**Postdoctoral position in Nanomaterials**

The Project "Scientific, Technological Capacity and Infrastructure in Radiopharmacy and Radiation at the service of Health" process FAPESP nº process 2017/50332-0 opens a vacancy for one Postdoctoral Fellow by means of this Notice.

The project, funded by FAPESP, has a team consisting of a multidisciplinary group of researchers from Nuclear and Energy Research Institute (IPEN) as well as from other Brazilian institutions. The objective of the project is the investigation of new materials and methods for application in the health area. The researchers involved in the project work in different fields of knowledge and apply several methodologies in their investigations.

The candidate will work in one of the main research subprojects entitled "Magnetic nanoparticles doped with radiation-emitting elements for intracellular treatment of tumors." In this subproject, magnetic nanoparticles will be synthesized and innovatively characterized experimentally by using nuclear techniques to measure hyperfine interactions and neutron diffraction.

It is essential to have previous knowledge and experience in nanostructure synthesis by chemical methods and characterization of magnetic nanoparticles, X-ray diffraction and hyperfine interactions. It is desirable that the candidate has some knowledge in characterization by physical techniques (Transmission and scanning electron microscopy, neutron diffraction and others).

The postdoctoral fellow (PD) should conduct theoretical and / or empirical research in the program, as well as other regular activities, such as the presentation of seminars, the preparation of papers and the dissemination of research results. From the postdoctoral research, the candidate should also produce articles to be submitted in journals of high academic impact, as well as present them in conferences.

**CONDITIONS OF THE FELLOWSHIP**

The work will be developed at the Research Reactor Center (CRPq) of IPEN. The vacancy is open to Brazilians and foreigners. The Post-Doctoral Fellowship will be paid by FAPESP (7,373.10 Brazilian Reais per month). An additional Technical Reserve of PD Grant equivalent to 15% of the annual value of the scholarship will be also available and it is intended to meet unforeseen expenses directly related to the research activity. The scholarship will be awarded for **18 months**. For the implementation of the scholarship, a dedication of 40 hours per week during business hours will be required.

**REGISTRATION DOCUMENTATION**

1. Complete Curriculum Vitae (maximum 3 pages including a list of publications)

2. Printing of MyCitation (Google Scholar) and Web of Science pages;

3. Work plan, in Portuguese or English, with a maximum of 5 (five) pages, related to the subject matter of this project. The work plan should include introduction, objectives, methodology, method of analysis of results, conclusions and bibliography.

**CONTACT AND DEADLINE**

The candidate should send the documentation via email to: ***egp01@ipen.br*** with the title: **"Bolsa - PD Institutos - CRPq"**.

The deadline for submission of entries will end on **05/10/2018** until 17h. Subsequent registrations will not be accepted.

For clarification and additional information about the Research Program, please contact us at carbonar@ipen.br .

**SELECTIVE PROCESS**

Candidates will be selected by curriculum vitae evaluation, considering the candidate's publications, profile and trajectory, as well as the scientific quality of the proposal and its adherence to the project's research lines.

**DISCLOSURE OF RESULTS**

The result will be announced on IPEN's website on **October 19th, 2018**.

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

If the best classified candidate does not present the necessary conditions for the implementation of the scholarship, the second place will be called, and so on, until the filling of the vacancy.

The decision of the Selection Committee will be taken definitively and will not be appealed.
The selected candidate is expected to start work on **December 1st, 2018**.

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