



Composites en Aquitaine, Nanostructures Organiques
Bordeaux – Institut National Polytechnique
Département de l'ADERA
Cheminnov- ENSCBP
16 avenue Pey Berland
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CALL FOR APPLICATIONS FOR AN EARLY STAGE RESEARCHER (ESR) POSITION

Applications are invited for a full-time position, leading to a PhD degree from the University of Bordeaux, at CANOE (Composites en Aquitaine et Nano-structures Organiques) in collaboration with P. Poulin from Centre de Recherche Paul Pascal (CNRS) in Bordeaux, France. This call is part of the Marie Curie ITN (Innovative Training Network) project DiStruc (Directed Structure at the meso-scale).

JOB DESCRIPTION: CANOE is Research Company dedicated to the development of innovative organic nanostructured composite and coating technologies. Within the DiStruc project, CANOE will develop a new generation of green, low cost and high performances composite fibers from bio-resources. Such fibers will be used as precursors for the manufacturing of carbon fibers.

The aim of the thesis project is the study of the different parameters involved in the wet-spinning process of cellulose nanocomposite fibers. These parameters include the organization of the dope material, the formation of liquid-crystalline phases of cellulose assisted by colloidal rods or platelets (e.g nanotubes, nanocellulose, graphene...). Correlation between the structure, fiber spinning conditions and fiber properties will be established. Rheology, mechanical analysis, X-Ray Diffraction, microscopy are among the characterization techniques that will be used in this work.

The PhD student will also be able to go to partners European laboratories or companies (including Belgium, Germany, the Netherlands, Greece, and UK) to ensure good achievement of this project. He/she will also gain scientific and technological training from schools and dedicated courses organized in the frame of the project, in addition to courses provided by the doctoral school of the University of Bordeaux.

CANDIDATE PROFILE: Experimentalist in the fields of physical-chemistry, polymer or materials science. Interest for lab experiments is needed as well as an ability to work independently in a small-team environment. Languages: English mandatory and French much appreciated.

DURATION: 36 MONTH

STARTING DATE: SEPTEMBER 1, 2015

ACADEMIC REQUIREMENTS: Master's degree and less than 4 years research experience after Master's degree. The ESR **must not have** a PhD degree.

MOBILITY REQUIREMENTS: According to the Marie Curie ITN program, researchers **must not have** resided or carried out their main activity (work, studies, etc) in the country of their host organization for more than 12 months in the 3 years immediately prior to the date of recruitment.

DEADLINE FOR APPLICATIONS: MAY 31ST, 2015

HOW TO APPLY

Contact: mercader@plateforme-canoe.com. Please send by e-mail the following documents

- Curriculum Vitae
- A presentation letter including research interests, master studies description and experience related to the job offer.
- Names and e-mail addresses of reference persons to contact

LINKS: <http://distruc.chem.ox.ac.uk/> www.plateforme-canoe.com www.crpp-bordeaux.cnrs.fr

