



Frontiers in Imaging & Analysis at the Single-Molecule Level

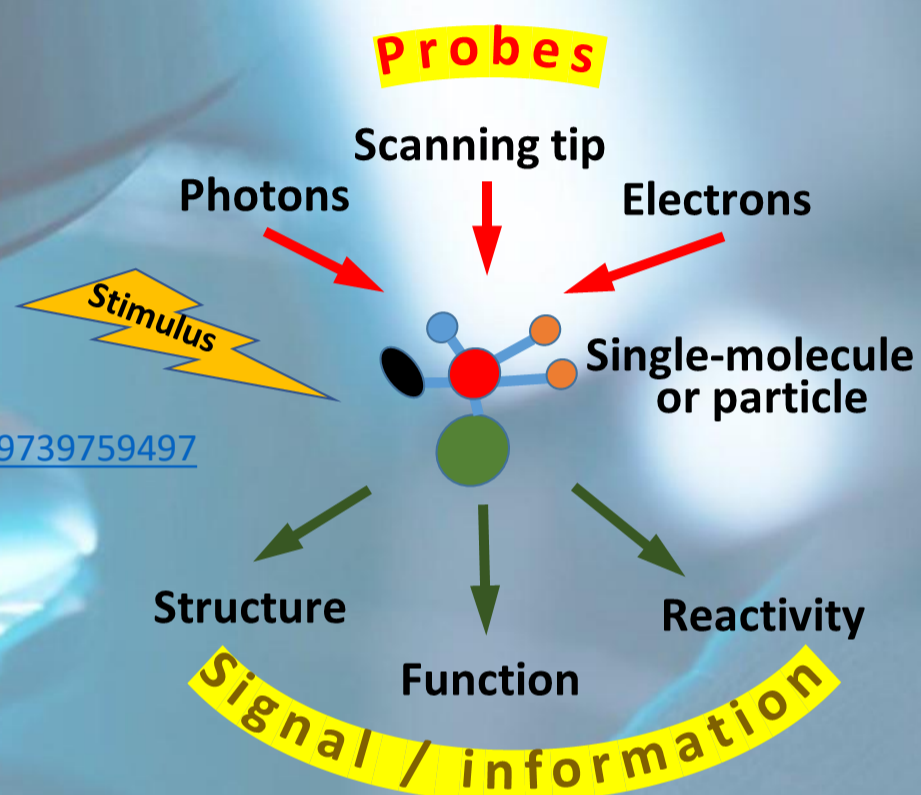
Microscopy and spectroscopy at the single-molecule level are now emerging as platform technologies for the broadest spectrum of research challenges, from drug-delivery systems to data storage and catalysis, spanning Physics, Chemistry, Biology and Materials Engineering. The symposium is intended to stimulate cross-disciplinary discussions of the emerging methods and capabilities for studying and manipulating matter at the molecular level.

Tues 21 June 2022, 9.00-17.30

**School of Chemistry, X1
University of Nottingham**

FREE. Registration essential:

<https://www.eventbrite.co.uk/e/frontiers-in-imaging-analysis-tickets-329739759497>



Symposium programme:

Talks by leaders in the field who develop different approaches to address the challenge of single-molecule/particle imaging and analysis:

- **Jeremy Baumberg**, *University of Cambridge*
- **Amanda Wright**, *University of Nottingham*
- **Philipp Kukura**, *University of Oxford*
- **Alex Saywell**, *University of Nottingham*
- **Melissa Mather**, *University of Nottingham*
- **Julie MacPherson**, *University of Warwick*
- **Andrei Khlobystov**, *University of Nottingham*
- **Wolfgang Theis**, *University of Birmingham*

Current technical capabilities available for imaging and analysis at the single-molecule/particle level will be reviewed, highlighting the latest development in methods to control states of molecules/atoms/particles, including their positions, orientations, motion, electronic, magnetic and chemical states. Advances in time-resolved imaging affording 'movies' of physical processes and chemical reactions at nanoscale, and pathways to material discovery and characterization of functional properties will be discussed.

Panel discussion: *Seeing is Believing: are we getting closer to truth?*

The event will culminate in a panel discussion where you'll have the chance to ask the speakers in-depth questions and express your own opinions on the challenges and opportunities in single-molecule imaging & analysis. Our collective thinking is important to sketch a roadmap for future developments in single-molecule imaging and analysis.