

Timothy John Deming

Mailing Address:

Department of Bioengineering, 5121C Engineering 5
University of California, Los Angeles
CA 90095-1600

Phone: (310)-267-4450 e-mail: demingt@seas.ucla.edu
Fax: (310)-794-5956 Web: <http://deming.seas.ucla.edu/Welcome.html>

Research Interests Design, synthesis, processing, characterization and development of biologically active and biomimetic materials composed of polypeptides, transition metal catalysis, self-assembly, polymeric therapeutics and delivery agents. Emphasis on development of new synthetic methodologies as well as the use of biological precedents and strategies for the design of new materials for biology and medical applications. Our lab continues to take on significant new challenges in the exploration of applications of our materials as well as development of new economical and scalable preparative routes to more complex and functional polypeptide architectures.

Employment History

7/20 – Present Distinguished Professor, Department of Bioengineering, Department of Chemistry and Biochemistry, UCLA
7/15 – 1/16 Vice-Chair, Undergraduate affairs, Department of Bioengineering, UCLA
7/06 – 6/11 Chairman, Department of Bioengineering, UCLA
7/06 – 12/08 Chairman, Biomedical Engineering Interdepartmental Graduate Program, UCLA
7/05 – 6/20 Professor, Department of Chemistry and Biochemistry, UCLA
7/04 – 6/20 Professor, Department of Bioengineering, UCLA
7/03 – 6/04 Professor, Materials and Chemistry Departments, Interdepartmental Program of Biomolecular Science and Engineering, UCSB
7/99 – 6/03 Associate Professor, Materials and Chemistry Departments, Interdepartmental Program of Biomolecular Science and Engineering, UCSB
1/96 – 6/99 Assistant Professor Materials and Chemistry Departments, UCSB
3/95 – 1/96 Assistant Professor, Materials Department, UCSB
11/93-3/95 Postdoctoral research associate with Professor David A. Tirrell, Polymer Science and Engineering Department, University of Massachusetts, Amherst, MA

Education

8/89 - 10/93 Ph.D. in Chemistry, University of California, Berkeley, CA
9/85 - 6/89 BS in Chemistry (magna cum laude), University of California, Irvine, CA

Honors and Fellowships

Initiative of Excellence Visiting Faculty Scholar, University of Bordeaux, France **2020-2021**.
Fulbright Scholar - Fulbright-Toqueville Distinguished Chair Award **2015-2016**.
Professeur Invité, University of Bordeaux, France **2012**.
Fellow of the American Institute for Medical and Biological Engineering (AIMBE) **2010**.
Herbert Newby McCoy Award (UCLA Dept. of Chem. & Biochem.) **2008**.
IUPAC Macromolecular Division, Samsung-IUPAC Young Scientist Award **2004**.
Materials Research Society Young Investigator Award **2003**.

Timothy John Deming

Rothschild and Mayent Foundation Fellow, Institut Curie, Paris **2002**.
Camille Dreyfus Teacher-Scholar Award **2000**.
3M Non-Tenured Faculty Award **1999**.
Beckman Young Investigator Award **1998**.
Alfred P. Sloan Research Fellow **1998**.
National Science Foundation CAREER Award **1997**.
Office of Naval Research Young Investigator **1996**.
University of California, Regents Junior Faculty Fellow **1996**.
Unilever Award for Outstanding Graduate Research in Polymer Chemistry **1994**.

Research Highlights

"Three pronged approach shows promise treating spinal cord injuries." *R&D Magazine*, **August 29, 2018**.
"A recipe for regenerating nerve fibers across complete spinal cord injury." *EurekAlert AAAS*, **August 29, 2018**.
"Two-in-One: A copolypeptide provides antimicrobial activity and barrier properties" *Adv. Sci. News*, **March 17, 2017**.
"Regeneration: Not everything is scary about a glial scar" Liddel, S. A.; Barres, B. A. "News and Views", *Nature* **2016**, 532, 182-183.
"Artificial Cells" *Popular Mechanics*, **April, 2012**.
"Emulsions Double Up" *Chem. Engr. News*, **September 8, 2008**, p.35.
"The WOW factor" Editor's Summary, *Nature* **2008**, 455, p. ix.
"Arginine-Containing Vesicles Deliver" *Chem. Engr. News*, **December 11, 2006**, p.31.
"Tough and Smart" Jones, R. A. L. "News and Views", *Nature Mat.* **2004**, 3, 209-210.
"Crafty Carriers" *Science News* **2004**, 165(17), p. 261.
"Swell gels" Kopecek, J. "News and Views", *Nature* **2002**, 417, 388-391.
"Diblock copolypeptide amphiphiles form rapidly recovering hydrogels" *MRS Bulletin*, **2002**, 27, p.584
"Rapid-response hydrogels" *Physics Today*, **August 2002**, 55, p. 9.
"Block polypeptide hydrogels" *Chemical and Engineering News*, **May 27, 2002**, 80, p.14.
"Beyond Jell-O: New ideas gel in the lab" *Science News* **2002**, 161(21), p. 323.
"Behind the stickiness of mussel glue" *Chem. Engr. News*, **June 14, 1999**, p.30.
"Amino acid puts the muscle in mussel glue" *Science News*, **1999**, 156, p. 5.
"Simple polypeptides stick like mussel glue" *Chem. Engr. News*, **August 17, 1998**, p.37.
"For the living there is hope" Tirrell, D. A. "News and Views", *Nature*, **1997**, 390, 336-339.

Professional Activities and Service

2021, Organizer, Symposium on Bioinspired synthetic polymers: synthesis, self-assembly and application, Pacificchem, Honolulu.
2019, Organizer, Symposium on Design, Synthesis, and Engineering of Polypeptides for Biological and Biomedical Applications, PMSE Division, ACS National Meeting, San Diego.
2017, Organizer, *Biomacromolecules* round table discussion, ACS National Meeting, Washington DC.
2017, Organizer, Symposium on Polymers at the Interface with Biology, POLY Division, ACS National Meeting, Washington DC.
2016, Chair, Gordon Research Conference on Bioinspired Materials, Les Diablerets, Switzerland.
2015, Organizer, Symposium on Synthetic Biopolymers, Pacificchem, Honolulu.
2014-present, Associate Editor, *Biomacromolecules*.

Timothy John Deming

2014, Organizer, Symposium on Polypeptides in Nanomedicine, POLY Division, ACS National Meeting, Dallas.

2014, Vice-Chair, Gordon Research Conference on Bioinspired Materials, Maine.

2014, Symposium Organizer, IUPAC World Polymer Congress, Thailand.

2014, International Advisory Committee member, IUPAC World Polymer Congress, Thailand.

2013-2018, External Advisory Board member, NSF-PREM center, Texas State University San Marcos.

2012, Organizer, Symposium on Glycopeptide Polymers, POLY Division, ACS National Meeting, San Diego.

2011, Head of Steering Committee and Lead Organizer, 6th DFG-NSF Research Conference on Bioinspired Design and Engineering of Novel Functional Materials, New York.

2010-present, Faculty Advisor, Los Angeles Student Chapter of the International Society of Pharmaceutical Engineers.

2010-present, Editorial Advisory Board, *Biomacromolecules*.

2009, Program Chair, First International Conference on multifunctional, hybrid, and nanomaterials, Tours, France.

2007, Organizer, Symposium on Polypeptide and Protein Materials, PMSE Division, ACS National Meeting, Boston.

2006, Technical Program Chair, Biomedical Engineering Society (BMES) National Meeting, Los Angeles.

2006-present; member, Johnsson Comprehensive Cancer Center, UCLA.

2005-2009, Editorial Advisory Board, *Soft Matter*.

2004-2011, member, Materials Creating Training Program, NSF IGERT.

2002-present, Editorial Advisory Board, *Macromolecular Bioscience*.

2003-2006, Editorial Advisory Board, *Macromolecules*.

2000-2005, Editorial Advisory Board, *Biopolymers*.

2003, Organizer, Symposium on Biological and Bio-Inspired Materials Assembly, MRS Fall Meeting, Boston.

2003, Polymer Science demonstrations for Washington School students (5th and 6th grade, SB, CA).

2001, Presentation and Polymer Science demonstrations for Redwood Middle School students (7th and 8th grade, Thousand Oaks, CA).

2000, Organizer, Symposium on Polymers in Biology, POLY Division, ACS National Meeting, Chicago.

2000, Organizer, ACS Award in Polymer Chemistry Symposium, ACS National Meeting, San Diego.

2000, Speaker and City College Interns in Materials Research (CCIMR) representative at SB City College.

Selected Invited Lectures

2018, **Keynote Speaker** at 2018 Bordeaux Polymer Conference, Bordeaux, France.

2017, Xingda Lectureship, Peking University, China.

2016, Fulbright Inaugural Lecture, University of Bordeaux, France.

2014, Du Pont Discovery Lecture, Wilmington, DE.

2013, Young Chemists Committee Symposium, ACS National Meeting, New Orleans, LA.

2013, Program of Polymer Science and Technology (PPST) lecture, MIT.

2011, Chinese-American Frontiers of Engineering, National Academy of Engineering, San Diego, CA.

2010, **Spotlight Speaker**, National Academy of Engineering Grand Challenge Summit, Raleigh, NC.

2010, Molecular Science Forum Lecture Professorship, Institute of Chemistry, Chinese Academy of Science, Beijing, China.

2008, **Plenary Lecture** at 2nd CNSI/G-COE Joint Symposium, Fukuoka, Japan.

2008, **Keynote Speaker** at 5th Marie Curie INVENTS Conference on Biomaterials, Madeira, Portugal.

Timothy John Deming

2007, Keynote Speaker at Nuremburg Congress on Coatings, Nuremburg, Germany.
2007, High Polymer Conference, Pott Shrigley, England.
2007, Program of Polymer Science and Technology (PPST) lecture, MIT.
2006, Center for Nanophase Materials Sciences (CNMS) lecture, Oak Ridge National Lab, Tennessee.
2006, Poly. Sci. and Engr. Dept. University of Massachusetts, Amherst.
2006, Frontiers of Engineering, National Academy of Engineering, Dearborn, MI.
2004, World Polymer Congress, MACRO 2004, Paris, France.
2004, Keynote Speaker at 43rd Microsymposium on Polymer Biomaterials, Prague, Czech Republic.
2003, MRS Outstanding Young Investigator Award Lecture.
2002, Rothschild Fellow Lecture, Institut Curie, Paris.
2001, Plenary Lecture, European Polymer Federation 2001 Meeting, Eindhoven, Netherlands.
2000, ACS Industrial Achievement Award Symposium, National ACS Meeting, Washington DC.

Peer Reviewed Publications: 154; **h-Index (April 13, 2021):** 64 (Google Scholar)

Patent Applications: 33; **Issued Patents:** 18

Complete List of Published Work in ORCID: <http://orcid.org/0000-0002-0594-5025>