



# ILV

## Institut Lavoisier de Versailles

### 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 – Csl**

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.

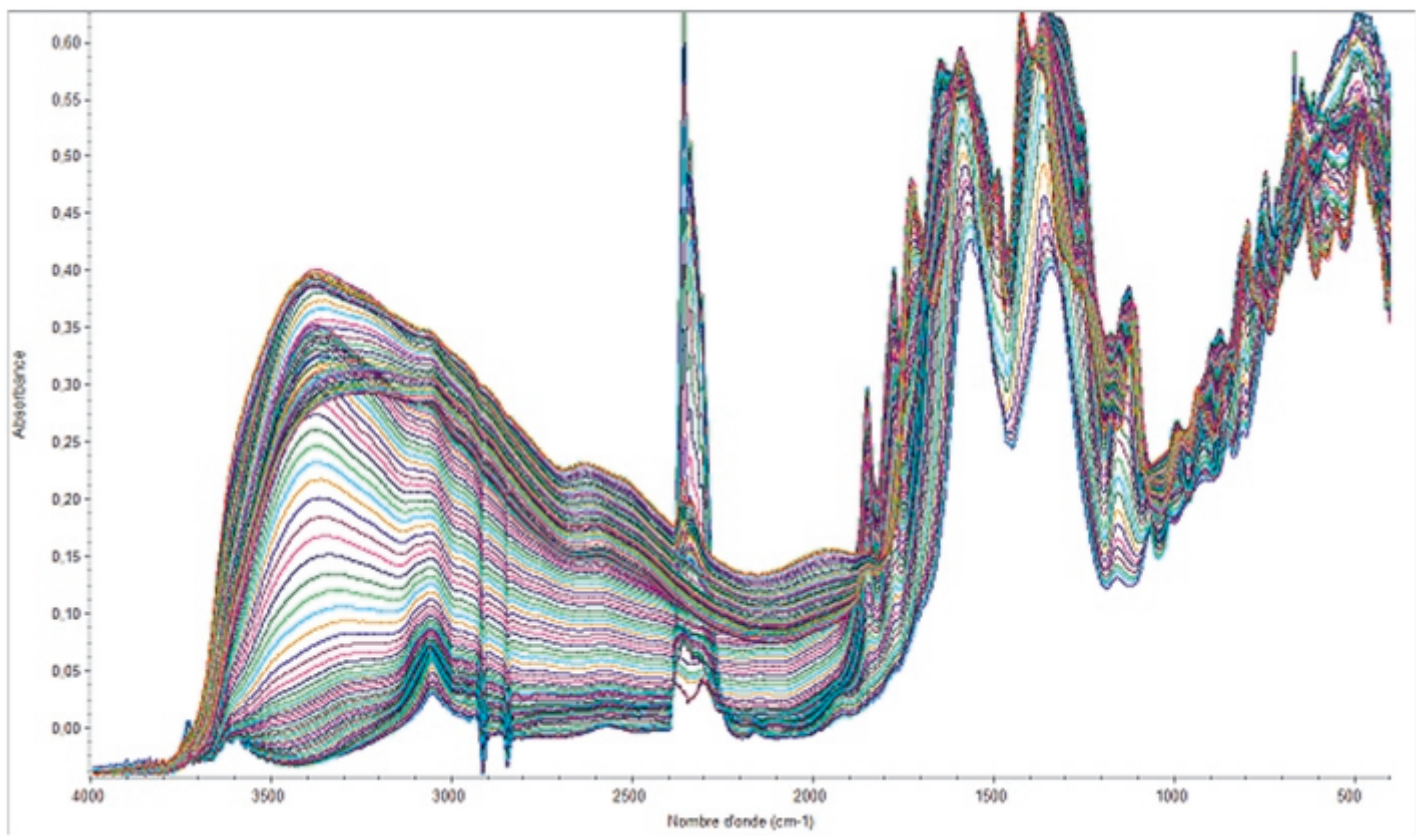
High Temperature / Vacuum Room for Collector II ranging from room temperature to 900 ° C for variable temperature analysis.



Software: OMNIC

Used on reservation for specific analyzes.

## **Analaysis 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.

