

The Polytechnic Institute of Leiria (IPLeiria) - School of Technology and Management (ESTG) is now opening applications for a scientific research fellowship (BI), in the following terms:

**Project:** Tooling 4G – Advanced Tools for Smart Manufacturing (Mobilizador n.º 24516).

**Project coordinator:** Carlos Fernando Couceiro de Sousa Neves.

**Fellowship scientific supervisor:** Hugo Filipe Costelha de Castro.

**Scientific area:** Electrical and Computer Engineering.

**Type:** Scientific Research Fellowship (BI).

**Goals:** Development of a monitoring and sensing system for CNC machines in the scope of Industry 4.0.

**Object:** Applied research with hardware and software development and integration for monitoring and sensing systems.

**Duration:** 12 months, with the possibility of renewal. The fellowship is due to start in October 2018.

**Goals:** Implementation of communication systems with CNC machines. Additional sensorization of CNC machines. Providing data through an industrial protocol, namely OPC-UA. Experimental development and test of an integrated system, with a final application on a demonstrator. Producing documentation detailing the study and the obtained results.

**Recipients:** Holders of an undergraduate degree in Computer and Electrical Engineering or related fields.

**Profile:** Experience in developing hardware/software for electronic systems. Good knowledge of computer science tools for developing software and hardware for electronic systems and communication with industrial systems. High autonomy, strong motivation to work in a team, will to learn, create new knowledge, and evolve with the project.

**Workplace:** School of Technology and Management of the Polytechnic Institute of Leiria (ESTG-IPLeiria).

**Financing entity:** Co-funded by the COMPETE 2020 programme, PORTUGAL 2020, European Union, through the European Regional Development Fund.

**Financial details:** Monthly maintenance stipend of €745, according to the FCT Regulation for Studentships and Fellowships ([www.fct.pt/apoios/bolsas/valores](http://www.fct.pt/apoios/bolsas/valores)), and the Regulation of Scientific Research Grants of IPLeiria, plus the Voluntary Social insurance (optional), under the conditions defined in the Research Fellowship Holder Statute, as well as the Personal Accident Insurance.

**Periodicity:** Monthly.

**Payment:** Check or bank transfer.

**Scheme:** Exclusivity, according to the applicable legislation.

**Evaluation:** The evaluation of the applications is based on the curriculum vitae analysis, and a possible interview, taking into account the required profile and the evaluation criteria.

**Evaluation criteria:** a) Academic qualifications (AQ): final undergraduate degree grade; b) Professional/Academic experience (PE); c) Interview (I); with the final score (FS) =  $[AQ \cdot 0.45 + PE \cdot 0.2 + I \cdot 0.35]$ . If the jury decides not to do the Interview, which must be duly justified in the minute, the final score is:  $FS = [AQ \cdot 0.6 + PE \cdot 0.4]$ . The evaluation and ranking criteria are part of the jury's minute, which can be consulted upon request.

**Jury:** Professors Hugo Filipe Costelha de Castro (president), Carlos Fernando Couceiro de Sousa Neves and Luís Manuel Conde Bento (effective members); Hugo Miguel Cravo Gomes and João da Silva Pereira (substitute members).

**Renewal:** According to article no. 27 of the Regulation of Scientific Research Grants of IPLeiria.

**Applications deadline:** From 12<sup>th</sup> to 26<sup>th</sup> of September, 2018.

**Applications:** Applications are made by presenting a duly filled, dated and signed application form (available at [www.ipleiria.pt](http://www.ipleiria.pt)), with the following documentation attached:

a) Documents attesting that the candidate meets the requirements for this type of fellowship, namely academic qualifications certificates (with the final grade, and the classification obtained in every subject). Candidates holding foreign qualifications must prove the registration of the academic degree, under the terms of Decree-Law no. 341/2007, dated October 12<sup>th</sup>, or, when applicable, the equivalence/recognition of the academic degree, under the terms of Decree-Law no. 283/83, dated June 21<sup>st</sup>;

b) Curriculum Vitae;

c) Valid I.D. number;

d) Declaration, in the application form, that the candidate does not simultaneously benefit from any other fellowship for the same purpose or, if they do, proof that there is an agreement between the financing entities;

e) Any other document which the candidate considers relevant for the application evaluation.

**Submission of applications:** The applications can be delivered in person at ESTG-Leiria; sent by mail (registered letter with return receipt requested) to Escola Superior de Tecnologia e Gestão de Leiria, Campus 2, Morro do Lena – Alto do Vieiro, Apartado 4163, 2411-901 Leiria (until the applications deadline); or sent by e-mail to [estg@estg.ipleiria.pt](mailto:estg@estg.ipleiria.pt).

**Notifications:** Up to 10 working days after the selection, by e-mail with delivery receipt, or personal notification of the candidates. Following the procedure for awarding the fellowship, if the number of approved candidates is higher than the number of fellowships to be granted, an internal recruitment reserve is created, and can be used if the selected fellow withdraws, during the project's eligibility period.

**Contract and final reports:** Templates approved by the IPLeiria.

**Information and publicity of the granted funding:** According to article no. 30 of the Regulation of Scientific Research Grants of IPLeiria.

**Applicable legislation and regulations:** Research Fellowship Holder Statute, approved by Law no. 40/2004, dated August 18<sup>th</sup>, published in Series I-A of the *Diário da República* no.194, amended by Decree-law no. 202/2012, published in Series I of the *Diário da República* no.165, dated August 27<sup>th</sup>, Law no. 12/2013, published in Series I of the *Diário da República* no.20, dated January 29<sup>th</sup>, and Decree-law no. 89/2013, dated July 9<sup>th</sup>, published in Series I of the *Diário da República* no.130; FCT Regulation for Studentships and Fellowships (<https://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2018.pdf>);

Regulation of Scientific Research Grants of IPLeiria, Regulation no. 506/2017, published in Series II of the *Diário da República* no.187, dated September 27<sup>th</sup>.

Leiria, September 12<sup>th</sup>, 2018.

**President of the Polytechnic Institute of Leiria  
Rui Filipe Pinto Pedrosa**

Cofinanciado por: