FOREWORD SPECIAL ISSUE ON THE INTERNATIONAL CONGRESS ON ADVANCES IN NUCLEAR POWER PLANTS (ICAPP 2014)

Guest Editor

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This special issue of *Nuclear Technology* contains full-length, peer-reviewed papers presented at the International Congress on Advances in Nuclear Power Plants (ICAPP 2014), held in Charlotte, North Carolina, on April 6–9, 2014. ICAPP 2014 was cosponsored by the American Nuclear Society (ANS), the Atomic Energy Society of Japan, the Korean Nuclear Society, the Société Française d'Énergie Nucléaire, and a number of other major international nuclear societies. Since its inception in 2002, in even-numbered years, the ICAPP conference series traditionally has been held as an international embedded topical meeting during the ANS Annual Meeting; ICAPP is held in Europe and Asia as a standalone meeting in odd-numbered years. ICAPP 2014 was the first time the ICAPP conference has been held as a standalone topical meeting in the United States. This very successful meeting brought together more than 400 leaders of the nuclear industry to exchange information, present results from their work, review the state of the industry, and discuss future directions and needs for the deployment of new nuclear power plant systems around the world.

The papers featured in this issue of *Nuclear Technology* were selected from the highest-ranked papers as evaluated by the ICAPP 2014 reviewers and session organizers. Some have been updated and expanded to include additional information not contained in the original conference paper. Topics in this issue include design of advanced nuclear power plants, fuel cycles, reactor safety, and plant operations. This special issue provides an expanded platform to disseminate the very significant work by these authors and a special benefit to the journal's readers.

On behalf of the ICAPP 2014 organizers, Dhiaa M. Jamil, Françoise De Bois, Kenji Umeda, and Seok Cho—General Chairs; Peter B. Lyons, Noël Camarcat, Takuya Hattori, and Jong Kyung Kim— Honorary Chairs; Frank Carré, Shinsuke Yamanaka, and Sun Koo Kang—Assistant Technical Program Chairs; and Samim Anghaie, Jacopo Buongiorno, Mujid Kazimi, and Atam Rao—Steering Committee, we would like to thank the reviewers and session organizers who volunteered their time and expertise to reviewing the papers for ICAPP 2014, including the selected papers contained in this ICAPP 2014 special issue of *Nuclear Technology*.