New dimensions to micro-CT imaging

Fast dynamic CT imaging and spectral CT on TESCAN micro-CT systems

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Wednesday 22nd April 2026

2:30 PM @ AIBN Level 1 Seminar Room

For more details contact
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Figure 3: Animated gif of CO2 dissolution inside a rock

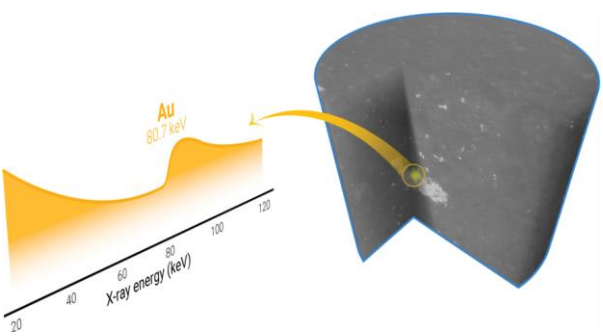

Figure 1: detection of gold inside an unprocessed rock core

Figure 2: Fast, in-situ dynamic imaging of beer foam collapse

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Micro-computed tomography (Micro-CT) has evolved into a powerful, non-destructive tool for three-dimensional characterization across life sciences, materials research, geoscience, and industrial applications. Recent advances in detector technology, in situ experimentation, and spectral imaging have expanded its capabilities beyond structural visualization to enable quantitative analysis of composition, phase distribution, and dynamic processes.
This presentation provides an overview of how high-resolution Micro-CT and spectral techniques can be applied across diverse fields, from biological tissue analysis and biomaterials to composites, porous media, and advanced manufacturing. Emphasis will be placed on workflow integration, multi-scale imaging strategies, and extracting actionable data from complex 3D datasets.

Michiel Krols, Product Marketing Manager for Micro-CT.
Michiel is Product Marketing Manager for Micro-CT at Tescan, where he drives application strategy and supports global research and industrial partners in implementing advanced X-ray imaging workflows.

With a background in cell biology and light microscopy, and over five years of experience as a Micro-CT Application Scientist, he has worked across a broad range of disciplines, including oncology and immunology, advanced composites, additive manufacturing, and fluid transport in porous media. His expertise spans high-resolution imaging, in situ and dynamic CT, and the integration of spectral and multimodal techniques for quantitative analysis.