

FOREWORD

The objective of the OECD/NEA Information Exchange Programme on Actinide and Fission Product Partitioning and Transmutation, established in 1989, is to enhance the value of basic research in this area by facilitating the exchange of information and discussions of programmes, experimental procedures and results. This Programme was established under the auspices of the NEA Committee for Technical and Economic Studies on Nuclear Energy Development and the Fuel Cycle (NDC) and is jointly co-ordinated by the NEA Nuclear Development Division and the NEA Nuclear Science Section.

The scope of the Programme includes information on all current and past research related to the following areas:

1. Physical and chemical properties of elements generated in the nuclear fuel cycle:
 - a. Chemical properties and behaviour of the actinide species in aqueous and organic solutions.
 - b. Analytical techniques and methods.
 - c. Physical and chemical properties of various actinide compounds.
 - d. Collection and evaluation of nuclear and thermodynamic data of relevant elements.
2. Partitioning technology:
 - e. Partitioning of high-level liquid waste with wet and dry processes.
 - f. Platinum-group metals-recovery technology.
 - g. Fabrication technology of the fuel and target materials.
 - h. Partitioning in the reprocessing process.
3. Transmutation:
 - i. Transmutation with fast reactors.
 - j. Transmutation with TRU burner reactors.
 - k. Transmutation with proton accelerators.
 - l. Transmutation with electron accelerators.
4. Applications.

Other activities related to nuclear data, benchmark exercises and more basic science studies in relation to this Programme are conducted by the NEA Nuclear Science Section and the NEA Data Bank.

The Programme is open to all interested NEA member countries contributing to the information exchange activities and the European Commission. All participants designated a liaison officer who is a member of the Liaison Group (see Annex 1, CD-ROM).

The information exchange meetings form an integral part of the Programme and are intended to provide a biennial review of the state of the art of partitioning and transmutation. They are co-organised by the NEA Secretariat and major laboratories in member countries.

An overview of NEA activities on partitioning and transmutation and relevant publications are available at <http://www.nea.fr/html/pt/welcome.html>.

These proceedings include the papers presented at the 7th Information Exchange Meeting on P&T in Jeju, Republic of Korea on 14-16 October 2002, held in co-operation with the European Commission (EC) and the International Atomic Energy Agency (IAEA). The opinions expressed are those of the authors only, and do not necessarily reflect the views of any national authority or international organisation. These proceedings are published on the responsibility of the Secretary-General of the OECD.

Acknowledgements

The OECD Nuclear Energy Agency (NEA) gratefully acknowledges the Korea Atomic Energy Research Institute (KAERI), the Korea Electric Power Research Institute (KEPRI) and the Korean Nuclear Society (KNS) for hosting the 7th Information Exchange Meeting on Actinide and Fission Product Partitioning and Transmutation. The Agency also extends its gratitude to the European Commission (EC) and the International Atomic Energy Agency (IAEA) for their co-operation. Special thanks are conveyed to Ms. Brigitte Ziegler for having prepared the proceedings for publication.