

MANAGEMENT OF RADIOACTIVE WASTE

Cross-cutting research on radioactive waste management

Today, some academic centres retain both a teaching role and research programmes in actinide sciences, but support for renewing equipment and increasing staff numbers is often lacking and sometimes even the existence of courses in nuclear sciences is under threat. A portion of these teaching and training activities and associated resources will be placed under common ownership within the network. In particular, greater participation in training in universities is being planned by the national laboratories. Annual ACTINET summer schools, held alternately in ITU (Karlsruhe) and in CEA (Marcoule), will focus on specific fields within the actinide sciences.

Improved access to facilities, enable ambitious research

In a situation where there is a scarcity of available tools, establishing a shared European infrastructure policy will improve access to major actinide research facilities for the European scientific community. This will optimise the utilisation of existing experimental facilities and coordinate the deployment of future facilities at the European level.

The definition of shared ambitious research programmes, taking advantage of this access to up-to-date experimental tools, will reduce the fragmentation of the European community in actinide sciences and strengthen scientific excellence. Enhanced mobility and infrastructure availability for joint research programmes will allow the next generation of actinide scientists and engineers to gain important hands-on experience in a wide range of experimental techniques as part of their training. This will be a major benefit to an integrated European policy.

Safe and effective disposal, new technologies

Understanding fundamental actinide science is of major importance in ensuring that the disposal of high-level, long-lived radioactive waste is achieved as safely and effectively as possible. Actinide science can lead to the development of new disposal techniques that benefit health and safety and further reduce the risks to society. Fundamentally, it can also help deliver new nuclear fuel cycles that minimise production of high-level waste and increase the efficiency of nuclear power plants. No matter what the future is for nuclear power, current waste stocks and future quantities arising from a variety of technological and medical activities will remain a fact of life for future generations; it is important that society retains the knowledge, expertise and resources in actinide science to be able to deal with this material safely.

I N F O R M A T I O N

Coordinator:

Pascal CHAIX
Commissariat à l'Energie Atomique
DEN/DSOE
Centre de Saclay Bât. 121
FR-91191 Gif-sur-Yvette Cedex
Tel: +33 169 08 84 38
Fax: +33 169 08 15 44
pascal.chaix@cea.fr

There are two project Websites, one reserved for ACTINET partners and the following for public access:
<http://www.actinet-network.org>

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EC Project Officer:	Simon WEBSTER European Commission Directorate-General for Research J.4 - Nuclear Fission and Radiation Protection CDMA 1/55, BE-1049 Brussels Tel: + 32 2 299 04 42 Fax: + 32 2 295 49 91

Partners

European Commission-Joint Research Centre, BE
Institute for Transuranian Elements, DE
Forschungszentrum Karlsruhe GmbH, DE
Studiecentrum voor Kernenergie -
Centre d'Etudes de l'Energie Nucléaire (SCK-CEN), BE
Chalmers Tekniska Hogskola AB, SE
Centro de Investigaciones Energeticas, Medioambientales
y Tecnologicas, ES
Centre National de la Recherche Scientifique, FR
Ceske Vysoke Ucení Technike v Praze, CZ
Forschungszentrum Jülich GmbH, DE
Forschungszentrum Rossendorf E.V., DE
Johannes Gutenberg-Universität, Mainz, DE
Kungliga Tekniska Hogskolan, SE
Koebenhavns Universitet, DK
Ustav Jaderneho Vyzkumu Rez A.S., CZ
W. Trzebiatowski Institute of Low Temperature and Structure Research
Polish Academy of Sciences, PL
Paul Scherrer Institut, CH
Stockholms Universitet, SE
Universiteit Antwerpen, BE
The Chancellor, Masters and Scholars of the University of Cambridge, UK
University of Cyprus, CY
Helsingin Yliopisto, FI
Université de Liège, BE
The Victoria University of Manchester, UK
Universitat Politecnica de Catalunya, ES
Nuclear Research and Consultancy Group, NL
Imperial College of Science, Technology and Medicine, UK
Ecole Nationale Supérieure de Chimie de Paris, FR