

of Newfoundland. With a PhD in engineering from Cornell University, Dr. Duthinh worked in offshore and arctic engineering with Exxon Production Research and Petro-Canada prior to joining C-CORE. His particular research interests lie in ice-structure interaction. Most recently, he has led research programs to establish design criteria for iceberg impact against a gravity-based structure, wave-driven bergy bit and sea ice impact against a floating production vessel.

**Author:** See previous session for Michel Engler's resume.

**Author:** Jean-François Regrettier is a research engineer with the Research and Development Centre at Bureau Veritas. A specialist in applied geophysics and geotechnical engineering, he worked for several years with the French Austral and Antarctic Territories (TAAF) working on the behaviour of breakwaters and embankments, support of runways, steel and composite materials temperatures in cold climates and sea ice. Since joining Bureau Veritas in 1988, his principal areas of interest have been service temperature for steel and composite materials and temperature distribution inside an embankment in a polar area.

**Abstract:** The cooperative Canada/France scientific program on Antarctic iceberg-seabed interaction is reviewed. The objective of the research is to measure the collisions of icebergs with the rocky seabed to gain insight into the strength of ice at large scales. The collisions occur naturally under wave action, or when icebergs drift or are towed into shallower waters. Iceberg shapes are determined by sonar profiling, stereoscopic aerial photography and underwater photography. Iceberg motions are recorded by a 5-axis motion sensor and towing forces measured by an instrumented chain link. In addition, an attempt is made to measure the area of contact by a deformable metallic grid.

### "Ice-Structure Interaction"

**Stephen Jones**

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**Author:** Stephen Jones is head of the Arctic Vessel Laboratory of the Institute for Marine Dynamics in St. John's, Newfoundland. After completing a PhD in physics at the University of Birmingham (1967), he came to Canada and joined the Inland Waters Directorate of Environment Canada where he pursued ice research in several projects. While his research has concentrated on the mechanical properties of ice, he has also worked on electrical properties. In 1984 Dr. Jones joined the National Research Council in his present position. He was responsible for setting up