



**of the European Atomic Energy Community (Euratom)
for nuclear research and training activities (2007-2011)**

Collaborative Project & Coordination and Support Action

<i>ACTINET-I3</i>

Project title:	ACTINET Integrated Infrastructure Initiative
Project number:	232631
Project coordinator:	Commissariat Energie Atomique CEA, Paris, France
Project homepage:	http://www.actinet-i3.eu/
FZD participant:	Institute of Radiochemistry
Starting date:	01.10.2009
Duration (months):	36

Summary

Actinides play a central role in the nuclear energy generation systems. In order to keep a leading position in the field of nuclear energy – both in terms of safety and efficient use of natural resources – Europe needs to reinforce its expertise and to prepare the next generation of scientists and engineers who will be able to contribute to develop actinide management strategies based on sound scientific bases.

However, because most actinides are radioactive, their study requires specific tools and facilities that are only available in a small number of laboratories in Europe. It is therefore strategic to coordinate the major facilities available in Europe, and to strengthen the community of European scientists working on actinides. The establishment of a network of actinide scientists – ACTINET – was a first step in this direction, achieved under the 6th Framework Programme.

The objective of the Integrated Infrastructure Initiative ACTINET-I3 is to reinforce the networking of the European infrastructures necessary for actinide sciences, and to facilitate their efficient use by the European scientific community. The concept of the ACTINET-I3 initiative is

- to combine a consistent pool of facilities from CEA, ITU, FZK, FZD and PSI, providing the necessary tools and environments to work on systems containing actinides;

- to complement these experimental tools by a virtual infrastructure providing support in theory and modeling, with a focus on the complementarities between theory and experiments;
- to support and manage jointly an access programme for joint research projects making use of the proposed facilities;
- to run a set of joint research activities involving the member organizations, with the objective to produce new instruments or data of common interest.

The governance of the ACTINET-I3 will involve representatives of the users and the stakeholders.