

Media Release

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## Harvesting seaweed to make skin from the sea

Researchers from the South Coast of NSW are hoping to develop new treatments for burns and wounds, by using the most plentiful resource at their fingertips – the sea.

ARC Centre of Excellence for Electromaterials Science (ACES) at the University of Wollongong and Venus Shell Systems (VSS) have started a collaborative research project to fast-track the development and commercialisation of the seaweed wound healing materials.

The process starts with unique Aussie seaweed, which is harvested to extract valuable molecules.

VSS Director Dr. Pia Winberg said the seaweed molecules are very similar to the natural molecular matrix that supports and repairs human skin cells.

“This is in part because the salty environment in the sea is similar to than in humans, but also because of the unique chemical structure of the seaweed,” Dr. Winberg said.

From there, high-tech processing and fabrication techniques at ACES, including a new customised 3D printer in development, will be used to turn the molecules into medical treatments, with artificial skin a potential end product to treat burns.

ACES Director Prof. Gordon Wallace said he encourages regional manufacturers to take advantage of the Centre’s knowledge and expertise in areas such as materials processing and fabrication techniques including 3D printing.

“Local industry can realise global opportunities by tapping into the internationally recognised and networked research organisations,” Prof. Wallace said.

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High res images and interviews are available.

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