

Boost and automate analysis with AI

ZEISS Phase Identifier 3D

Raw Materials Industry and Academia

AI enhanced 3D phase segmentation and classification algorithm

- High clarity reconstruction utilising deep learning neural networks (DeepRecon Pro) for increased speed and image quality
- AI contrast enhancement for complex, multiphase samples
- No pre-knowledge of sample required – adaptive classification and labelling for single or multi-sample workflows
- Fully quantified image analysis and absorption contrast based characterisation

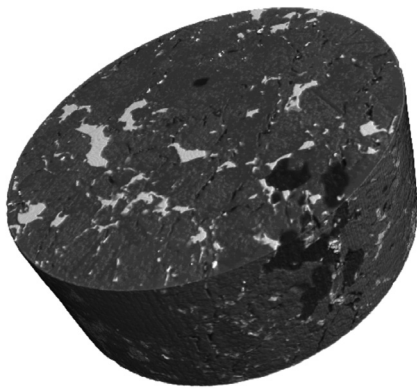
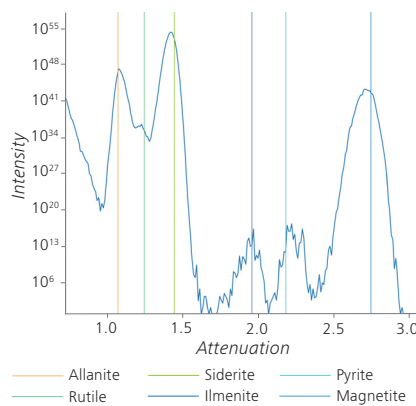
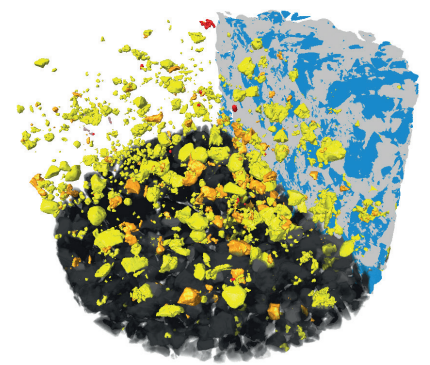


IMAGE: X-ray Computed Tomography (XCT) images enable detailed observations to be made of the interior of complex multi-phase samples such as this high density, ore body core. Deep learning contrast enhancement means complex mineral relationships can be distinguished even with similar density phases. Imaging is key for both solid rock samples, core, or crushed material for particle and grain analysis.



EXPLORE: Quantitative XCT reconstruction algorithms mean attenuation values now have direct meaning for your sample. Minerals can be directly identified from absorption contrast imaging, allowing direct analysis of the key phases that are present in your sample and the ability to target critical areas for further analysis. Quantitative, repeatable results enable repeated analysis and batch processing with single, global settings.



DISCOVER: The 3D microscopy workflow finishes with the extraction of functional data providing key insights into our samples. Automated image segmentation based on the underlying data leads to robust, consistent image analysis with measurements and outputs essential for holistic rock characterisation including solid sample and particle-grain analysis.



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