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## Antarctic sea ice scientist wins Future Fellowship grant

A leading Antarctic scientist at the University of Tasmania has been awarded nearly one million dollars from the Australian Research Council's (ARC) Future Fellowship scheme for a four-year research project into a type of sea ice crucial for the Earth's climate.

Dr Alex Fraser specialises in researching landfast ice — frozen seawater attached to the Antarctic coastline or grounded icebergs — with the Australian Antarctic Program Partnership based at the Institute for Marine and Antarctic Studies in Hobart.

His successful ARC Future Fellowship application entitled "*The puzzle of landfast sea ice: how 'fast' ice can control near-term climate impacts*" aims to develop new mapping techniques and include landfast ice in climate models for the first time.

Dr Fraser said the ARC Future Fellowship will enable key research priorities highlighted in a recent major [review](#) to be addressed.

"Landfast ice is hugely important for global climate and Southern Ocean ecosystems but its extent plummeted significantly last year," said Dr Fraser.

"This ARC Future Fellowship is extremely timely because it will enable large-scale, high resolution, automated mapping of the extent and thickness of landfast ice."

"In turn, this will enable us to incorporate landfast ice in Australia's new ice-ocean Earth system model for the first time, which will allow assessment of its impacts on global ocean circulation and ice shelf melt," he said.

Nationally, the Australian Research Council received more than 500 applications for Future Fellowships, of which 100 were approved. The grant to the University of Tasmania of \$966,706 for landfast ice research will also support two PhD and three Honours projects.

University of Tasmania Deputy Vice-Chancellor (Research), Professor Anthony Koutoulis, welcomed the award of the ARC Future Fellowship grant to Tasmania and congratulated Dr Fraser.

"It's extremely gratifying to see his efforts rewarded through the prestigious ARC Future Fellowship scheme."

"Dr Fraser is an outstanding mid-career scientist with a proven track record for world-leading Antarctic and Southern Ocean research."

"This grant will allow Dr Fraser and the University to continue growing crucial research that addresses the big science questions involving sea ice around Antarctica, at a time when

major changes appear to be happening in the Southern Ocean with potential knock-on effects globally,” Professor Koutoulis said.

**Media: Mark Horstman, AAPP Communication and Impact Officer, +61 407 701 530, [mark.horstman@utas.edu.au](mailto:mark.horstman@utas.edu.au)**

**Information released by:**

Communications Office

University of Tasmania

[Communications.Office@utas.edu.au](mailto:Communications.Office@utas.edu.au)

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