

INEX provide production planar waveguides for the world's first Dual Polarisation Interferometer analytical instrument, developed by Farfield, and now part of Biolin Scientific AB (Sweden). The evanescent field emanating from the waveguide interrogates immobilised molecules, providing real-time insight into molecular behaviour. INEX developed an improved manufacturing process for the planar waveguide chip, providing Farfield with their second generation disposable interferometer manufactured in volume on a 150mm wafer platform.



Substrate: Si (150 mm wafer)

Technology: SiON_x dual waveguide (0.002 RI control), deposition, patterning & etch

Scope: Development & Production

Integration: Surface functionalisation combined with microfluidic sample presentation and laser interrogation.

Application: Biomolecular structure & stability, membrane protein & lipid studies, protein-metal ion interactions, drug discovery, biocompatibility, structure-function & structure-behaviour relationships, etc.