Irish 3D Printing research is a broad field, with research into methodologies, materials, potential applications and products that can be manufactured. This event will focus on two areas of 3D printing research: 3D printing of medical devices, and the application of 3D printing in Africa, to promote innovation and tackle marine plastic waste.

**Med3DP** is an initiative to develop on-demand medical devices for humanitarian healthcare, using 3D printing technology, in association with Trinity College, Dublin. Med3DP currently hosts a wide range of projects, complete with ready-to-print files, documentation and other helpful information. Each year a talented group of students in the Masters of Bioengineering programme brainstorm, prototype, and develop 3D printable medical devices.

**Dr. Michael Monaghan** is the Trinity College, Dublin Professor who heads the Med3DP initiative, along with Brooke Tornifoglio and Matteo Solazzo, postgraduate researchers who help with running the programme.

**The Rapid Foundation** is a social entrepreneurship programme with the aim of distributing disruptive technology around the world, to tackle the UN's Sustainable Development Goals; 3D printing has been identified as a key technology due to its ability to quickly create prototypes & functional items for testing or sale, with local printing & remote support.

**Dr. Shane Keaveney** is a NUIM lecturer in Material Science in the department of Design Innovation, a medical device engineer & researcher and co-founder of the Rapid Foundation. He received funding from the IMechE in 2019 to established 3D printing at a community led recycling centre, EcoWorld Watamu, in Watamu, Kenya. This collaboration is exploring the potential for 3D printing for education, innovation, job creation and repurposing of recycled marine plastic, with the goal is to use sustainable feedstocks for the printing activities.

There is no charge for this lecture, and it is open to the public.

**Mechanical & Manufacturing Division & IMechE Contact:**
Diarmaid Cowhie diarmaid.cowhie@gmail.com