

SafeG

Safety of GFR Through Innovative Materials, Technologies and Processes

OBJECTIVES

The global objective of the SafeG project is to further develop the GFR technology and strengthen its safety. The project shall support the development of nuclear low-CO₂ electricity and industrial process heat generation technology through the following main objectives:

- To strengthen safety of the GFR demonstrator ALLEGRO
- To review the GFR reference options in materials and technologies
- To adapt GFR safety to changing needs in electricity production worldwide with increased and decentralized portion of nuclear electricity by study of various fuel cycles and their suitability from the safety and proliferation resistance points of view
- To bring in students and young professionals, boosting interest in GFR research
- To deepen the collaboration with international non-EU research teams, and relevant European and international bodies

EXPECTED IMPACTS

- To draw on the unique expertise and operational feedback experience gained by the EU in Generation-IV technologies, to place the EU at the forefront of the development of safety standards for this new generation of reactors, helping EU safety standards to be adopted worldwide.
- Ensure any deployment of this next generation of reactors in conformity with the recognised stringent European safety standards.
- Boosting EU technological and industrial competitiveness.

HIGHLIGHTS

The SafeG project is a part of broader initiatives leading to the construction of GFR experimental reactor ALLEGRO. It is therefore vital to maximise the outreach of the project activities mainly towards V4G4 Centre of Excellence but also other relevant initiatives such as Generation IV International Forum and European Sustainable Nuclear Industrial Initiative. Interaction with other platforms and EU projects, initiatives and international organisations, particularly with the Generation IV International Forum will be organized and performed by the project partners. At the final stage of the project, a workshop addressing various stakeholders (nuclear industry, academia, regulatory bodies) will be organized to share project findings and development. The project is also strongly related to various national research activities and projects. SafeG's results will be promoted through project publications scientific peer-reviewed journals, on thematic portals, industry magazines and others. The project will be promoted during the entire project via participation at regional, national, and international events (conferences, fairs, workshops, seminars).

PARTNERS

VUJE / ÚJV / MTA-EK / NCBJ / CVR / CEA / JACOBS / BriVaTech / KU / CVUT / BME / STU / UCAM / USFD / EVALION

DURATION & BUDGET

10/2020 – 09/2024 - 4 years
€ 4 495 010

CONTACTS

Technical Project Leader:
Dr. Branislav Hatala (VUJE, a.s.)
Email: branislav.hatala@vuje.sk

EVENTS

GFR summer school, Advanced modelling techniques workshop, Thermal-hydraulics benchmark, Masters and PhD theses connected to the project, On-job training activities,...

