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Sommario/riassunto	The IAEA facilitated the co-operation on research and development among its Member States on the development and validation of computer codes for the design and safety analysis of nuclear power plants. The main objective of this effort was to bring together the current state-of-knowledge on uncertainty propagation in severe accident analyses that has been accumulated by experienced analysts with the aim of increasing the sophistication and competency of the practitioners in this field. This publication provides the contributions from four individual organizations from four Member States describing their employed uncertainty and sensitivity assessment methods applied in simulating the QUENCH-06 experiment performed at the Karlsruhe Institute of Technology (Germany) in December 2000. The QUENCH-06 experiment was designed to explore the behavior of nuclear fuel under oxidizing and quenching conditions during severe accident scenarios in light water nuclear reactors. Due to its comprehensive nature, this experiment was chosen as the benchmark for evaluating the performance of severe accident codes employed by participants in this coordinated research project. This publication is intended for nuclear

engineers, researchers, code developers, experimentalists in nuclear energy fields, reactor vendors and developers, university professors and students, regulatory experts, and nuclear power plant planners.
