

## Scientific Basis for Nuclear Waste Management XII Held in Berlin 20 Countries Represented

The 12th International Materials Research Society symposium on the Scientific Basis for Nuclear Waste Management was held in Berlin, October 10-13, 1988. The meeting was cosponsored with the Hahn-Meitner Institute in Berlin with financial support from the Commission of the European Communities, the U.S. Department of Energy, and private companies in Germany.

This was the third time the meeting has been held in Europe (Berlin in 1982 and Stockholm in 1985) as part of a three-year cycle in which the symposium rotates from the MRS Fall Meeting in Boston. In 1991, the meeting will be hosted by the French Commissariat A L'Energie Atomique and sponsored by the European Materials Research Society in Strasbourg. This symposium has become a fine example of international cooperation in organizing international meetings on materials research topics.

The meeting was a success by any standard and received prominent coverage in German newspapers. There were over 250 participants from 20 countries. The largest contingents came from the Federal Republic of Germany, United States, France, United Kingdom, Sweden, and Canada. Nearly 190 abstracts were submitted, of which 146 were included in the final program, as well as four invited presentations. The meeting was organized so that there were never conflicting sessions. This was done by having nearly equal numbers of oral and poster presentations.

The poster sessions were very effective because they were organized around specific themes. The viewing audience was treated to wine, beer and food; and the poster session chairs assumed the responsibility of organizing discussions around the poster presentations. The audience traveled in small groups from poster to poster—and the discussion was excellent and stimulating. It was great fun to finally have the people who do performance assessments talk to those who generate the laboratory and natural analogue data that go into the performance assessments. One cannot overemphasize the importance of having these diverse groups stand in the same place and explain their work—and its relevance to the problem of the final, safe disposal of nuclear waste.

The invited presentations were provocative and enjoyable. Charles McCombie (NAGRA, Switzerland) opened the meeting with "Research Priority: Are We Tack-



*Dr. Werner Lutze of the Hahn-Meitner Institute in Berlin opens the 12th International Symposium on the Scientific Basis for Nuclear Waste Management.*

ling the Most Important Problems in Waste Management." David Shoesmith (AECL, Canada) reviewed the mechanistic basis for modeling corrosion of spent fuel and container failure. R.D. McCright (Lawrence Livermore National Laboratory, USA) discussed the corrosion of canister materials. G. de Marsily (Ecole Nationale Supérieure des Mines de Paris, France) reviewed the constraints on modeling chemical speciation in solution during migration through heterogeneous media. M. Apted (Battelle Pacific Northwest Laboratories, USA) provided an entertaining and challenging on-the-spot analysis of the science presented at the meeting and an impression of what should be done in the future. This was appropriately the last oral presentation of the meeting—and he spoke to a full house.

The sessions themselves covered the fol-

lowing topics: glass and crystalline waste forms; spent fuel; corrosion of canister and overpack materials; cement waste forms; performance assessment, *in situ* tests, and backfill materials; reaction and transport of radionuclides and water. In short, the organizer, W. Lutze, and the program committee (representing eight countries) made every effort to ensure that the scientific quality of the meeting was high and that there was ample opportunity to discuss the important materials science issues related to the final disposal of nuclear waste. Grants were made available through the conference to support part of the travel expenses of the program committee to two meetings for the selection and review of papers. The conference proceedings will be published by MRS and will include over 124 papers. Co-editors are W. Lutze and R.C. Ewings.

Finally, the conference organizers (Helga Fuchs and staff) coordinated every aspect of the program in the very efficient setting of the Internationales Congress Centrum in Berlin. Conference participants were received at a reception hosted by the Senate of Berlin in the Martin-Gropius-Bau Museum, where they viewed "Stations of the Modern" starting with the Brücke Show of 1910 and ending with "Video Gallery" of 1982. Participants also had the opportunity to attend performances of the Berlin Philharmonic Orchestra and the Deutsche Opera. The latter included a special premier performance of "Los Alamos," an opera on the conflict between man in the natural setting and technology.

In 1989, the symposium returns to Boston and will be co-chaired by Virginia Oversby of Lawrence Livermore National Laboratory and Paul Brown of Pennsylvania State University.

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