

**This post is part-funded by European Regional Development Fund as part of the England 2014 to 2020 European Structural and Investment Funds Growth Programme.**

**It is a fixed term contract and will be offered subject to the approval of European Regional Development Funding.**



### **Early Stage Researchers**

The Open Innovation Hub for Antimicrobial Surfaces at the University of Liverpool is seeking to appoint two suitably qualified individuals as Early Stage Researchers to work within a recently awarded ERDF programme "Formulated Materials for Infectious Disease Prevention". The ERDF programme brings together an Interdisciplinary Team from the University of Liverpool (UoL), Liverpool School of Tropical Medicine (LSTM), Unilever and Against Malaria Foundation.

Early Stage Researchers (ESRs) will build new research capability and knowledge in Antimicrobial and Anti-infective Surfaces and Materials in the Liverpool City Region and will play an important role in delivering 'real-life' solutions to industry. The ESRs have the opportunity to work toward a PhD at the University of Liverpool.

**Funding Notes:** By joining OPIHAS and the ERDF Programme, you will receive a stipend that is the equivalent of £25K a year for 3 years.

### **POST DETAILS**

You will:

- Obtain training to operate and maintain sophisticated research apparatus, equipment and instruments, for research, innovation and analysis purposes.
- Provide technical and research expertise on specific projects in intensive collaboration with local SMEs (typically 2 to 4).
- Undertake fundamental work to build new knowledge and capacity in "Surface Functionalisation", "Surface Nanofabrication" and "Antimicrobial Surfaces and Materials".
- Upskill in background knowledge required to deliver work via the BITE Training Programme.
- You will have the opportunity to submit the above work towards a PhD degree.

- Carry out defined projects under the supervision of higher graded individuals.
- Provide the ability to think creatively and provide innovative solutions to problems.
- Possess the ability, with training, to interpret results and communicate results to stakeholders.
- Be responsible to work in a safe manner adhering to local and legal requirements.
- Communicate with senior staff on laboratory issues in Workspace 2 of the ERDF project.
- Prepare and maintain adequate laboratory records of methods, sample details and results.
- Provide limited supervision of other technical staff as appropriate.

You should be highly self-motivated and a Masters level qualification with a good degree (1 or 2i) in any of the following subjects: chemistry, physics, materials science, biophysics, biomedical science, or a related Science subject, with demonstrable expertise in at least one of the following areas:

- The preparation, functionalisation and characterisation of surfaces
- Spectroscopic and imaging techniques
- Functional Surfaces and Materials
- Microbial Cell-Surface interactions

Positions are only open for UK/EU citizens only.

Applicants should email a copy of their CV to Professor Raval ([Raval@liverpool.ac.uk](mailto:Raval@liverpool.ac.uk)) along with email addresses for 2 academic referees.

<b>EMPLOYEE SPECIFICATION – Shortlisting Criteria</b>
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**Post Title: Early Stage Researcher**  
**Department: Chemistry, Open Innovation Hub for**  
**Antimicrobial Surfaces, Workspace 2**

**Job Ref:**

Attributes	No.	Essential Criteria (Identified from – Application form/CV/Supporting Statement/Interview/References)	Desirable Criteria (Identified from – Application form/CV/Supporting Statement/Interview/References)
1. EXPERIENCE	1.1	Research project experience in one of the following areas: Physical chemistry/spectroscopy Surface science Condensed matter physics Soft matter science Materials science Nanofabrication/lithography Antimicrobial surfaces Biophysics/bioengineering	Experience in: Surface characterisation techniques Nanopatterning and lithographic techniques Preparation and functionalisation of surfaces Cell surface interactions Cell cultures and assays
2. EDUCATION QUALIFICATIONS TRAINING	2.1	Master's Degree with a degree (1 or 2.1) in any of the following: Chemistry, physics, materials science, biophysics, biomedical science or related science subject.	Research projects in: Surface science techniques Functional surfaces and materials Microbial cell- material interactions
3. SKILLS, GENERAL AND SPECIAL KNOWLEDGE	3.1 3.2 3.3 3.4 3.5	Good standard of written and verbal English IT skills: Word processing, graphics, etc Report writing skills Good interpersonal and communication skills Analytical and problem solving skills	Previous involvement with industry or outreach programmes Scientific presentation skills
	4.1	Able to work well independently and as part of a team	

4. PERSONAL ATTRIBUTES AND CIRCUMSTANCES	4.2 4.3	Self-motivated Able to liaise effectively with industrial companies and healthcare professionals	
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