

13 - 15 September 2023
Berlin



Interdisziplinäres Forschungssymposium für die Sicherheit der nuklearen Entsorgung

Call for Contributions

The Federal Office for the Safety of Nuclear Waste Management (BASE) will host the second international research symposium on the safety of nuclear waste management (safeND) from **13 - 15 September 2023**. The conference will give scientists from a wide range of disciplines the opportunity to present their research with regard to the safe handling and disposal of radioactive waste, and to discuss their findings in an intra- and interdisciplinary environment. The conference also aims to identify open research questions and needs.

We hereby invite you to propose contributions to the symposium. You can submit your abstract via the [Call for Contributions](#) until 31/03/2023.

https://www.base.bund.de/DE/service/safend/cfc/callForContributions_node.html

You can use the form to submit both presentations and posters for sessions that have already been announced. You can also express your wish to contribute to an announced panel or workshop (see section "announced formats"). Please write an informative description of your proposal, which can be evaluated by the scientific committee. Please also include a descriptive title, and specify the presentation format. Please note the following requirements for the different formats:

- **Presentation:** Presentations must not exceed 15 minutes. There will be an additional 5 minutes for questions.
- **Poster presentation:** The posters will be presented in two-hour poster sessions, the format shall be DIN A0 (84 cm wide and 119 cm high). The authors will also have the opportunity to present their contribution as a one-minute short talk on one slide. Authors should be present at their poster boards during the poster sessions.
- **Workshop or panel contribution:** If you would like to make a short contribution as part of the announced workshops or panel discussions, please let us know here. We will put you in touch with the relevant workshop or panel chair for further coordination of the content.

Following the call for contributions deadline, BASE will review all session and poster proposals together with the scientific committee, and then contact you. In the event of a high number of submissions, preference will be given to those that are directly related to this year's symposium focus theme.

We will then ask the authors of all selected submissions to upload their contributions to a conference platform so that they can be published in the conference proceedings. In addition, the names of the authors and the titles of the papers will be published on the BASE website as part of the programme.

The conference language will be English. Please submit your proposal in English. Only then can it be reviewed and considered by the scientific committee.

Announced formats:

The following topics for sessions, workshops and panels were submitted as part of the Call for Sessions. Contributions on these topics can be submitted.

Proposed lecture sessions:

- S01: International Organizational Models in Nuclear Decommissioning**
- S02: Nuclear Decommissioning and Waste Minimization**
- S03: Related aspects to interim storage, conditioning and transport**
- S04: Global climate change and its impact on the nuclear safety of a repository.**
- S05: Corrosion of canister materials in deep geological repositories**
- S06: Surface based site investigation: collecting a reliable data base for decision making**
- S07: The role of geomechanics and structural modelling in the site selection process**
- S08: Handling uncertainties in safety analyses for a geological repository for nuclear waste**
- S09: Geologic Disposal of Low- to High-Level Waste: Recent Advances in Computational Methods and Process Coupling (THMCB)**
- S10: Deep Geological Disposal - Geosciences behind regulatory, technical and social challenges: best practices and lessons learned**
- S11: Type and precision of public measurement of environment constraints**
- S12: The impact of armed conflicts on the safety and security of nuclear waste installations**
- S13: Safeguards and non-proliferation in nuclear waste management**
- S14: Technical-economic analysis of "new" nuclear reactor concepts and interaction with waste disposal**
- S15: Reactor Based Nuclear Waste Management**
- S16: Borehole Disposal for Radioactive Waste - Recent Developments**
- S17: Disposal pathways as future pathways. Planning between pragmatic narrowing and thinking about the expected future.**
- S18: Communicating uncertainties in nuclear waste management**
- S19: Long term information and awareness preservation**
- S20: Participation processes for projects involving nuclear safety and disposal**
- S21: Safety in law - legal bases for safety-related decisions in international comparison. Or: What's safe**
- S22: Specific aspects of historical and economic sciences**
- S23: Towards literacy in long-term governance of nuclear waste: a proposition for Strategic Monitoring**

Proposed workshops:

- W01: Trade-Offs in nuclear waste management concerning intra- vs. intergenerational justice**
- W02: Discourse deep geological repository - defining retardation moments and questioning the feasibility of prognostic approaches**
- W03: How to estimate the 3D stress state for a deep geological repository**
- W04: Optimizing the safety case through transdisciplinary research?**
- W05: Identifying safety-relevant knowledge gaps concerning radionuclide mobility - bringing together fundamental research and application**
- W06: Impact of Extended Interim Storage of High-Level Radioactive Waste on the Safety of Final Disposal**
- W07: Geodata for the public - best practice examples from GIS and web applications**
- W08: Uranium mining - challenges and learnings for nuclear disposal in view of participation and safety**
- W09: Learning through public engagement**
- W10: Let's do science communication: how can science communication support the search for a nuclear waste repository?**
- W11: Exploring potentials for transdisciplinary coproduction in the case of nuclear waste disposal**
- W12: Fostering Interdisciplinary Knowledge**
- W13: Putting Nuclear Waste on the Sustainability Agenda- Integration into the concept of planetary boundary**

Proposed panels:

P01: Safeguarding nuclear waste managing; Part I and Part II

P02: "Novel" Nuclear Reactors as Alternative Disposal Option

P03: Preserving awareness for oversight - towards a resilient system at social level over centuries and millennia

P04: The role of law in nuclear waste management.

The focus theme for safeND 2023 is:

Research on resilient safety: gaps, progress and priorities

Safety in nuclear waste management means considering all conceivable scenarios, making adequate provisions, and establishing viable communication processes. In the recent past, however, we have observed how previously insufficiently considered scenarios and crisis situations suddenly became reality: We are experiencing a pandemic that temporarily brought public life to a standstill; we are witnessing wartime attacks on nuclear facilities, attacks on critical infrastructure and, not least, global climate change, which also has implications for nuclear safety. When it comes to safety in nuclear waste disposal, which is associated with extremely long time horizons, we therefore need extraordinarily resilient systems - technically, institutionally, socially. Where are we today, and what knowledge gaps do we see? What progress in knowledge has been made in recent years? And what priorities are at the top of the international research agenda for the coming period?

Scientific Committee

We are pleased to have the support of the following renowned scientists for safeND 2023.

Anne Bergmans	Institute of Environment & Sustainable Development, University of Antwerp, Belgium
Jens Birkholzer	Lawrence Berkeley National Laboratory, USA
Ulrike Felt	University of Vienna, Austria
Sascha Gentes	Karlsruhe Institute of Technology, Germany
Markku Lehtonen	Universitat Pompeu Fabra Barcelona, Spain
Wolfgang Liebert	University of Natural Resources and Applied Life Sciences Vienna, Austria
Patrizia Nanz	Federal Office for the Safety of Nuclear Waste Disposal (BASE), Germany
Irmgard Niemeyer	Jülich Research Centre, Germany
Claudio Pescatore	Linnaeus University, Italy
Barbara Reichert	University of Bonn, Germany
Klaus-Jürgen Röbling	TU Clausthal, Germany
Florence-Nathalie Sentuc	Society for Plant and Reactor Safety, Germany
Tim Vietor	NAGRA, Switzerland
Holger Völzke	Federal Institute for Materials Research and Testing, Germany

Venue

The venue for the symposium will be Cafe Moskau in Berlin. You can find the address and directions here: <https://www.cafemoskau.com/kontakt>.

Registration

Registration for the symposium will start in March 2023. We will draw your attention to this separately.

Website and office

Further information on safeND can be found on our website: <https://www.base.bund.de/safend-en>



Bundesamt
für die Sicherheit
der nuklearen Entsorgung

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