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MEDIA RELEASE

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Australia's Defence Materials Technology Centre (DMTC) has featured prominently in prestigious awards recognising success in naval and maritime innovation.

DMTC received a High Commendation for its leadership of a project to study **Microbiological Corrosion** on Australian naval vessels, and DMTC researcher **Peter Kabakov** was recognised with the prestigious Young Innovator scholarship prize.

The Maritime Australia Industry Innovation Awards were presented by the Minister for Defence Industry, the Hon Christopher Pyne MP, on 4 October at the Pacific 2017 International Maritime Exposition at Sydney's International Convention Centre (ICC).

Employed by the Australian Nuclear Science & Technology Organisation (ANSTO), Mr Kabakov has worked on a DMTC project to establish an Australian production capability for single crystal, piezoelectric ceramics.

Since mid-2015, he has been the Lead Scientist on the project that has direct relevance to Australia's Future Submarine Program and the upgrades and sustainment of the Collins submarine fleet.

With local development of acoustic transducers currently limited by issues with the supply of single crystals from overseas, the project is developing the technology solutions to enable establishment of a manufacturing capability in Australia. Continuing research is focused on fully characterising the properties that will enable the single crystal piezoelectric technology to be considered for commercial scale production.

CEO of DMTC, Dr Mark Hodge, said

"We are delighted for Peter. As a not for profit public company, DMTC exists to build and exploit deep expertise and intellectual property for the Australian defence sector. One way we achieve this is through identifying, sponsoring and providing unique opportunities for future research and industry leaders.

"Peter's achievements are a great exemplar of DMTC's ambition to be an "organisation of choice" for Australia's best young researchers," Dr Hodge said.

DMTC's Maritime Program has made significant advances in understanding and mitigating the effects of Microbiological Influenced Corrosion (MIC).

Corrosion of Royal Australian Navy (RAN) platforms has a significant impact on maintenance, downtime and associated costs. DMTC and its research partner, Swinburne University of Technology, and industry partner ASC, assessed Australian naval ports and harbours to identify the specific microbiological species in these waters and how these local conditions influence the development of MIC.

DMTC's project has provided its industry partners and the Navy with an understanding of the correlations between environmental factors and corrosion processes, and is informing more robust corrosion prediction models. Resulting changes to maintenance processes and procedures have led to enhanced operational capability of Defence platforms, increasing availability while reducing sustainment costs.

About DMTC

The Defence Materials Technology Centre (DMTC) develops and delivers technology and manufacturing solutions that enhance Australian Defence Force (ADF) capabilities and strengthen Australian industrial capacity. DMTC outcomes are achieved through collaborative partnerships between the Department of Defence, government research agencies, academia and industry partners. Collaborating with DMTC allows companies to leverage existing relationships with Defence and build their Australian supply chains. DMTC has a key role in initiatives from the Defence Industry Policy Statement released by the Australian Government in early 2016, including the Defence Innovation Hub. Established in 2008, DMTC is a not for profit company limited by guarantee. For more information, visit www.dmtc.com.au

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