

Assignment internship background student Food Engineering

Living Lab Biobased Brazil

The Living Lab Biobased Brazil is a transnational Living Lab in the field of Biobased Economy, created in 2014 by a consortium of Dutch Universities of Applied Sciences in collaboration with several Brazilian universities. The Living Lab helps students with internships and graduation projects in Brazil with the focus on Biobased Economy. We also help students finding accommodation, and offer buddy support, Portuguese classes, a bye-bye meeting and an introduction weekend in Brazil

In return the Living Lab expects you contribute to the Living Lab blog. You have to blog about your personal and internship experiences during your stay in Brazil. We also expect you to participate in the mini symposium at the end of each semester.

These events help you to increase your personal network and is focused on your personal development! For more information please visit <https://www.biobasedbrazil.org/student/brazil/>.

Company/University information:

Universidade Federal de Viçosa (UFV). The Federal University of Viçosa (UFV; [Portuguese](#): Universidade Federal de Viçosa, spelled with a [c-cedilla](#)) is a federal university in the city of [Viçosa](#), state of [Minas Gerais](#), [Brazil](#). In 2010 enrollment was over 15,000 [students](#). Viçosa is a technical university and offers courses in engineering, agronomy, veterinary medicine, animal husbandry, and other areas related to science.

UFV remains among the **best universities in the world** in agricultural and forestry sciences (QS World University Rankings).

<https://www.youtube.com/watch?v=INckSwCllr0&t=64s> - Overview of research and graduate studies at Universidade Federal de Viçosa (Viçosa Federal University), Brazil. English.

Research Project:

Extraction and quantification of bioactive compounds from fruits.

General background:

National fruits receive a lot of attention from researchers because their consumption is associated with reduced risk of chronic diseases such as cancer and cardiovascular diseases due to the presence of antioxidants. Brazil has a great biodiversity, with a great variety of fruits that have high content of vitamin C, phenolic compounds and other substances with antioxidant activity. Moreover, some bioactive compounds, such as anthocyanins, are natural colorants. Thus, in order to optimize the extraction and use of bioactive compounds from fruits, extraction techniques that use high pressure, ultrasound, microwave and addition of enzymes may be used.



Goal of internship:

- To assist master and doctorate students in the development of their research;
- To obtain experience with laboratory techniques;
- To participate in the research laboratory meetings;
- To have contact with a different university, language and culture.

Activities:

The Project involves:

- To do an extensive literature review and identify extraction methods (e.g. ultrasound, high temperature/pressure, etc) that may increase the extraction of bioactive compounds from fruits (1 or 2 fruits will be selected);
- To apply the selected methods in the laboratory;
- To quantify the extracted bioactive compounds;
- To analyze and discuss the data;
- To assist in the writing of a scientific paper and/or an abstract for a conference.

Starting date

September 2019. The intern will be part of a research team lead by the adviser and supervised by Professor Frederico Barros.

Desirable skills/qualities of the student

- Good knowledge of the English (and preferably Portuguese) language is required.

Information of the company:

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Interested?

Please send your CV and motivation letter to Guilherme de Souza Reis (Coordinator Living Lab Biobased Brazil). For further questions you can contact: +316 51924343

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