UNIVERSIDADE DE COIMBRA

CALL FOR RESEARCH GRANT

A call for one research fellowship is open, in the framework of the TOOLING4G project "Advanced Tools for Smart Manufacturing" (reference: TOOLING4G/2016/24516), project in consortium including the University of Coimbra (UC), 20 companies in the areas of molds and injection of plastics, and 10 non-corporate R&D institutions, higher education institutions, and technological interface centers, co-financed by the European Regional Development Fund, through Portugal 2020 (PT2020), and by the Competitiveness and Internationalization Operational Programme (COMPETE 2020), and Lisbon Regional Operational Program 2014/2020 (LISBOA2020, in the following conditions:

Scientific area: Electrical and Computer Engineering, Informatics Engineering, Engineering Physics, or a related area.

Admission requirements: Master/MSc in the area of Electrical and Computer Engineering, Informatics Engineering, Engineering Physics, or a related area.
Preferential conditions: knowledge on real-time systems, computational intelligence, intelligent control, control, digital control, computer programming; knowledge in the subject areas of the activity object of the fellowship.
Candidates with foreign academic diplomas are obliged to present records of the equivalence/recognition of such diplomas and the conversion of the respective final notes to the Portuguese classification scale (whenever a final classification is attributed with the foreign diploma), issued by the Directorate-General for Higher Education or by a Portuguese public higher education establishment (regulated by Decree-Law no. 341/2007, of 12 October) or, in alternative, present the document of equivalence/recognition of such foreign qualifications to the corresponding Portuguese qualifications, issued by a Portuguese public higher education establishment (regulated by Decree-Law no. 283/83, of 21 June).

Work plan: Research and development activities in real-time systems, computational intelligence and control, in the domain of the molds and plastic injections industries, for: (i) Development of an application for monitoring and control of the mold; (ii) Development of an application for monitoring and control of the machines and peripherals; (iii) Development of algorithms for the prediction of defects in the injected products and failures in the tools, as well as their corresponding correction; (iv) Development of algorithms for the detection of failures that may occur in the injection process as well as in all the peripherals.

Regime: The attribution of the fellowship does not generate or entitle a relation of a legal-labour nature, and the fellowship is undertaken in an exclusive dedication regime. The fellow is granted with the Fellow Statute of the UC, in its current wording, according to the Statute of the Scientific Research Fellow, and according to the Regulation of Research Grants of the Fundação para a Ciência e a Tecnologia, I.P., both in their current wording.

Location: Department of Electrotechnical Engineering and Computers, Faculty of Science and Technology – University of Coimbra, and partner facilities as needed.

Duration: 6 months.

Renewal: Eventually renewable, generally in periods of 6 months (or less), limited to a total of 21 months.

Scientific orientation: Prof. Rui Alexandre de Matos Araújo.

Financial conditions: The amount of the grant is € 980,00 corresponding to the monthly compensation stipulated in the FCT table (https://www.fct.pt/apoios/bolsas/valores.phtml.en), plus social security (*Seguro Social Voluntário*, first level contributions) and personal accidents insurance. The payment will be made by bank transfer. This amount will not be increased during the entire period of the grant duration.

Selection methods: Curricular evaluation (70%) and interview (30%) of the 10 candidates best classified in the curricular evaluation part. In case no candidate has an adequate profile (global evaluation under 50%), the fellowship will not be granted.

Selection criteria: The curricular evaluation will focus on the following criteria: (1) Curricular elements presented, including the adequacy of the profile and merit of the candidate to the needs of the project (40%); (2) Experience and knowledge in the area of the work plan and desired profile: previous experience in works and/or research and development projects related to the research and development program to be developed; knowledge on real-time systems, computational intelligence, intelligent control, control, digital control, computer programming; knowledge in the subject areas of the activity object of the fellowship (30%). In the interview, motivation, commitment, perseverance, adequacy of the profile and merit of the candidate to the needs of the project, and experience and knowledge in the area of the work plan and desired profile will be evaluated (30%).

Jury responsible for selection: Prof. Aníbal Traça de Carvalho Almeida, Prof. Urbano José Carreira Nunes, Prof. Rui Alexandre de Matos Araújo, Dr. Jérôme Amaro Pires Mendes.

Formalization of application: Applications must be formalized, obligatorily, by sending the following elements: (1) Letter of presentation, application and motivation; (2) Curriculum Vitae (CV) of the applicant; (3) Copy of the certificate(s) of academic qualifications with the mean overall final classification in the courses (e.g. Grade Point Average, GPA). The CV should include: (i) contact information, (ii) Academic qualifications (including, for each course, a complete list of the concluded courses/subjects/curricular units and their classifications), (iii) List of scientific publications, (iv) Main

projects where the applicant has participated, and working experience, (v) other information considered relevant.

Applications submission: Applications should be sent in PDF format by email to: rui@isr.uc.pt.

Submission of applications: 12/04/2018 a 26/04/2018.

Publication date: 11/04/2018.

Submission deadline date: 26/04/2018.

Additional information: The evaluation results will be announced within 90 days after the end of the applications submission deadline, by notifying the applicants via email. After the announcement of the results, candidates are considered automatically notified to, if they wish to do so, comment on the results on a preliminary hearing period within 10 days after that date. After this, the selected candidates will have to declare in writing their acceptance. Unless a justification worthy of consideration is presented, if the declaration is not submitted within the referred period, it is considered that the candidate waivers the grant. In case of resignation or withdrawal of the selected candidate, the next candidate with the highest evaluation score will be notified immediately.