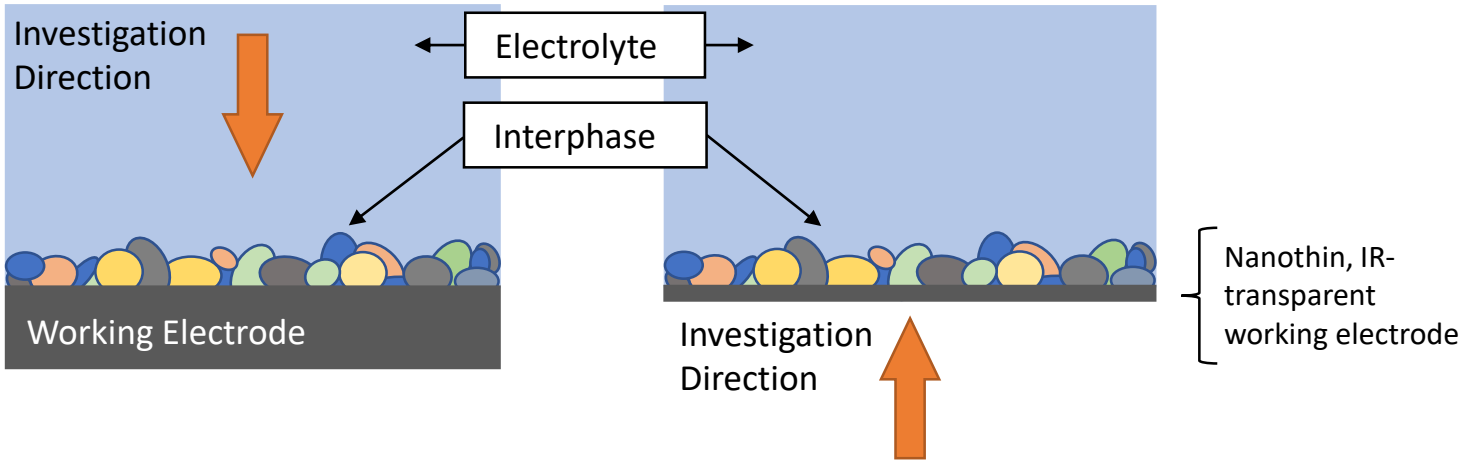
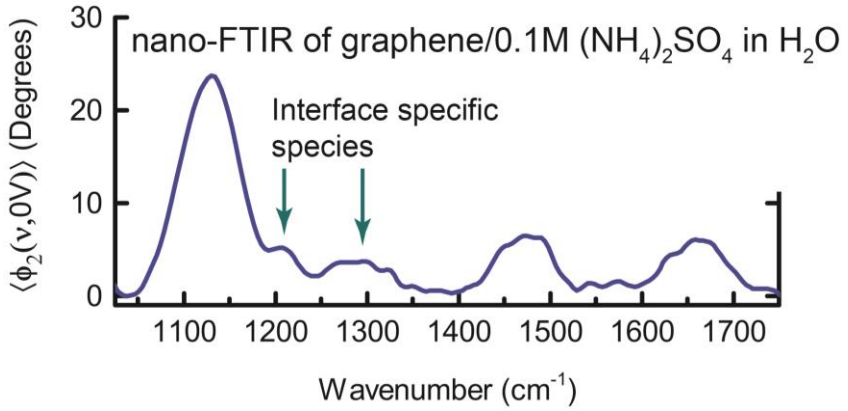
Infrared Nanospectroscopy: a Unique Pathway to Characterize Electrochemically Active Solid-Liquid Interfaces and Interphases

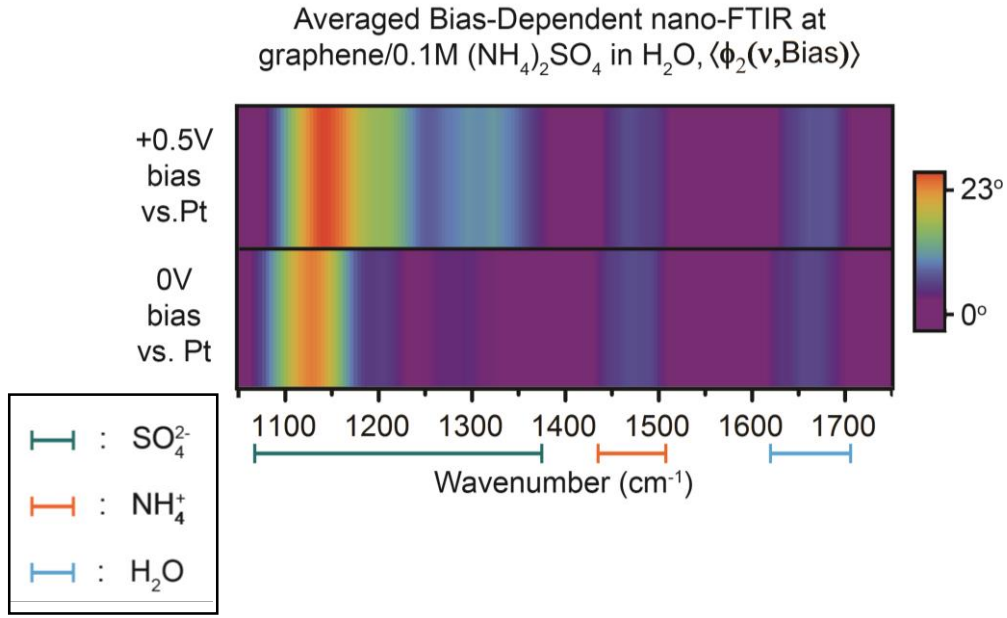


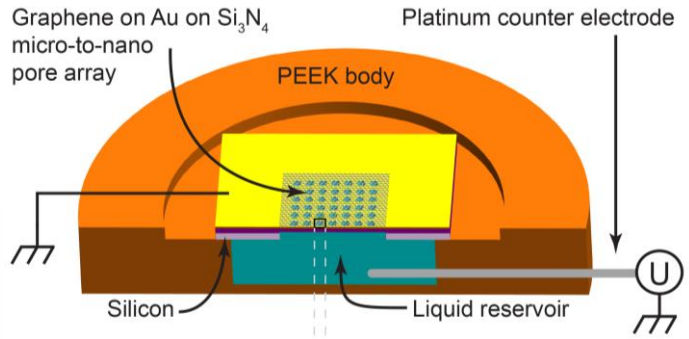


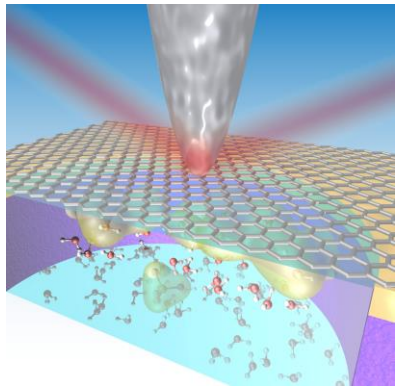
Practical experimental challenges:

- Opening top of liquid cell
- Penetrating liquid electrolyte
- Overcoming interphase roughness

- Challenges eliminated
- Enables non-disruptive access for in-situ / operando investigations of
  - i. interphase chemistry
  - ii. Interphase kinetics







Y.-H. Lu & J.M. Larson et al, *Nano Lett.*, 19 (2019), 5388