



International Atomic Energy Agency

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INTERNATIONAL WORKING GROUP ON GAS COOLED REACTORS

BEHAVIOUR OF GAS COOLED REACTOR FUEL UNDER ACCIDENT CONDITIONS

PROCEEDINGS OF A SPECIALISTS MEETING
ORGANIZED BY THE
INTERNATIONAL ATOMIC ENERGY AGENCY
AND HELD IN OAK RIDGE, 5-8 NOVEMBER 1990

INTERNATIONAL ATOMIC ENERGY AGENCY, VIENNA, 1991

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FOREWORD

The Specialists Meeting on Behaviour of Gas Cooled Reactor Fuel under Accident Conditions was held at the Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee, USA, 5-8 November 1990. The meeting was convened by the International Atomic Energy Agency on the recommendation of the International Working Group on Gas Cooled Reactors. The purpose of the meeting was to provide an international forum for the review of the development status and for the discussion on the behaviour of gas cooled reactor fuel under accident conditions and to identify areas in which additional research and development are still needed and where international co-operation would be beneficial for all involved parties. The meeting was attended by 45 participants from France, Germany, Japan, Switzerland, the Union of Soviet Socialist Republics, the United Kingdom, the United States of America, CEC and the IAEA. The meeting was chaired by Mr. J. Cleveland, ORNL, and subdivided into five technical sessions:

- 1) Summary of Current Research and Development Programmes for Fuel
- 2) Fuel Manufacture & Quality Control; Safety Requirements
- 3) Modelling of Fission Product Release - Part I and Part II
- 4) Irradiation Testing/Operational Experience with Fuel Elements
- 5) Behaviour at Depressurization, Core Heat-up, Power Transients, Water/Steam Ingress - Part I and Part II

At the end of the meeting a round table discussion was held on Directions for Future R&D Work and International Co-operation.

This document contains all papers presented at the meeting.

EDITORIAL NOTE

In preparing this material for the press, staff of the International Atomic Energy Agency have mounted and paginated the original manuscripts as submitted by the authors and given some attention to the presentation.

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