

Foreword

Special issue featuring papers from the 14th International Conference on Radiation Shielding and 21st Topical Meeting of the Radiation Protection and Shielding Division (ICRS 14/RPSD 2022)

Guest Editors

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It was a long road to the 14th International Conference on Radiation Shielding and 21st Topical Meeting of the Radiation Protection and Shielding Division (ICRS 14/RPSD 2022).

The Radiation Protection and Shielding Division (RPSD) of the American Nuclear Society (ANS) had scheduled its biennial topical meeting for September 13–18, 2020. All papers were fully reviewed as of May 5, 2020, but at the end of the month, due to the COVID pandemic, the RPSD executive committee voted to postpone the conference for one year, until September 12–16, 2021. How optimistic that was! In March 2021, the executive committee voted for another one-year postponement, until September 25–29, 2022. Even then, it wasn't clear whether the conference would be held as scheduled.

But the conference was held, and though there were some differences from the plans that had been made in early 2020, it was a success. ICRS 14/RPSD 2022 was held at the Seattle Marriott Waterfront in Seattle, Washington, and featured 123 presented papers. The 182 full-meeting attendees and 7 one-day attendees (pictured below) included experts from Japan, Korea, and several European countries in addition to many from North America.

Shaheen Dewji served as general chair, with general cochair Irina Popova. The honorary chairs were Nolan Hertel, of the Georgia Institute of Technology; Bernadette Kirk, of Oak Ridge National Laboratory (ORNL)

(retired); and Enrico Sartori, of the Nuclear Energy Agency (retired). The program chair was Pedro Vaz, along with cochairs Thomas Miller; Jeffrey Favorite; and Rui Qiu, of Tsinghua University. Miller played a leading and decisive role in shaping the conference program. Favorite also served as publications chair. The program committee is grateful to the many paper reviewers from the RPSD community.

The general chairs and the program chairs planned a series of very interesting plenary talks. Eric Williams (TerraPower) addressed topics related to emerging nuclear reactor concepts; Michael Loughlin (ORNL) discussed shielding and radiation protection for ITER; Don Cool (International Commission on Radiological Protection [ICRP]) discussed revision of ICRP's recommendations for radiological protection; Kohei Iwanaga (Nuclear Regulation Authority) discussed the situation at Fukushima Daiichi 10 years after the accident; Günter Muhrer (European Spallation Source [ESS]) discussed shielding and radiation protection for ESS; and Vasilis Vlachoudis (Conseil européen pour la recherche nucléaire [CERN]) discussed shielding and radiation protection at CERN.

Plenary highlights for many attendees were the career retrospectives and reflections from Jeffrey Johnson (ORNL, retired), Nolan Hertel, and Lawrence Townsend (University of Tennessee–Knoxville).

Joel Risner (ORNL) was the workshops chair. The seven workshops that he planned dealt with various computer codes used for radiation shielding applications.



ICRS 14/RPSD 2022 attendees

The planning committee is especially grateful to Janet Davis (ANS) and Ashley Gallegos (ANS), who spent three years attending monthly or biweekly Zoom meetings with us and helped deal with the chaos caused by the pandemic. In addition, Paula Cappelletti (ANS) negotiated with the conference hotel when we postponed twice. During the meeting, Davis, Gallegos, and Eileen Cullen (ANS) were especially welcoming and helpful.

At the conference banquet, Johnson received RPSD's highest honor, the Rockwell Award. The 2021 Rockwell Award winner, Townsend, was also recognized. Amir Bahadori (University of Kansas) was awarded the RPSD Service Award for his leadership in the preparation of ANS Position Statement #41, "Risks of Exposure to Low-Level Ionizing Radiation," and as RPSD program chair.

The banquet was lovely and even featured a short juggling exhibition. The meeting organizers and ANS staff agreed that the hotel food was excellent.

Meeting sponsors included Constellation, Silver Fir Software, TerraPower, the Korean Association for Radiation Protection, the Korean Nuclear Society, the University of Tennessee–Knoxville Department of Nuclear Engineering, the Georgia Institute of Technology, Mirion Technologies, and the Organisation for Economic Co-

operation and Development/Nuclear Energy Agency. Additional exhibitors were Los Alamos National Laboratory, ORNL, Pacific Northwest National Laboratory, and TRAD Tests & Radiations.

The papers in this special issue of *Nuclear Science and Engineering* (NSE) are not necessarily "highlights," as has historically been the case for journal special issues containing conference papers. In accordance with a new policy instituted by NSE editor Farzad Rahnama, all authors were invited to update and expand their work into a suitable journal article. During the conference, the publication chair's efforts to solicit journal submissions became noteworthy for their regularity and encouraging humor. Thus, the papers that were submitted were selected by their own authors. We are pleased that almost one-fourth of the conference papers are represented in this special issue.

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