## UNIVERSITÀ DEGLI STUDI DI MILANO



### TO MAGNIFICO RETTORE OF UNIVERSITA' DEGLI STUDI DI MILANO

ID CODE <u>6009</u>

I the undersigned asks to participate in the public selection, for qualifications and examinations, for the awarding of a type B fellowship at **Dipartimento di Scienze per gli Alimenti, la Nutrizione e l'Ambiente** Scientist- in - charge: <u>Prof. Marti Alessandra</u>

Gabriel Siqueira Galvão Novo

#### CURRICULUM VITAE

#### PERSONAL INFORMATION

| Surname | Siqueira Galvão Novo |
|---------|----------------------|
| Name    | Gabriel              |

#### PRESENT OCCUPATION

| Appointment  | Structure |
|--|-----------|
| None (Recently finished my<br>Masters and currently applying<br>for PhD and research<br>fellowships) |           |

#### EDUCATION AND TRAINING

| Degree         | Course of studies              | University  | year of achievement of the degree |
|----------------|--------------------------------|---|-----------------------------------|
| Degree         | Chemical<br>Engineering        | Federal University<br>of Rio Grande -<br>FURG, in the city of<br>Rio Grande, in the<br>state of Rio Grande<br>do Sul, Brazil<br>(in portuguese:<br>Universidade<br>Federal do Rio<br>Grande - FURG) | 2021                              |
| Specialization |                                |   |                                   |
| PhD            |                                |   |                                   |
| Master         | Food Science and<br>Technology | Federal University<br>of Rio Grande do<br>Sul (UFRGS), in the   | 2023                              |



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|                                      | city of Porto<br>Alegre, in the state<br>of Rio Grande do<br>Sul, Brazil<br>(in portuguese:<br>Universidade<br>Federal do Rio<br>Grande do Sul) |
|--------------------------------------|---|
| Degree of medical specialization     |   |
| Degree of European<br>specialization |   |
| Other                                |   |

#### REGISTRATION IN PROFESSIONAL ASSOCIATIONS

| Date<br>registration | of | Association   | City         |
|----------------------|----|---|--------------|
| 06/20/2023           |    | 5° Regional Council of Chemistry (in portuguese: Conselho<br>Regional de Química da 5ª Região), regional regulation<br>agency of chemistry professionals. | Porto Alegre |

#### FOREIGN LANGUAGES

| Languages  | level of knowledge |
|------------|--------------------|
| Portuguese | Native             |
| English    | Advanced           |
| Spanish    | Basic              |
| Italian    | Basic              |

#### AWARDS, ACKNOWLEDGEMENTS, SCHOLARSHIPS

| Year        | Description of award   |
|-------------|--|
| 2017 - 2019 | Member of the <b>"Tutorial Education Program in Chemical Engineering"</b> (PET/EQ, from the portuguese <i>Programa de Educação Tutorial em Engenharia Química</i> ), fellowship sponsored by Brazil's Ministry of Education. The program consisted in a group of students tutored by a professor, in which the aim was to enhance the academic training of the chemical engineering students of the Federal University of Rio Grande, through research, teaching and extension projects. During six months I acted as leader of the group. |
| 2019 - 2020 | Scientific initiation in the Laboratory of Microbiology and Bioseparations. During this period,<br>I worked on the master's research of a student in the laboratory, which involved the<br>enzymatic hydrolysis of feather meal for application in animal feed.  |
| 2019        | Monitor in the disciplines of Thermodynamics I and Thermodynamics II   |
| 2020 - 2021 | Tutor in the project <b>Tutoring in Chemical Engineering.</b> In the early stages of the covid 19 pandemic, the Federal University of Rio Grande (FURG), temporarily switched from in-person   |



|             | teaching to remote teaching. In this context, this project, formed by a group of three chemical engineering students, had the objective to provide technical support and guidance to all other chemical engineering students of the University regarding their difficulties of adapting to the remote. The scholarship was funded by the university. |
|-------------|--|
| 2021 - 2023 | Scholarship funded by Brazil's Ministry of Education though the Coordination for the Improvement of Higher Education Personnel (CAPES) for the realization of the Master's Degree in Food Science and Technology in the Institute of Food Science and Technology of the University of Rio Grande do Sul (UFRGS).                                     |

#### TRAINING OR RESEARCH ACTIVITY

#### description of activity

Training in laboratory chemical waste management, taught by the technical-scientific nucleus of the Institute of Food Science and Technology of the Federal University of Rio Grande do Sul (2022)

Safety training in chemical, biological laboratory and semi-industrial plants, taught by the technicalscientific nucleus of the Institute of Food Science and Technology of the Federal University of Rio Grande do Sul (2022)

#### PROJECT ACTIVITY

| Year        | Project   |
|-------------|---|
| 2020 - 2023 | <b>Production of enriched breads with powder from the insects</b> <i>Hermetia illucens</i> and <i>Gryllus assimilis</i> - This was the research project developed during my Masters in Food Science and Technology in the Federal University of Rio Grande do Sul, and consisted in the physicochemical characterization of the insect powders, production of enriched breads with varying amounts of mono- and diglycerides, ascorbic acid and water, and the determination of the chemical composition of the breads and their technological properties, such as volume, texture, color and crumb structure.                |
| 2021 - 2022 | <b>Extraction and characterization of functional properties of proteins from the insects</b><br><i>Tenebrio Molitor</i> and <i>Gryllus Assimillis</i> for use in food - This was my colleague Rafael's<br>master's research project. It involved the production of sourdough breads with the inclusion<br>of insect powder. My contribution was to carry out chemical composition analyzes,<br>microbiological analyzes, maintaining the sourdough starter and production of some of his<br>samples of bread.   |
| 2022 - 2023 | <b>Elaboration of pasta with the black soldier fly (Hermetia illucens)</b> - This is my colleague<br>Raquel's PhD research project. The project involves the production of fresh and dry pasta<br>with the inclusion of the insect species <i>Hermetia illucens</i> , alongside with the<br>characterization of the insect powder and the pasta produced. My contribution was to carry<br>out chemical composition analyzes and microbiological analyzes. Also, when possible, I was<br>present during the production of the pasta and during the tests.  |
| 2022 - 2023 | <b>UFRGS Open doors (</b> <i>Portas abertas</i> <b>in portuguese)</b> - University extension project of the Federal University of Rio Grande do Sul, whose objective was to present to society: the university, the courses, and the projects developed. On a specific date, students and professors participating in the project prepare activities and welcome people interested in getting to know the university's institutions and spaces. Interested people do not need to register, just go to the university on the published date. The project takes place once a year, every year, I participated in 2022 and 2023. |
| 2023        | <b>Production of sourdough breads with native fruits from the Pampa biome</b> - This is my colleague Tainan's master's research project. It involves the use of two native fruits from the state of Rio Grande do Sul (Brazil), butiá (Butia spp.) and uvaia (Eugenia pyriformis). My   |



|      | contribution was to carry out proximate composition analyses, assist in the application of sensory analysis and provide technical and scientific support in carrying out analyzes of the technological properties of the breads.  |
|------|---|
| 2023 | <b>Myths and truths about food</b> - University extension project of the Institute of Food Science<br>and Technology of the Federal University of Rio Grande do Sul, whose objetive was to<br>disseminate scientific information abouts foods through social media. Posts were made via<br>Instagram and Facebook, 3 times a week, always accompanied by scientific references. |

#### PATENTS

| Patent |  |  |
|--------|--|--|
|        |  |  |

#### CONGRESSES AND SEMINARS

| Date | Title | Place |
|------|-------|-------|
|      |       |       |

#### PUBLICATIONS

Books

Articles in reviews

#### Congress proceedings

Maximization of enzymatic hydrolysis of feather meal with Bacillus sp. P45 protease, Abstract, VIII International Conference on Food Proteins and Colloids, School of Food Engineering/UNICAMP, Campinas, 2020

#### OTHER INFORMATION

Organization of scientific events, including: VI Academic Week of the School of Chemistry and Food, V Academic Week of the School of Chemistry and Food, V Workshop in Food Science and Technology. In addition to several lectures, short courses, forums and meetings during the time I was a member of the Tutorial Education Program in Chemical Engineering

Participation on the examination board of the bachelor's thesis "Proposal for a mixture of gluten-free ingredients to replace wheat flour in chocolate cake: evaluation of physical and sensory aspects" of the food engineering student Aline Mattos Fontana.

Participation on the examination board of research projects at the 37<sup>th</sup> and 38<sup>th</sup> MOSTRATEC (International Science and Technological Fair) in 2022 and 2023, respectively. The fair take place on the city of Novo Hamburgo, Rio Grande do Sul, Brazil.

The work developed during my master's degree generated two high quality research articles, which are being considered for publication in international journals: "Production of protein-enriched bread through the incorporation of the black soldier fly (Hermetia illucens) larvae" and "Jamaican field cricket



(Gryllus assimilis) powder for wheat bread enrichment: techno-functional and physicochemical properties"

Declarations given in the present curriculum must be considered released according to art. 46 and 47 of DPR n. 445/2000.

The present curriculum does not contain confidential and legal information according to art. 4, paragraph 1, points d) and e) of D.Lgs. 30.06.2003 n. 196.

Please note that CV WILL BE PUBLISHED on the University website and It is recommended that personal and sensitive data should not be included. This template is realized to satisfy the need of publication without personal and sensitive data.

Please DO NOT SIGN this form.

Place and date: Porto Alegre, 11/27/2023