The 11th Annual Harold I. Schiff Lecture
Faculty of Pure and Applied Science

Presented by:

Professor William L. Miller

Department of Oceanography
Life Sciences Centre, Dalhousie University

on:

Tales from the Air-Sea Interface

Tuesday, December 4, 2001
2:30 p.m.
York University
Senate Chamber, N940, Ross Bldg.

Abstract: The interface between the world's oceans and the lower atmosphere represents a dynamic environment where exchange of climatically-active trace gases such as carbon dioxide, carbon monoxide, and dimethylsulfide, respond to and affect climatic change. The air-sea exchange of these gases depends on a variety of factors including physical forcing, chemical and photochemical reactions, and biological community structure (which in turn is controlled by the upper ocean physics and chemistry). The interactive and complex nature of trace gas processes in the surface ocean and lower atmosphere make predictions of the impact of oceanic emissions on the global climate difficult. This same complexity, however, has produced some interesting theories and intriguing scenarios as to how the ocean-atmosphere system might work together in controlling the Earth's climate system. Using examples, this talk will explore selected processes currently thought to play a role in this dynamic interaction and speculate on how these processes might be different in future climate scenarios.

Organized by the York University Centre for Atmospheric Chemistry
For further information please contact Carol Weldon, 416-736-5410 or cac@yorku.ca