

# INTRODUCTION

## FUELS I – SPECIAL SESSION ON FUEL CLADDING MODELS

A. L. LOTTIS

*Metals and Ceramic Division, Oak Ridge National Laboratory  
Oak Ridge, Tennessee 37830*

The first of this series contained in this issue of *Nuclear Applications and Technology* is on the topic of fuel cladding models. The integrated fuel-element performance model must consider irradiation effects on cladding properties and the development of stress analysis and failure analysis techniques for the cladding. The papers presented are intended as a survey of some of the important ideas involving these aspects of fuel element behavior. The papers do not as a body pretend to represent all the work which is going on in the field, but they do serve as an excellent starting point for an understanding of the present state-of-the-art.