



Siddharth Komini Babu has been a Staff Scientist at Los Alamos National Laboratory since 2019. He joined LANL in 2016 as a postdoctoral research associate working with Rod Borup and Piotr Zelenay on Fuel Cell Performance and Durability (FC-PAD) and Electrocatalyst (ElectroCat) consortium. He received B.Tech. degrees in Mechanical Engineering from Indian Institute of Information Technology, Design and Manufacturing, in 2007. His M.S. and Ph.D. degrees in Mechanical Engineering were obtained at the Carnegie Mellon University, in 2013 and 2016, respectively. His Ph.D. thesis focused on understanding transport phenomena in precious group metal free (PGM-free) catalyst-based fuel cell electrodes using computational modeling with inputs from morphological and electrochemical characterization. His current research focuses on development of novel electrode architectures and catalyst support for fuel cells and other electrochemical devices, development of novel porous transport layer (or gas diffusion medium) for fuel cell, electrolyzer and reversible fuel cell application, development of electrodes for electrochemical desalination and ion separation, development of computational models and diagnostic methods to understand cation transport in polymer electrolyte fuel cells, development of molecular probes to identify active sites in PGM-free catalyst, characterization of electrochemical materials through X-ray computed tomography (XCT). He has authored ~ 20 papers in peer-reviewed journals, a few more patent applications pending, and has an h-index of 13.