

OPEN POSITION

Early-Stage Researcher / PhD position (ESR 5) at University of Cambridge, United Kingdom

This ESR position is part of the European Training Network “BIOREMIA” dealing with research on novel biofilm-resistant materials for hard tissue implant applications. BIOREMIA offers the possibility to pursue the PhD within the Network at different universities and industrial companies from 10 European countries (Germany, Austria, Italy, Sweden, Greece, UK, Spain, Ireland, France, and Switzerland).

Background information on all ESR positions and BIOREMIA Network is available on www.bioremia.eu

BIOREMIA (“*BIO*film-*RE*sistant Materials for hard tissue Implant Applications”) is funded by the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement no. 861046.

Job title	Early-Stage Researcher (PhD student position) / ESR 5
Project title	ESR 5: Optimisation of biomechanical behavior and deformation mechanisms of antibacterial glassy alloys
Application deadline	03/03/2020
Expected starting date¹	August 2020 (approx.)
Recruiting institution	The Chancellor, Masters and Scholars of the University of Cambridge (UCAM) The Old Schools, Trinity Lane, Cambridge, CB2 1TN Website: https://www.cam.ac.uk/
City, Country	Cambridge, UK
Job/project description	<p>Objectives: This project will focus on expanding the accessible range of structures and property combinations of the biocompatible metallic glasses developed in BIOREMIA. It will explore the various mechanical properties and glass-forming ability of the new antibacterial compositions. The work aims to combine processing (such as thermal cycling and heavy surface deformation) with composition optimisation to dramatically improve the bulk mechanical properties and surface patternability (thermoplastic forming). Complementary work will be carried out to study the effects of different relaxation and rejuvenation treatments on metallic glasses structure and properties.</p> <p>Expected Results: a) Widening the window for effective thermomechanical patterning of BMG surfaces; b) Characterization of optimal structure-property combinations in biocompatible metallic glasses.</p> <p>The ESR will travel abroad for research secondments at partner organisations of the BIOREMIA Network (e.g. at Montanuniversität Leoben - Austria, Yale University - USA, PX Services - Switzerland) and will participate in specialised training meetings and international conferences.</p>
Appointment	The appointment will be on a temporary basis for a maximum period of 36 months (PhD student, regular full-time employment contract), with an attractive salary plus allowances package according to the Marie Skłodowska-Curie / Innovative Training Networks rules.
Eligibility conditions	Applicants must at the time of recruitment: 1) Be in the first four years (full-time equivalent) of their research careers

	<p>2) Have not resided in the United Kingdom for more than 12 months in the last 3 years</p> <p>3) Have not been awarded a doctoral degree.</p>
Candidate's profile	<ul style="list-style-type: none"> • Applicants must hold a Master's degree or equivalent in <i>Materials Science and Engineering, or Physics</i> providing access to PhD programmes and should have experience with experimental research. • Applicants must have excellent proficiency in written and spoken English as indicated on the University of Cambridge website for graduate admissions: https://www.graduate.study.cam.ac.uk/international/competence-english • Applicants must have strong motivation and ability to collaborate in an interdisciplinary and international team.
How to apply²	<p>Interested candidates should send an application containing the following documents in English (and, when necessary, a certified translation of official documents):</p> <ul style="list-style-type: none"> • Motivation Letter (describing research career goals, skills, experience, and highlighting the consistency between the candidate's profile and the chosen ESR position) • A complete Curriculum Vitae with references to past research and training experiences • Copies of Bachelor and Master's certificates/diploma & transcripts • Two Reference Letters • Publications (if available). <p>Applications should be sent by e-mail <u>as a single PDF</u>, quoting the project name and the ESR position "BIOREMIA - ESR 5", to:</p> <p>Prof. Lindsay Greer at alg13@cam.ac.uk</p> <p>Applications can also be submitted via the online <i>Application Form</i> at www.bioremia.eu</p>
Further information	<ul style="list-style-type: none"> • Any questions or about this ESR position should be submitted by e-mail to the scientist-in-charge: Prof. Lindsay Greer at alg13@cam.ac.uk • Some background material about host institution can be found here: https://www.mkg.msm.cam.ac.uk and www.bioremia.eu

¹ Employment start date to be mutually agreed

² The recruiting organization may decide to interview only those applicants who appear from the information available, to be the most suitable, in terms of experience, qualifications and other requirements of the position.

The University of Cambridge is committed in its pursuit of academic excellence to equality of opportunity and to a proactive and inclusive approach to equality, which supports and encourages all under-represented groups, promotes an inclusive culture, and values diversity.

The University of Cambridge has a responsibility to ensure that all employees are eligible to live and work in the UK.