

[Geoscientist]

Expertise Geophysics, Rock Mechanics, Numerical simulation, Model Generation (meshing), Scripting, Training course instructor, Visual Basic and Python programming

Education Master of Science (Geosciences), 2021
Ruhr-Universität, Bochum, Germany

Bachelor of Science (Geosciences), 2017
Ruhr-Universität, Bochum, Germany

Professional Experience

October 2021 – Present Itasca Consultants GmbH, Gelsenkirchen, Germany
Project Engineer

Publications

Yang, H., Dahlhaus, N., and Renner, J.: On the Effect of Lateral Confinement on Rock-Cutting Tool Interactions, Rock Mechanics and Rock Engineering, <https://doi.org/10.1007/s00603-024-03837-2>, 2024.

Poller, A., Resele, G., Missal, C., Dahlhaus, N., and Voss, M.: Semi-analytical approach to modelling matrix diffusion in fractured media, Saf. Nucl. Waste Disposal, 2, 163–163, <https://doi.org/10.5194/sand-2-163-2023>, 2023.

Project Experience

Creation of meshes and modelling for a cave mining project (2021).

Development of a workflow to create open pit models and stability analyses (2021–2022).

Specialized support of BASE in safety analyses within the framework of the nuclear waste repository selection procedure (2022–2023).

Modelling of generic nuclear waste repositories based on the ERA Morsleben (2022–2023).

Training course instructor for scripting and the use of Python in FLAC3D (since 2023).

Conducting rock mechanics simulations and designs in clay and crystalline host rocks (since 2023).