



ILV

Institut Lavoisier de Versailles

VALORISATION OF NATURAL PRODUCTS AND INDUSTRIAL APPLICATIONS

Coordinator of the axis

Christine Thomassigny (Associate Professor)

Permanent members

Olivier David (Professor)

Alexandre Genoux (Professor Junior)

Régis Goumont (Professor)

Sylvain Marque (Associate Professor)

Bruce Pégot (Associate Professor)

PhD Students/Postdocs

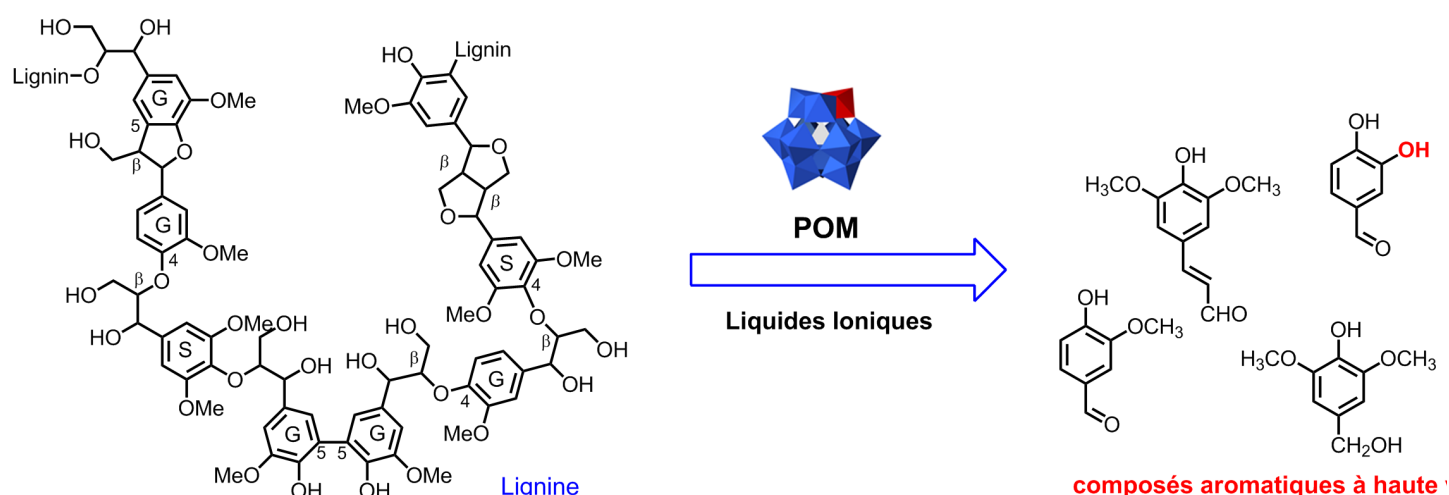
Kelvin Meza Casamayor (PhD student)

List of publications

Main themes

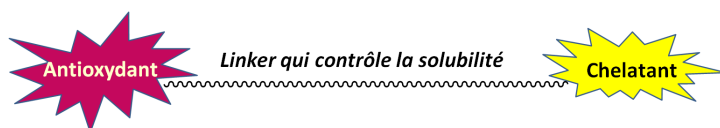
Demethylation and depolymerisation of lignin

(Collaboration with INRA, Versailles)



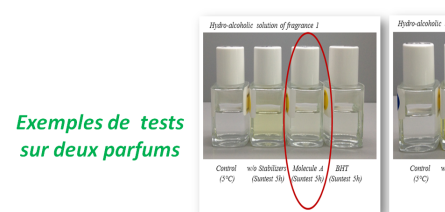
Synthesis of new multi-functional anti-oxidants

(Collaboration with Symrise)



Stratégie innovante pour obtenir des composés multifonctionnels, capables de remplacer le BHT et l'EDTA

Résultats présentés au congrès 30th IFSCC (International Federation of Societies of Cosmetic Chemists), Munich, Septembre 2018.



Propriétés testées sur eaux de bases parfumantes de crème

New anti-oxidants by an eco-compatible procedure

(Collaboration with International Flavors and Fragrances IFF)

Development of flavor agents and encapsulation of flavors by extrusion

(Collaboration with Expressions Aromatiques)

- Development of natural substances by methods approaching organic synthesis but compatible with the description « natural » following regulation CE 1334/2008 relating to flavours.
- Scale-up of equipment for industrial production of these products.
- Molecular approach to the encapsulation of flavours by dual extrusion.
- Thermo-resistance studies of flavours.
- Development of products with glass transition temperatures greater than 40°C.

Versailles-Sciences Lab platform

» Partnership with Nez Editions

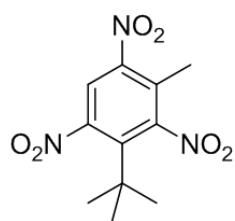


« **Les Matières premières – Les Synthétiques** » in « Le Grand Livre du parfum » ouvrage collectif, **octobre 2018**

« **Dialogue entre une artiste et un chimiste** » in « Voici des feuilles, des fleurs, des fauves et des oiseaux - Une monographie de Julie C. Fortier » ouvrage collectif, **juillet 2020**

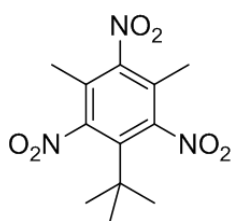
» Collaboration with the Osmothèque, Versailles

Synthesis of nitro-musks



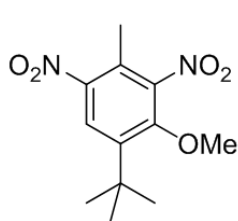
musk Baur

Baur, 1888



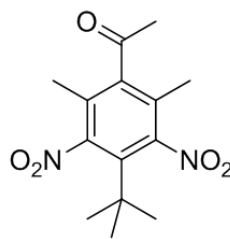
musk xylene

Schnauffer & Hupfeld 1888



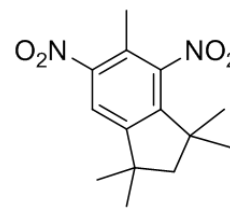
musk ambrette

Baur, 1891



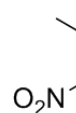
musk ketone

Mallmann, 1893



Moskene

Barbier, 1930



T

Carp

» Extraction by supercritical CO₂

(collaboration with the TPE Bouture.com)

Extraction of oils rich in omega-3, with variable tocopherol levels, from the seeds of tree peonies (collaboration with the TPE Bouture.com)

Extraction of molecules responsible for the aroma of vanilla (collaboration with the TPE Excellence Bourbon)

