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SmartCrete CRC Announcement

SmartCrete to fund key projects with university partners.

In partnership with Macquarie University, Western Sydney University and Swinburne University of Technology, SmartCrete CRC has announced funding for two different projects that will allow research into improving productivity in concrete infrastructure. This funding will focus on areas such as engineered solutions, asset management and sustainability which are core themes that we have identified to address problems faced by the concrete sector.

The first project is centred around the use of recycled waste from latex paint to produce polymer modified concrete. This initiative, led by Dr Salwan Al-Assafi at Paintback will endeavour to reduce cost by converting unused paint into viable product with environmental and economic benefits. Dr Shima Taheri, Associate Professor Sorn Vimonsatit and Professor Simon Clark, from Macquarie University's School of Engineering are also working on this project in collaboration with Western Sydney University and Swinburne University of Technology.

“This regenerative project will contribute significantly to the circular economy, through the repurposing of waste product into a value supply stream for the building industry,” said Professor Simon Clark. “By utilising unwanted latex paint in this manner and converting it into an effective concrete solution will see a reduction in raw material costs, boasting both a strong economic and environmental benefit for the wider industry.”

The second project led by Dr Heriberto Bustamante of Sydney Water and including industry partner Melbourne Water, will research the development of a photonic sensor integrator to monitor and examine the health of concrete sewer pipes. Also leading this project, Dr Martin Ams and Professor Michael Withford of Macquarie University's Department of Physics and Astronomy, will assist in the reduction of maintenance costs and minimise disruption to local communities, to extend the life of concrete sewer structures.

SmartCrete CRC is delighted to partner with these universities on these key projects and are excited to see the benefits it will provide in its application to concrete infrastructure.