

RADIATE
Research And Development with Ion Beams –
Advancing Technology in Europe

Participant No	Participant organisation name	Country
1 (Coordinator)	Helmholtz-Zentrum Dresden-Rossendorf (HZDR)	Germany
2	Atomki Institute of the Hungarian Academy of Sciences (Atomki)	Hungary
3	Costruzioni Apparecchiature Elettroniche Nucleari S.p.A (CAEN)	Italy
4	Centre National de la Recherche Scientifique (CNRS)	France
5	Eidgenoessische Technische Hochschule Zurich (ETHZ)	Switzerland
6	Interuniversity Microelectronics Centre (IMEC)	Belgium
7	Istituto Nazionale di Fisica Nucleare (INFN)	Italy
8	IONOPTIKA	United Kingdom
9	Ionplus	Switzerland
10	Instituto Superior Técnico (IST)	Portugal
11	Jožef Stefan Institute (JSI)	Slovenia
12	Jyväskylän Yliopisto (JYU)	Finland
13	Katholieke Universiteit Leuven (KUL)	Belgium
14	Orsay Physics	France
15	Ruđer Bošković Institute (RBI)	Croatia
16	University of Surrey (SUR)	United Kingdom
17	Universität der Bundeswehr München (UBW)	Germany
18	Universität Wien (UW)	Austria

Abstract

Fourteen partners from public research and four SMEs, sharing the vision of structuring the ERA in the field of ion technology application and innovation, join forces in the RADIATE project. Largely complementary national ion beam facilities will be integrated into one single virtual multi-sited ion beam centre providing unprecedented research capabilities for scientists from a large variety of different research fields and from anywhere in Europe and beyond. New challenges arising from the commitment of the EU to Open science, Open innovation and Open to the world will be tackled. To this end an Ion Beam Web Portal will be developed and will serve as pivotal platform for sharing information and software among researchers and for access to ion beam-related databases and to research data. Combining the consortia of the previous successful EU projects ITS LEIF and SPIRIT incorporating leading high and low energy ion beam labs, and integrating top-notch AMS facilities, a comprehensive, easy, flexible, and efficient access to Europe's key ion beam facilities will be provided. Users from Widening Countries and from new research communities, and young researchers are targeted by a dedicated guest researcher programme. Innovation managers will be established at selected facilities to raise awareness of the exploitation potential of ion beam technology, to support the technology transfer along the whole value chain, and to spin-off commercial activities. Reach-through to industry will be enhanced and self-sustainability of the network and its provisions will be achieved based on the economic success associated with the growth of industrial service and technology transfer activities. Joint Research activities involving the industrial partners will target specific challenges for major advances across multiple sub-fields of ion beam science and technology, thus reinforcing Europe's leading position in ion beam science and technology.

