

FOREWORD

The second Euroconference and NEA Workshop on Speciation, Techniques and Facilities for Radioactive Materials at Synchrotron Light Sources, Actinide-XAS-2000, was held in Grenoble, France, on 10-12 September 2000. The meeting focused on the application of synchrotron-based techniques to radionuclide/actinide sciences. Over 70 participants from 12 countries discussed the progress made in this field since the first meeting, Actinide-XAS-98. In particular, the following topics were addressed:

- radionuclides in the environment;
- nuclear waste forms and remediation;
- separation technology;
- general actinide chemistry;
- radiopharmaceutical chemistry;
- actinide interaction with micro-organisms;
- electric and magnetic properties.

Twenty-nine oral presentations, most of them invited talks, contributed to the sections on:

- X-ray absorption spectroscopy of radionuclides;
- application of synchrotron radiation techniques and complementary techniques;
- present and future synchrotron facilities for radionuclide studies.

An additional 27 contributed papers were presented at the poster session.

These proceedings contain the abstracts and some of the full papers presented at the meeting. The editors, Dr. Reich and Dr. Shuh, and other anonymous referees reviewed the full papers. The organising committee wishes to thank these reviewers.

Actinide-XAS-2000 was hosted by the European Synchrotron Radiation Facility (ESRF) and the Institute Laue Langevin (ILL), and organised mainly by the *Forschungszentrum Rossendorf* (FZR), Germany. The European Commission, the NEA and the US Department of Energy co-sponsored the meeting.