We currently have seven members in the consortium and would welcome additional "active" members. Active members are those who supply core/logs for measurement and use by consortium members. We have been in existence since 2002. We have limited access to fresh shale core a primary necessity in studying aspects of anisotropy and would certainly welcome any shales a member or supporter might donate. We continue to develop and populate a database of petrophysical measurements which is made available to consortium members over the Internet. At last count we have measurements on over 600 cores in the database. We developed a user interface to guide query construction and allow retrieval as EXCEL compatible files. It now includes all known and consortium measured anisotropy data. We are currently developing and have prototyped an analytical interface which will permit web based user interaction with retrieval data in the form of cross-plotting and regression analysis. We have also developed a graphical interface to assist users in seeking data.

We have students working on correlating NMR and Hg capillary pressure data with the purpose of 1) deriving capillary pressure from NMR measurements and 2) understanding the relationships between the two measurements. This has been fruitful for certain classes of rock. Empirical permeability estimators based on NMR data have been evaluated for various rock types. Another student has completed a study of the petrophysical properties of a California turbidite which demonstrates the dominant influence of mineralogy on strength variations while another student studied the determination of water saturations from resistivity measurements. We have another student evaluating multi-staged single specimen triaxial testing compared to conventional multi-sample triaxial testing for the determination of mechanical properties. This study is focused on evaluating and establishing the optimum testing procedures for reliable measurements. One student is evaluating the corrections made to Hg injection data to account for system compressibilities and temperature changes. These become increasingly important in tight gas interpretation.

Additional studies are focusing on the freezing and thawing of fluids in rock. The objectives are to understand the petrophysical and seismic response of partially frozen rock/fluid systems. These have implications to exploration in permafrost regions, preserving core and in the pursuit of gas hydrates.

We have recently joined with Prof. Roger Slatt, Geological Sciences, in studying the petrophysical properties of two cores taken from a turbidite outcrop he has studied extensively. Additional, he has a complete suite of logs in the cored holes adjacent to the outcrop. We find this an exciting and rare opportunity to address seismic scaling and petrophysical upscaling. We intend to pursue this beyond the current New Zealand cores and address new cores from a larger turbidite study in Wyoming. We have submitted a proposal to fund this study and are circulating an additional and separate consortium proposal to study the petrophysical and geological properties of thin bedded deep water turbidites.

As you can see, we have a fairly solid experimental program underway and a very promising industry focused new direction defined. Membership fees are minimal at $25k/year and they go a long way in supporting students, your future employees.
For more information the following pdf files are available to download:

Experimental Rock Physics Consortium Presentation

Experimental Rock Physics Consortium Agreement

Thin-bedded Turbidite Consortium Proposal