

JAMES RENNIE BEQUEST

REPORT ON CONFERENCE

**Expedition/Project/
Conference Title:**

American Geophysical Union 2011 General Assembly

Travel Dates:

5- 9 December 2011

Location:

San Francisco, California

Group member(s):

Aisling Layden

Aims:

1. To orally present "A study of the cold period of lake surface water temperatures (LSWT) of large lakes"
2. To meet and discuss work with people working in the same area of research
3. To highlight the availability of the 'ARC Lake' dataset and encourage collaboration.

OUTCOME (not less than 300 words):-

The American Geophysical Union (AGU) General Assembly, the world's largest gathering of Earth and space scientists was attended by over 20,000 people.

Being accepted to orally present proved to be a strong motivation in pushing forward with my work in the 3 months preceding the conference. This in itself was invaluable to me. During the conference, talking with other scientists in the same area of research offered a deeper insight into the challenges and potential in my area of work. Discussing progress and stumbling blocks with other researchers was a very consolidating experience. For example, I met another person who was also in the process of aligning a model with lake surface temperature satellite data, we discussed the challenges in tuning model parameters, such as, light extinction coefficient, wind data and surface roughness.

There were several observations made by other researchers in relation to lake surface temperature trends which I have the potential to independently assess using the ARC lake dataset. On my part, this will encourage communication and potential collaborations with other researcher in this area.

My talk was well practiced and went smoothly. With little time for questions (I had time only to take one question), several session presenters and attendees

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congregated outside the session room and continued some very worthwhile discussions. I gained some valuable feedback; a researcher in a similar area thought my presentation would have gained a lot of interest in the 'Lakes and Reservoirs in Cold Region Hydrology' session. This, I will keep in mind for next year.

A talk by invited speaker Claude Duguay, in the 'Lakes and Reservoirs in Cold Region Hydrology' session highlighted the on-going effort by ESA funded 'North Hydrology' to validate and improve lake surface temperature satellite data and to compare it to existing lake models, in order to generate useful lake ice and lake surface temperature products. This is hugely encouraging for the 'ARC Lake' project and for my area of research. I also had an opportunity to meet with the North Hydrology data manager and have since been in communication.

Apart from the poster and oral sessions most relevant to my research 'Lakes and Reservoirs in Cold Region Hydrology' and 'Variations in Lake Stratification, Energy Budgets, and Ecosystem Dynamics Across Latitudes', there were many other interesting talks.

I was highly impressed by the following plenary talks, they were both inspiring and motivating;

A talk by Simon Winchester (author of 'A Crack in the Edge of the World', 'Krakatoa', 'The Professor and the Madman', 'The Man Who Loved China') and his endeavour to humanise his topic of research.

A tribute to the work of Dr Steve Schneider internationally recognised for his research integrated approach to climate science and his science communication ability.

A witty and well delivered talk on the life of John Tyndall, famous for his work on green house gases (150 years ago he stated that a slight change to the amount of CO² and other absorbing gases could have important effects on the climate), highlighted his passion for science and open communication.

A strong theme that ran through many talks was a change towards stronger collaborations, transparency and better communication and trust between the scientific community and the public. For example Dr Jane Lubchenco released

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NOAAs policy on scientific integrity. Scientists now free to talk to reporters, they no longer need clearance. This rightly places a stronger responsibility on the individual scientist. Invited speaker, Hiroshi Ichikaw, discussed some ocean science communication groups in Japan, where panellist are made up scientists and non-scientists. He also discussed mutual science communication, where the two-way approach removes the enigma from climate science. A talk given on 'Effective Engagement of Hostile Audiences on Climate Change' highlighted the 'Do's' and 'Don'ts' when dealing with a tough audience was very amusing.

I sincerely thank the James Rennie Bequest, whose financial support allowed me to attend the 2011 AGU conference. This afforded me a great opportunity to present my work, gain valuable feedback, build-up a network with people worldwide in the same area of research, encourage others to utilise the 'ARC Lake' dataset and to understand the challenges and areas of potential progress associated with my research. This has very far-reaching implications in how I pursue and direct my research.