



***Centre for Marine Science and Technology
Newsletter***

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Director's welcome

Happy new year and welcome to the very first CMST newsletter. Following John Penrose's retirement just before Christmas, I have been appointed Director of CMST for 6 months from 1st January, so have the privilege of being the newsletter's founding editor. The purpose of this newsletter is to keep stakeholders abreast of developments within CMST so that they are better placed to make the most of any opportunities that may arise. I also hope the newsletter becomes a two-way information path, so I would like to publish items of interest supplied by stakeholders. Whilst the immediate target audience of the newsletter is the Board, I also intend circulating it to all our staff and other interested parties.

My 6-month period as Director is the third time I have held this position for any significant duration. Technically, it is a "night watchman" role until a new Director is found, but the Centre does not work in that fashion. New initiatives must continually be pursued and it is my intention to ensure that the sound financial foundations handed down to me are translated into worthwhile research and educational results. Furthermore we must secure additional large-scale funding that takes us beyond the 3-year Centre of Excellence grant. CRCs and ARC Linkage Grants are just two avenues that will be vigorously targeted over the next 6 months. I hope these efforts will be fruitful, and that they will involve organisations represented on the Board.

Kim Klaka

CMST activities, successes and opportunities

Biological sea noise contract

Senior Research Fellow Dr Rob McCauley has secured CMST's largest ever contract, valued at more than \$500k over 3 years, to conduct research for the Royal Australian Navy studying biological sea noise sources, including Blue and other Baleen whales, off Western Australia.

Hydroelasticity of offshore structures grant

Senior Research Fellow Dr Jinzhu Xia was recently awarded a prestigious Discovery Project Grant by the Australian Research Council, valued at \$168,000 for research on the hydroelasticity of offshore structures. The overall objective of this research programme is to expand Australia's knowledge base and research capability in deep-water offshore structures and to meet the ever-demanding met-ocean challenges in the relatively young offshore oil and gas industry. The work will be conducted in collaboration with the Norwegian University of Science and Technology, Melbourne University and the University of Western Australia over the next 3 years. CMST is currently seeking a PhD student to assist with this project, and a scholarship is available.

Underwater stereovision

A British underwater technology firm has recently commissioned CMST to develop and manufacture an underwater video system suitable for deep-water operations. The contract is valued at approximately \$80k and will be managed by Research Fellow Andrew Woods.

Scholarships available

a) Biomass estimation

A PhD scholarship is available at CMST through the Strategic Research Fund for the Marine Environment Program, on enhancing zooplankton and micronekton biomass estimation and size and species classification based on acoustic remote sensing. The project will be run jointly with CSIRO. Emeritus Professor John Penrose has more information.

b) Hydroelasticity of offshore structures

PhD scholarship available. See same header on previous page.

Industry linkage grants

As per the last Board meeting, Phil Christensen (MD Formation Design Systems) has written a summary of the ARC Linkage Grants, from an industry perspective, reproduced here:

ARC Linkage grants are Federal research grants provided to universities, generally to support research students and staff for specified projects. The grant is provided to the institution but must be supported by industry. That support must include a measure of cash (min \$5k) as well as in-kind support. The industry support component is critical and the project must be demonstrably a part of the company's strategic plan and shown to add value to the company. Grants are between \$20k and \$500k in value per annum and usually for a 3-year period.

There are two levels of grant, APDI and APAI. The first is to fund a higher level researcher while the second generally funds a postgraduate student to complete a PhD. APDI will cover a stipend for the researcher and may also cover some equipment and travel costs, APAI will just cover the salary support for the PhD student. APAI grants look to be easier to obtain and have a faster approval time. However, typically time from start of application to grant is at least 7 months.

The documentation requirements do not look too onerous from the industry partners' point of view, they include a 2-page letter of support, and contribution to an initial annual project report and a progress report and final report.

Some of the important conditions for the grants are:

- Research student must be an Australian permanent resident or citizen
- Grants over \$5k per year require a minimum of 20% in cash
- There are strict rules on how in-kind support (particularly for data and software) is valued.

These grants look to be a useful way for getting a subsidy for longer-term research. The simplest model would be funding of a PhD student to complete research on an area of interest for the company.

Full documentation on the grants is available at:

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

Thanks to Phil for providing this interpretation. The closing date for applications in 2002 has not yet been announced, but is expected to be in late March. If you would like to explore Linkage Grant opportunities, please contact Kim Klaka.

New staff and students

Physics graduate Susan Rennie has won an Australian Postgraduate Award and will be studying for a PhD working on oceanographical aspects of the Navy biological sea noise project (see page 1).

Third year Physics student Katrina Seet starts a 6-week summer studentship with Rob McCauley, working on underwater acoustics of marine mammals. The studentship is funded jointly by CMST and the Department of Applied Physics.

Dr Prabhat Pal has joined CMST as an Adjunct Fellow. He was a senior lecturer in naval architecture at UNSW for 13 years and during his retirement he will be carrying out research with CMST on ship design procedures.

Progress with new senior appointments

Applications for the two Centre of Excellence-funded senior appointments were readvertised in early December in a more attractive package than previously offered. Applications closed on 21st December, with several new applications being received. Efforts are being made to ensure that appointments are made by 1st July this year.

CRC bids - maritime engineering and coastal zone technologies

CMST is currently involved with two Cooperative Research Centre (CRC) bids, both of them extensions of existing CRCs. The CRC for Welded Structures (CRC-WS) is preparing an extension bid in the field of maritime engineering. CMST is working on this together with CRC-WS and the Centre for Oil and Gas Engineering at UWA. Discussions have been held with four major marine companies, exploring the R&D requirements for manufacture and operation of ships and offshore structures. Structural loadings, welding and production techniques appear to be topics of particular relevance.

The CRC for Coastal Zone, Estuary and Waterways Management (CZ-CRC) is considering an extension bid on a national focus and enabling technologies. CMST is involved together with UWA, CSIRO Marine Research, CALM and DSTO. This CRC currently operates out of Queensland and the proposal is firstly to support a national reach by conducting research programs at a site in Western Australia. Secondly, technologies to enable improved assessment and monitoring of coastal and estuarine zones will be developed, notably concerning the benthic environment.

The details of both bids will be fleshed out over the next 3 months, but their magnitude is expected to be of the order \$2M p.a. for 3 years. Submissions close in mid 2002, for start-up in mid 2003. Any Board member whose company may be interested in joining either of these bids is invited to contact Kim Klaka as soon as possible.

And finally...

I hope you have found this newsletter interesting. I would greatly appreciate feedback on its content, style or format; all suggestions welcomed!

Kim Klaka