



Institute for Photonics & Advanced Sensing (IPAS)

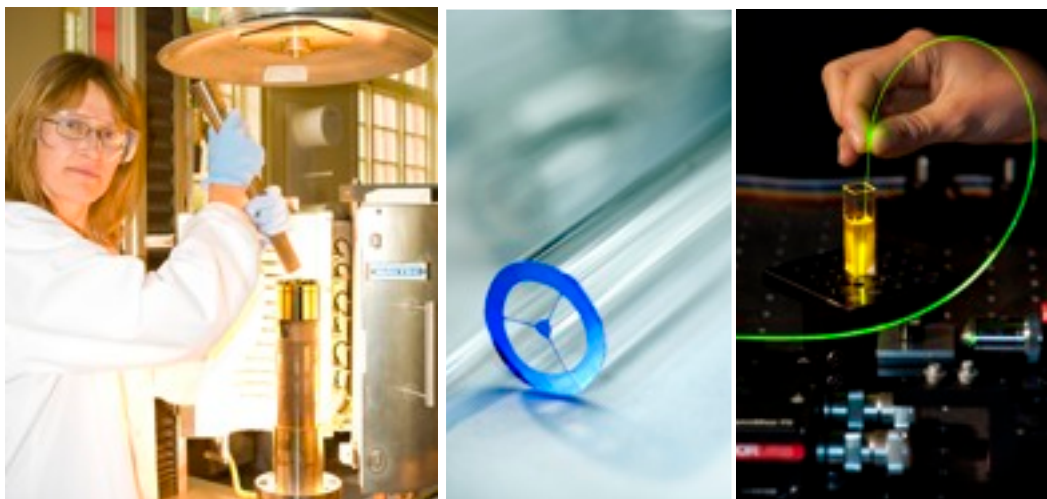
F2 Wagon Wheel Fibre

www.ipas.edu.au

IPAS specialises in producing suspended core fibres with small core sizes (0.4-2µm) and variable hole size [1]. These fibres can be used for sensing and other light-matter interaction applications [2]. These fibres are available in commercial F2 lead silicate glass which we source from Schott Glass Co.

The high index of F2 glass (1.62 at 633nm) enables the use of higher index liquids. F2 glass suspended core fibres can be surface functionalised [3]

For pricing and availability, please contact [Luis Lima-Marques](#).



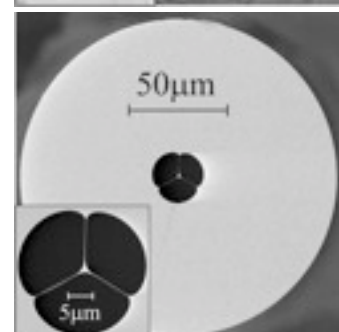
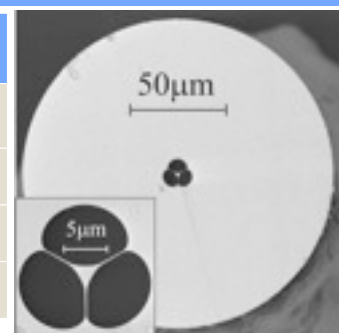
The Institute for Photonics & Advanced Sensing (IPAS)

IPAS brings together physicists, chemists and biologists to pursue a new transdisciplinary approach to science.

We are developing novel photonic, sensing and measurement technologies that are changing the way science is done within traditional discipline areas, stimulating the creation of new industries, and inspiring a new generation of scientists to be engaged in solving real-world problems.

IPAS research targets applications in four key market areas: defence and national security, environmental monitoring, preventative health, food and wine. We have world leading facilities for the production of novel soft and silica fibres, surface functionalisation and sensor development.

PROPERTIES		F2 GLASS
Optical	Transmission range	0.4-1.7µm
	Refractive index at 633nm	1.62
Thermal	Glass transition temperature (Tg)	434°C
Physical	Density	3.60g/cm ³



[1] H. Ebendorff-Heidepriem, S.C. Warren-Smith, T.M. Monro, "Suspended nanowires: fabrication, design and characterization of fibers with nanoscale cores", Optics Express 17 (4), 2646-2657, February 2009

[2] T.M. Monro, S.C. Warren-Smith, E.P. Schartner, A. François, S. Heng, H. Ebendorff-Heidepriem, S. Afshar V., "Sensing with suspended-core optical fibers", Optical Fibre Technology 16 (6), 343-356, December 2010

[3] S.C. Warren-Smith, S. Heng, H. Ebendorff-Heidepriem, A.D. Abell, T.M. Monro, "Fluorescence-Based Aluminum Ion Sensing using a Surface Functionalized Microstructured Optical Fiber", Langmuir 27, (9), 5680-5685, April 2011