# NRESi "Our environment is our future"

## Friday Sept 19, 2008

3:30 - 4:30

LECTURE THEATRE

7 - 212

LIGHT REFRESHMENTS SERVED AT 3:20 PM



#### RESEARCH COLLOQUIUM SERIES



#### **Howard Freeland**

Argo Co-Chairman
Fisheries & Oceans Canada / Institute of
Ocean Sciences



### **Argo Watches the Oceans**

Physical oceanography is presently undergoing a radical change with the installation of a global, real-time observing system called Argo that was initiated 9 years ago at the OceanObs-99 meeting in France.

This talk will outline how the Argo instrumentation works and will describe the evolution towards a global observing system that has been created entirely within the last 9 years. This observing system has required international cooperation within the scientific community at a level that is unprecedented in oceanography. The talk will also outline some results deriving from the global array.

Today a global observing system exists in the oceans of the world. Indeed, more ocean climate data will be gathered in the Southern Ocean in 2008 than has been gathered from the sum of all previous research missions to the Southern Ocean. So today we know at all times how the ocean is changing, how heat is being stored in the oceans and how it is being redistributed by ocean currents.

Nevertheless there are threats to the long-term survival of this program notwithstanding the enormous social benefits that will derive from its survival. Political decisions over the next 2 years will determine whether or not there is a potential for the long-term survival of the Argo array.