
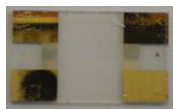
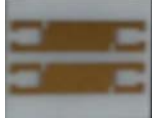















Research equipment:

<p>Surface Acoustic Wave (SAW) devices: Operating frequencies @50MHz, 104MHz, 110MHz, 155MHz (various piezoelectric substrates, designs).</p>	 <p>Quartz, $f_0=155\text{MHz}$</p>	 <p>Quartz, $f_0=110\text{MHz}$</p>	 <p>LiTaO₃, $f_0=50\text{MHz}$</p>
<p>Network Analyzers (N.A.) dedicated for measurements with the SAW devices. Various signal outputs measuring the real-time change of the phase and amplitude of the acoustic wave. More specifically, the equipment consists of:</p> <ol style="list-style-type: none"> i. HP 4195A (10Hz-500MHz) ii. HP 8753ES (30kHz-3GHz) with time-gating option; connected with Agilent switch control system 3499A for simultaneous measurements on many SAW devices iii. Agilent E5061A (300kHz-1.5GHz) 	 <p style="text-align: center;">Switch control</p>  <p style="text-align: center;">Network Analyzer</p>		
<p>Quartz Crystal Microbalance with Dissipation monitoring (QCM-D): Qsense D-300 for real-time acoustic measurements at low frequencies (5-35MHz).</p>			
<p>Surface Plasmon Resonance (SPR): Reichert SR-7000 optical biosensor for real-time monitoring of biomolecular interactions.</p>			
<p>Fluorimeter BIO-TEK Synergy HT: For kinetic, end-point and fluorescence measurements routinely used for ELISA plate readings.</p>			

<p>Spin-coater (Specialty Coating Systems, P6700 series): Spin-coating of various polymeric films.</p>	
<p>Expanded Plasma Cleaner & PlasmaFlo™ (Harrick Scientific Corp.): Atmospheric plasma etching, for surface cleaning, surface treatment and activation/functionalization. Potential for gas incorporation at will.</p>	
<p>PCR thermocycler (Labnet MultiGene II): Performing polymerase-chain-reaction assays.</p>	
<p>pH meter OAKTON: measurement range pH 1-14.</p>	
<p>Precision microbalance (Mettler Toledo AB135-S).</p>	
<p>Gilson peristaltic pumps</p>	

<p>Harvard PHD2000: Programmable syringe pump for precision injection in microfluidic capillaries. 2 syringes at the same time <i>(capable of connection with HPLC-type fluidic system).</i></p>	
<p>Micro-Viscometer (AMVn – ANTON PAAR)</p>	

Access to other facilities, hosted by IMBB-FORTH/University of Crete:

- Sputter-coater and Ar-plasma etcher
- Atomic Force Microscope (AFM)
- Scanning Electron Microscope (SEM)
- Spectroscopic Ellipsometry
- Microscopes (optical, fluorescence, stereoscopes)
- Confocal microscope
- Cell cultures room
- Flow cytometry (FACScaliber by BD)