



INTERNATIONAL CALL

The IPEN Institutional Developing Program funded partially by FAPESP-PDIP addresses the need of a **post-doctoral fellow** in Laser Plasma Acceleration of particles, to be realized at IPEN, in the program

“Laser particle acceleration in the program Scientific, technological and infrastructure Developments in radiopharmaceuticals and entrepreneurship to the service of health”.

The project funded by FAPESP grant **2017/50332-0** opens a vacancy for **fellow Post-Doctorate** by this Notice.

This project team consists of a group that includes researchers from IPEN, USP, ITA, and an international collaboration with the University of Nebraska-Lincoln, whose lines of research are focused on the development of compact laser particle accelerators (electrons and protons), and the radiations induced by these bundles for use in medicine. The candidate should have experimental familiarity in one or more areas of this activity, which involves the following areas:

- lasers or;
- lasers induced plasma, in solids, liquids or gases or;
- Experience in production of gas and liquid targets for plasma with density profile controlled and adjustable, measurable or;
- Target preparation with adjustable and controlled density profile or;
- Detection of the beams of particles formed in these laser-plasma interaction with their characterization of divergences and dispersion of energy.

In particular, it is intended to accelerate electrons and/or protons to achieve kinetic energies of a tens of MeV, being this the main objective of this stage of the research. Detection methods should be developed.

The results of this research including the establishment of detectors and equipment dedicated to the experiments, will be presented in the form of seminars, internal and in conferences, symposia and other scientific forms of presentation, as well as the writing of scientific articles and patents in order to publicize the results of the research.

The postdoc fellowship is designed to develop a specific project on the theme: **Laser proton/electron accelerators and their applications.**



INTERNATIONAL CALL

FELLOWSHIP CONDITIONS

The opportunity is open for Brazilian and foreign candidates. It is recommended that the applicant holds a PhD in areas that use lasers and associated instrumentation with a history of publication and good performance in the area; good spoken and written English is needed.

The work will be developed at Instituto de Pesquisas Energéticas e Nucleares - IPEN, in the campus Cidade Universitária of the city of São Paulo, Brazil.

The selected person will receive a scholarship that corresponds to an amount of **R\$ 7.174,80**, paid monthly.

The grant also includes an installation assistance for researchers who need to move to the city of São Paulo, Brazil, home of the leader institution of the project, located in Cidade Universitária, USP campus, city of São Paulo, Brazil.

The grant duration is 18 months.

For implementation of the fellowship a dedication of 40 hours/week during business hours will be required.

Details on Aid Installation and more information about the scholarship:
www.fapesp.br/bolsas/pd.

One person will be selected for the scholarship.

DOCUMENTATION FOR REGISTRATION

1. CV Lattes (www.lattes.cnpq.br) or Curriculum Vitae (for foreigners).
2. MyCitation (Google Scholar).

CONTACT AND DEADLINE REGISTRATION

The applicant must submit the documentation above via e-mail to: egp02@ipen.br with the title: "**Grant - Post-doctoral fellowships – LASER - LPA**".

The deadline for submission is July 9th, 2021 until 17h (BRST). Subsequent entries will not be accepted.

For questions and additional information about the Research Program, please contact Dr. Nilson Dias Vieira Jr. at nilsondv@ipen.br.

SELECTIVE PROCESS



INTERNATIONAL CALL

The selection of candidates will be held by analysis of the curriculum, publications, profile and the candidate's career, as well as its adherence to the project's research lines will be evaluated. To this end, the applicant must submit a brief project with a maximum of 2 pages, A4 size, 1.5 spacing and font size 11, describing how their past activities will contribute to the goals of this Laser acceleration project.

DISCLOSURE OF RESULTS

The result will be announced on the IPEN website on **July 20^h, 2021**

The result will be announced in order of classification ranking in the selection process. The ranking of candidates will be considered for the waiting list effect.

If the candidate with the highest score does not present conditions for implementation of the grant, the second will be called and so on until the vacancy is filled.

The decision of the Selection Committee will be taken on a definitive basis and must not be appealed.

Other information: <http://www.fapesp.br/opportunidades> .