DEPARTMENT OF CHEMISTRY **OXFORD UNIVERSITY**



PHYSICAL & THEORETICAL CHEMISTRY LABORATORY

THE HINSHELWOOD LECTURES 2018

Professor Lydéric Bocquet

Professor of Physics and CNRS / Directeur du Master ICFP Ecole Normale Supérieure, Paris

"Soft Interfaces: A Journey Across Scales"

Will be presented in the form of six lectures on the following dates:

General Introduction (within Lecture 1): Soft Interfaces and Scales

LECTURE 1: Tuesday, 24 April - Slippery Roads of Hydrodynamic Slippage

LECTURE 2: Thursday, 26 April - Flows at Nanoscales, from Exotic Transport to Ionic Machines

LECTURE 3: Tuesday, 1 May - Playing with Osmosis: Kidney Filtration, Active Sieving and Energy

Harvesting

LECTURE 4: Thursday, 3 May - Interfacial Transport: from Colloid Transport to Active Matter

LECTURE 5: Tuesday, 15 May - Ski Friction and the Alchemy of Waxing

LECTURE 6: Thursday, 17 May - An Outdoor Pause: Skipping Stones, Splashes (and some tea to

conclude)

The Lectures will be presented in the Physical & Theoretical Chemistry Laboratory in the Main Lecture Theatre at 11.15 am. They will be of particular interest to researchers and senior undergraduates.