







# CALL FOR APPLICATIONS FOR ONE POST-DOCTORAL RESEARCH GRANT FOR THE PROJECT "R2U TECHNOLOGIES" AT THE FACULTY OF ARCHITECTURE OF THE UNIVERSITY OF PORTO - FAUP, (Ref<sup>a</sup> 2023/5)

The Faculty of Architecture of the University of Porto hereby opens this Call for Applications for one Post-Doctoral research grant for the project "R2U Technologies" at the Faculty of Architecture of the University of Porto, financed by the PRR, Resilience and Recovery Plan, financed by the European Union, which is ongoing at the Faculty of Architecture of the University of Porto (FAUP), according to the following conditions:

# 1. Research field / Scientific area:

Architecture

# 2. Admission requirements:

All adults with the following requirements, guaranteed by documents, may apply for this scholarship:

- a) PhD in Architecture;
- b) Hold a doctoral degree obtained in the three years prior to the application submission date;
- c) Having carried out the research work that led to the attribution of a doctoral degree in an entity other than the host institution;
- d) The scholarship holder does not exceed, with the conclusion of the scholarship contract in question, including possible renewals, an accumulated period of three years in this type of scholarship, followed by interpolated ones.

If the candidate holds a doctoral degree awarded by a foreign higher education institution, it must be recognized by a Portuguese higher education institution, in accordance with the provisions of article 25 of Decree-Law no. 66/2018 of 16 August, which approves the legal regime for the recognition of academic degrees and higher education diplomas awarded by foreign higher education institutions and Article 4 (2) (e) of Decree-Law no. 60/2018 of 3 August, and any formalities established therein be fulfilled up to the date of the contracting act.

## 3. Preferred requirements:

- a) PhD in architecture on the field of digital transformation (preferred), and/or modular construction, and/or sustainability;
- b) Practical skills in the domain of digital technologies relevant to the theme of the project and activities to be developed.
- c) Immediate availability and flexibility of schedules (to be indicated in the letter of motivation);









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# 4. Work Plan:

As part of the team of the Digital Fabrication Lab (DFL) research group of the CEAU, the selected researcher will follow the development of the tasks of the R2U Technologies project assigned to FAUP. Under the guidance of the Project Coordinator, the collaboration will be focused in the following activities:

- a) research and development of a methodology and system for assessing and communicating the quality of modular construction projects from the perspective of the New European Bauhaus;
- b) assistance to the coordination and operation of the simulation technology resources (virtual and augmented reality) of the DFL, supporting the planning, installation and use of relevant equipment;

In addition, the grant holder will collaborate with the project team in supporting:

- a) research and survey work;
- b) carrying out practical experiences involving design, analysis and digital fabrication;
- c) research and development of the modular construction project DFL Vo Hut;
- d) fundamental research of relevant digital technologies;
- e) documentation, dissemination and transfer of research knowledge, through the production of articles, communications and content for electronic platforms, organization of events, guidance and scientific training.

# 5. Applicable Legislation and Regulations:

The present call is governed by the FCT Regulations for Research Fellowships approved by the Regulation no. 950/2019 (published in the Series II of the DR, of 16th December) or University of Porto Regulations for Research Fellowships approved by the Regulation n.<sup>o</sup> 184/2021 (published in the Series II of the DR, of 3<sup>rd</sup> March) and by the Research Fellowship Holder Statute (approved by Law no. 40/2004, of 18th of August, in its current version)

# 6. Workplace:

The work will be carried out at the Faculty of Architecture of the University of Porto, in its Digital Fabrication Laboratory (DFL), or in other places necessary for the execution of the work plan, under the scientific guidance of Professor José Pedro Sousa, Coordinator at FAUP of the R2U Technologies project.

# 7. Duration:

The grant will last for 12 months. The scholarship contract, on an exclusive basis, may be renewed, for equal or different periods, according to institutional needs and financial availability, up to the maximum limit of the duration of the project, under no circumstances exceeding the limits defined in the Regulation for the type of scholarship in question.











## 8. Monthly maintenance allowance amount:

The monthly maintenance allowance is 1741,00€, according to the scholarship values table attached to the University of Porto Scholarship Regulations. Payment will be made by FAUP through bank transference. In addition, the grant holder will be covered by personal accident insurance.

#### 9. Evaluation methods:

The selection will be made by Curriculum Evaluation (70%). The selection process may be complemented by a professional interview (30%), if the Jury deems it is necessary, to the three (3) best ranked candidates in the curriculum evaluation. In case there is no interview, the final classification will be equal to the classification obtained in the curriculum evaluation.

The Curriculum Evaluation will take into account the following assessment factors and weighting criteria:

- a) PhD and research carried out in the field of architecture, preferably on topics related to digital transformation, and/or modular construction, and/or sustainability (25 points)
- b) Practical knowledge in the domain of digital technologies relevant to the theme of the project, and activities to be developed (0 to 25 points), in particular:
  - a. parametric, generative design, programming and AI (5 points),
  - b. building information modeling (BIM) (5 points),
  - c. virtual reality and augmented reality (5points),
  - d. simulation and performative analysis (eg material, environmental, energy, comfort) and life cycle (LCA) (5 points),
  - e. digital fabrication, 3D printing and robotics (5 points);
- c) Letter of motivation (from 0 to 20 points);
- d) Work presented by the candidate as the most representative in conjunction with the research project and the conditions of preference (from 0 to 30 points).

\* Notwithstanding the indication given in point 2 of this Opening Notice in relation to the academic qualifications awarded by a foreign higher education institution, candidates who do not present the academic degrees and respective final classifications, here under evaluation, duly recognized in Portugal until the date of deadline for the application, will be scored with a minimum classification of 10 points.

The evaluation factors of the selection interview, if it takes place, will be:

- a) Breadth and specificity of knowledge in the area of the research project (from 0 to 50 points);
- b) Communication capacity (from 0 to 20 points):
- c) Motivation, availability and knowledge of English (from 0 to 30 points).









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If candidates fail to appear at the interview stage of the selection process, they will be considered as having withdrawn from this process and will be excluded.

In the event that the selected scholarship holder withdraws, the final ranking list of candidates in this competition may be used to replace them. If none of the candidates demonstrates that they have the profile indicated to carry out the work plan, the jury reserves the right not to award the scholarship to the competition.

## 10. Selection panel:

President – João Pedro Sampaio Xavier PhD, Full Professor at FAUP 1st effective member – José Pedro Ovelheiro Marques de Sousa, PhD, Full Professor at FAUP 2nd effective member – Maria Clara Pimenta de Carvalho do Vale, Full Professor at FAUP 1st substitute member – Filipa de Castro Guerreiro, Full Professor at FAUP 2nd substitute member – Teresa Manuel Almeida Calix Augusto, Full Professor at FAUP

#### 11. Disclosure of the results:

The final results will be disclosed by sending minutes via email indicated by the candidates in the CV/Motivation Letter.

The candidates have a period of 10 working days, counting from the day immediately after the notification, to give their opinion, if they wish, in a prior hearing of the interested parties, under articles 121 and following of the Code of Procedure Administrative (CPA).

## 12. Submission of applications:

The Call for Applications is open until, 14th april 2023

Applications must be submitted on the website of the Faculty of Architecture of the University of Porto at the following address: https://sigarra.up.pt/faup/pt/cnt\_cand\_geral.concursos\_list accompanied by the following documents:

- a) Curriculum vitae;
- b) Motivation letter, indicating the flexibility of schedules and immediate availability to start the Work Plan;
- c) Copy of the certificate(s) of the required qualifications and degree recognition if it was obtained in a foreign higher education institution (this recognition can be delivered until the hiring act);
- d) Work selected by the candidate as being the most representative of his/her academic career;
- e) Proof of preference conditions (if applicable);
- f) Any documents that the candidates consider to be relevant for the assessment of their merits.

Documents must be attached directly to the application message, without links to external platforms/drives. In order to guarantee the reading of all documents, the preferred recording format is the Portable Document Format (.pdf). The files must









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be named with the candidate's first and last name and must not exceed, as a whole, 5 MB. These can be compressed in .zip format.

**13.** The University of Porto promotes a policy of non-discrimination and equal access, thus no applicant may be privileged, benefited, damaged or deprived of any right or exempted from any duty, due to ancestry, age, gender, sexual orientation, marital status, family status, economic status, education, origin or social condition, genetic heritage, reduced work capacity, disability, chronic disease, nationality, ethnicity, territory of origin, language, religion, political or ideological beliefs or trade union affiliation.