PhD Studentships - Development and Characterisation of a Novel, biodegradable Manuka-honey supplemented Collagen biomaterial for application in the treatment of burn and chronic wounds

Department of Materials, Faculty of Engineering

Campus: South Kensington Campus

Duration: 48 months (starting on 1st October 2018)

There is currently a clinical need in cost-effective skin substitute materials able to actively promote wound healing, while preventing infection. Collagen has a strong history in tissue repair, while honey is an effective antimicrobial agent. The objective of this project is to develop homogenous, highly conformable, collagen-honey based materials that have the potential to address this challenge. These material platform could be used in wound healing, providing infection prevention, pH modulation, and mitigating risks associated with antibiotic resistance and use of silver. The work involves the synthesis of the materials as well as their structural, mechanical and biological evaluation.

This project is in collaboration with Welland Medical.

This programme seeks candidates for October 2018 entry.

For more information please see our website: http://www.imperial.ac.uk/structural-ceramics/. To make informal enquires please contact Professor Eduardo Saiz (e.saiz@imperial.ac.uk)

Applications will be handled in two stages:

Stage 1: Send a full CV, including your marks (%), the names and contact details of two referees, as well as a covering letter, to Professor Saiz (e.saiz@imperial.ac.uk). Applications that do not provide all this information cannot be considered.

Stage 2: Suitable applicants will be interviewed and, if successful, invited to make a formal application. The prospectus, entry requirements and application form (under 'how to apply') are available at: http://www.imperial.ac.uk/pgprospectus. Please contact Fiona Thomson (fiona.thomson@imperial.ac.uk) for further information. Information about the Department can be found at http://www3.imperial.ac.uk/materials

Closing date: 18th March 2018

Funding: is available to applicants who have been ordinarily resident in the UK for three years prior to the start date

Committed to equality and valuing diversity, we are also an Athena SWAN Silver Award winner, a Stonewall Diversity Champion, a Disability Confident Employer and are working in partnership with GIRES to promote respect for trans people.

The College is a proud signatory to the San-Francisco Declaration on Research Assessment (DORA), which means that in hiring and promotion decisions, we evaluate applicants on the quality of their work, not the journal impact factor where it is published. For more information, see https://www.imperial.ac.uk/research-and-innovation/about-imperial-research/research-evaluation/