

**Gareth H. McKinley** (email: [gareth@mit.edu](mailto:gareth@mit.edu))

**Education:**

Ph.D.	Massachusetts Institute of Technology Ph.D in Chemical Engineering Thesis advisors R.A. Brown, R.C. Armstrong	1991
M.Eng. & M.A.	University of Cambridge; Downing College Department of Chemical Engineering; advisor Prof. M. Mackley	1986
B.A. (Natural Sciences)	University of Cambridge; Downing College	1985

**Professional Employment, Other Positions Held, and Affiliations:**

School of Engineering Professor of Teaching Innovation, M.I.T.		July 1, 2006–
Head, Area 1 (Mechanics; Modeling Experimentation & Computation; MMEC) Department of Mechanical Engineering, MIT		July 1, 2005
Director, Program in Polymer Science & Technology (PPST), MIT.		July 1, 2004
Director, Hatsopoulos Microfluids Laboratory, Dept. Mechanical Engineering		July 1, 2002
Visiting Professor, Monash Univ. & Miegunyah Fellow, University of Melbourne,		Jan.–Jul. 2002
Professor (Associate Professor)	Massachusetts Institute of Technology Department of Mechanical Engineering	2001 – 2006 (1997 – 2001)
Associate Professor	Harvard University, Division of Engineering and Applied Sciences	1995-1997
Assistant Professor	Harvard University	1991-1995

**PROFESSIONAL ACTIVITIES AND AWARDS**

Member, US National Committee for Theoretical & Applied Mechanics (USNC/TAM)	2007 –
Fellow of the American Physical Society (APS)	2007
MIT Class of 1960 Fellow for Teaching Excellence	2005 – 2007
Frenkiel Award of the APS, Division of Fluid Dynamics	2002
Society of Rheology; Technical Program Chair, 74th Annual Meeting	2001
Executive Editor, <i>J. Non-Newtonian Fluid Mechanics</i>	2000 – present
Editorial Board, <i>Rheol. Acta</i> , <i>J. of Rheology</i> , <i>Applied Rheology</i> and <i>Korea-Aust. Rheology Journal</i>	
Bose Award for Teaching Excellence, M.I.T. School of Engineering	2000
Ruth & Joel Spira Award for Excellence in Teaching, M.I.T.	2000
Presidential Faculty Fellowship, National Science Foundation	1995 – 1998
Rosenbaum Fellowship at the Isaac Newton Institute, Univ. of Cambridge	1996
Hon. Vice President, London International Youth Science Forum (LIYSF)	1995 –present
Annual Award of the British Society of Rheology	1994
National Young Investigator Award, National Science Foundation	1993-1995

**Representative Recent Publications (from 110+ publications)**

Tuteja, A., Choi, W., Ma, M., Mabry, J.M., Mazzella, S.A., Rutledge, G.C., Cohen, R.E. and McKinley, G.H., Designing Superoleophobic Surfaces, *Science*, **318** (2007), 1618-1622.

Liff, S.M., Kumar, N. and McKinley, G.H., High Performance Elastomeric Nanocomposites via Solvent Exchange Processing, *Nat. Mat.*, (2007), **6**(1), 76-84.

Ewoldt, R., Clasen, C., Hosoi, A.E. and McKinley, G.H., Rheological Fingerprinting of Gastropod Pedal Mucus and Bioinspired Complex Fluids for Adhesive Locomotion, *Soft Matter*, **3**(5) (2007), 634-643; DOI: 10.1039/b615546d.

Clasen C, Eggers J, Fontelos M, Li J and McKinley G H, The "Beads on a String" Structure of Polymeric Jets, *J. Fluid Mech.*, **556** (2006), 283-308.

McKinley, G.H. and T. Sridhar, "Filament Stretching Rheometry of Complex Liquids", *Ann. Rev. Fluid Mech.*, (Annual Reviews Press, Palo Alto), (2002), **34**, pp. 375-415.