Foreword

Mathematics and Computations, Reactor Physics, and Environmental Analyses

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The 1995 International Conference on Mathematics and Computations, Reactor Physics, and Environmental Analyses was held in Portland, Oregon, on April 30–May 4, 1995. The meeting was sponsored by the Mathematics and Computation (M&C) Division and the Eastern Washington Section and co-sponsored by the Reactor Physics and the Environmental Science (ES) Divisions of the American Nuclear Society. This marked the first time that the M&C Division had formally included the area of environmental analyses as a major focus of a topical meeting, and it was also the first time that the ES Division had participated as a co-sponsor of an M&C conference. About 270 people attended the conference.

The technical program began with a morning plenary session tutorial on radiative transfer in the Earth’s atmosphere, presented by Dr. Robert Cahalan of the National Aeronautics and Space Administration. This was followed by 27 technical sessions presented over three full days and covering topics in neutral and charged-particle transport, diffusion theory, thermal-hydraulic analysis, groundwater transport, risk assessment, fuel management, lattice assembly calculations, and parallel processing. In all, 156 papers were presented, representing work from 25 different countries, with about 40% of the papers from outside the United States.

The July and September special issues of Nuclear Science and Engineering (NS&E) cover exclusively papers that are extensions of select papers from the conference. These papers were chosen on the basis of technical merit and are representative of the range of topics covered in the technical scope of the conference.

The Technical Program Committee of the conference is pleased to have the opportunity to publish these papers in the archival literature and wishes to thank NS&E editor Dan G. Cacuci and his editorial assistant, Kris Filipovich, for their efforts in organizing these special issues of NS&E.