POST-DOCTORAL POSITION AT TOULOUSE BIOTECHNOLOGY INSTITUTE

JOB DESCRIPTION
The team Catalysis and Enzyme Molecular Engineering of Toulouse Biotechnology Institute (TBI) located in Toulouse, France, is currently seeking a post-doctoral member to work on a project funded by industrial partners. The project is focused on the production of original Polyhydroxyalkanoates (PHA) polymers. These bio-based and biodegradable polyesters represent attractive alternatives to fossil-based polymers and can be used as bioplastics or biopolymers for various applications.

A first generation of strains producing medium-chain length polymers with original properties has already been developed in the lab. The project aims at engineering these strains to improve their yield and make them compatible with an industrial use. The successful applicant will participate in a group of 6 researchers for the strains construction, their cultivation in Erlenmeyers and in bioreactor, and with the monitoring of their growth, substrate consumption, and polymer production.

QUALIFICATIONS
The successful candidate will hold a PhD in microbial physiology, biotechnology or a related field. He/She should have experience in metabolic engineering and recent yeast genetic engineering techniques, and in microbial cultivation. Experience using liquid and/or gaseous chromatography will be appreciated.

Successful candidate will be able to conduct independent research, plan and execute experiments, write research reports, and have strong communication skills. Some knowledge of the French language would be useful, however, non-French speakers should be fluent in English.

LABORATORY & RESEARCH TEAM
The Toulouse Biotechnology Institute is an interdisciplinary research laboratory of 350 people that develops its research activity at the interface between life sciences and process sciences. It carries out an excellent research with economic and societal relevance in the field of catalysis and enzyme engineering, systemic and synthetic biology, fermentation, process engineering and eco design.

The successful candidate will work in the frame of laboratory PopLaB (Polymers, Plastic and Biotechnology). This laboratory, between the TBI Enzyme molecular engineering and catalysis Team (CIMEs) and the green chemistry company Carbios, develop enzymes for plastic depolymerisation and strains for bioplastic production. He/She will benefit of the CIMEs and PopLaB expertise in enzyme engineering and synthetic biology and of TBI core facilities such as ICEO platform.

CONDITIONS
The position is available from May 2 2021 for 12 month and can be extended depending on the success of the first year.

CONTACT
To apply, please email: Florence Bordes (Florence.bordes@insa-toulouse.fr) and Alain Marty (Alain.marty@carbios.fr); Attach CV, cover letter, summary of previous research, and contact information for referees. Deadline: 15/04/2021.