

ERACAREERS

<http://www.eracareers.pt/opportunities/index.aspx?task=global&jobId=117554>

Unique identifier:de1a0a22-aff1-478a-84a3-dc08387f87a3

Notice for Call to hire a PhD Researcher

Reference: Senior PhD Researcher – Printed electronics

1. Job summary

The collaborative laboratory Associação AlmaScience - Investigação e Desenvolvimento em Celulose para Aplicações Inteligentes e Sustentáveis (CoLAB AlmaScience), funded by the Lisbon 2020 Operational Program, in the Competitiveness and Employment thematic area, through the European Social Fund (ESF), LISBOA-05-3559-FSE-000007, has opened up to two job positions for the role of Senior PhD Researcher – Printed electronics.

Envisioned as a bridge to connect – on one side – a set of science producers with outstanding track record at European level in the fields of Advanced functional materials and pioneers in promoting the area of Transparent Electronics and paper electronics and – on the other side – major paper and pulp developers and producers and a set of its end-users willing to revolutionize their market approach, CoLAB AlmaScience aims to establish in Portugal an integrated and innovative sustainable smart paper-based platform able to serve multi-sectors with fully recyclable product-ranges, capturing the needs associated with the Internet of Things (IoT).

In close contact with the academic and the industry associates, and within a multidisciplinary scientific environment, the candidate will lead and conduct R&D activities in the field of Lead and conduct R&I activities in the field of printed technological processes on cellulose-based substrates, besides other scientific and management activities better described in the candidate profile and main attributions sections below.

2. Type of contract and applicable legislation

The hiring of the PhD Researcher shall be made in accordance with the Decree-Law 57/2016, and its amendments, and the Labour Code. It will translate into an uncertain terminating term employment contract. The contract should begin in November 2019.

3. About the CoLAB AlmaScience

Colab Almascience – Research and Development on Cellulose for Smart and Sustainable Solutions, is a non-profit private association focused on research, innovation, development and deployment activities in interdisciplinary fields, involving the exploitation of nanotechnology and advanced functional materials and their use to create eco-game-changing paper-based, fully printable, multifunctional devices and systems.

On this base, Colab Almascience aims to deliver sustainable and universally accessible solutions, with real life impact on people and companies, by effectively enabling IoT in areas like, security, environment, health, electronics, logistics, food or energy.

Envisioned as a bridge to connect a set of science producers (Raiz – Forest and Paper Research Institute; Fraunhofer Portugal Research; NOVAidFCT – Associação para a Inovação e Desenvolvimento da FCT; and Universidade Nova de Lisboa) with outstanding track record at

European level in the fields of Advanced functional materials and pioneers in promoting the area of Transparent Electronics and paper electronics and – on the other side – paper and pulp developers and producers and a set of its end-users willing to revolutionize their market approach (The Navigator Company; INCM - Portuguese Mint and Official Printing Office; and Clara Saúde), CoLAB AlmaScience aims to establish in Portugal an integrated and innovative sustainable smart paper-based platform able to serve multi-sectors with fully recyclable, eco-product-ranges, capturing the needs associated with the Internet of Things (IoT).

4. Candidate profile / admission requirements

The candidate must have a PhD in the area of Materials Science, Nanotechnologies, Physics or related fields , with proven experience in:

- Paper as substrate and active component for paper devices development and manufacturing: Sensors and Biosensors, ICs, Discreet components (transistors, RFID antennas), Active and Smart packaging, Microfluidics (conventional and DMF) and Diagnostics.
- Printing techniques (Spin-coating, Shear-casting, Dip-coating & Layer-by-layer deposition, Spray coating, Inkjet-printing, Office printers, Flexo-printing and Screen-printing) and functional inks development (mainly nanoparticles-based ink).
- Low temperature printed oxide materials for TFTs.
- Preference will be given to anyone who has published scientific articles in the area as author or co-author and experience in the draft and production of reports and deliverables for science-related projects;
- Strong research and analytical skills; demonstrated ability to formulate research plan, collect and analyze useful data and information; knowledge of research tools and methodology;
- Demonstrated ability to manage projects and project members to deliver objectives on time;
- Ability to work unsupervised, in a rapidly changing environment;
- Excellent English communication skills, orally as well as in scientific writing.

Candidates with a foreign degree or diploma must provide proof of recognition of the degree in accordance with Decree-Law No. 66/2018. Any candidate without recognition of the grade(s) will not be admitted to evaluation

5. Main attributions

The PhD Researcher shall be responsible for performing the following tasks:

- Lead and conduct R&I activities in the field of printed technological processes on cellulose-based substrates;
- Work in multidisciplinary teams, in different faculties or schools in academia, and in different functions of the business in industry;
- Collaborate with industry and academia to apply the results of research and develop new techniques, products or practices;
- Devise or help to draw up new research proposals and apply for funding;
- Communicate results to the scientific community via published papers, as well as in academic conferences;
- Keep well-informed of useful information, resources, equipment, tools, technical and technological development in related fields, to ensure research capacity is up-to-date;

- Supervise students (in co-coordination with academia), train and supervise other members of staff;
- Assigning, coordinating, and reviewing the technical and scientific work.

The PhD Researcher shall fully devote the whole of his/her professional activity to AlmaScience, on an exclusive basis.

6. Place of work

The PhD Researcher's working place shall be at the premises AlmaScience located in Faculty of Science and Technology of NOVA University of Lisbon and he/she shall travel, in Portugal or abroad, as required by his/her attributions or as necessary for his/her activity.

7. Reference remuneration statue

The reference remuneration statue for this position at the CoLAB AlmaScience has correspondence with TRU's 54th position, which might be adjusted in accordance with the candidates profile and experience.

8. How to apply

To apply the candidate must send to recruiting@almascience.pt until 29 of September 2019:

1. A letter of motivation (pdf file) on why the candidate would be a suitable for the position;
 2. Detailed curriculum vitae with copy of qualification certificates and copy of other relevant supporting documents (pdf file);
 3. Copy (or reference) of scientific articles in which the candidate is author considers most relevant of his/her professional career;
 4. One-minute English video where you must briefly describe your motivation for this application (YouTube or other link);
 5. Recommendation letters (pdf file).
- The email subject shall only contain the job reference: Senior PhD Researcher – Circuits Design.

9. Jury composition

Applications shall be subject to evaluation by a jury composed of the following members.

- President – Professora Doutora Elvira Fortunato (Universidade Nova de Lisboa / NovaidFCT);
- First effective member: Professora Doutora Liliana Ferreira (Associação Fraunhofer Portugal Research);
- Second effective member: Professor Doutor Carlos Neto (Raiz – Instituto de Investigação da Floresta e do Papel);
- Substitute Member: Doutora Sílvia Garcia (INCM - Imprensa Nacional – Casa da Moeda, S.A.);
- Substitute Member: Dr. Carlos Clara (Clara Saúde, Lda).

10. Selection criteria

Applications will be ordered based on curriculum evaluation and, if deemed necessary by the jury, an interview will be conducted. In all cases, the suitability of the candidate's profile will be considered according to the duties / activities to be performed. Applications that do not include all elements required in the application submission will be automatically excluded from the competition. The selection phases and criteria and their respective weighting shall be as follows:

- a) First phase – curriculum evaluation
 - a. Curriculum vitae evaluation (50%);
 - b. Experience in the field of the project (50%);
 - c. If the jury evaluates the candidate with a total value above 60% in the first two criteria, the candidate will advance for the professional interview phase; if the evaluation lays bellow the 60% limit, the candidate will be excluded.
- b) Second phase – professional interview – if the candidate advances to the professional interview phase, the selection criteria and their respective weighting shall be as follows:
 - a. CV evaluation (35%);
 - b. Experience in the field of the project (35%);
 - c. Professional interview (30%).

11. Final Decision

The final deliberation of the jury shall be homologated by the ultimate governing body of AlmaScience that is also responsible for the final decision of hiring. CoLAB AlmaScience is free to fill the seat or not, and may suspend or terminate the process at any time by informing all applicants.

The list of admitted and excluded candidates and the final list of classification will be publicized on the website of AlmaScience (www.almascience.pt) and sent by electronic mail with receipt of delivery to all candidates.

12. Non-discrimination and equal access policy

AlmaScience actively promotes a non-discrimination and equal access policy, reason for which no candidate can be benefited, prejudiced or deprived of any duty, namely age, sex, disability, sexual orientation, chronic illness, nationality, ethnic origin or race, religion or political beliefs.