FOREWORD

Over the past decade, interest in partitioning and transmutation (P&T) has grown in many countries around the world with the expectation that P&T could be a key technology to reduce the need for geological disposal of spent fuel and high-level waste. In order to give experts a forum to present and discuss state-of-the-art developments in the P&T field, the OECD/NEA has been holding biennial Information Exchange Meetings on Actinide and Fission Product Partitioning and Transmutation since 1990. The meetings have been held in Mito (Japan) in 1990, at ANL (USA) in 1992, in Cadarache (France) in 1994, in Mito (Japan) in 1996, in Mol (Belgium) in 1998, in Madrid (Spain) in 2000 and in Jeju (Korea) in 2002. These meetings are co-organised by the NEA Secretariat and major laboratories in member countries, and have often been co-sponsored by the European Commission (EC) and the International Atomic Energy Agency (IAEA). The 8th Information Exchange Meeting was held in Las Vegas, Nevada, USA on 9-11 November 2004 and organised in co-operation with the US Department of Energy, the EC and the IAEA.

The information exchange meetings on P&T form an integral part of NEA activities in the field of advanced nuclear fuel cycles. An overview of NEA activities on P&T and relevant publications are available at http://www.nea.fr.html/pt/welcome.html.

The scope of the information exchange meetings covers all of the major scientific topics related to P&T. The main theme of the 8^{th} Information Exchange Meeting was the impact of P&T on radioactive waste management.

These proceedings include all of the papers presented at the 8th Information Exchange Meeting. The papers presented in the general session are provided in printed form, whereas others papers and posters can be found in the enclosed CD-ROM. The opinions expressed are those of the authors only, and do not necessarily reflect the views of the NEA, any national authority or any other international organisation. These proceedings are published on the responsibility of the Secretary-General of the OECD.

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