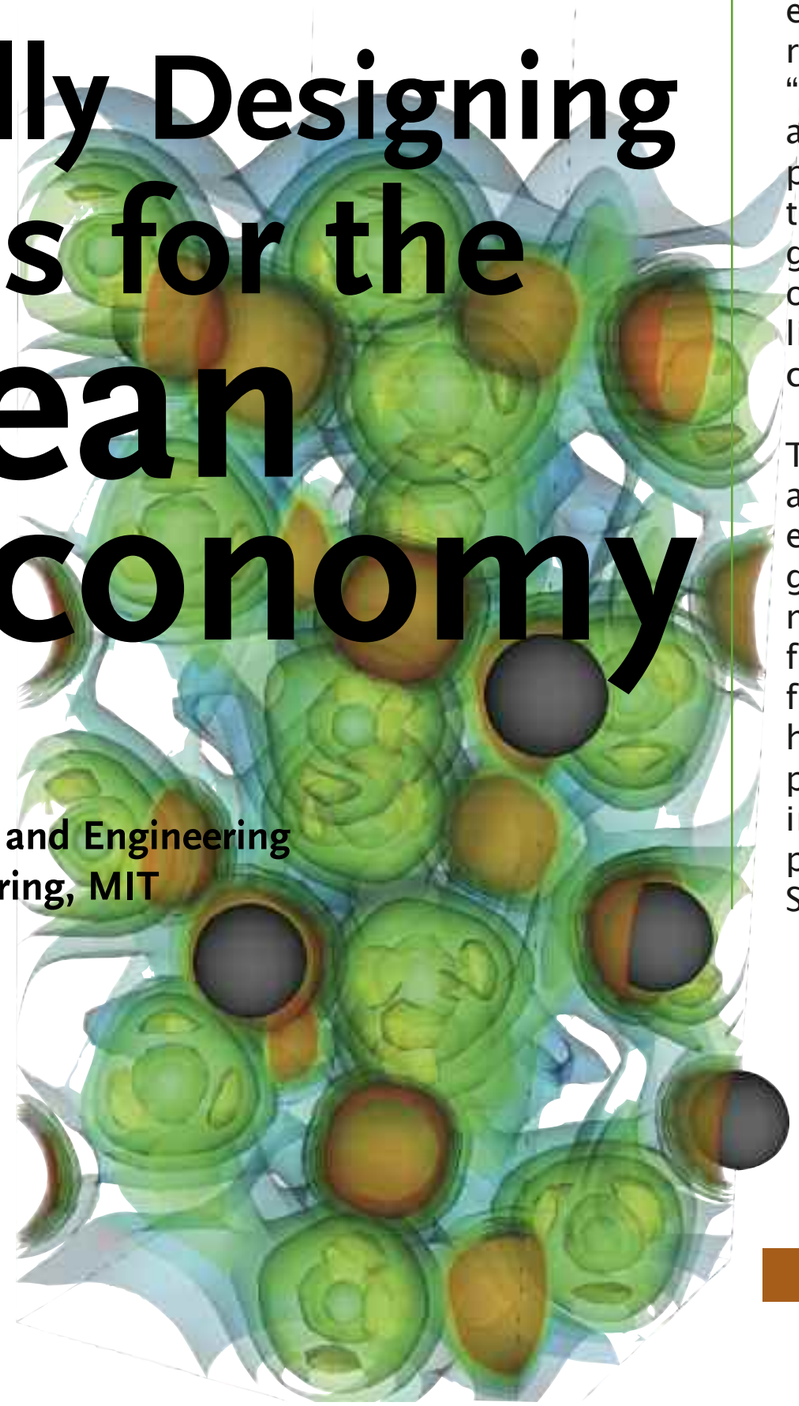
Fall 2010 Wulff Lecture

Wednesday, November 17, 2010
5:00–6:00 pm
Room 32-123
Reception immediately following

Computationally Designing Materials for the Clean Energy Economy



Professor Gerbrand Ceder
R. P. Simmons Professor of Materials Science and Engineering
Department of Materials Science and Engineering, MIT

The need for novel materials is the technological Achilles Heel of our strategy to address the energy and climate problem facing the world. The large-scale deployment of photovoltaics, photosynthesis, storage of electricity, thermo-electrics, or reversible fuel catalysis cannot be realized with current materials technologies. The "Materials Genome" project, started at MIT, has as its objective to use high-throughput first principles computations on an unparalleled scale to discover new materials for energy technologies. This talk will address successful examples of high-throughput calculations in the field of lithium batteries and discuss other materials challenges in the energy field.

The Wulff Lecture is an introductory, general-audience, entertaining lecture which serves to educate, inspire, and encourage MIT undergraduates to take up study in the field of materials science and engineering and related fields. The entire MIT community, particularly freshmen, is invited to attend. The Wulff Lecture honors the late Professor John Wulff, a skilled, provocative, and entertaining teacher who inaugurated a new approach to teaching the popular freshman subject: 3.091 Introduction to Solid State Chemistry.

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