

## Special Issue

# Nuclear Waste Management and Sustainability

### Message from the Guest Editors

The effective management of nuclear waste is crucial to ensure the safe sustainable usage of nuclear energy in electricity generation, and numerous applications in medicine, industry, agriculture, and scientific research. Nuclear waste generated in these technologies must be treated and conditioned for safe handling, transportation, storage, and ultimate disposal. Nuclear waste should be disposed of aiming for the permanent protection of dangerous radioactive materials from humans and the biosphere. Both processing and disposal activities of the waste encompass the utilisation of advanced technologies and materials aiming to ensure the reliability of the waste's long-term isolation. Cements, geopolymers, glasses, glass composite materials, ceramics, and metals are the materials analysed for expected performance in the envisaged disposal environment. Natural analogue systems and materials proven for their long-term stability and durability are investigated to ensure confidence in the multi-scale approaches currently used to predict the behaviour of waste disposal systems on geological timescales.

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### Guest Editors

Prof. Dr. Michael I. Ojovan

Prof. Dr. Vladislav A. Petrov

Prof. Dr. Sergey V. Yudintsev

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### Deadline for manuscript submissions

closed (26 March 2023)



## Sustainability

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### Editor-in-Chief

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