

Scientific Initiation Studentships

Applications are open for one Scientific Initiation Studentships, within the framework of project/R&D institution PARADiSE / IST-ID, 1801P.01119, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific Area: Plasma Physics and Nuclear Fusion

Admission Requirements:

- a) *To be enrolled at a professional higher technical course, at a bachelor degree, at an integrated master or master degree, or to have a bachelor degree and be enrolled at a course that does not award an academic degree and it is integrated in the educational project of a higher education institution, performed in association or cooperation with one or several R&D units;*
- b) *not to exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions;*
- c) *not to have held any other fellowship directly or indirectly funded by FCT.*

Workplan: Develop methods of analysis and development of kinetic schemes for low-temperature plasmas based on machine learning techniques.

Legislation and Regulations: Statute of Scientific Research Fellow, approved by Law nr. 40/2004, of August 18, as worded by Decree-Law nr. 123/2019, of August 28; FCT Regulation for Research Studentships and Fellowships, available on <https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2019.pdf> and <https://dre.pt/application/file/a/127230968>.

Workplace: The work will be developed at Instituto de Plasmas e Fusão Nuclear of Instituto Superior Técnico, under the scientific supervision of Professor Vasco Guerra

Duration: The research fellowship(s) will have the duration of 6 months. It's expected to begin in February 2024, and may be eventually renewed up to the maximum of 6 months.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (https://www.fct.pt/wp-content/uploads/2023/02/Tabela-de-Valores-SMM_2023.pdf), the amount of the monthly maintenance allowance is € 541.12, being the payment method an option of the Fellow by Wire Transfer/Check.

Selection methods: The selection methods will be the following: curriculum evaluation, motivation letter and reference letters, classified on a scale from 1 to 5, with the respective weights of 40%, 30% and 30%. From this evaluation an intermediate classification is obtained and a shortlist of the candidates to interview, from which will be selected the candidate to be hired, is defined. The interviews will be held in English via zoom, and will be classified from 1 to 5. The final mark is obtained from a weighted average of the intermediate classification and the interview, with the respective weights of 60% and 40%. Experience with low-temperature plasmas and with machine learning will be positively valued.

Composition of the selection Jury: Vasco Guerra, Tiago Silva e Pedro Viegas

Announcement/ notification of the results: The final evaluation results will be communicated to all applicants by email.

Deadlines and procedures of complaint and appeal. A complaint may be lodged from the final decision within 15 working days, or an appeal to the Executive Board of IST-ID within 30 working days, both counted from the respective notification

Application deadline and formalization: The call is open from January 24 until February 6, 2024.

It is mandatory to formalize applications with the submission of the following documents: i) B1 Form – Fellowship application (<https://ist-id.pt/concursos/bolsas/>); ii) *Curriculum Vitae*; iii) academic degree certificate, where applicable; iv) proof of enrollment at an academic degree course or at a course that does not award an academic degree; v) motivation letter; vi) declaration on honour that the applicant does not exceed with this contract, including the possible renovations, an accumulated period of one year in this type of studentship, continuously or with interruptions, and has not held any other fellowship directly or indirectly funded by FCT.

Applications must be submitted to the email: carla.reis@tecnico.ulisboa.pt