

Massey University's Centre of Additive Manufacturing

Established in 2016, Massey University's Centre for Additive Manufacturing is New Zealand's only dedicated research facility in the field. The Centre operates equipment spanning the range of industrial additive manufacturing techniques, including:

- Selective Laser Sintering (SLS) of polymer powder
- Direct Metal Printing (DMP) of metal powders
- Fused Deposition Modelling (FDM) of polymer filaments
- Multi-material MultiJet printing of polymers
- Stereolithography (SLA) of polymers

The Centre's research spans the range from Finite Element Analysis (FEA) of CAD designs, to the design of novel additive manufacturing systems and the characterisation of printed components. The Centre has close ties to industry, supplying expert assistance in all aspects of design for additive manufacturing and the production of commercial prototype components.

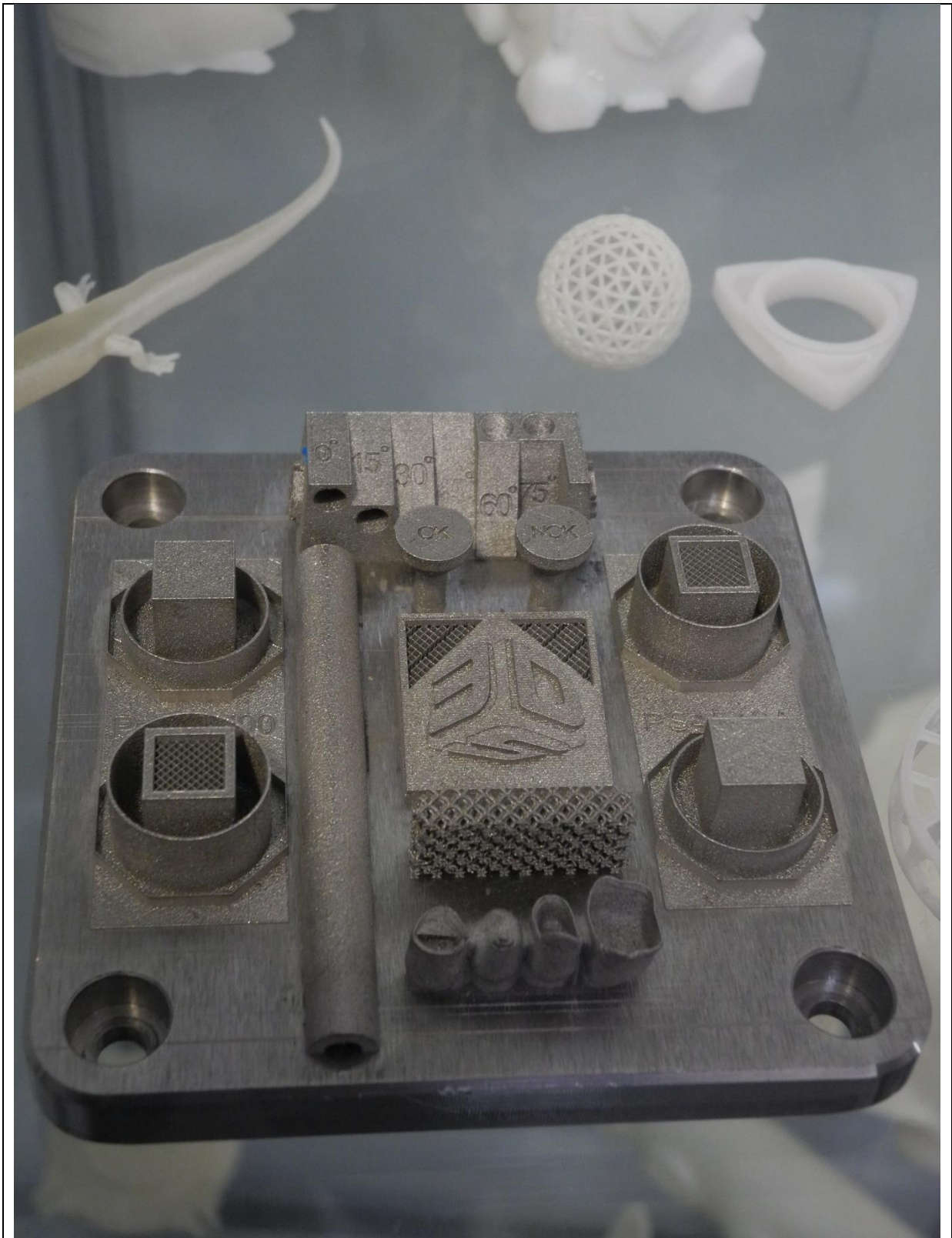
For further information please contact:

Associate Professor Johan Potgieter

Phone: +64 (09) 414 0800 ext. 43569

Email: J.Potgieter@massey.ac.nz





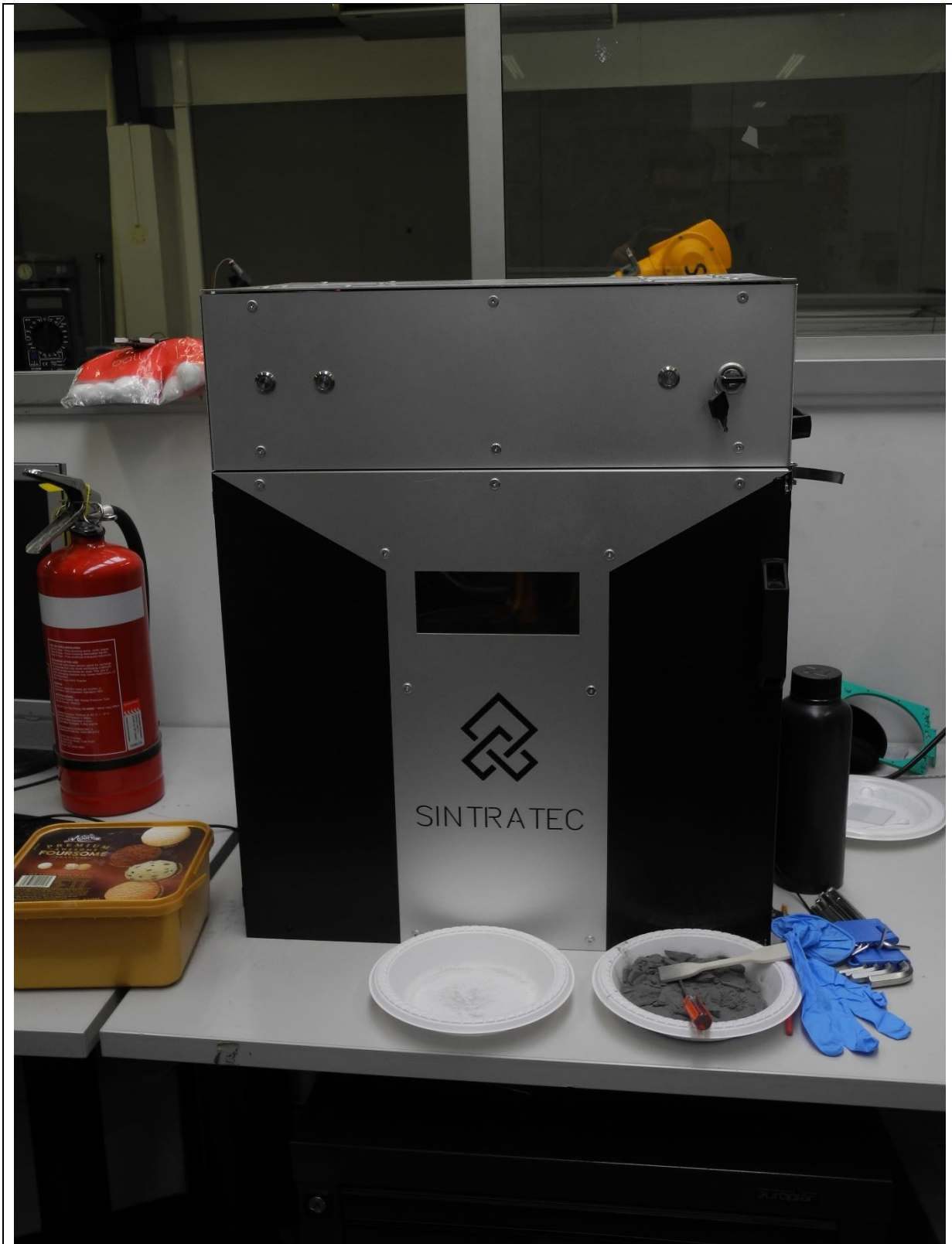
Direct Metal Printing:

- Equipment
 - 3D Systems ProX DMP 100
- Equipment details
 - <https://www.3dsystems.com/3d-printers/prox-dmp-100>









Selective Laser Sintering:

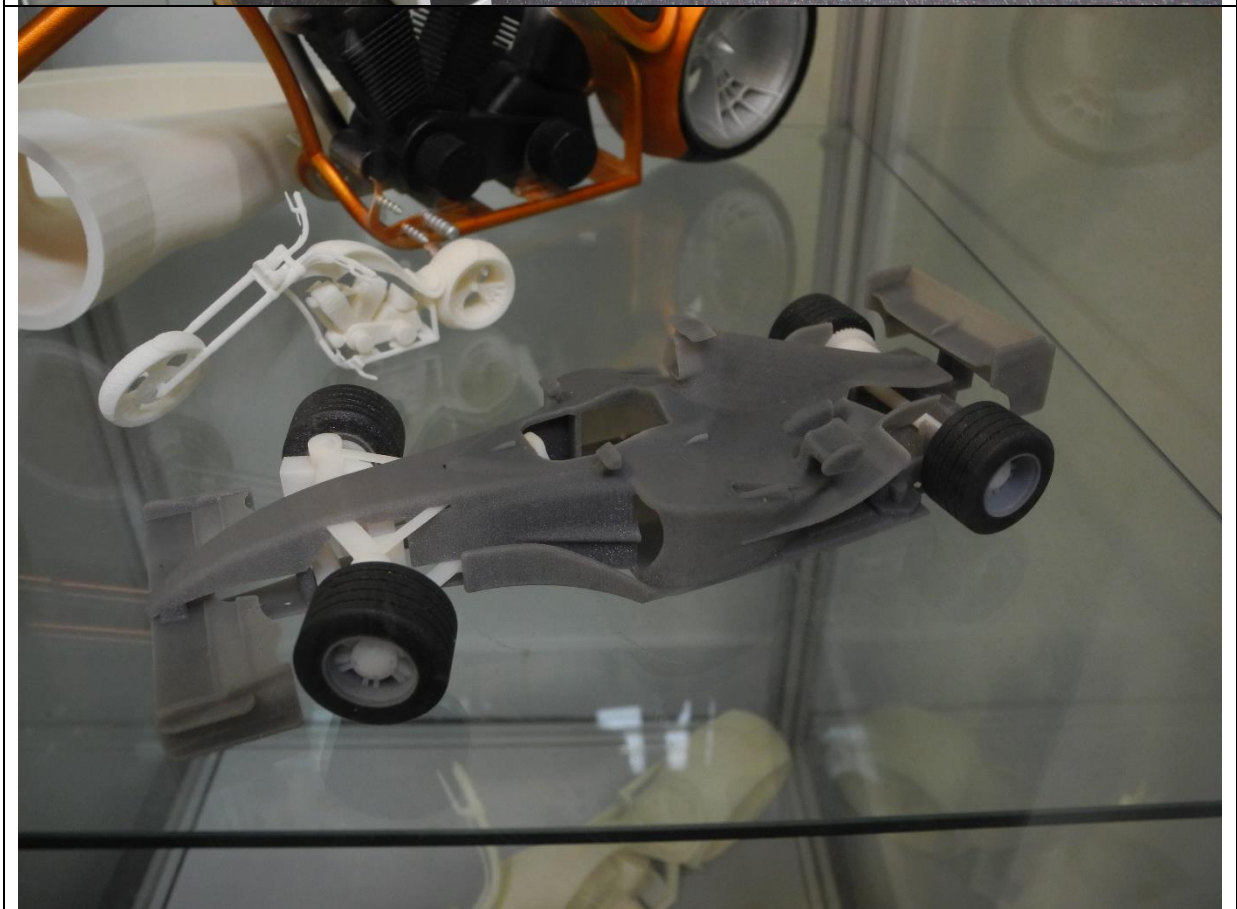
- Equipment:
 - DTM (3D Systems) SINTERSTATION 2500
 - TPM ELITE P3200
 - Sintratec benchtop SLS
- Equipment details
 - <https://www.3dsystems.com/3d-printers/plastic#selective-laser-sintering-printers-sls>
 - <http://www.aniwaa.com/product/3d-printers/trump-precision-machinery-elite-p3200/>

- <http://sintratec.com/>



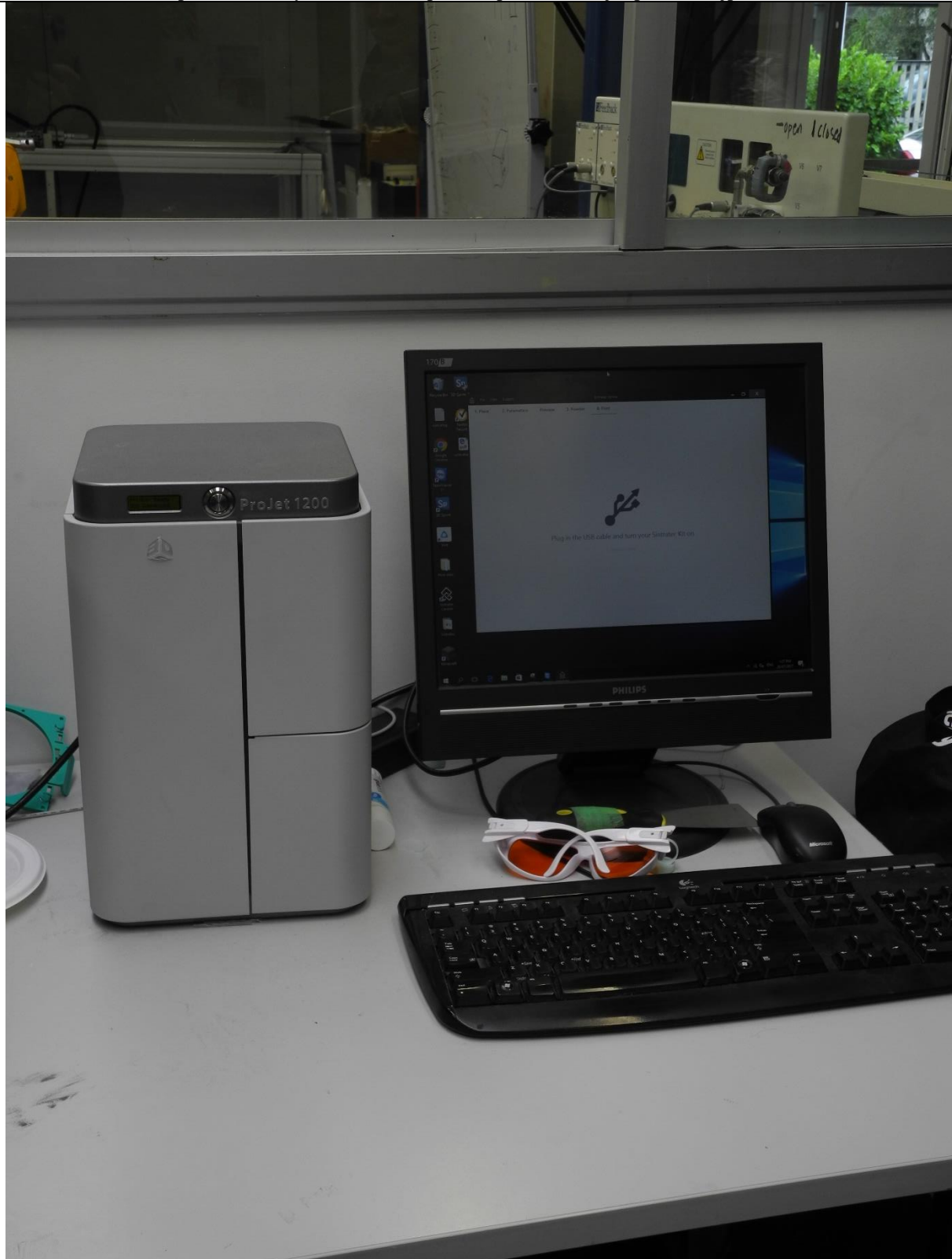
Fused Deposition Modelling:

- Equipment
 - Stratasys Fortus 250MC
- Equipment details
 - <http://www.stratasys.com/>



Multi-material MultiJet Printing:

- Equipment
 - 3D Systems ProJet 5500 X
- Equipment details
 - <https://www.3dsystems.com/3d-printers/plastic#multijet-printers-mjp>



Stereolithography (SLA)

- Equipment
 - 3D Systems ProJet 1200

- Equipment details
 - <https://www.3dsystems.com/3d-printers/plastic#stereolithography-printers-sla> ProJet 1200

Characterisation of test pieces:

- Bench-top SEM for characterising the morphology of feedstock and printed components.
- Tensile testing facilities (with high temperature capability), combined with Digital Image Correlation (DIC) analysis for true strain analysis