

## Battery Technologies

Session Organizers: Yasuhiro Goto, *Toshiba Corporation*,  
and Steven Visco, *Lawrence Berkeley  
National Laboratory & Polyplus Battery Company*

The session will begin with presentations by U.S. speakers, who will introduce the topic by communicating to the audience the requirements for various battery applications, including laptops, cellphones, hybrid electric vehicles, and electric vehicles. This will be followed by discussion of the fundamental limitations of batteries and the pursuit and commercialization of advanced batteries. The first speaker will discuss how computational materials science can be used to guide the discovery process, and the second speaker will discuss advanced characterization tools to elucidate how battery materials function and how they can be improved. These talks will lead into the Japanese talk on Lithium ion batteries, which support various mobile applications.

