

C2MC: A common lab for the study of complex matrices



A group of researchers from **IPREM** and **LFCR** are part of a new common laboratory, the **C2MC** (for *Molecular Cartographies of Complex Matrices*), which is a major step forward in petroleum research. This new structure, nearly the only of its kind in the world, is built on the synergies, in terms of tools and expertise, among all of its partners:

- * inorganic mass spectrometry for UPPA
- * molecular mass spectrometry for the University of Rouen
- * refining for Total.

This partnership aims to establish precise molecular cartographies of fossil and plant raw materials used in refining and petrochemicals.

"Complex matrices are a major industrial challenge", explains Brice Bouyssière, the IPREM project leader. "We are interested in heavy petroleum, which is plentiful but difficult to process and refine. We need to understand them better to be able to transform them into lighter composites like gasoline."

The industrial and environmental consequences are enormous. The laboratory has a second, equally ambitious goal: to study the integration of bio-resources in the refining industry.