



**of the European Atomic Energy Community (Euratom)
for nuclear research and training activities (2007-2013)**

Collaborative Project & Coordination and Support Action

MatISSE

Project title:	Materials' Innovations for a Safe and Sustainable nuclear in Europe
Project number:	604862
Project coordinator:	Commissariat a l Energie Atomique et aux Energies Alternatives CEA, Paris, France
HZDR participant:	Institute of Ion-Beam Physics and Materials Research
Starting date:	01.11.2013
Duration (months):	48

Summary

The European Energy Research Alliance, set-up under the European Strategic Energy Technology Plan, has launched an initiative for a Joint Programme on Nuclear Materials (JPNM). The JPNM aims at establishing key priorities in the area of advanced nuclear materials, identifying funding opportunities and harmonizing this scientific & technical domain at the European level by maximizing complementarities and synergies with the major actors of the field.

The JPNM partners propose, through MatISSE, a combination of Collaborative Projects and Coordination and Support Actions to face the challenge of implementing a pan-European integrated research programme with common research activities establishing, at the same time,

appropriate strategy and governance structure. Focusing on cross-cutting activities related to materials used in fuel and structural elements of safe and sustainable advanced nuclear systems, the project aims at covering the key priorities identified in the JPNM: pre-normative research in support of ESNII systems, Oxide Dispersed Strengthened steels, refractory composites for the high temperature applications, development of predictive capacities.

MatISSE will foster the link between the respective national research programmes through networking and integrating activities on material innovations for advanced nuclear systems, sharing partners best practices and setting-up efficient communication tools. It is expected that, through MatISSE, a real boost toward Joint Programming among the Member States, the European Commission and the main European research actors, will be achieved.