan Institute was established in the 1950s. as the Slovenian nuclear institute. Since then, the Institute has grown and expanded its research interests beyond nuclear power, which remains at the core of the Institute's activities. Today, the Jožef Stefan Institute is the sole research organization in Slovenia with research programs in reactor physics and nuclear engineering. The Institute operates a research and training reactor, a nuclear training centre (including training of nuclear power plant and empowers senior nuclear operators), researchers as professors in nuclear engineering M.Sc. and Ph.D. programs at the Faculty of Mathematics and Physics, University of Ljubljana. Additionally, specialist teachers from the Institute contribute to other Slovenian universities, and the Institute acts as a Technical Safety Organization for the Slovenian nuclear regulatory body.

OUR PROJECTS AND EXPERTISE



The **ECC-SMART project** (Joint European Canadian Chinese development of Small Modular Reactor Technology, HORIZON 2020 EURATOM) focuses on science-based recommendations and methodologies for performing safety evaluations. This includes the experimental validation of essential items for safety demonstrations related to the supercritical steam small reactor technology under development in Europe, China, and Canada.



The HARMONISE project (Towards harmonisation in licensing of future nuclear power technologies in Europe, HORIZON EUROPE EURATOM) studies the harmonisation of licensing for future nuclear power technologies in Europe. It conducts research and cooperation activities aimed at standardising nuclear safety regulation within the EU.



The EASI-SMR project (Ensuring Assessment of Safety Innovations for SMR, HORIZON EUROPE EURATOM) aims to resolve the safety issues **EASI** SMR associated with major Light-Water Small Modular (LW-SMR) innovations, implementation of these technologies as soon as possible across Europe and beyond.

Small and Modular Reactors, along with large Generation II and III reactors, will enable the EU to maintain and reinforce its leadership in the lowcarbon energy transition.



JOŽEF STEFAN INSTITUTE IN THE **EUROPEAN INDUSTRIAL ALLIANCE ON SMRs**



TWG2: Technology and R&D&I

Engage with the technology developers and R&D community to contribute to the resolution of challenges in the development and commercialization of the SMRs.



TWG4: Skills

Contribute to the attraction, development and retainment of the new nuclear talents, with the focus on research based higher nuclear education and professional nuclearisation training.



TWG6: Nuclear Safety and Safeguard

Contribute to the research and development needed to resolve potential technical safety challenges in the regulations and/or newly developed technologies.



Cizeli



