



# CSM INSTRUMENTS

## Biomaterials Applications

Expert in Indentation, Scratch Test and Tribometer Instruments

### CSM Instruments is specialized in Mechanical Surface Characterization

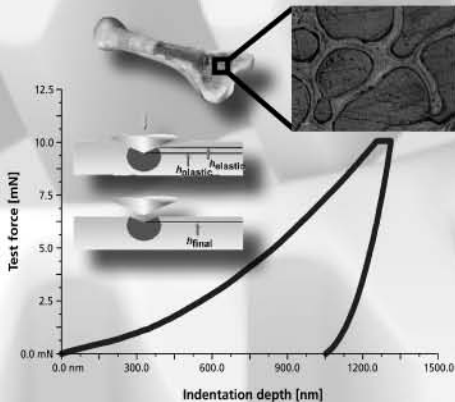


CSM Instruments has developed State-of-the-Art testing process for the following Biomaterials :

- > Friction and Mechanical Properties of Hairs
- > Scratch Resistance of Glasses and Contact Lenses
- > Material Properties of Teeth
- > Coating Adhesion (Hip prothesis, Vertebral, ...)
- > Tribology on Catheters
- > Mechanical properties of Artificial Cartilage
- > Investigation of Cell
- > Characterization of Brain Tissue

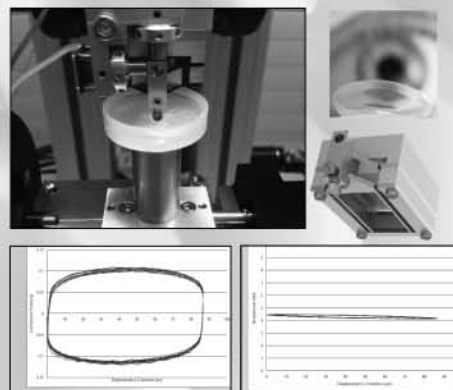
#### > Nanoindentation on Bone Tissue

- Indentation Modulus,  $E_{IT}$
- Indentation Hardness,  $H_{IT}$
- Dissipated Energy,  $W_{plastic}$
- Creep,  $C_{IT}$



#### > Tribology on contact lenses

- Friction coefficient
- Continuous wear depth
- Adhesion measurements
- Test in liquid and dry condition



#### > Scratch of Arterial Implants (Stents)

- Adhesion of coating
- Friction coefficient
- Scratch resistance

