



SCAL & EOR EXPERTS



Apostolos Kantzas, PhD, P.Eng. President & CEO

A professor from the University of Calgary, Dr. Kantzas has over 30 years of experience leading advanced research of fluid flow in

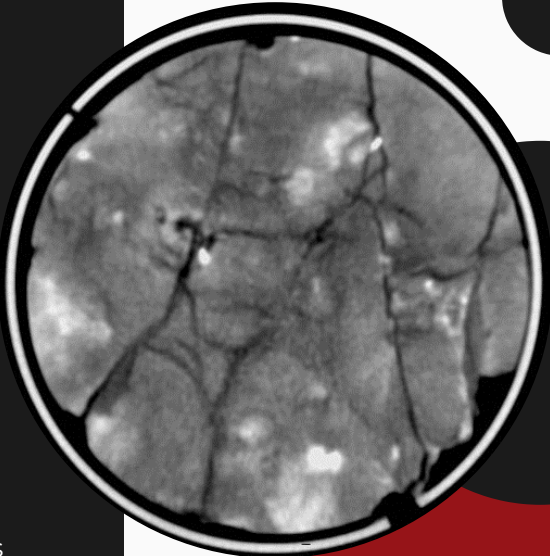
porous media. He is an expert in Tomographic Imaging, Porous Media Physics and Magnetic Resonance Sensor Technology. Dr. Kantzas also leads an Industrial Research Chain in Fundamentals of Unconventional Resources (FUR).



Jonathan Bryan, PhD, P.Eng. Technical Advisor

Dr. Bryan has close to 20 years of expertise in Petrophysics, Enhanced Oil Recovery, Special Core Analysis and Magnetic Resonance. As a project Manager and Technical Advisor with PERM, he works with clients to understand reservoir and production issues, and design lab-scale testing to model reservoir flow and oil recovery processes.

Who We Are



PERM Inc.'s story begun in 1994 in Calgary, Alberta. Dr. Apostolos Kantzas founded PERM Inc. as a Special Core Analysis and R&D Laboratory for the oil and gas industry. It is also known as the Tomographic Imaging and Porous Media Laboratory (TIPM Lab).

PERM specializes in conducting Special Core Analysis & Enhanced Oil Recovery Studies for the oil and gas industry. Whether it is doing full diameter corefloods at high pressures and temperatures, conducting complex relative permeability measurements while scanning, or studying EOR in unconventional deposits, PERM routinely takes on complex projects.

CONTACT US

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PERM Inc
TIPM LABORATORY

**SPECIAL CORE ANALYSIS &
ENHANCED OIL RECOVERY
LABORATORY**

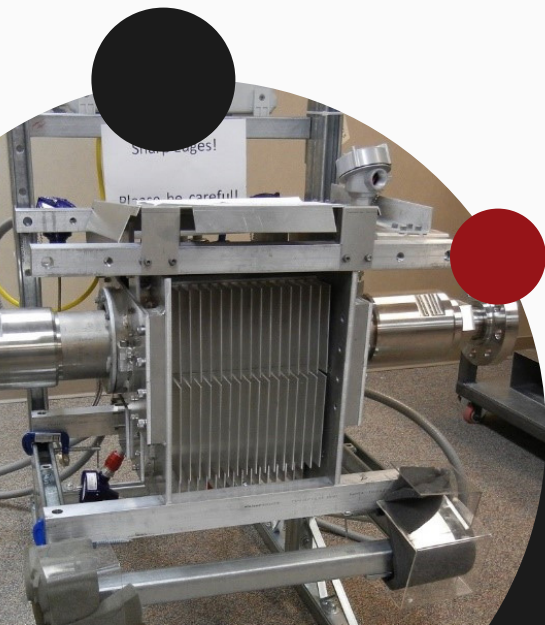
ANALYTICAL LABORATORY

- Dead/Live Oil Property Testing
- PVT Testing
- Oil SimDist (C6 - C120+)
- Interfacial Tension Testing
- Water Chemistry (Ions, pH, Conductivity)
- Produced Gas Online GC Testing

NMR LABORATORY

- Fluid Distribution
- Reservoir Characterization with NMR
- Oil and Water Cut in Fluids
- T2cutoff Calibration
- Logging Tool Calibration
- Used in Carbonates/Oil Sands Where T2 is N/A
- Core Logging
- Production Metering (Online Water Cut Meter for Heavy Oil and Bitumen)

JOINT INDUSTRY VENTURES JOINT VENTURES INDUSTRY TRAINING COURSES



COREFLOODS/ENHANCED OIL RECOVERY (EOR) EVALUATION LABORATORY

- Thermal and Steam /Solvent Oil Recovery
- Non-Thermal Oil Recovery Testing
- Solvent-Based Oil Recovery Tests
- Surfactant and Alkali Flooding
- Polymer and SP Core Floods
- Chemical EOR for Heavy Oil - Visualization of Emulsion Flow
- Electrical EOR
- Foam EOR at Steam Conditions
- Variable Salinity EOR
- Immiscible Gas EOR
- Miscible Gas EOR
- Recovery Efficiency
- Waterflooding in Linear and 2D Systems
- Shale Oil and Gas Characterization
- Unconventional Resource EOR Studies
- CBM Gas Adsorption Studies



TOMOGRAPHIC IMAGING (CT SCANNING) LABORATORY

- CT Scanning Core for Reservoir Characterization
- CT Scanning Core During Core Floods (Flow Visualization and Fluid Distribution)
- Micro-CT Scanning
- Core Logging

SPECIAL CORE ANALYSIS

- Relative Permeability
- Wettability
- Capillary Pressure
- Formation Factor and Resistivity Testing
- Thermal Conductivity
- Surfactant Phase Behaviour Studies
- Formation Damage Studies
- Water Compatibility
- Bitumen and Oil Extraction
- Surface Area Analysis
- Adsorption Isotherms
- Tight Core Analysis
- Acidizing Evaluation
- Asphaltene Precipitation
- Imbibition
- Mud Invasion Studies
- Fracture Fluid Surfactant Testing
- Conformance Evaluation
- Rock/Fluid Interaction
- Fluid Flow Phenomena
- In Situ Upgrading
- Acoustic Velocity
- Electric and Di-Electric Properties
- Oil Sands Mining and Tailings Research