

# Professor Bradley Chmelka

## Honors:

- 2021-present** Vice-President, International Mesosstructured Materials Association
- 2017** Professeur invité, École Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
- 2017** Elected to Royal Swedish Academy of Engineering (IVA)
- 2016** Braskem Award from the Materials Engineering & Sciences Division (MESD) of AIChE
- 2015** Elected to, Royal Swedish Academy of Sciences (KVA)
- 2015-present** Co-Director, Institute for Collaborative Biotechnologies, USARO, UCSB-MIT-Caltech
- 2013** Doctor Honoris Causa, Chalmers University of Technology, Gothenburg, Sweden
- 2012-15** UCSB Committee on Academic Personnel, Vice-Chair 2013-14, Chair 2014-15
- 2012-13** Professeur Invité, École Normale Supérieure de Lyon I, France
- 2012** Professeur Invité, Ecole Supérieure de Physique et de Chimie Industrielles, Paris, France
- 2011** Visiting Professor, Consejo Superior de Investigaciones Científicas (CSIC), Barcelona, Spain
- 2009** Visiting Professor, Laboratoire des Agrégats Moléculaires, Université Montpellier II, France
- 2006** Meyerhoff Visiting Professorship, Weizmann Institute of Science, Rehovot, Israel
- 2006** Chalmers Jubilee Visiting Professorship, Chalmers University, Gothenburg, Sweden
- 2005** Visiting Professor, Technion, Israel Institute of Technology, Haifa, Israel
- 2004, 2005** Profesor Invitado, Universidad Rey Juan Carlos, Madrid, Spain
- 1996-98, 2003** Professeur Invite, University of Paris, Jussieu
- 1996** Alfred P. Sloan Foundation Research Award
- 1993** David and Lucile Packard Foundation Award
- 1993** Camille and Henry Dreyfus Foundation Teacher-Scholar Award
- 1992** New Young Investigator Award, NSF Division of Materials Research
- 1989** NSF Division of Chemistry Post-doctoral Fellowship Award
- 1989** NSF-NATO Post-doctoral Fellowship Award

## Research Description:

Correlation of macroscopic material properties and function with molecular structure and dynamics, particularly in heterogeneous macromolecular solids. Synthesis and characterization of self-assembled inorganic-organic and mesoporous materials for catalysis, separations, and optoelectronic applications. Molecular dynamics and structure in hierarchically ordered polymers, liquid crystals, nanocrystals, and biominerals. Development and application of nuclear magnetic

resonance spectroscopy methods for characterizing structure, dynamics, adsorption, transport, and reaction properties of new solid-state materials.

Education:

**BS:** Chemical Engineering, Arizona State University (1982)

**PhD:** Chemical Engineering, University of California, Berkeley (1990)

**Post-doctoral:** Chemistry, University of California, Berkeley (1990), Max-Planck Institute for Polymer Research, Germany (1991-92)