

## Keynote speaker

**Rommie E. Amaro, Ph.D**

*University of California, San Diego*

### **Title: Computational Microscopy of SARS-CoV-2**

**Abstract:** I will discuss our lab's efforts, together with collaborators, to understand the SARS-CoV-2 virus in atomic detail, with the goals to better understand molecular recognition of the virus and host cell receptors, antibody binding and design, and the search for novel therapeutics. I will focus on our studies of the spike protein, its glycan shield, and our efforts to model the SARS-CoV-2 virion with atomic detail.

**Short CV:** Rommie E. Amaro holds the Distinguished Professorship in Theoretical and Computational Chemistry at the Department of Chemistry and Biochemistry at the University of California, San Diego. She received her B.S. in Chemical Engineering (1999) and her Ph.D. in Chemistry (2005) from the University of Illinois at Urbana-Champaign. Rommie was a NIH postdoctoral fellow with Prof. J. Andrew McCammon at UC San Diego from 2005-2009, and started her independent lab in 2009. She is the recipient of an NIH New Innovator Award, the Presidential Early Career Award for Scientists and Engineers, the ACS COMP OpenEye Outstanding Junior Faculty Award, the ACS Kavli Foundation Emerging Leader in Chemistry, and the Corwin Hansch Award. Rommie's scientific interests lie at the intersection of computer-aided drug discovery and biophysical simulation. Her scientific vision revolves around expanding the range and complexity of molecular constituents represented in such simulations, the development of novel multiscale methods for elucidating their time dependent dynamics, and the discovery of novel chemical matter controlling biological function.