Probing Molecular Growth, Interactions and Networks

Wenchao Lu, Chandika Amarasinghe, Oleg Kostko and Musahid Ahmed

Chemical Sciences Division, Lawrence Berkeley National Laboratory, 1 Cyclotron Rd, Berkeley, CA 94720, USA

Background, Significance, and Design

- An investigation of complex multistep and multiphase chemical transformations built from isolated elementary bimolecular reactions to gas-surface reaction dynamics.

1. Molecular Cluster Chemistry
   and Hydrogen-Bonding Networks

2. Molecular Chemistry of Polycyclic Aromatic Hydrocarbon Growth

Future Directions

- Photoionization Dynamics of Polyol-Water Clusters: Insight into hydrogen bond networks
- Evaporation dynamics probed by MS and VMI

Acknowledgements: DOE-Gas Phase Chemical Physics Program