

# TIMOTHY M. SWAGER

## **PERSONAL:**

### **PROFESSIONAL POSITIONS:**

#### *Massachusetts Institute of Technology*

John D. MacArthur Professor of Chemistry July 1, 2005-Present  
Director of the Deshpande Center for Technological Innovation May 1, 2014-Present  
Head of The Department of Chemistry July 1, 2005-June 30, 2010  
Founding Associate Director Institute for Soldier Nanotechnologies June 1, 2002-June 30, 2005  
Professor of Chemistry August 1, 1996-July 1, 2005

#### *University of Pennsylvania*

Professor of Chemistry July 1, 1996-July 31, 1996  
Assistant Professor of Chemistry July 1, 1990-June 30, 1996

#### *Massachusetts Institute of Technology*

Postdoctoral Fellow, Advisor: Mark S. Wrighton August 1988-July 1990

### **EDUCATION:**

Ph.D., Chemistry, *California Institute of Technology* May 1988

Research Advisor: Robert H. Grubbs

B.S., Chemistry, With Highest Honors, *Montana State University* June 1983

### **PRINCIPAL RESEARCH INTERESTS:**

Colloid Science, Electronic Materials, Chemical Sensors, Supramolecular Science, Polymer Science, Liquid Crystals, Synthetic Conductors, Molecular Recognition, Molecular Electronics, Photonics

### **AWARDS AND FELLOWSHIPS:**

National Academy of Inventors Fellow 2020; Polymer Chemistry Award (ACS) 2019; Vannevar Bush Faculty Fellowship (DoD) 2018; Chandler Medal, Columbia University 2017; Pauling Medal 2016, Gustavus John Esselen Award for Chemistry in the Public Interest 2016; Humboldt Senior Research Award 2014; Council for Chemical Research-Diversity Award 2014; Fellow of the American Chemical Society 2013; Award for Creative Invention (ACS) 2013; Royal Society of Chemistry (UK) Centenary Prize 2012; Fellow of the Division of Polymer Chemistry (ACS) 2009; John Scott Award 2008; Elected to the National Academy of Sciences 2008; Honorary Doctorate of Science, Montana State University 2008; Lemelson-MIT Award for Invention and Innovation 2007; Elected to the American Academy of Arts and Sciences 2006; Christopher Columbus Foundation Homeland Security Award 2005; The Carl S. Marvel Creative Polymer Chemistry Award (ACS-Polymer Div) 2005; Clare Hall Visiting Fellow (U. Cambridge, England) 2005; Visiting Professor (Université Bordeaux) 2003; Vladimir Karapetoff Award (MIT) 2000; Cope Scholar Award (ACS) 2000; Union Carbide Innovation Recognition Award 1997-8; Philadelphia Section Award (ACS) 1996; Camille Dreyfus Teacher-Scholar 1995-1997; Alfred P. Sloan Research Fellow 1994-1996; DuPont Young Faculty Award 1993-1996; NSF-Young Investigator 1992-1997, Office of Naval Research Young Investigator 1992-1995, Lawton Chiles Postdoctoral Fellowship in Biotechnology (NIH) 1989; Herbert Newby McCoy Award For Outstanding Graduate Research (California Institute of Technology) 1988; Advanced Technologies Graduate Fellow (Aerojet General, General Motors, TRW) 1988; IBM Graduate Fellow 1984-1987; Most Outstanding Senior Chemistry Major (American Institute of Chemists) 1983; Merck Index Undergraduate Chemistry Award 1983

### **OTHER PROFESSIONAL ACTIVITIES:**

*Service to the Federal Government:* National Academies Board on Chemical Sciences and Technology 2012-2018 (Co-Chair 2012-2015), TSA Blue Ribbon Panel, Project Newton 2009, Naval Studies Board 2009-2014, National Research Council Science & Technology Committee for Countering Terrorism 2002, Member of JIEDDO Standing Committee 2006-2007, Defense Science Board Task Force on Chemical Warfare Defense 2001-2002, National Science Foundation (Organizer: Materials Chemistry Workshop 1996, Review of Materials Chemistry 1997, Organizer US-UK Bilateral Assistant Professor Workshop 2004-2005), Organizer UK-US Conference on Chemical and Biological Sensors and Detectors 2007. Service on Numerous Other Panels for NIH, NSF, DoD, US Senate Commerce Committee.

*Scientific Advisory Boards:* Inkbit 2019- Via Separations 2017-2018; Advanced Research Center Chemical Building Blocks Consortium (Holland) 2016-2019; Nano-C Inc. Westwood, MA 2006-; ICx Technologies Science & Technology Council, Washington DC 2006-2010; Coatue Corp., Cambridge MA, 2001-2003; Mitsubishi Chemical Company, Tokyo 2002, Nomadics Inc., Stillwater OK and Cambridge MA, 2000-2005; Collegium Pharmaceutical Inc., Hingham, MA, 2001-4, Plextronics Inc. Pittsburgh PA, 2006-2014, E-ink, Cambridge MA, 1999-2002; Polaroid Corp., Cambridge MA, 1999-2002

*Scientific Founder:* Iptyx Corp., 2003-2009, (High Performance Polymers) Acquired by ICx Technologies; DyNuPol Inc., 2009-, Newton MA (Agents for Dynamic Nuclear Polarization Enhancement); PolyJoule, 2011-, Billerica MA (Energy Storage Devices); C<sub>2</sub> Sense, 2014-, Watertown MA (Gas Sensors); Xibus Systems, 2018- Watertown MA (Bacteria Detection Systems).

*Editorial Advisory Boards:* Chemistry of Materials 1997-2002; Accounts of Chemical Research 1998-2000, 2002-2014; J. of Polymer Science 1999-; J. Am. Chem. Soc. 2000-2002; Supramolecular Chemistry 2001-2006; Advanced Synthesis & Catalysis 2001-2010; J. Supramolecular Chemistry 2001-2006; Associate Editor of Synfacts, 2005-, Chemistry Letters 2010-, Associate Editor of Macromolecules 2010-2019, Angewandte Chemie International Advisory Board 2017-2020

**PUBLICATIONS:** > 500 Peer Reviewed Manuscripts

**PROCEEDINGS:** >70 Published Manuscripts in Proceedings Volumes.

**BOOK CHAPTERS:** 11 Published

**U.S. PATENTS:** >100 (Many Have been Converted to International Patents)

**INVITED LECTURES:** Since 1990 Swager has given over 400 university/industrial lectures and more than 300 invited, plenary, or keynote lectures at professional meetings.