

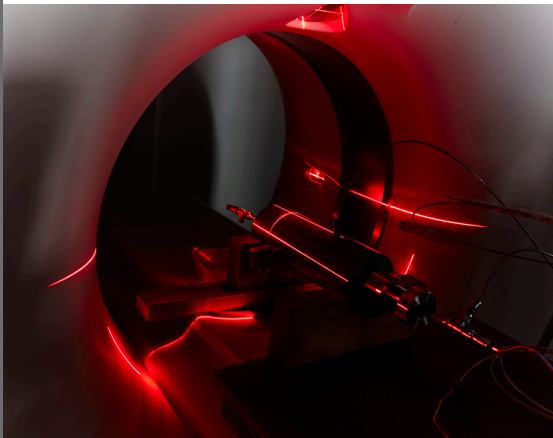


PETGAS

www.petgas.leeds.ac.uk

The Petrophysics of Tight Gas Sandstones (PETGAS) project has been hugely successful in generating a high quality database of the petrophysical properties of tight gas sandstones and using bespoke software to visualize the results to increase understanding of key properties.

The project has led to new understanding of key controls on the petrophysical properties of tight gas sandstones and created a new data visualization/software tool PETMiner.



PREVIOUS SPONSORS

BG, BP, EBN, GDF Suez, Nexen, San Leon Energy (formerly Aurelian Oil and Gas), Shell and Wintershall.

DELIVERABLES

WP 1: Extending the Rock Core Analysis PETGAS database

The rock core analysis PETGAS database will be continually updated throughout the project with 15 samples per sponsor analysed. Updates to the PETGAS website and PETMiner software will be provided every 3 months.

WP 2: Special Core Analysis (SCAL)

Obtaining high quality SCAL data for tight gas sandstones is extremely time-consuming. Indeed, many experiments conducted in Phase II took nearly the full 3 years to complete, which has limited the amount of SCAL data we have collected. We therefore propose to continue SCAL measurements on samples from previous phases as well as those provided for analysis during Phase IV.

WP 3: Data Visualisation, data mining and integration with wire-line logs

The PETMiner software has already provided a step change for visualization and mining petrophysical property data. In Phase IV, we will increase functionality to help with the integration of laboratory measurements with wire-line log data and attempt to identify methods to predict properties using machine learning when only cuttings data are available.

WP 4: Data analysis

We propose to continue analysis of data collected during PETGAS Phases I, II & III and integrate the results with other datasets in the PETMiner environment.

COSTS

Phase IV of PETGAS costs £150,000 per sponsor and runs until the end of 2023.

CONTACT US

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KNOWLEDGE TRANSFER

Knowledge transfer will take place using the same methods as for PETGAS Phases I, II & III.

- 6 monthly sponsor meetings.
- A range of reports will be provided aimed at different audiences within the sponsor organisations.
- The searchable website will be maintained and enhanced.
- Data will be uploaded to the PETMiner software and sponsors will be provided with regularly updated version of the software.
- The academic team will make regular presentations of the results to individual sponsors.