Opening position
Assistant/Associate Professor in Fermentation

Teaching profile
The candidate will teach in the departments of Biochemical Engineering and STPI (Science and Technology for the Engineer) of INSA Toulouse. He (she) will integrate into the teaching teams carrying out the biotechnology lessons (courses, tutorials, practical work and multidisciplinary projects). The recruited person will mainly participate in the teaching of the Biochemical Engineering discipline in 4th and 5th year INSA and in the new International Master of the EUR BioEco in French and English languages. He (she) will have to give lectures and supervise tutorials and labworks on microbial kinetics and culture of microorganisms in bioreactors at lab and pilot scale. He (she) will also supervise various projects (4th and 5th year calculation projects in particular) and will participate in monitoring student internships. He (she) will also be involved in the ongoing training of INSA Toulouse.
The recruited person must be able to implement innovative pedagogies (project-based learning, MOOC, etc.) in the teaching.

Research profile
The candidate will develop its research within the Toulouse Biotechnology Institute as part of the Fermentation Advances & Microbial Engineering research team. Its research should focus on the kinetic study of microbial transformations in order to identify phenomena limiting the production performance of microbial processes. The candidate will need to have expertise in microbial cultures in bioreactors and master the concepts of transfer within the bioreactors. The challenge is to reinforce the research themes of FAME team in its various axes in the fields of fermentation, especially with filamentous fungi in liquid and solid fermentation.

TBI, Toulouse Biotechnology Institute, Bio & Chemical Engineering (UMR. INSA INRA 792 and UMR. CNRS 5504) is a laboratory located on the campus of the National Institute of Applied Sciences (INSA) in Toulouse, with nearly 300 people, including 150 permanent staff. TBI researches focus, at the interface between Life Sciences and Engineering Sciences, on biotechnology and processes with many industrial applications in health, biotechnology, water and environment, agro-food, bioenergy, green chemistry, and cosmetics.
The Research activities of the FAME group focus on kinetic and stoichiometric studies of microbial transformations in order to identify the phenomena that limit the performances of biotechnological processes. The objective is to understand, quantify and model the dynamic interactions within the "Process-Environment-Microorganism" System in order to i) reveal the key phenomena affecting the microbial physiology under intensive production conditions and ii) to deduce optimal culture conditions. From the knowledge of the innate microorganism potential and depending on the objectives of the process of interest, a complementary strain engineering approach is developed in order to explore/implement original potentialities for the "Microorganism / Bioreactor" System.

Other Activities
Involvement in the institution’s cross-cutting activities, in the setting up of large-scale projects and in scientific outreach within the framework of the institution’s societal issues (available on the institution’s website)

Contacts :
Prof. Stéphane Guillouet, Head of Research team FAME, guillouet@insa-toulouse.fr, Tel. 06 99 81 85 69
Prof Carole Molina Jouve, Head of TBI, carole.jouve@insa-toulouse.fr +33 6 27 75 46 97
Prof Philippe Schmitz, Head of Biochemical Engineering Department, schmitz@insa-toulouse.fr +33 5 61 55 94 35
Expected appointment date: September 2020

IMPORTANT

Applications :
https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/cand_recrutement_enseignantschercheurs.htm

Warning: the procedure is now completely dematerialized on Galaxie website

Application filing deadline: Thursday, April 9th, 2020 at 4:00 p.m.

Supporting documents to be provided
Warning: the list of documents requested from the candidates has been revised.

See the amended decree of 13 February 2015 on the general terms of transfer, secondment and recruitment by competition of lecturers: https://www.galaxie.enseignementsup-recherche.gouv.fr/ensup/Recrutement/AM_23juillet2019_recrutement.pdf