## INTRODUCTION TO THE BEST ESTIMATE METHODS—2004 SPECIAL ISSUE

## Dedicated to the Memory of Gerassimos (Mike) Analytis

NUSRET AKSAN

Paul Scherrer Institut (PSI)

YASSIN HASSAN Texas A&M University (TAMU)

This special issue is dedicated to the memory of Dr. Mike Analytis, a well-known contributor to the international nuclear community for over twenty years, until his untimely death at the age of 53 on March 15, 2004, after a battle with cancer. His death has deeply saddened all the people who were fortunate enough to know and work with him. His tireless energy and smile inspired all of us. He was a vibrant, enthusiastic, loquacious person, always the "life of the party." Mike received his PhD from Queen Mary College, University of London in 1979. He joined the Swiss Federal Institute for Reactor Research (EIR) in January 1981. As EIR was reorganized to be Paul Scherrer Institut (PSI) in 1989, he continued to be employed by PSI. His contributions to neutron noise analysis and thermal hydraulics are characterized by understanding of basic phenomena that underlie complex nuclear engineering applications. Dr. Analytis published his research results in several valued nuclear engineering journals. From his hospital bed he wrote several articles. Now that he is gone, his example remains with us as a source of inspiration for our own lives.

The International Meeting on Updates in Best Estimate Methods in Nuclear Installations Safety Analysis (BE-2004) was the second in a series of embedded conferences that focused on generating and sustaining dialogue regarding the use of best estimate plus uncertainty tools to license operational and advanced nuclear systems. BE-2004 was held in conjunction with the American Nuclear Society 2004 Annual Meeting (Washington, D.C., November 14–18, 2004). Seven invited and 42 contributed papers were presented. The session entitled "BE Methodology Development in and Application to GEN-IV and Other Designs" was dedicated to the memory of Dr. Mike Analytis, who provided major contributions to the model developments and improvements for the best estimate methods and analysis.

The authors of the papers presented in this issue extended and updated their original conference presentations. Subsequently, the review process was at the same level of rigor as that used for regular papers submitted to *Nuclear Technology*.

In preparing this special issue of *Nuclear Technology*, the goal has been to provide technical details and applications of best estimate plus uncertainty tools for various nuclear systems from the presentations and papers of BE-2004.