## Film Metrology & More

## FR-Liquid: In-situ Monitoring and Characterization of coatings immersed on liquids.

**FR-Liquid** is an accessory for the real time monitoring of changes, e.g. **swelling** or **dissolution**, in **thickness** and **optical constants** (n&k) of thin/thick films **during processing in liquids**. It consists of a PTFE (Teflon) cell and a holder to accommodate the sample under test. PTFE, due to its properties (*hydrophobic, chemical and thermal resistant*) make suitable the use of FR-Liquid for **a wide range of liquids**. Optical measurements with the FR-Basic tool are possible due to the optical window design on the cell, which establishes the non-contact between the optical probe and the liquid.

## **Features**

o Teflon base: 140x140x15 mm

Teflon cell: 110x35x130 mm

Optical window: 18 mm (diameter)

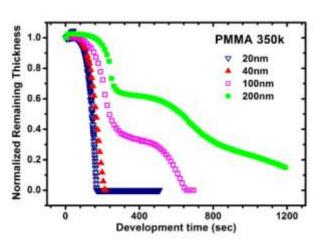
o Liquid capacity: 30 - 40 ml

Sample holder for samples of any shape in

the 30x45 mm range

## **Applications**

- o In-Situ Measurements
- Materials Characterization
- Polymers/Photoresists Characterization
- HardCoats
- o Semiconductor
- Non Metal films



PMMA dissolution films on Si in MIBK:IPA solutions and irradiated with DUV light

