

Post doc Position at the IMP Laboratory (Ingénierie des Matériaux Polymères)

University of Lyon 1/ collaboration with Velay Innovative Fishing and Enky-3DP industries

<http://www.imp-umr5223.fr/>



Title: Development of new environmentally friendly fishing lures

The project GREENFISH is dealing with the development of a new fishing lures family which will be more respectful of the environment mainly the aquatic one. This project is composed of 3 axes of work, namely the development/formulation of new materials, the development of hard lures with the implementation of materials and the manufacture of prototypes of new fishing lures and a detailed characterization of the developed materials as well as the study of the materials behaviour in real conditions of use.

The work will consist in developing new formulations based on PLA biodegradable polymer which can be implemented by 3D printing through the preparation of extruded filament. The formulation should thus meet specific requirements in relation with the ability to be easily processed, the mechanical behaviour and the ability to respond to controlled degradation mechanism in aqueous media.

More specifically, the morphology of these blends will be studied. Their suitability for shaping will be analysed by means of rheological analyses. Their mechanical behaviour will be particularly scrutinized in order to select the most suitable formulations for the final applications. Finally, the degradation mechanism and kinetics will be investigated in aqueous media representative of sea or rivers.

Contacts

The CV and motivation letters have to be sent to

Eliane Espuche: eliane.espuche@univ-lyon1.fr

Véronique Bounor-Legaré: bounor@univ-lyon1.fr

Applicant skills: Polymer chemistry, polymer processing, polymer formulation, Biodegradability

Duration : 18months