

Seminar

Charge transport and catalysis reactions at the electrified interfaces

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Possibility of studying the properties of molecules or nanostructures at single entity level offers huge opportunities to tune structure property relationships at nanoscale. The problem with current state-of-the-art nanomaterials and energy research involving charge or electron transport at electrode|molecule interface as a key process is centered in the fact that no single experimental technique can independently provide complete information on nanoscale structure-property relationships. The development of fast, cost effective and structure sensitive characterization methods at single entity level is the target of much current nanotechnology research.

During this presentation, I will try to show the experimental framework (experimental technique and methodologies development) that I am planning to implement/develop in my future laboratory to address the key issue of nanoscale structure-property relationships under in-operando conditions.¹⁻⁴

References:

1. Kaliginedi et al., *Nanoscale*. 2015, 7 (42), 17685-17692.
2. Rudnev, A., Kaliginedi et al., *Science Advances*. 2017, 3, e1602297.
3. Seth, C., Kaliginedi et al., *Chemical Science*. 2017, 8, 1576-1591.
4. Atesci, H., Kaliginedi et al., *Nature Nanotechnology*. 2018, 13, 117.

Friday, Jul 6th 2018

10:00 AM (Tea/Coffee at 9:30 AM)

Seminar Hall, TIFR-H