

# Knowledge-based Design of Dental Surfaces to combat Oral Biofilms

4 year PhD Position available Oct 2024

## A collaboration between University of Liverpool & Unilever R&D.

Oral diseases affect an estimated 3.5 billion people.

This interdisciplinary project will investigate the protective effect of natural materials by combining advanced fabrication, imaging and spectroscopic techniques to create precision model tooth surfaces and tracking how bacteria interact and behave at these surfaces.

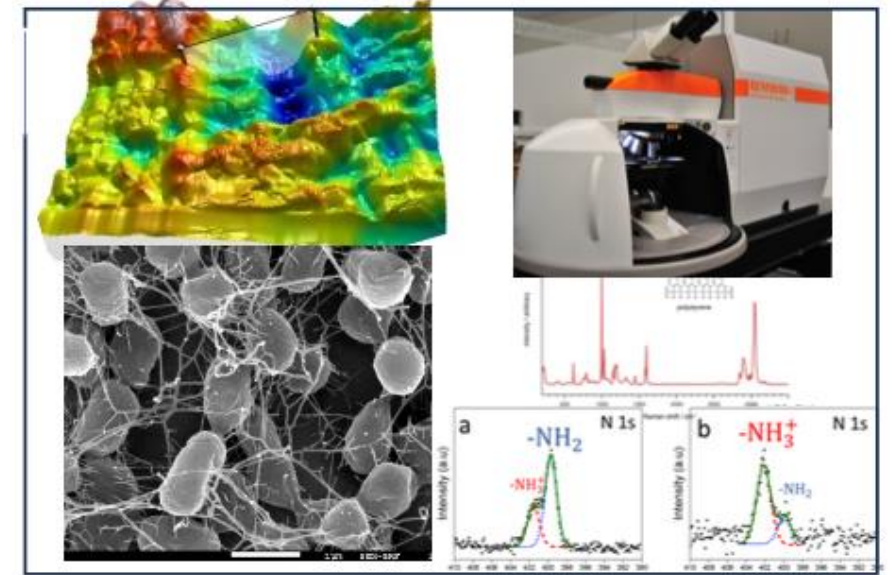
The PhD will include:

- interdisciplinary science and global innovation.
- advanced imaging and spectroscopic techniques

The student will enrol in NBIC's Doctoral Training Centre which trains inter-disciplinary PhD researchers at the Interface of Physical and Life Sciences.

- Provide high level training and mentorship in research and entrepreneurship
- Join a National Network of leading Research Groups in the UK
- Join a community of leading companies in the UK

Applications are encouraged from highly motivated candidates who have, or expect to have, at least a 2:1 degree or equivalent. Applications should be made as soon as possible. Candidates will be evaluated as applications are received and the position will be filled if a suitable candidate is identified. Informal enquiries are also encouraged and should be addressed to Lucy Jones ([Lucy.Jones2@liverpool.ac.uk](mailto:Lucy.Jones2@liverpool.ac.uk))



*Combining advanced techniques to track  
science and technology.*

### **Supervisory team:**

*Professor R Raval, Department of Chemistry*

*Prof Ian Prior (Academic co-supervisor),  
Molecular and Integrative Biology, University of  
Liverpool.*

*Dr V Slomka (Industrial supervisor), Unilever R&D  
Port Sunlight, Bebington*