

# LA-ICP-MS

(Laser ablation-Inductively Coupled Plasma-Mass Spectrometer)



Laser ablation : New Wave Research UP-193 FX Fast Excimer

ICP-MS : Thermo Scientific X-Series2 with CCT (Collision Cell Technology)

Laser ablation system produces craters in the sample ranging in size from 2 to 150 microns. The ablated material is then swept by an He-Ar flow from the sample cell directly into the plasma of the ICP-MS. The sample particles are then ionized and the ions are separated and detected by the mass spectrometer.

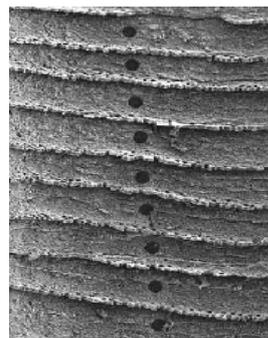
Laser ablation system is an analytical tool designed to target microfeatures (microstructures, inclusions, crystals) in a sample or to give the profile of elements in following the growth of the shell.

Analyses : a few examples of materials studies by LA-ICP-MS

- mussels & shells
- sclerosponges
- thin sections of rocks
- minerals
- metals
- woods



Mussel



Bivalves