

CALL FOR ONE RESEARCH FELLOWSHIP FOR AN MSc HOLDER

Applications are open for one research fellowship for an MSc, within the framework of project “ANIMAL FUTURE” (IST-ID), ref. SusAn/0001/2016, financed by national funds through FCT/MCTES (PIDDAC), under the following conditions:

Scientific area: Environmental Engineering

Admission Requirements: Master’s degree*, with a final grade of at least 16 out of 20 (2nd cycle). Interest in pursuing a scientific career at the PhD level, and commitment to prepare a proposal for PhD funding by Fundação para a Ciência e Tecnologia during the period of the grant, with the support of the supervisors. English writing skills and experience are necessary for this position. Experience doing research or other relevant professional experience after completion of the Master’s degree in the scientific area of the work plan described will also be valued. Experience with remote sensing data acquisition, management and analysis will be given preference. Experience or academic familiarity with machine learning tools will also be a plus. Scientific production in conference proceedings or peer-reviewed journals will be a plus. Preference will be given to candidates who, additionally to the previous profile, demonstrate competencies and knowledge in programming languages (e.g. Matlab, Python or equivalent).

*Applicants with foreign degrees shall have the degree registered or recognized/with equivalence in Portugal.

Work plan: The work is integrated in the activities of the European project “Animal Future” and will be carried out in collaboration with the MARETEC/LARSyS team in charge of research activities within the thematic area “Grazing for Sustainability”. Those activities involve modelling agricultural systems, in particular grazing-based animal production systems and the effects of land use and climate change. The candidate will assist the development of mass balance models for livestock, plants and soil at regional (Alentejo) and global levels. The candidate will (1) perform field work for data acquisition in farms in Alentejo; (2) compile and aid in the processing of remote sensing data and use it for modelling; (3) adapt and develop models, working on such features as the simulation of the effects of management practices, particularly for pasture systems; (4) use models to assess issues related to the sustainability of animal production; and (5) support the writing of scientific papers.

Legislation and Regulations: Lei n.º 40/2004, de 18 de Agosto (Estatuto do Bolseiro de Investigação Científica) (Statute of Scientific Research Fellow, approved by Law n. 40/2004, of August 18); Regulamento de Bolsas de Investigação da Fundação para a Ciência e a Tecnologia (Research Fellowships Regulation of the Foundation for Science and Technology in force) (www.fct.pt/apoios/bolsas/docs/RegulamentoBolsasFCT2018.pdf); Regulamento de Bolsas de investigação do IST-ID (Research Fellowships Regulation of IST-ID).

Workplace: The work will be carried out at MARETEC/DEM, Instituto Superior Técnico, under supervision from Doctor Ricardo Teixeira and co-supervision from Professor Tiago Domingos.

Duration: The research fellowship will have the duration of 12 months. It is expected to begin in April 2019 and may be eventually renewed.

Monthly maintenance allowance: According to the values for Research Fellowships awarded by FCT in Portugal (<http://www.fct.pt/apoios/bolsas/valores>), the amount of the monthly maintenance allowance is 980 €, being the payment method an option of the Fellow by Wire Transfer/Check. Voluntary Social Security paid by the fellow will be reimbursed by IST-ID (but only in the first level).

Selection criteria: The methods used for selection will be the following: 1 – curricular assessment (score between 1 and 20, where 20 is the maximum): 80%, where 50% are dedicated to the classification obtained in the Master’s degree and relevance of other educational activities, as well as relevant professional experience (particularly remote sensing/machine learning), 20% for skills in programming and modelling, and 10% for experience in scientific English writing and papers published; 2 – interview (which will only take place in case of a draw between the best scored candidates; score between 1 and 20, where 20 is the maximum): 20%. If there are no candidates that score more than 60% under Method 1, then no candidate will be hired.

Composition of the Selection Jury: President: Prof. Tiago Morais Delgado Domingos; Members: Prof. Tânia Alexandra dos Santos Costa e Sousa and Prof. Ramiro Joaquim de Jesus Neves. Substitute: Inv. Aux. Marcos Duarte Mateus.

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

Application deadline and formalization: The call is open from 10 until 24 April 2019.

It is mandatory to formalize applications with the submission of the following documents: B1 Form – Fellowship application (<http://ist-id.pt/documentos/bolsas-de-investigacao/>), *Curriculum Vitae*, academic degree certificate and motivation letter. Applications must be submitted to nuno.sarmento@tecnico.ulisboa.pt.