



Recherche Post-doc motivé(e)



Project COPOBIO in collaboration with SOLVAY

New strategies for the elaboration of biosourced and biodegradable copolyesters

Organisme d'accueil

IMP UMR5223 Site INSA de Lyon
17 avenue Jean Capelle 69621 Villeurbanne CEDEX

Supervisors

Prof Etienne FLEURY & Dr Daniel PORTINHA

salary

Around 2800 € gross monthly salary

Start of contract/ Duration of contract

September 2023 / 24 months

Context

In the context of a sustainable economy, valorizing biobased materials is becoming more and more obvious. However, for considering the life cycle analysis and limiting their possible environmental impacts, the best is to limit the number of biomass transformation steps, for example by directly valorizing readily accessible biosourced building blocks to produce high performance polymers of the future

The aim of the project COPOBIO is to develop new strategies for designing biosourced copolyesters having various physicochemical properties. To achieve this objective, the COPOBIO project is based on a multi-competencies team, located in Solvay and IMP team in Lyon.

The success of this project will lead to biodegradable polyester materials having a wide application range in daily life applications.

Missions

At the IMP, the aim of the post-doctoral work will be to:

- test various new biosourced monomers,
- develop a new innovative polymerization process,
- determine with accuracy the structure and properties of polymers (NMR, SEC, DSC...)
- determine the application properties of these polymers.

All of these studies will be carried out in close collaboration with the two Solvay research centers located in Saint-Fons and Aubervilliers.

Skills and Knowledges

The candidate must have a PhD degree. The knowledge and skills required for the project are those for chemistry of polymers and their chemical and structural characterizations. Knowledge and experience in the field of step growth polymerization would be an advantage. Being in contact with different partners, the candidate will have to demonstrate good interpersonal skills and be able to work autonomously.

How to apply: Send a CV and a cover letter by email to etienne.fleury@insa-lyon.fr and daniel.portinha@insa-lyon.fr