



Centre for Marine Science and Technology
Newsletter

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Thank you for all your very encouraging feedback on the first CMST newsletter distributed in January this year - it looks like we have a winner on our hands! I hope you find this second edition equally informative.

The next CMST Board meeting is planned for 15th May. Agenda papers will be sent out shortly. I look forward to seeing you there.

Kim Klaka

Progress with new senior appointments

Interviews were held in March for the two senior appointments in acoustics and hydrodynamics. It is envisaged that an offer will be made in late April for the acoustics appointment. The selection panel agreed that, after over 12 months of exhaustive effort to find a suitable hydrodynamics applicant, the process would be closed and a lower level appointment would be made by invitation, subject to State Government approval under the Centre of Excellence agreement.

CRC bids - maritime engineering and coastal zone technologies

It was reported in the last newsletter that CMST was involved with two Cooperative Research Centre (CRC) bids, both of them extensions of existing CRCs. The CRC for Welded Structures bid in the field of maritime engineering did not attract sufficient industry support to progress further, but the other bid is very much alive...

In March the Board of the CRC for Coastal, Estuarine and Waterway Management adopted the bid initiated by CMST for supplementary funding. The bid is focussed on "Rapid and cost-effective assessment of shallow water marine benthic habitats". Discussions with a number of participants are now proceeding. Participants include national and international industries, two universities and several government instrumentalities. An experienced consultant has been recruited to aid in developing the bid documentation and working meetings are being held on a weekly basis. Submissions close in May 2002, for start-up in mid 2003. Further details from Emeritus Professor John Penrose.

Field trips

Senior Research Fellow Rob McCauley has so far this year been on three field trips. The first was in early January where seven moorings were deployed in the Perth Canyon. Three moorings were fitted with acoustic loggers and five with strings of temperature loggers. One string of temperature loggers was set in 1000 m water depth, all other moorings were in 450-500 m depth. In late March, Rob flew to a very hot and humid Karratha where he carried out noise measurements of the Cossack Pioneer petroleum facility. In early April, Rob attempted to recover a Perth Canyon acoustic logger, but although the acoustic release released, a strong SW current held the gear under. A further trip is planned in May to recover all seven moorings.

In March, Masters student Kristoffer Grande conducted sea trials on a 15m sailing catamaran in Cockburn Sound. The vessel motions were measured to correlate with in-house seakeeping prediction programs. Similar trials are planned in April, which will include measuring slamming events on the catamaran bridgedeck. More information from Jinzhu Xia.

Commercial sail imaging software sales

Kim Klaka attended the YachtVision02 conference held at Auckland in February. In between sessions he sold a copy of the CMST SailTool software to the University of Auckland. This program uses still photos of yacht sails to characterise sail shape, mast bend etc. It was originally developed for the Australian Olympic Sailing team as a training aid in their successful Sydney Olympics campaign. The University of Auckland will be using SailTool in their wind tunnel, where much research is conducted on yacht sails. Discussions are under way to jointly develop the product for semi-automation. Further details from Research Fellow Andrew Woods.

Industry linkage grants

Following the article in the previous newsletter, I am pleased to advise that CMST is expecting to submit two ARC Linkage grants, each with Industry Partners represented on the CMST Board. The next round of applications must be submitted by November, for startup (if successful) in July 2003. Full documentation on the grants is available at:

<http://www.arc.gov.au/ncgp/linkage/default.htm>

If you would like to explore Linkage Grant opportunities, please contact Kim Klaka.

Staff and student changes

A SRFME PhD scholarship (Strategic Research Fund for the Marine Environment) has been awarded to Chris van Etten, who will be working on enhancing zooplankton and micronekton biomass estimation and size and species classification based on acoustic remote sensing. He will be supervised by John Penrose and Alec Duncan.

Local boatbuilder Colin Ayres has enrolled part time in a Postgraduate Diploma in Applied Physics. His project work is on roll reduction devices for ships and boats. He is supervised by Kim Klaka.

John Penrose was officially awarded the title Emeritus Professor of Marine Science and Technology in February. John is very busy with CMST in his retirement, managing a CRC extension bid (see above) and supervising postgraduate students amongst other things. He is, however, finding time to do a bit of fishing from his boat. The more things change, the more they stay the same!

Masters student Rick Shock has been awarded his degree for research on lift dumping of foils. This is a technique for controlling ship motions by forcing air onto the underwater control surfaces. The work was conducted with support from ship design and construction companies. CMST expects a bumper year of research student completions, with no less than six students expected to submit their theses in 2002.