# **Meeting Minutes Highlights**

# NCR-101 Committee for Controlled Environment Technology and Use March 16 2004, Brisbane Australia

# Attendance (listed in no particular order)

Dave Fleisher, Chieri Kubota, Reg Quiring, Ramesh Kanwar, A.J. Both, Henry Imberti, Peter Ling, Dick Gladon, Bruce Kettner, Mark Theroux, Mark Romer, Rob Kerslake, Joel L. Cuello, Ian Flitcraft, Desmond Mortley, Ray Wheeler, Ted Tibbitts, Conrad Bonsi, Erik Runkle, Joey Norikane, Lou Albright, Cary Mitchell, John Wierzchowski, Wade Berry, Neil Yorio, Jeff Werner, Meriam Karlsson, Paul Austin, Gary Stutte, Yoshiaki Kitaya, John Sager, Garry Taylor, L.D. Incoll, Richard Denis, Bruce Bugbee, Tony Agostino, Alex Turkewitsch, Alec Mackenzie, Marlene Meckazo, Dennis Greer, Lance Hoare

#### **Executive Committee**

Reg Quiring, Chair Chieri Kubota, Vice-Chair Dave Fleisher, Secretary David Tremmel, Past Chair

#### **Meeting Synopsis**

The 2004 NCR-101 committee meeting was conducted as part of an international conference in conjunction with the UKCEUG (United Kingdom Controlled Environment Users Group) and ACEWG (Australasian Controlled Environment Working Group). The joint meeting was held in recognition of the rapid technological changes occurring with controlled environment industry, the diversity of use for such technology, and the need to strengthen ties and disseminate information with international colleagues and industrial partners. The breadth of topics covered by the conference participants (appendix 3) demonstrates the success the committee had in addressing these needs.

#### Administrator Advisor's Report

Ramesh Kanwar discussed potential funding sources including the USDA NRI program, NSF, NASA, and DOD, particularly for research in controls and sensing technologies. The NCR-101 committee was to be commended for continuing to reflect the global nature of controlled environment technology. The committee has established strong ties with industrial partners and international colleagues and has done an excellent job in facilitating information exchange as demonstrated by this years joint meeting with UKCEUG and ACEWG groups.

## **Mailing List and Membership Report**

Mark Romer reported on the current NCR-101 membership which includes 132 members and 92 institutes. Due to the closing of the Duke phytotron, the future home of the NCR-101 website was unclear. Mark Romer and David Tremmel have updated the existing website (<a href="http://www.ncr101.duke.edu">http://www.ncr101.duke.edu</a>) with information from previous years meetings, station reports, and representative contact information.

## **NCR 101 Instrument Package Report**

Bruce Bugbee reported two uses for the instrument package in 2003. The current budget was at \$1500. Two instrument packages are available for rent for a two week period: (1) a portable new spectroradiometer with laptop and (2) a datalogger with 3 Li-Cor calibrated quantum sensors. The cost is approximately \$450 for both or \$300 when borrowed separately. Other instruments including a pyranometer, anemometer, R / FR sensors, and a UV meter are available upon request.

## **Minimum Reporting Guidelines Brochure Report**

Ted Tibbitts and A.J. Both reported on the history and current status of the guidelines brochure. Approximately 20,000 pamphlets were made between America, New Zealand, and Australian printing agencies. In the U.S., industry sponsors Conviron, Econair and Percival contributed \$200 a piece to support printing costs for the guideline brochures. Methods for distributing the brochures were discussed. Various committee members also volunteered to investigate the feasibility of publishing the guidelines in different technical journals and professional meetings.

#### **Travel Grant Status**

Chieri Kubota explained that \$10,000 from a USDA CSREES grant was used to support registration fees of station representatives, speakers, and NCR-101 officers. Discussion was held on what to do with the remaining balance of \$1671.24. Financial support for publication of conference proceedings, abstracts, or presentations was discussed, but it was agreed that further debate was needed before a decision could be reached. A \$10,000 request to the USDA NRI program was also still under review by the funding agency. The money was expected to be used to reimburse travel costs for speakers and junior members.

# **Update on Growth Chamber Handbook**

A.J. Both reported that work was slow on the handbook due to efforts with the minimum guidelines. There was discussion on whether placing the original handbook (published by Iowa State University in 1997) on the NCR-101 website would be a copyright infringement.

#### **Station Reports**

Oral station reports were not presented. Instead, attendees made oral presentations on a topic of research. Written station reports were provided from Alaska, Arizona, Georgia, Indiana, Kentucky, Michigan, New Jersey, New York, Ohio, Wisconsin and the USDA.

# 2005 meeting

Chieri Kubota agreed that the University of Arizona would host the 2005 meeting from March 12 through 15<sup>th</sup>. The meeting may include tours of Arizona facilities and possibly include the Biosphere II.

#### **New Business**

Desmond Mortley's nomination to incoming secretary was approved collectively by the entire committee.

Respectfully Submitted,

David H. Fleisher NCR-101 Secretary