

# OPTICAL SPECTROSCOPY (IR, UV)

## INFRARED SPECTROSCOPY

The Institut Lavoisier has a high performance IR platform for FT-IR analysis of solid and liquid materials or compounds in transmission or reflection between ambient temperature and 900°C as well as surface analysis.

### Equipments

#### Spectrometer Nicolet 6700 FTIR – Csi

Equipped with ATR SMART  
ORBIT module  
with 2 types of crystals

- \* Diamond
- \* Germanium

Software : OMNIC

This device is dedicated to  
routine analysis.



#### Spectrometer IRTF Nicolet iS10



Equipped with a KBr / Ge splitter, can be equipped with 2 modules:

\* Advanced Diffuse Reflection Collector II,

\* VARIGATR for surface analysis.

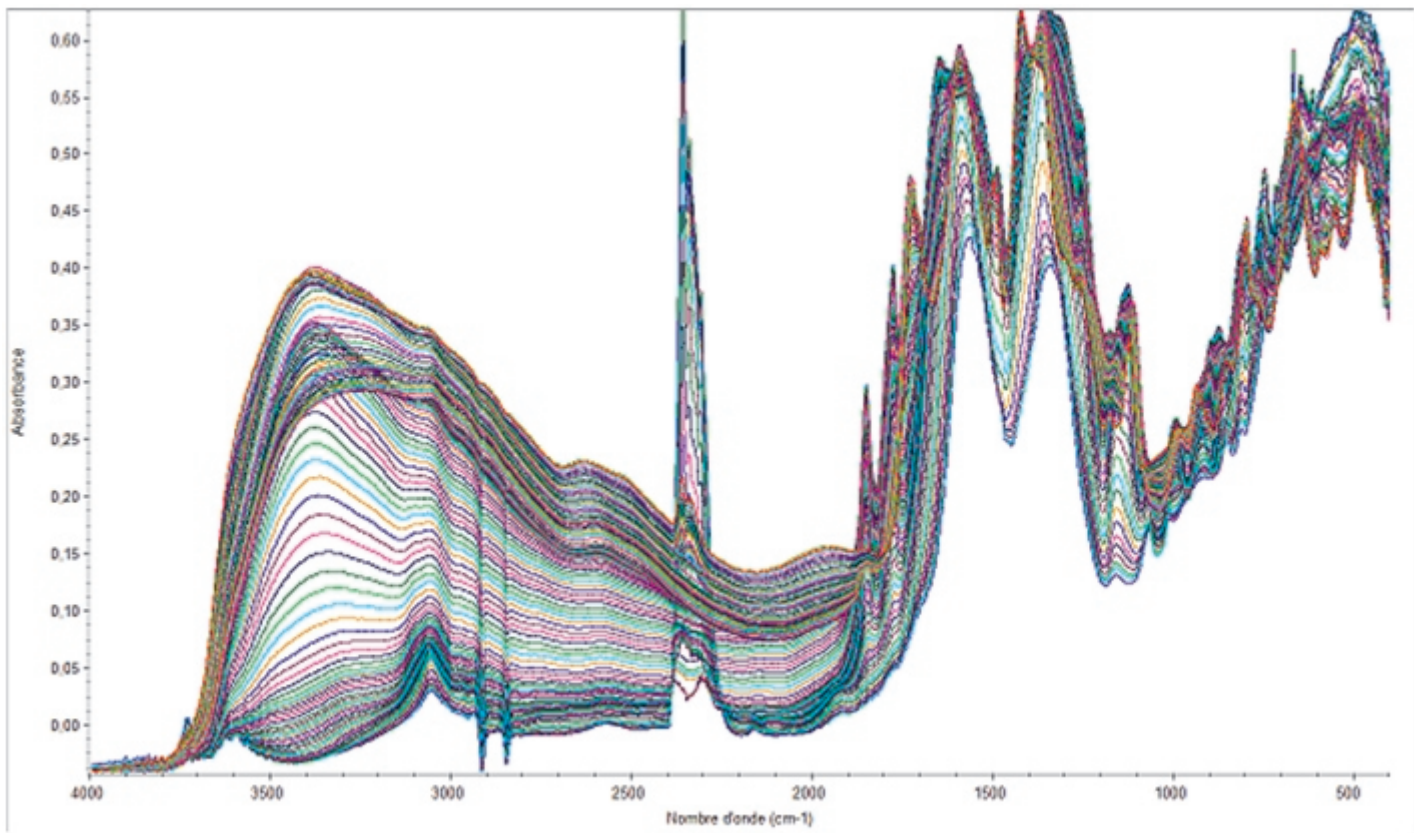
High Temperature / Vacuum Room for Collector II ranging from room temperature to 900 ° C for variable temperature analysis.



Software: OMNIC

Used on reservation for specific analyzes.

## Analayis examples



### Evolution of the IR spectra at different temperatures.

We can observe the loss of water, then the solvent, and finally the degradation of the product.

THESE FACILITIES ARE OPEN TO THE ENTIRE SCIENTIFIC COMMUNITY.

Service manager :  
Flavien Bourdreux

Thanks to the C'nano Ile de France and the UVSQ for the ECOPOM 2009 and the 2010 PFIR projects that enabled the acquisition of the two new aircraft.

