



11 ICI: some related papers

Syed M. Qaim¹ · Chary Rangacharyulu² · Lidia Matei³

Accepted: 14 June 2024 / Published online: 9 August 2024
© The Author(s) 2024

The Eleventh International Conference on Isotopes and Expo (11 ICI) was held under the umbrella of the World Council on Isotopes (WCI) in Saskatoon, Saskatchewan, Canada, 23–27 July 2023. It was organised by Sylvia Fedoruk Canadian Centre for Nuclear Innovation in partnership with the University of Saskatchewan, both in Saskatoon. A detailed report on Conference has been published [1]. Hence, we outline here only a few salient aspects.

About 300 persons from over 20 countries with about 35 sponsors and exhibitors from the industry participated in the conference. Organised under the theme ‘*Isotopes around us, their applications and beyond*’, the programme of the conference consisted of five tracks, each with several sessions, covering various aspects of isotope research and technology, e.g. fundamental nuclear data, production of isotopes, standardisation of nuclear methods and techniques, development of future irradiation facilities, nuclear instrumentation, etc. A very special feature was the organisation of several Panel Discussions and Fora, namely, Policy Perspectives, Role of Women Nuclear Scientists, Isotopes Demand and Supply, Isotopes and Nuclear Power and Public Perceptions about Radiation. The critical and enlightening presentations and subsequent discussions created the impression that a new thriving impulse to radionuclide technology is emerging, especially with regard to radionuclide targeted therapy. In particular, the enhancing interest of industry and also of Governments in this direction is very appealing and satisfying.

During the conference the participants were encouraged to submit manuscripts on their presentations to the Journal of Radioanalytical and Nuclear Chemistry (JRNC), for

consideration for publication. The call resulted in several submissions, but the total number of submitted manuscripts remained rather small. After a critical peer-review of each manuscript, a total of 12 submissions were accepted. They are included in this issue of the journal, serving as a partial record of presentations at the 11 ICI.

Though not covering all tracks of the conference, the contributions published here deal with many presently hotly discussed topics. For example, alternative production routes of the radionuclides ⁹⁹Mo ($T_{1/2}=2.7\text{d}$) and ²²⁵Ac ($T_{1/2}=10.0\text{d}$) are under focus.

Two other less commonly used but very promising radionuclides, namely ⁸⁹Zr ($T_{1/2}=3.27\text{d}$) and ⁴⁷Sc ($T_{1/2}=3.35\text{d}$), have also been the subject of study. In addition to production methods of above-mentioned radionuclides, a few papers dealing with other topics are also being reported, e.g., radiochemical separations, environmental radioactivity, nucleosynthesis, development of high-current cyclotrons, etc.

In summary, while the papers published in this issue do not depict the full spectrum of technical discussions at the conference they do give a glimpse of the great diversity in the field of radioisotopes.

We sincerely thank the authors, and especially the reviewers, for their painstaking efforts to help achieve the high standard of publication of this journal. One of the basic objectives of WCI is to enhance our knowledge of isotopes. We hope that the 11 ICI and the publication of this collection of papers would serve as a small contribution to this ongoing effort.

Funding Open Access funding enabled and organized by Projekt DEAL.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in

Guest Editor: Syed M. Qaim, on behalf of WCI.

✉ Syed M. Qaim
s.m.qaim@fz-juelich.de

¹ Forschungszentrum Jülich (FZJ), Jülich, Germany

² University of Saskatchewan, Saskatoon, SK, Canada

³ Organization of Canadian Nuclear Industries (OCNI),
Pickering, ON, Canada

the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Reference

1. Venkatesh M, Matei L, Rangacharyulu C, Kim JK, Dickman P (2023) World council on isotopes, Seoul, Korea. Newsletter of WCI 12(8–9):1–18