

## PUBLIC NOTICE

### Research Fellowship (BPD) Position University of Beira Interior - Project POCI-01-0145-FEDER-029494

University of Beira Interior is opening a position for one post-doctoral Research Fellowship (BPD) within the framework of the Project POCI-01-0145-FEDER-029494 - "Efficient and Reliable DC Electricity Distribution at Home and Offices", under development at the R&D Unit "CISE - Electromechatronic Systems Research Centre". The fellowship is intended to the development of research work in the scope of "DC Microgrid Protection Systems". The activities will be conducted at CISE - Electromechatronic Systems Research Centre, under the following conditions:

**Reference:** "BPD - Ef&ReIDC@HomO"

**Scientific field:** Electrical Engineering.

**Admission requirements:** 1) PhD degree in Electrical Engineering. 2) Strong background and orientation for the development of theoretical and experimental research work in the field of DC Microgrid Protection Systems, or similar. 3) Solid knowledge of written and spoken English.

**Work plan:** The research activities aim to implement a smart protection system, which can deal with the problems of the DC protection, and provide selectivity and coordination among cascaded protection devices, isolating the faulted component without disrupting the operation of the entire DC system. The list of tasks to carry out include:

- Literature review on solid-state circuit-breakers and DC microgrid protection systems;
- Development and prototyping of solid state circuit-breakers;
- Development of the DC microgrid protection systems - modelling and simulation;
- Laboratory implementation and validation of the DC microgrid protection systems;
- Promotion and dissemination of the research activities and major achievements through the elaboration of scientific reports/papers.

Cofinanciado por:



**Applicable laws and regulations:**

Law no. 40/2004, of August 18, amended by Decree-Law no. 202/2012, of August 27, by Decree-Law no. 233/2012, of October 29, by Law no. 12/2013, of January 29 and Decree-Law no. 89/2013, of July 9 (Statute of the Scientific Research Grant), as well as the Regulation of Research Grants of the Foundation for Science and Technology IP (FCT) in force ([www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2018.pdf](http://www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2018.pdf)).

**Working place:** The work plan will be developed at CISE - Electromechatronic Systems Research Centre, under the supervision of Professor Dr. Antonio J. Marques Cardoso and Professor Dr. Luís Manuel Ramos de Oliveira.

**Duration of the research fellowship:** The research fellowship contract will last 18 months, and it is foreseen to start in September 2018.

**Value of monthly maintenance stipend:** The fellowship amount corresponds to € 1.495,00, according to the table of stipends values established by FCT, I.P. in Portugal (<http://www.fct.pt/apoios/bolsas/valores.phtml.en>). The grant is paid at the end of each month by bank transfer, plus social security (voluntary social insurance, first level contributions).

**Selection criteria:** Candidates will be evaluated based on their *Curriculum Vitae*. The evaluation parameters, the corresponding weighting, scoreboard and final score will be included in the Jury Report, taking into account the scientific, technical and professional curriculum, and corresponding adequacy to the work plan. The evaluation will result in a numeric classification comprised between 0 and 20 (classification rounded to the decimal places). The jury can decide on the need for candidate interviews. In the event that none of the Candidates satisfy the necessary requirements, this call will be closed without selection of any of the Candidates.

**Composition of the selection Jury:**

President: Professor Dr. Antonio J. Marques Cardoso;

Full members: Professor Dr. Carlos Manuel Pereira Cabrita, Professor Dr. Davide Sérgio Baptista da Fonseca;

Substitute member: Professor Dr. Jorge Oliveira Estima.

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**Form of disclosure / notification of results:** The final evaluation results will be announced, through sorted list of final classification, fixed in public and visible places at the University of Beira Interior. Following the disclosure of the results, candidates will be notified via email. The candidates have a maximum period of 10 working days after that date for prior hearings.

**Deadline for submission of applications and formalization of the application:** The call will be open between August 16<sup>th</sup>, 2018 and August 29<sup>th</sup>, 2018.

All applications must be formalized by the candidates through the submission of an application letter, along with the following documents: *Curriculum Vitae*, list of publications, copy of the PhD degree certificate, and other documents that might be considered relevant to support the application.

Applications should be sent, preferably, to the email address [cise@ubi.pt](mailto:cise@ubi.pt), in pdf format, until 23h59m (Lisbon Time) of August 29th, 2018 or, alternatively, sent via physical mail, to the following address:

Professor Dr. Antonio J. Marques Cardoso  
Universidade da Beira Interior  
Laboratório de Sistemas Electromecatrónicos  
Depto. de Engenharia Electromecânica  
Calçada Fonte do Lameiro  
6201-001 Covilhã, Portugal

Further clarifications may be requested using the following email address: [cise@ubi.pt](mailto:cise@ubi.pt)

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