



Nuclear Wastes Management

Guest Editors:

Message from the Guest Editors

Prof. Bruno Merk

School of Engineering, University
of Liverpool, Liverpool L69 3BX,
UK

Dr. Andreas Wilden

Institute of Energy and Climate
Research, Forschungszentrum
Jülich GmbH, 52428 Jülich,
Germany

Dr. Alexander Stanculescu

Retired, International Atomic
Energy Agency, 1400 Vienna,
Austria

Nuclear waste management technology of has made considerable progress since the 1990s, including the demonstration of the feasibility of separation and burning of plutonium and minor actinides at laboratory scale in order to make nuclear technology a more viable option in the clean energy mix. However, the technologies are now at a crossroads, requiring a major leap from laboratory-scale demonstration to industrial demonstration and application. This requires a serious rethinking of the approach to identify the ideal next steps and substantial research to progress into the next level.

Keywords

nuclear waste management; partitioning; transmutation; advanced reactors; reprocessing; actinide separation; waste burners; fast reactors; accelerator-driven systems; molten salt reactors; fuel cycle scenario; national and international programmes; advanced fuel cycle; advanced fuels; closed fuel cycle; recycling; waste management strategies; re-use of actinides; waste storage; nuclear energy; final disposal; geological disposal; waste conditioning

Deadline for manuscript
submissions:

closed (20 February 2022)





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giulio Nicola Cerullo

Dipartimento di Fisica,
Politecnico di Milano, Piazza L.
da Vinci 32, 20133 Milano, Italy

Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Inspec, CAPlus / SciFinder, and other databases.

Journal Rank: JCR - Q2 (*Engineering, Multidisciplinary*) / CiteScore - Q1 (*General Engineering*)

Contact Us

Applied Sciences Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/applsci
applsci@mdpi.com
[X@Applsci](https://twitter.com/Applsci)