Naturally Occurring Methane Hydrates: Future Energy Source?

Russell, R.

Summary

Gas hydrate is an ice-like form of water that traps gas molecules. Formation of hydrates during gas production and transportation has been problematic in the energy industry. However, there is now a growing worldwide interest in naturally occurring hydrates as a potential energy source for future exploitation. By some estimates, the total reserves of gas trapped in hydrates worldwide are said to be twice as large as all known hydrocarbon pools. Coordinated research efforts by industry and governments have focused on the recovery of gas hydrates found on continental slopes and rises. Research is also being conducted to evaluate the application of hydrates for gas transportation purposes.

This presentation will provide a basic understanding of gas hydrates, where and how they occur naturally, along with a synopsis of the current research into the recovery of gas from naturally occurring hydrates, and the potential use of hydrates for transportation of gas.

Mr. Robert Russell is currently the president at Akan Oil and Minerals Ltd., with over 30 years of experience worldwide as a geologist/ geophysicist. Robert has worked for numerous oil/gas and mining companies in North America and Europe, and has been involved with numerous discoveries and developments worldwide including White Rose and Terra Nova. He has also been involved with various non-oil and gas projects such as organizing an Earthquake Warning System for Vancouver in conjunction with the Department of Geomatics at the University of Calgary. Over the past few years, he has focused his research on gas hydrates potential and development. He has recently finished writing a book entitled, The Gloves are Off which is currently being published.