

[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).