



THE UNIVERSITY OF
CHICAGO



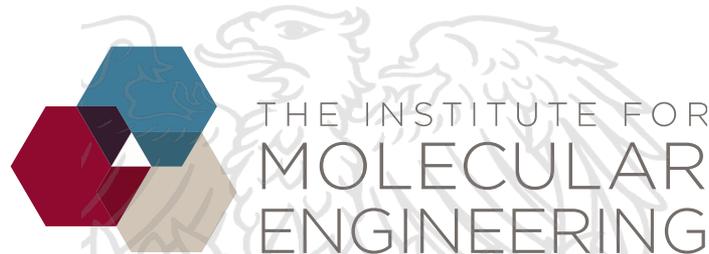
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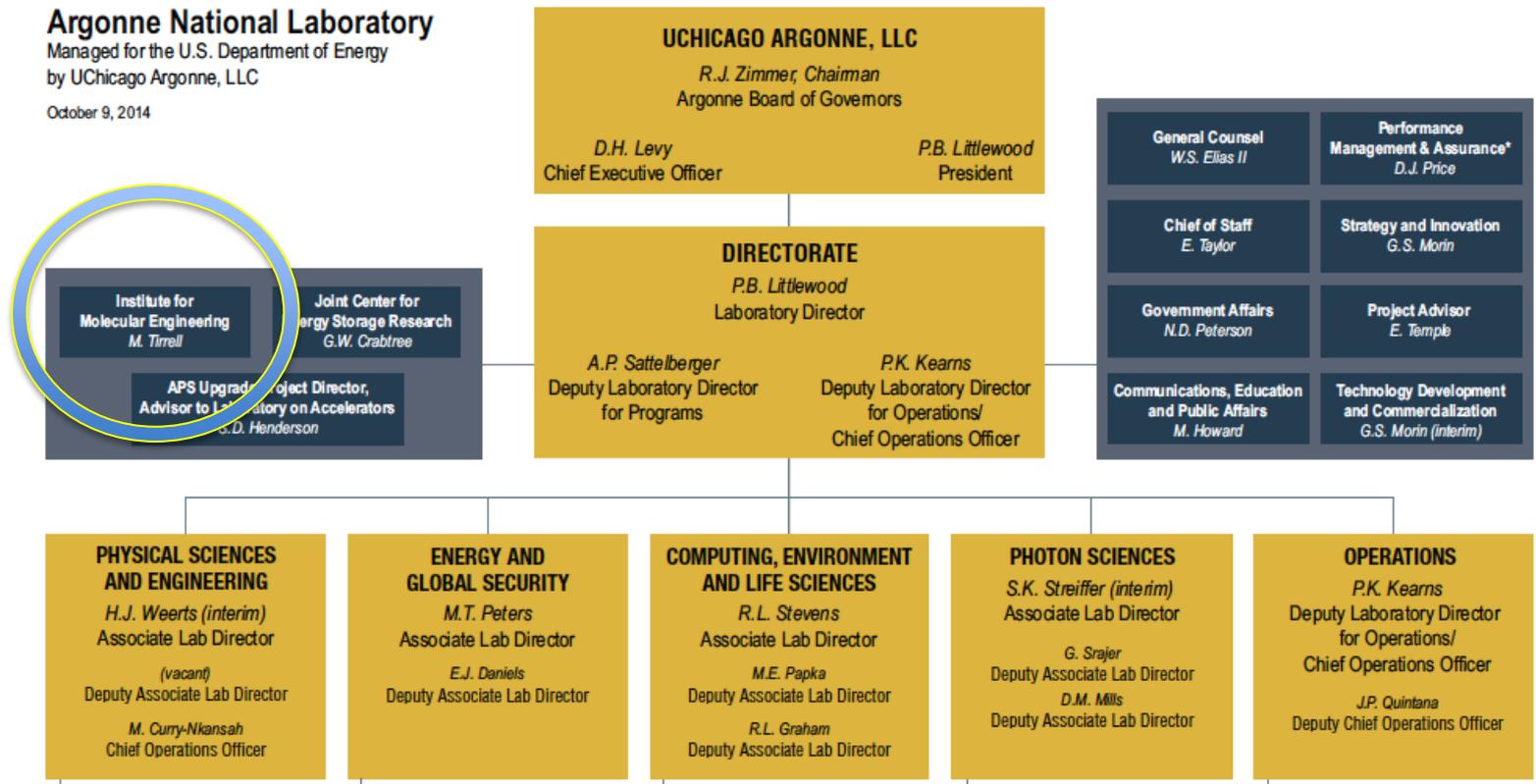
<http://ime.uchicago.edu/>

**COMMISSION TO REVIEW THE EFFECTIVENESS OF THE NATIONAL
ENERGY LABORATORIES**

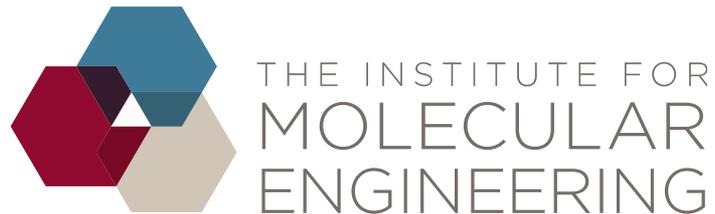
November 4, 2014



- **Tirrell experience with laboratory – university relationships:**
 - 1999 – 2009 Dean of Engineering, UC Santa Barbara, Member of the Science and Technology Panel of the University of California President’s Council on the National Laboratories.
 - 2008 – 2013 Chair, Advisory Board, Center for Nanophase Materials Science, Oak Ridge NL.
 - 2009 – 2011 Chair, Department of Bioengineering, UC Berkeley, Faculty Scientist, Lawrence Berkeley NL.
 - 2011 – present, Director and Dean of the Faculty of Molecular Engineering, University of Chicago, Senior Scientist, Argonne NL.
 - 2013 – present, PI of NSF grant, Director of ChemMat CARS, APS Sector 15, Argonne NL.
 - 2014 – present, member, Oak Ridge NL, Director’s Science Advisory Board.
- **IME has a unique role in bridging the campus and the laboratory.**



- The Institute for Molecular Engineering (IME) is the University of Chicago's first engineering program, aiming at creating new technologies from molecular-level science. Themes in soft matter, quantum materials, bioengineering, water, energy storage.
- IME has made seven joint (out of nine total) hires thus far.
- One ANL-based program in soft matter at \$1.5 million per year (plus equipment); a second in quantum materials given a tentative green light.
- Significant space allocated to IME in Building 241.
- Fifteen IME researchers (and growing) located at ANL.



- **Special research opportunities:**
 - Larger scale collaborative projects
 - Unique facilities in characterization, computation
- These qualities are not only an asset to pursuing research but they also provide an **avenue for universities to contribute to broader national efforts** in areas such as energy, environment, water, materials, and synthetic biology.
- The national laboratories are central to providing the country with **facilities** in x-ray scattering, neutron scattering, electron microscopy, and more, **that no university has.**
- **Joint laboratory – university hiring and appointments** are very effective for both institutions.

