



## **The Ocean Margins LINK Programme: Multidisciplinary research into deep structure, shallow processes and fluid flow on continental margins.**

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The UK Ocean Margins LINK Programme is a research initiative co-funded by government and industry focusing on the geological evolution of ocean margins. The programme has three main themes; deep structure, sedimentary processes, and fluid flow.

The deep structure theme has focussed on characterisation of the nature of the upper lithosphere in the area of margins including those, like the margin NW of the British Isles, associated with volcanic activity. These studies have shed light on aspects of margin evolution which might have significant implications for hydrocarbon exploration.

Sedimentological research has included both outcrop and laboratory studies into the characteristics of gravity flows, including the features that relate to separation of flows and sediment distributions within channels. Study of sidescan sonar images of the sea bed is also of value in examining sediment transport processes and predicting geohazard risks.

Increased understanding of various aspects of fluid flow within the marginal basins is also important in predicting reservoir quality, trap location and slope stability. Modelling of fluid flow within basins has integrated sedimentological and structural data to predict fault seal properties in deep water basins.

Integration of research from the three themes within the Ocean Margins LINK Programme is building towards a model of ocean margin evolution that provides improved understanding and prediction of resources in hydrocarbon exploration, of slope instability and of geohazards.