



# Research&Industrial Optics (Products Summary)

## Components:

- Windows (detector's, Brewster)
- Lenses: spherical, cylindrical
- Prisms
- Beam splitters
- Shaped sapphire rods and tubes
- The entire spectrum of ZnSe optics for IR applications, including CO<sub>2</sub>-laser
- Glass mirrors: flat, high precision flat, spherical, off-axis parabolic, diagonal
- ATR prisms
- Notch filters
- IR polarisers
- THz components and accessories: low pass filters, band pass filters, polarisers, attenuators, windows, lenses, prisms, mirrors, spectral splitters, beam splitters, waveplates, AR coatings.

## Materials Used for Transmission Optics:

- NaF<sub>2</sub>
- BaF<sub>2</sub>
- UV Fused Silica (analogue of Suprasil)
- UV-IR High Purity Synthetic Fused Silica
- NaCl
- KCl
- KBr
- K8 glass (analogue of BK7)
- Other optical glasses
- Crystal quartz
- Sapphire
- Silicon (including High-Resistivity FZ-Silicon for THz applications and EMI grade)
- Germanium (optical as well as EMI grade)
- GaAs
- ZnSe
- ZnS
- TPX
- Polyethylene

## Materials Used for Mirrors:

- K8 glass
- LK7 glass (analogue of Pyrex)
- Sitall (analogue of Zerodur) and Zerodur
- Fused Silica
- Silicon

## Coatings:

- Anti-reflection coatings
- High-reflection (HR) dielectric mirror coatings
- Partial reflecting (PR) dielectric coatings
- Wavelength Separating/Combining Coatings
- Hot/Cold mirrors
- Metallic coatings
- Hard carbon coating (DLC: "Diamond-Like Coating")

## Sizes:

- From 2 mm to 1.3 m

## Surface Accuracy:

- To L/16-L/20@0.63mm

## Opto-electronic Products:

- Golay Detectors
- RF Thermoacoustic Detector TAD-1
- Pulsed THz Radiation Electro-Optic Detector
- THz Scanning Fabry-Perot Interferometer