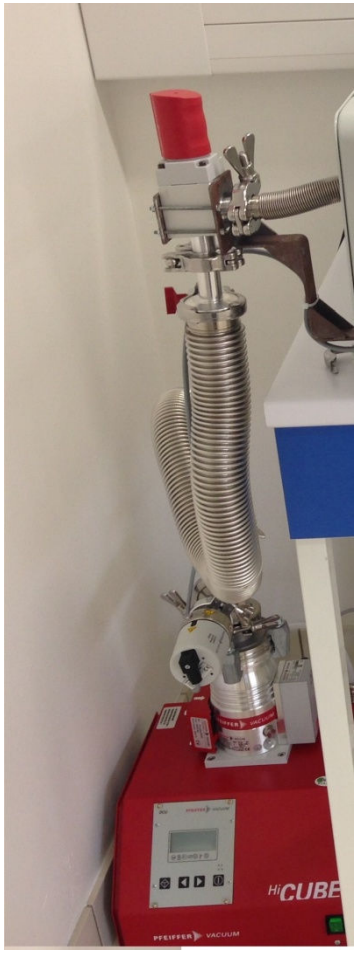
TFSC

Instrument

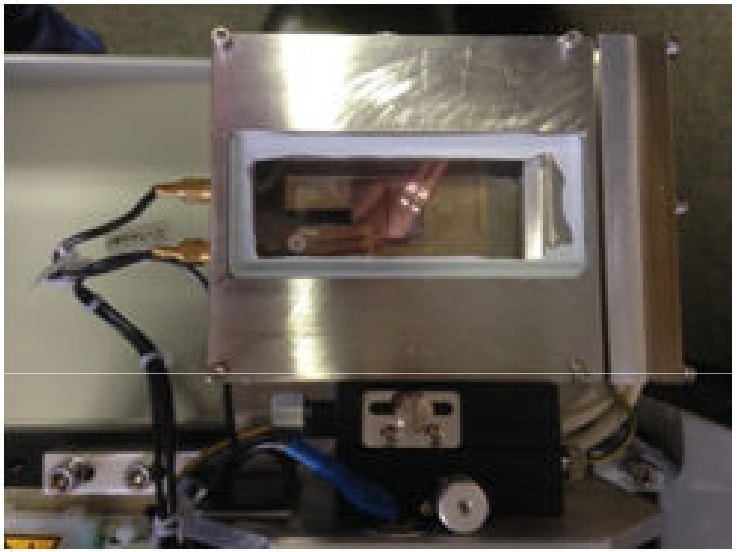
THIN FILM SEMICONDUCTOR Instrument

FOTOCON products: conductivities measurements (under dark and illumination)

FOTOCON-S



Pumping set-up



Sample enclosure

FOTOCON-S: specifications (I)

- Steady State Photoconductivity system
- Dark conductivity measurement
- Photoconductivity: conductivity under illumination with selection of one among the four wavelengths: 470 nm, 525 nm, 660 nm, 810 nm
- Illumination area ~ 1 cm^2. The active area between the contacts should be lower than the illumination area!
- Sample area is maximum : 4x4 cm^2
- Electronic command of light sources (LEDs): ON/OFF
- Temperature range of sample holder: RT (20-25 °C) to 215 °C
- Adjustable temperature step and set-points
- Temperature accuracy of set-point < +/- 1°C
- Automatic scan of temperature
- Air-cooling: inlet is provided but not cooling system otherwise it's a passive cooling
- Samples holder in air-tight chamber: can be pumped down or filled with controlled atmosphere
- Voltage source for sample
- illumination flux measured by integrated photodiode

FOTOCON-S: specifications (II)

- **Measurement and acquisitions: low current**
- Pico-ammeter with measured current lower limit resolution = 10 fA
- current measurement range = 20 fA to 20 mA
- stand alone system with PC IEEE-488-2 and RS232 interface
- controlled with computer and system S/W: values stored and displayed on the user interface

- **Pumping system:**
- Turbo-molecular pump (67 l/mn) with its controller
- dry rough pump
- full range gauge with power and reading cable
- manual valve
- adapters and vacuum tubing
- Pressure measurement displayed on the user interface on the computer