Institute for Photonics & Advanced Sensing (IPAS)

Silica Fibre Fabrication Facility

www.ipas.edu.au

The IPAS Silica Fibre Fabrication Facility is dedicated to the production of research grade silica fibres. We can design, develop and fabricate a wide range of specialised rare-earth doped and passive silica fibres for research purposes.

Facilities include: state of the art modified chemical vapour deposition equipment, ultrasonic drilling and milling of preforms, fibre drawing and characterisation equipment, as well as high power fibre laser test beds.

We actively collaborate with academia, industry and government agencies to produce custom fibres for their research requirements.

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.

Research Capability

Active program in rare-earth doped silica fibre laser development for short infrared (1-2.1μm) lasers.

- Rare-earth doped fibres (Er, Yb, Tm, Ho, etc.) for laser and amplifier applications.
- Single-mode silica fibres.
- Double/triple clad fibres.
- Novel fibre designs.

An open access model:

Fee-for-service, e.g. the production of specialty optical fibres.

- Direct access to instrumentation based on an hourly rate.
- Dedicated staff are on-hand to provide services, training and technical support to users where appropriate.
- Contract R&D.
- Consultancy.
- Research collaborations.

We encourage you to contact us if you have a requirement for silica fibre fabrication

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