

Development of porous adsorbent materials based on
Metal-Organic and Covalent Organic Frameworks
University de São Paulo

Direct Link: <https://www.AcademicKeys.com/r?job=249531>

Downloaded On: Dec. 4, 2024 9:50pm

Posted Nov. 25, 2024, set to expire Mar. 27, 2025

Job Title	Development of porous adsorbent materials based on Metal-Organic and Covalent Organic Frameworks
Department	Naval Engineering / Polytechnic School
Institution	University de São Paulo São Paulo, São Paulo, Brazil
Date Posted	Nov. 25, 2024
Application Deadline	Dec. 20, 2024
Position Start Date	January 2025
Job Categories	Post-Doc
Academic Field(s)	Material/Metallurgy Chemical/Petroleum Engineering - Other
Apply By Email	otic.jobs@usp.br

Job Description

The objective of this project is the development and study of materials with enhanced potential for adsorption/storage of H₂, CO₂ and other gases of interest, based on metal-organic frameworks (MOFs) and covalent-organic frameworks (COFs). These highly porous materials are capable of absorbing, retaining, separating, and releasing molecules in/from their porous networks.

The core innovation of the project is to use Materials Informatics by combining multiscale molecular simulations, machine learning, and topology optimization to accelerate the screening selection and design optimized morphologies to enhance the selectivity of CO₂ and H₂ within the MOF materials.

Development of porous adsorbent materials based on
Metal-Organic and Covalent Organic Frameworks
University de São Paulo

Direct Link: <https://www.AcademicKeys.com/r?job=249531>

Downloaded On: Dec. 4, 2024 9:50pm

Posted Nov. 25, 2024, set to expire Mar. 27, 2025

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact OTIC Jobs
Naval Engineering / Polytechnic School
University De São Paulo
São Paulo, São Paulo
Brazil

Phone Number +55 11 3091701

Contact E-mail otic.jobs@usp.br