

International Conference on

## Industrial Biotechnology and Bioprocessing

August 16-17, 2018 | Copenhagen, Denmark

## Estalishment of the Marine Bioproducts and Biotechnology Cooperative Research Centre – an Australian contribution to building a global blue bioeconomy

**Heimann K, Zhang W, Puri M** and **Franco C** Flinders University, Australia

Demand and improved availability of sustainably sourced natural bio-products has driven rapid expansion of a global marine biotechnology industry over the last decade. In 2014, it was worth US\$176 billion. Australia's emerging marine biotechnology sector is small but seeks to become a major global player over the coming decade.

The Marine Bioproducts and Biotechnology Cooperative Research Centre (MBB-CRC) is a dynamic partnership between industry, R&D, marketing and investment sectors, designed to underpin a step-change in the national marine biotechnology industry and push revenue growth over \$1 billion p.a. by 2030.

The CRC will focus on industry priorities for marine bioproduct development, innovative processing technologies and sustainable production of marine bioresources. The CRC will provide an active network of industry partners across the biotechnology value chain, and a pathway to connect industry to investors and e-Commerce collaborates in Australia and internationally.

An expertise-based and independent Board will govern the CRC and oversee investment in and delivery by Australia's leading universities and research agencies. Three programs will work closely with industry to optimise bio-product development, via innovative processing technologies and establishment of sustainable use of marine resources.

The CRC will also invest into a CET (Commercialisation, Education and Training) platform, designed to underpin the MBB-CRC programs. I will provide targeted pathways for commercialisation (C) through development of technoeconomic models and setting up incubators and clusters to link individual sectors with e-commerce and venture capital. The education (E) & training (T) component will identify and develop the next generation of industry leaders to provide Australia with a unique competitive advantage in a growth industry.

This presentation is given to inform international research providers and industry of this emerging opportunity for this sector in Australia, to start to lay the foundation for an internationalised approach to realise a blue bioeconomy through building relevant networks.

## **Speaker Biography**

Heimann K is a recognised leader in designing, enabling, implementing and advancing industry-driven research on closed system approaches using high-yield microbes in environmental, aqua- and agricultural and commercial applications for developing renewable products and sustainable industries. She has extensively in peer-reviewed scientific journals, including Nature, 91 journal articles (citations >2,500), 5 books and 11 book chapters, leading to a H-index of 27. Her research has won many awards, the NQ Corporate Business Women Award 2011 and the JCU Advisor of the Year Award 2016, being the latest. She is the president of ASPAB, associate editor of Botanica Marina, and has served on the science and education committee of the Advanced Manufacturing Cooperative Research Centre (AMCRC) and the tarong science steering committee for microalgae GHG emission abatement at coal-fired power stations.

e: kirsten.heimann@flinders.edu.au

