

Scaling-up tech to accelerate manufacturing of nanomaterials



The Cambridge Centre for Advanced Research and Education in Singapore (CARES) and NTUitive, the innovation and enterprise company of NTU Singapore, are collaborating to advance the development of nanomaterials.

Supported by the National Research Foundation, Singapore (NRF) with S\$6.5 million, the project, Accelerated, Manufacturing Platform for Engineered Nanomaterials (AMPLE), will develop both software and hardware infrastructure that supports higher efficiencies and productivity of nanomaterials, commonly used in antimicrobial coatings, energy storage devices and composite materials. The technologies will be scaled up in an automated factory adopting Industry 4.0 practices.

Compared to conventional technologies, the AMPLE approach is expected to be over 100 times more efficient, significantly reducing experimental workload and scale-up complexities and improving nanomaterial quality.

NTUitive will support AMPLE in its Intellectual Property management, working closely with CARES on the technology development and commercialisation front, and will manage the project funding in partnership with NRF.

The funding will come from NRF's Central Gap Fund, which encourages cross-collaboration between academia and industry and aims to support the translation of research outcomes into scalable solutions that generate economic and societal benefits for Singapore.

CARES is part of the NRF Campus for Research Excellence and Technological Enterprise (CREATE) programme and was established in 2013 between the University of Cambridge, NTU Singapore and the National University of Singapore.