

Lead institution: São Carlos Institute of Chemistry	
Supervisor name: Hamilton Varela	Department: Physical Chemistry
Recipient: https://sites.usp.br/rcgi/opportunities/ Ref: 24PDR266 – Postdoctoral Fellowship Deadline for submission: May 17 th , 2024	Type: Postdoctoral fellowship Period: 40 hours/week Number of months: 24 Intended beginning date: June/July 2024
Project title: (Portuguese and English) <p>Eletro-oxidação de etanol sobre eletrodos bi e trimetálicos: experimentos, modelagem e simulações numéricas.</p> <p>Ethanol electro-oxidation on bi- and trimetallic electrodes: experiments, modelling and numerical simulations.</p>	
Research theme area: (Portuguese and English) <p>Eletroquímica e eletrocatalise</p> <p>Electrochemistry and electrocatalysis</p>	
Abstract (Portuguese and English) <p>O candidato irá colaborar com os pesquisadores do projeto 83 - SPEC do FAPESP-Shell Centro de Pesquisa para a Inovação de Gases de Efeito Estufa da POLI-USP na Universidade de São Paulo. Resumo do programa e os projetos podem ser encontrados no site da RCGI (https://sites.usp.br/rcgi/). Em particular, a bolsa em questão tratará do desenvolvimento e utilização de superfícies complexas à base de platina e contendo mais um ou dois metais para a eletro-oxidação de etanol em meios ácido e alcalino e em baixa temperatura. Adicionalmente aos experimentos de bancada, serão realizadas as etapas de modelagem e simulações numéricas.</p> <p>The candidate will collaborate with researchers from the project 83 - SPEC of the FAPESP-Shell Research Centre for Greenhouse Gas Innovation of POLI-USP at the University of São Paulo. Summary of the program and projects can be found at the RCGI website (https://sites.usp.br/rcgi/). In particular, the grant in question will deal with the development and use of complex surfaces based on platinum and containing one or two more metals for the electro-oxidation of ethanol in acidic and alkaline media and at low temperatures. In addition to the bench experiments, modeling and numerical simulations will be carried out.</p>	
Description (Portuguese and English) <p>O candidato contribuirá alinhado aos principais objetivos do projeto:</p> <ol style="list-style-type: none"> 1. estudos cinético-mecanísticos da eletro-oxidação de etanol. 	

The applicant will contribute in line with the main objectives of the project:

1. Kinetic and mechanistic studies of the electro-oxidation of ethanol.

Requirements to fill the position. (Ex: specific experience, minimum or maximum years after concluding the course) (Portuguese and English)

Este projeto é adequado para um candidato altamente motivado e requer habilidades na realização de experimentos eletroquímicos de bancada e numéricos, relacionamento interpessoal, organização e proficiência em inglês são necessárias.

- O candidato deve ser doutor em Química, Física ou áreas afins.

This project is suitable for a highly motivated candidate and requires skills in carrying out bench and numerical electrochemical experiments, interpersonal skills, organization and proficiency in English is required.

- The candidate must have a doctorate in Chemistry, Physics or related areas.

Funding Notes: This Postdoctoral fellowship is funded by FAPESP. The fellowship will cover a standard maintenance stipend of R\$ 9.047,40 per month.

Work place: São Carlos Institute of Chemistry of the University of São Paulo, The Electrochemistry Group.

Documents/Information to be Sent:

Ref: 24PDR266

- 1) Access the link <https://sites.usp.br/rcgi/opportunities/>
- 2) Find the Position **Ref: 24PDR266**
- 3) Click on Application to apply

Deadline: May 17th, 2024.

In case you have any question, please write to rcgi.opportunities@usp.br