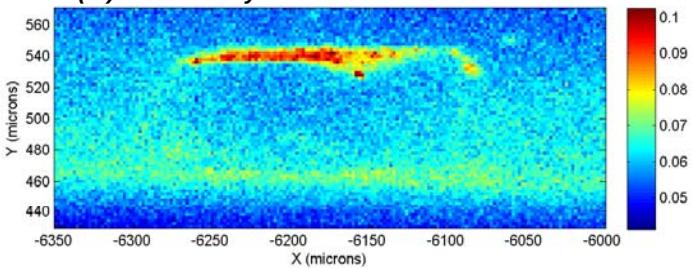
Research to Understand Migration and Design Remediation: Focus on Tc, U, CCl_4, and Pu in 200A and River Corridor Settings

Pacific Northwest NATIONAL LABORATORY

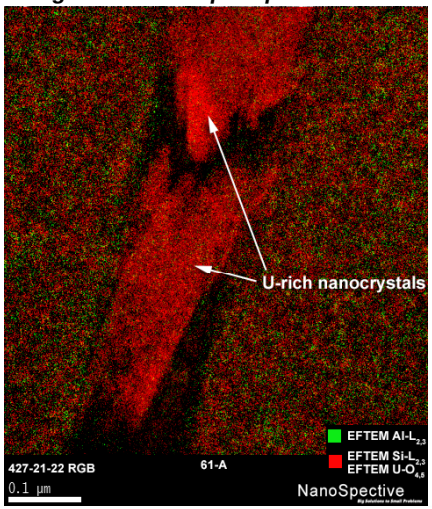
Unexpected Geochemical Processes

Tc(IV) stabilized by celadonite



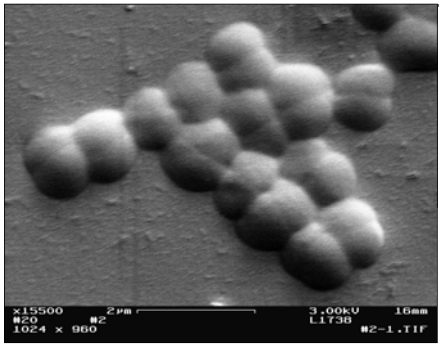
Coupled Processes

Intragrain uranium precipitates in BX-102 sediments



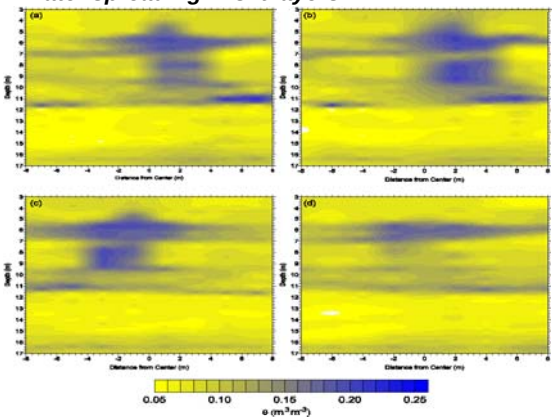
Unusual Life Forms

Deinoccus in SX-108 sediments



Unrecognized Controlling Features

Water spreading in silt layers



Basic Research Contributions

- Wrap-around science, Hanford-inspired science.
- Discover and understand scientific processes; establish improved models; resolve critical science issues.
- Rigor for site-specific conceptual migration models and characterization needs.
- Basis for extrapolation, prediction, and uncertainty analysis.
- Concepts for manipulation and system control; science to application pathway.
- "Site-wide" models under development for key contaminants.
- Predictability achieved for certain contaminants and settings.
- Supports confidence, quality, and informed approaches and decisions.

For more information about the science please contact:

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