

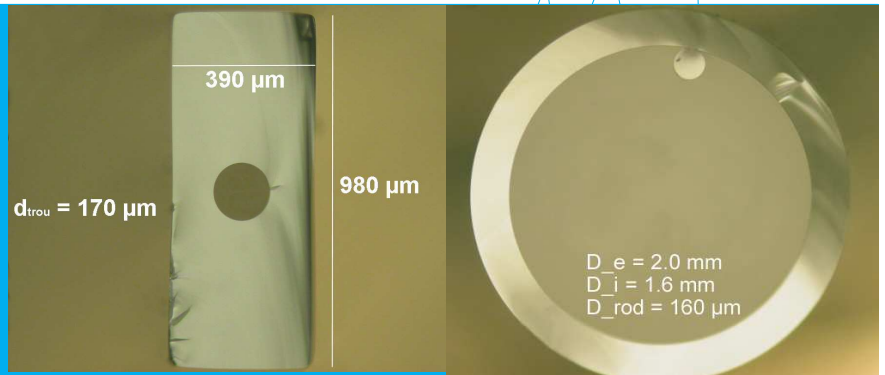
# CUSTOM CAPILLARIES AND FIBER OPTIC SENSORS

INO has developed a strong expertise in custom capillary tubes and specialty optical fibers for sensors applications.

## SOME OF OUR REALIZATIONS

### PURE SILICA CAPILLARY TUBES

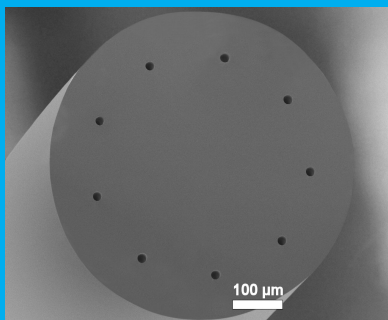
- . Designed from various diameters, shape and wall thicknesses
- . Used in microfluidic applications



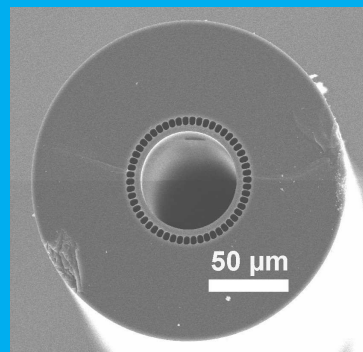
Rectangular cross-section capillary with circular central hole

Silica glass capillary with rod for micropipette fabrication

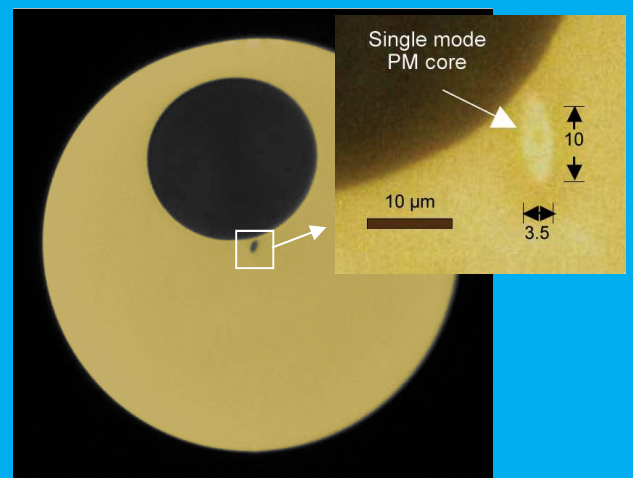
### CUSTOM MICROSTRUCTURED FIBERS



Nanospray emitters



Hollow-Core, Air-Clad MOF technology, for liquid core fiber



Custom fiber for polarimetric sensor applied to gas chromatography

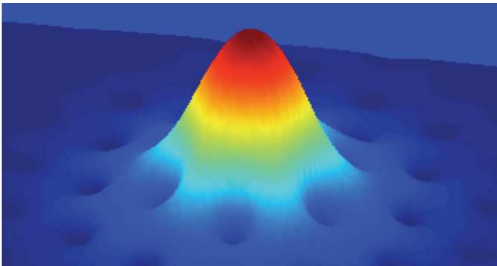
# SPECIALTY OPTICAL FIBERS

INO is a world-class R&D center specializing in optics and photonics and one of the world's leading suppliers of specialty optical fibers. Our team of experts can design and fabricate a wide range of superior quality custom optical fibers to meet your special needs in various fields such as fiber lasers, telecommunications, industrial processes, military, equipment, aerospace, and biomedical applications.

## OUR STRENGTHS

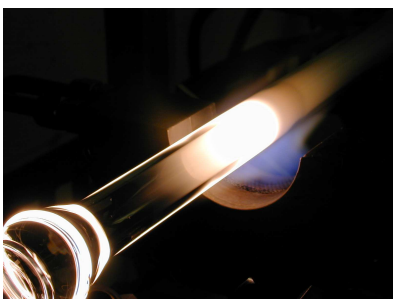
Expertise in:

- . Preform fabrication
- . Fiber and rod drawing, glass processing
- . Advanced fiber modeling and simulation



Cutting-edge facilities:

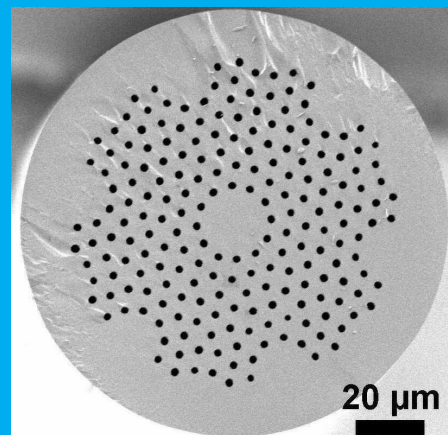
- . MCVD and glass lathes
- . Fiber drawing towers
- . High temperature furnace
- . Equipment for glass fabrication
- . Ultrasonic drilling equipment



## CUSTOM FIBERS FOR YOUR APPLICATIONS

Over time, this specialized know-how has translated into:

- . Single and multicladd rare earth doped optical fibers (also available in PM version)
- . Low-photodarkening fiber composition
- . Microstructured optical fibers for specific applications
- . Stress-applying-parts (SAP) for PM fiber fabrication
- . Photosensitive optical fibers for Bragg gratings
- . Fibers optimized for Raman fiber amplifiers
- . High attenuation fibers (singlemode and multimode)
- . Custom silica capillary tubes



Archimedean-like lattice microstructured optical fiber