Postdoctoral researcher in Catalyst development and testing (Male/Female)

Job description

The open postdoctoral position is related to catalytic oxidative coupling of methane (OCM) by oxide transition metal catalysts. The research will comprise at least the participation in the designing and building of a continuous flow reactor for catalytic experiments; design, preparation and characterization of catalysts; activity measurements; project management; and research activities depending on the preferences by the successful candidate.   
The duration of the employment is minimum one year with a possible extension

Tasks

Postdoctoral researchers participate in advising doctoral candidates and master's thesis students and contribute to mentoring. Also promoted are writing scientific publications and participation at international scientific meetings.  
The project has access to the research infrastructures of IRCELYON especially for catalyst characterization and AXEL'ONE for catalyst upscaling.

Education and skills

The successful candidate should preferably have a doctoral degree in chemical engineering or in a related area. Fluent written and verbal communication skills in English, the ability to work independently as part of a group in an international environment, as well as good organization and data management skills are required. The candidate should possess some of the appreciated skills/requirements:  
• Hands-on experience with high-pressure flow reactors  
• Knowledge of heterogeneous catalysis, including experience in synthesis and characterization thereof  
• Experience with transition metal oxide catalysts   
• Experience with modelling software (e.g. Matlab)

Environment

RCELYON (CNRS-Lyon University) brings together the forces in heterogeneous catalysis of the Lyon region and constitutes the largest catalysis laboratory in France and Europe, with around one hundred permanent staff from the CNRS and at least as many students, interns, post-docs and guest researchers from around thirty different countries. The specificity of the ING team, headed by Drs Farrusseng and Shuurman, lies in the mastery and the desire to cover the value chain of the integration of a catalytic process, from the molecular scale to the demonstrator. Modeling in general and more particularly micro-kinetic modeling constitutes the backbone of methodological developments within the team. The group aims for fundamental understanding of structure-activity relationships and strives towards more openness in science & teaching. See the webpage of the group for more information: <https://www.ircelyon.univ-lyon1.fr/team/ing/>

The project is funded by the EU, in the frame of the project “C123”

<https://cordis.europa.eu/project/id/814557/fr>

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|  | Salary  Salary is determined according to the salary system of CNRS and depends on the candidate's experience, between 2648 and 3768 euros/month. Health insurance included as well as other rights as per French law. |

Contact

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