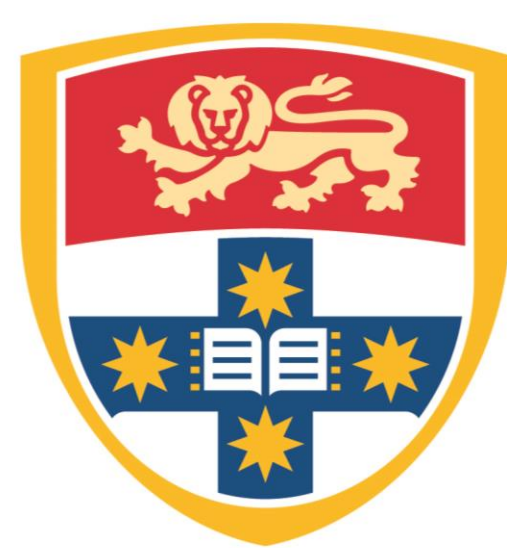
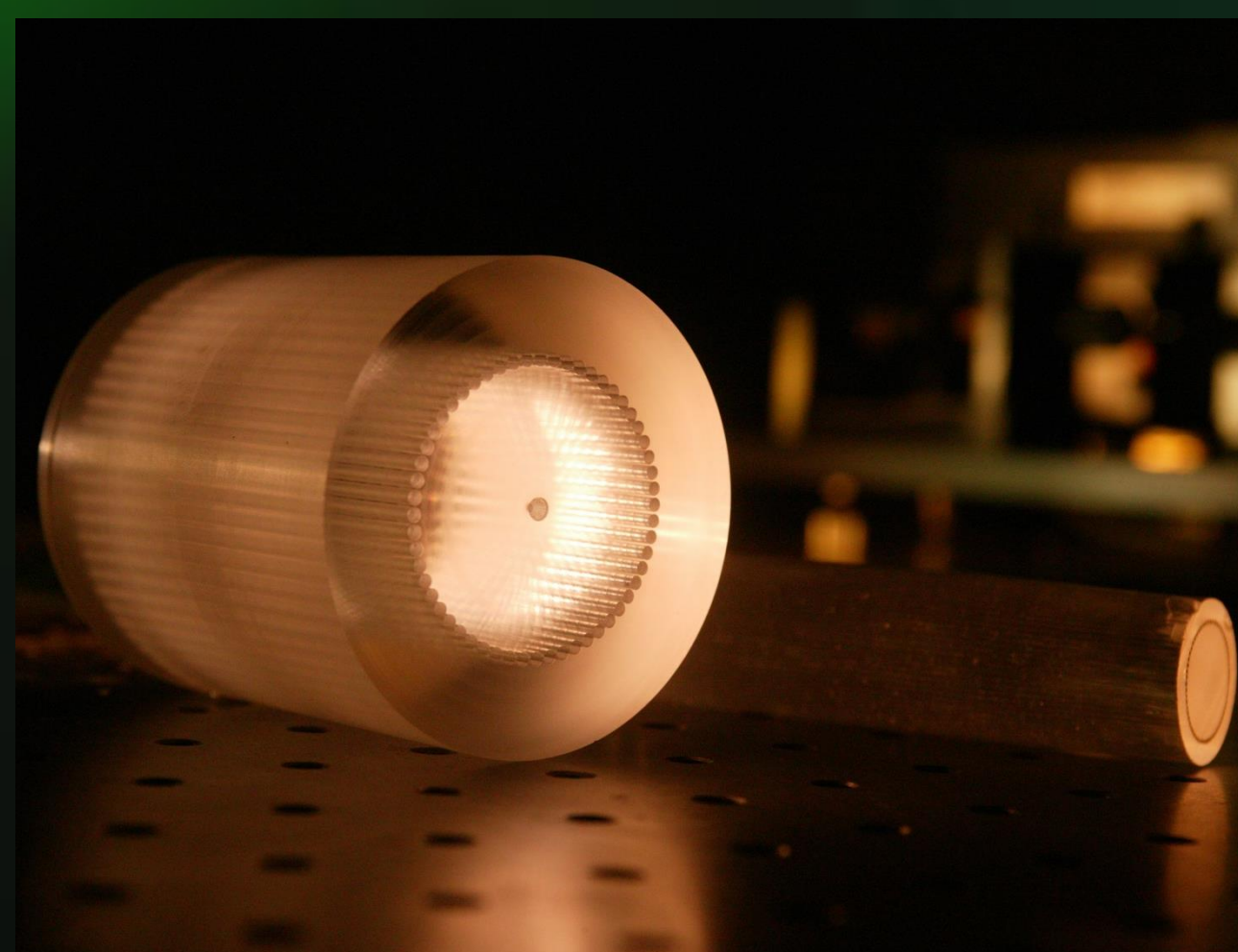
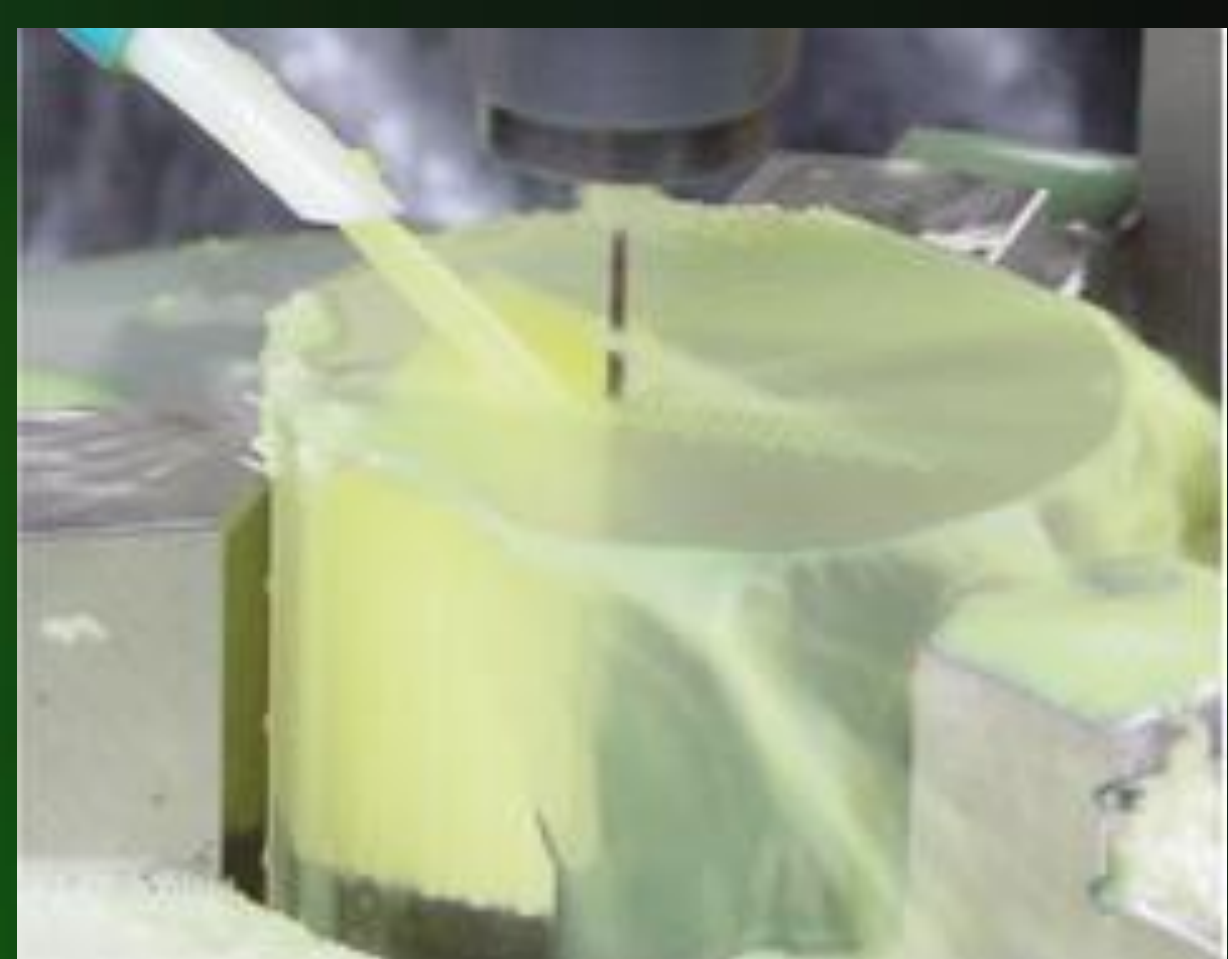
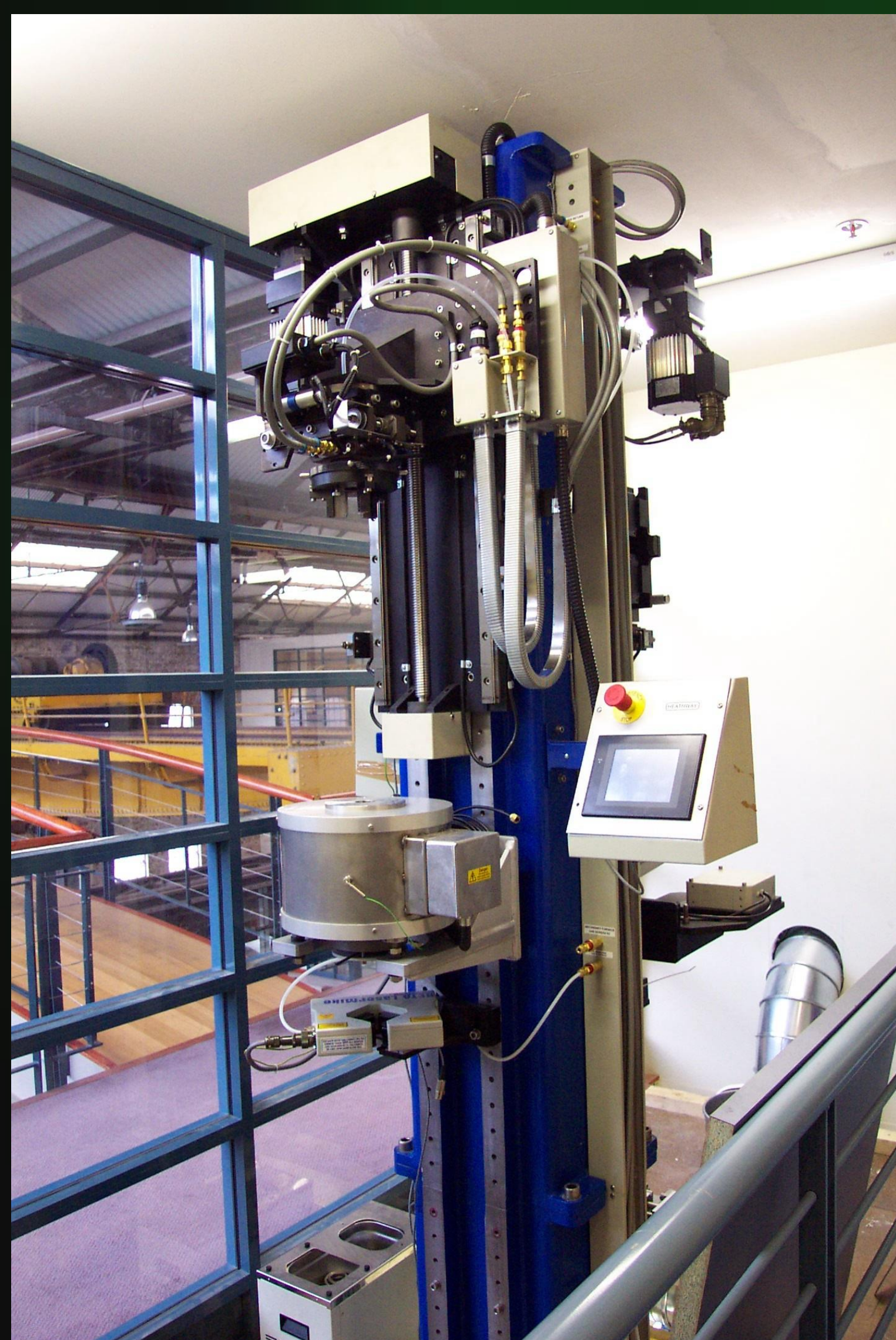




Specialty Fibre Fabrication

The Australian National Fabrication Facility (ANFF) OptoFab node at The University of Sydney specialises in the fabrication of Microstructured Polymer Optical Fibre (mPOF), mPOF preform fabrication and fibre characterisation and post-processing. The main type of fibres are single-mode, multi-mode and hollow-core mPOF. Specialty fibres can also be fabricated for specific needs.



Capabilities

- **Polymer preform fabrication facilities**
 - Drilling or stacking method
 - Preforms made from PMMA, PC and Zeonex polymer
- **Fibre drawing facilities**
 - Fibre diameters from 100 μ m to several mm
 - Fibre jacketing
- **Fibre characterisation**
 - Loss, optical and SEM microscopy
- **Fibre post-processing**
 - Imprinting long period gratings
 - Fibre connectorisation

Equipment

- **Lagun computer numerical controlled mill**
- **Heathway polymer fibre draw tower**
 - Diameter, temperature and tension monitored
 - Pressure and/or vacuum can be applied

Fibre Designs

- **Standard fibres**
 - Single mode, Multi-mode (Hi-NA, Graded Index)
- **Hollow core fibre**
- **Specialty fibres**
 - Unlimited fibre design possibilities

