



ANNOUNCEMENT FOR THE OPENING OF AN INTERNATIONAL SELECTION TENDER PROCEDURE FOR A DOCTORATE

Code: Researcher/Wellcome_Trust/i3S/0211/2022

I3S opens a selection tender for 1 vacancy of a doctorate to perform research duties in the area of Health and Life Sciences, under a work contract with unfixed term within the project Innovator Award “Light-activated cap for catheter sterilization”, reference WT223940/Z/21/Z, financed by the Wellcome Trust, UK, coordinated by Inês Gonçalves, from the Advanced Graphene Biomaterials Group.

1. Project’s summary

Healthcare-associated infections (HAI) affect ~1.7M people in USA and 4.1M in Europe, contributing to 99k and 37k deaths/year, respectively. Catheter-related infections are the most frequent cause of HAI, leading to life-threatening complications and colossal medical costs. Current prevention/treatment options such as lock solutions and systemic antibiotic administration are inefficient and lead to bacterial resistance, a huge threat to public health.

We propose the development of the “GOcap®”, the first light-activated cap for catheter sterilization. The “GOcap®” kills bacteria through the photoactivation of graphene without using antibiotics, hampering bacterial resistance. This innovative cap stands out as a safe, long-term antimicrobial solution to prevent catheter infections.

The “GOcap®” will contribute to patient well-being and quality of life, reducing infection-associated risks, re-intervention procedures, and hospitalizations, having a huge economic impact on the healthcare system.

The candidate will be integrated in an interdisciplinary team (i3S and INESC-TEC) to assist in the evaluation of the biological performance of the prototype. Work will be mainly performed at i3S under the supervision of Inês Gonçalves, focusing on the antimicrobial and safety studies using clinical samples provided by hospitals. The candidate will also work in collaboration with companies following international standards under good laboratory practices (GLP). The candidate will have the opportunity to be involved in the process of technology transference of the “GOcap®” to the market, to apply to a CEEC contract (individual or institutional CEEC) at the Advanced Graphene Biomaterials Group, or to apply to other positions that may open at the startup GOTech Antimicrobial related with this technology.

2. Applicable Legislation

Labor Code, Law no. 7/2009 of 12 February, on its current draft.

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3. Tender selection panel

President: Inês C. Gonçalves; Other members: Patrícia C. Henriques, Andreia T. Pereira;
Substitute: Cláudia Monteiro.

4. **Workplace** shall be at i3S – Institute for Research and Innovation in Health, Rua de Alfredo Allen, 208, Porto, within the research group Advanced Graphene Biomaterials, led by Inês Gonçalves.

5. **Monthly remuneration** to be paid is €2 153,94 (annual gross salary €30.155,16), equivalent to the category of Junior Researcher.

6. Any national, foreign and stateless candidate(s) holding a master degree in **Health and Life Sciences** or **related scientific area** and a scientific and professional curriculum whose profile is suited for the activity to be performed can submit their applications. In the event the master degree was awarded by a foreign higher education institution, said degree must comply with the provisions of Decree-Law no. 341/2007 of 12 October, and all formalities established therein must be complied with at the signature of contract.

7. The tender **admission specific requirements** are:

Mandatory requirements:

- PhD in Bioengineering, Biochemistry, Biotechnology, Biomedicine or other related fields of Biomedical Sciences;
- Proven laboratory experience in antimicrobial and/or biocompatibility assays;
- Minimum of 3 scientific publications in international peer reviewed journals, with at least 2 of them as first author;
- Proficiency in English (written and spoken);
- Reference letter (and contact email).

Preferential requirements:

- Hands-on experience in production/characterization of biomaterials, surface coating techniques, graphene-based materials and/or light radiation-based assays;
- Relevant publication track record in international peer-reviewed journals, preferably in areas related with Biomedical Sciences;
- Previous experience working in companies or having entrepreneurship-related skills;
- Highly motivated candidates, with good teamwork and interpersonal skills;
- Availability to start the contract between December 2022 and January 2023;
- Interest in applying to an individual or institutional Concurso Estímulo ao Emprego Científico (CEECE) at the Advanced Graphene Biomaterials Group in the area of prevention/treatment of medical device infections, or to other positions that may open at the startup GOTech Antimicrobial related with this technology.

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8. Evaluation criteria are the following:

a) Detailed Curricula (85%):

- Relevant laboratorial experience and/or business/entrepreneurial experience in the research area of the application (30%)
- Scientific and technological production, including publications and oral/poster communications in the research area of the application (25%)
- Other relevant criteria (e.g. awards, participation in projects, supervision/mentoring experience, international experience, science divulgation, organization of conferences, advanced training, volunteering...) (30%)

b) Motivation Letter (15%)

- Interest and motivation for the research area framing the position to be hired and mention of future prospects regarding scientific career and/or moving to a startup related to the project.

9. With the purpose of further clarification regarding the curricular elements presented, the candidates can be selected for an interview. In this case, for the interviewed candidates, the first component of the evaluation will be valued in 80% (68% detailed curricula - experience 24%, scientific production 20% and others 24% - and 12% motivation letter) and the interview will be valued in 20%.

10. Candidate **final classification** system shall be given based on a scale 0-100.

11. The panel shall deliberate by means of **roll-call vote** justified under adopted and disclosed selection criteria, with no abstentions allowed.

12. Minutes of panel meetings shall be executed and shall include a summary of all occurrences of said meeting and shall be provided to candidates whenever required.

13. After selection criteria application, the panel shall prepare a **sorted list of approved candidates** and respective classification.

14. Panel's decision shall be **validated by the leader** of the institution, who is also in charge of deciding about the hiring.

15. Applications shall include all supported documents encompassed by section 7 and 8 for tender admission, namely:

- a) Certificate or diploma copy (with mention to the obtained classification);
- b) Curriculum vitae, detailed and structured pursuant to sections from 7 to 8;
- c) Motivation letter;
- d) Reference letter;

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e) Other documentation relevant for the evaluation of qualifications in a related scientific area.

Candidates shall submit their application filing the required information and supporting documentation, in a digital form, in PDF format, from the 2nd to the 15th of November 2022 through the link:

https://DOZER.i3s.up.pt/applicationmanagement/#/addapplications/ResearcherWellcome_Trusti3S02112022

16. All candidates who formalize their applications in an improper way or fail to prove the requirements imposed by this tender **are excluded** from admission. In case of doubt, the panel is entitled to request any candidate to present further documentation supporting their statements.

17. False statements provided by the candidates shall be punished by law.

18. Both admitted and excluded candidate list and the **classification list** shall be published in the website of the Institute and the selected candidate shall be notified by email.

After publication of the results, candidates shall have 10 working days to comment. Within 90 days following the deadline for the submission of applications, the final decisions of the jury shall be disclosed on the i3S website, www.i3S.up.pt.

The anticipated start date for the contract is 16th December 2022. The maximum duration of the contract will be 15 months.

19. This tender is exclusively destined to fill this **specify vacancy** and can be terminated at any time until approval of final candidate list, expiring with the respective occupation of said vacancy.

20. Non-discrimination and equal access policy: i3S actively promotes a non-discrimination and equal access policy, wherefore no candidate can be privileged, benefited, impaired or deprived of any rights whatsoever, or be exempt of any duties based on their ancestry, age, sex, sexual preference, marital status, family and economic conditions, instruction, origin or social conditions, genetic heritage, reduced work capacity, disability, chronic illness, nationality, ethnic origin or race, origin territory, language, religion, political or ideological convictions and union membership.

21. Pursuant to Decree-Law no. 29/2001 of 3 February, **disabled candidates** shall be preferred in a situation of equal classification, and said preference supersedes any legal preferences. Candidates must declare, on their honour, their respective disability degree,

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type of disability and communication/expression means to be used during selection period on their application form, under the regulations above.

22. In the scope of the Commission Recommendation of 11 March 2005 on the **European Charter for Researchers** and on a **Code of Conduct for the Recruitment of Researchers**, i3S follows the principles of Open, Transparent and Merit-Based Recruitment of Researchers (OTM-R), aiming to conduct fair and transparent recruitment processes, bringing equal opportunities for all candidates.