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OpenWorkFlow - Development of an open-source synthesis-platform for safety investigations in the site selection process

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The search for suitable sites for the safe disposal of radioactive waste, a prerequisite for phasing out nuclear energy, is a major scientific, technical and political challenge on which intensive work is being done worldwide. Numerical models for safety investigations for site selection will also play an important role in the endeavour. The OpenWorkFlow project, which was initiated by the Bundesgesellschaft für Endlagerung (BGE), is creating a novel, open synthesis platform for the virtualization of repository systems. The simulation platform will be used both for the evaluation of far-field and near-field processes to support the site selection process and later for the geotechnical design of repository systems. Continuity and innovation are two basic principles of our development philosophy. Through continuous scientific development, the platform will always be at the cutting edge of science and technology and help to shape it. In addition, OpenWorkFlow is developed using the latest IT and digitization methods and the software concept is continuously adapted. As the name suggests, OpenWorkFlow is an open workflow platform, developed as an open source project based on the FAIR principles and an invitation to the community to participate.

Source:
Christoph Lehmann, Lars Bilke, Jörg Buchwald, Nico Graebling, Norbert Grunwald, Julian Heinze, Tobias Meisel, Renchao Lu, Dmitri Naumov, Karsten Rink, Ozan Özgür Sen, Philipp Selzer, Haibing Shao, Wenqing Wang, Florian Zill, Thomas Nagel, Olaf Kolditz (2024): OpenWorkFlow - Development of an open-source synthesis-platform for safety investigations in the site selection process, Grundwasser, in print

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References

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