

PREFACE

The International Materials Research Congress (IMRC) is held annually in Mexico and gathers together more than 1400 attendees from more than 40 countries. The XXIV IMRC held August 16-20, 2015 included a symposium dedicated to Materials for Nuclear Applications. Speakers and poster presenters from Brazil, Colombia, France, Germany, Spain, Saudi Arabia, US, and Mexico participated in this symposium, which provided a forum for presentations and discussion of the state-of-the-art and future trends on materials in nuclear science and technology.

The symposium showed the importance of continuing R&D in materials and fuels not only for future GenIV systems, but also for current reactors, in order to maintain their safety and competitiveness. The consideration of nuclear as an option for power generation suggests the necessity of having enough human resources in this field which can only be achieved through adequate academic and scientific programs for developing technicians and experts who can assume this responsibility.

The complex interaction between actual variables in NPP like environments and operating conditions involves changes in the materials behavior. These changes should be analyzed and studied, and their effect in the facility aging also has to be considered. Currently it is important to consider both the high neutron fluence values as well as those effects of operating conditions, especially in the pressure boundary systems and components.

The contributions to this symposium made evident the importance of materials in the development of the nuclear science industry. After this great meeting, as symposium organizers, we thank all of the participants for their enthusiasm and contributions toward the goals of this symposium. We look forward to your future contributions.

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