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Materials for Nuclear Waste Immobilization

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Message from the Guest Editors

Dear Colleagues,

Safe and effective management of nuclear waste is crucial in ensuring sustainable utilization of nuclear energy. Nuclear waste must be processed to make it safe, which includes its conditioning, so it is immobilized and packaged before storage and disposal. Immobilization of waste radionuclides in durable wasteform materials provides the most important barrier to contribute to the overall performance of any storage and/or disposal system. Materials for nuclear waste immobilization are, thus, at the core of multibarrier systems of isolation of radioactive waste from environment aimed to ensure long term safety of storage and disposal.

This Special Issue aims to analyze the materials currently used, as well as novel materials for nuclear waste immobilization, including technological approaches utilized in nuclear waste conditioning pursuing to ensure efficiency and long-term safety of storage and disposal systems. It will focus on cementitious materials, geopolymers, glasses, glass composite materials, and ceramics developed and used in nuclear waste immobilization with performance of such materials of the utmost importance.

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Message from the Editor-in-Chief

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