

Under the Antarctic Ice planned missions by an AUV & SUT Melbourne Branch AGM Friday 26th February 2010

Worley Parsons – Level 12, 333 Collins Street
Session Starts at 12.15pm sharp, Ends 1.00pm
A special FREE event with sandwiches served

Chaired by: **Christopher Lee**



WorleyParsons

Title: Use of an Explorer class Autonomous Underwater Vehicle for Missions under Sea Ice

Presenter: Professor Neil Bose, Director, AMC – National Centre for Maritime Engineering and Hydrodynamics, University of Tasmania



The autonomous underwater vehicle (AUV) operations described here are preparatory missions to enable operation of an AUV under sea ice in polar regions. The polar projects have included operations under land fast ice in the Arctic through an ice moon pool and a planned project to assess sea ice mass balance and habitat assessment in the Southern Ocean in East Antarctica.

This talk focuses on the preparatory missions, done in open water, and the planned Southern Ocean project. The plan is to use an autonomous underwater vehicle (AUV) for the under ice component of measurements. The ultimate goals are:-

- i) to quantify the size and shape of ridge keel structures and their contribution to the sea ice mass balance over a study region
- ii) to understand the processes that link sea ice with the distribution of ice algae and krill
- iii) to provide the necessary field measurements, over sufficiently large areas, for the calibration/validation of satellite-based measurements of the sea ice and snow cover thickness
- iv) to provide baseline measurements of sea ice thickness for future climate monitoring.

REGISTRATION FEES: This is a FREE event, strictly limited in numbers, preference given to members.

Event Sponsored by:



Join the Society of Underwater Technology Now
Apply for Membership today: Please see www.sut.org.au for application form.

To help reduce registration time, SUT would appreciate if you could register for this event ASAP.
To do this please e-mail Becky Wong on melbourne@sut.org with delegate name and affiliation.
If unable to pre register, registration and payment will still be accepted on the day.