

**Title:** Postdoctoral Fellowship - Biogeochemical Modelling in integrated crop-livestock systems

**Location:** Interdisciplinary Center for Energy Planning - NIPE/UNICAMP, Campinas, Brazil

**Job description:**

The successful candidate will parameterize, test and apply biogeochemical model simulations (such as Daycent, AgroIbis, G'Day) in a crop-livestock environment considering coupled carbon-nitrogen cycles at local and regional scales. The successful candidate will parameterize existing process-based models with infield measurements data at an experimental farm located in Caiuá, SP-Brazil.

The post-doc is part of the FAPESP - NWO Research "Monitoring Integrated Crop-livestock Systems Through Remote Sensing and Precision Agriculture for more sustainable Production-Toward Low Carbon Agriculture (FAPESP 2017 / 50205-9)". Several laboratories and institutions collaborate in this project, such as NIPE and School of Agricultural Engineering of Unicamp, Embrapa Agricultural Informatics and the Delft University-Netherlands.

The post-doc will be under the supervision of Dr. Rubens Lamparelli, Dr. Santiago Vianna Cuadra and Dr. Gleyce Figueiredo and will collaborate with different researchers involved in the project.

The fellowship is related to one year with a potential extension for another year and includes a tax-free monthly stipend of R\$ 7.373,10, plus 15% of the yearly value for research-related expenses. All conditions and salary related to this FAPESP post-doc are listed in: <http://www.fapesp.br/en/postdoc>

**Desired skills and competence**

- A Ph.D. in earth system science, ecophysiology, agronomy or related discipline.
- Previous experience in process-based modelling of soils, vegetation growth or similar complex models, confirmed by publications in this subject area.
- Working knowledge and experience on coding languages C++, R, etc.
- Minimum qualifications include a demonstrated ability to publish peer-reviewed papers, effective oral communication skills, and to work well in a collaborative team environment.
- Knowledge on GitHub platform will be a bonus.
- Experience with analysis of remotely sensed data will be a bonus
- Strong interpersonal skills and adequate fluency in English will be a bonus
- Full-time work, 1 year, starting in March 2020, with the possibility of an extension.
- All conditions and salary related to this FAPESP post-doc are listed there: <http://www.fapesp.br/en/postdoc>

## **Selection process**

Inquiries should be directed by email to Dr. Paulo Graziano (graziano@unicamp.br) with a copy to NIPE project manager (Johinislán Prates, jprates@unicamp.br), including “FAPESP project 2017/50205-9 post-doc PD3” in the subject line.

Send a cover letter stating your professional experiences and how you would satisfy the minimum qualifications (2 pages max), a CV, and two recommendations letters (all documents in pdf format).

**Submissions by email until March 16<sup>th</sup>, 2020.**