

"We have no time for science as usual"

Alan Aspuru-Guzik

Abstract:

In this talk, I argue that for materials discovery, one needs to go beyond simple computational screening approaches followed by traditional experimentation. I have been working on the design and implementation of what I call "materials acceleration platforms" (MAPs). MAPs are enabled by the confluence of three disparate fields, namely artificial intelligence (AI), high-throughput quantum chemistry (HTQC), and robotics. The integration of prediction, synthesis and characterization in an AI-driven closed-loop approach promises the acceleration of materials discovery by a factor of 10, or even a 100. I will describe our efforts under the Mission Innovation umbrella platform around this topic.

The meeting will be through GoToMeeting platform.

