

## **PhD fellowship – Nanomaterials**

**Field of knowledge:** Chemistry

**FAPESP process:** 2022/14645-2

**Project title:** Absorbable polyester nanoparticles for sustained nitric oxide (NO) release

**Working area:** Nanomaterials and Biomaterials

**Principal investigator:** Amedea Barozzi Seabra (<https://orcid.org/0000-0003-0591-0380>)

**Unit/Institution:** Federal University of ABC - UFABC

**Deadline for submissions:** June 15<sup>th</sup>, 2024

**Local:** Center for Natural and Human Sciences (CCNH), Federal University of ABC (UFABC), Avenida dos Estados 5001, Santo André, São Paulo, Zip code 09210-580, Brazil

**Number of PhD Grant:** 2

Federal University of ABC (UFABC), Santo André, SP, Brazil, is recruiting a Ph.D. student for developing a research project focused on the preparation and characterization of absorbable polyester nanoparticles for sustained nitric oxide (NO) release, under supervision of the Principal Investigator. The position is immediately available.

The PhD tasks within this project will mainly concern the development of innovative methodologies for the preparation of biocompatible nanoparticles for sustained NO release, and the characterization of their physical-chemical properties and cytotoxicity and inflammatory response in cultured cells.

The grant includes a monthly payment (please, see details here: (<https://fapesp.br/valores/bolsasnopais>)), free of taxes, for up to four years, air tickets for those who live abroad or outside São Paulo state, plus Research Contingence funds (10% of the annual value of fellowship) for covering research costs such as consumables and participation in conferences related to the project, paid by the São Paulo Research Foundation (FAPESP).

This position is available within a 5-years Thematic FAPESP-funded research project entitled “Nitric oxide releasing hydrogels and vascular prosthesis for cardiovascular applications” and involves collaborations with researchers from the Chemistry Institute of UNICAMP, Faculty of Medical Sciences at UNICAMP, and the Eindhoven University of Technology and the University of Twente in the Netherlands. The fellowship also allows short- and medium-term research internships in the Netherlands. Our laboratory is well equipped, receives ample FAPESP funding, and offers abundant opportunities for publications and presentations. Our studies are focused on basic and translational research related to biomedical applications of NO-releasing nano/biomaterials.

We are seeking ambitious students to develop new nano/biomaterials based in polymeric biomaterials, which are absorbable and capable of releasing NO locally for biomedical applications. Qualifications include an undergraduate course in Chemistry or Chemical Engineering from an accredited institution, supported by an excellent record of grades. Candidates who do not have a master's degree can apply. The PhD is expected to begin in the second semester of 2024.

### **Selection process**

Candidates should send a motivation letter highlighting previous experiences relevant to the project, a detailed CV, undergraduate transcript, and two recommendation letters to Prof. Amedea Barozzi Seabra ([amedea.seabra@ufabc.edu.br](mailto:amedea.seabra@ufabc.edu.br)) by email. After a pre-selection, interviews will be organized.

For more details, please contact Prof. Amedea Barozzi Seabra ([amedea.seabra@ufabc.edu.br](mailto:amedea.seabra@ufabc.edu.br)).