

CURRICULUM VITAE
STEPHEN GAROFF

Business Address

Department of Physics
Carnegie Mellon University
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Professional Experience

2021-present

Professor Emeritus
Department of Physics, Carnegie Mellon University, Pittsburgh, PA
(Courtesy Professor of Chemical Engineering and

1988-2021

Professor
Department of Physics, Carnegie Mellon University, Pittsburgh, PA
(Courtesy Professor of Chemical Engineering and
Courtesy Professor of Material Science and Engineering)

Primary areas of research:

- wetting and spreading of fluids on simple and heterogeneous surfaces
- interfacial structure of simple and complex fluids
- electrophoresis of complex particles
- microscopic origins of friction
- pulmonary aerosol drug delivery

2013-2017

Head, Department of Physics, Carnegie Mellon University

1994-1999, 2007- 2012

Associate Head, Department of Physics, Carnegie Mellon University

1986-1988

Research Scientist
Schlumberger-Doll Research, Ridgefield, CT

Primary areas of research:

- wetting and spreading of fluids on simple and heterogeneous surfaces
- interfacial structure of simple and complex fluids

1977-1986

Research Scientist
Exxon Research and Engineering Company, Annandale, NJ

Primary areas of research:

- optical probes of finely dispersed materials, thin films, carbonaceous materials, and interfacial regions
- electrodynamics of rough metal surfaces
- fluorescent solar collectors
- molecular structure of organic monolayers
- microscopic origins of wetting, and friction at organic surfaces

1973-1977

Research Assistant
Harvard University, Cambridge, MA

Areas of research:

-structure, optical properties, and phase transitions of liquid crystals

1974-1975

Teaching Assistant
Harvard University

Education

Ph.D. Applied Physics, 1977
Harvard University, Cambridge, MA
Thesis Title: Ferroelectric Liquid Crystals
Advisor: Robert B. Meyer

S.M. Applied Physics, 1974
Harvard University

B.S. Physics, 1972
Yale University, New Haven, CT

Awards

Mellon College of Science Richard Moore Teaching Award, 2018
Carnegie Mellon University Academic Advising Award, 2002
Elected Fellow, American Physical Society, 1998
Harvard University:
Xerox Corporation Fellowship, 1975-1976
Yale University:
Phi Beta Kappa
Graduated magna cum laude with honors in Physics

Memberships

American Physical Society
American Chemical Society

Selected Conference Organizing and Professional Activities

Program Committee--American Chemical Society Symposium on Photoprocesses at Solid Surfaces, March, 1983
Organizing Committee--International Symposium on Complex and Supermolecular Fluids, June, 1985
Panel Member--Department of Energy Materials Science Panel on Organic Thin Films, September, 1986
Chairman--Gordon Conference on Organic Thin Films, February, 1988
Panel Member--Department of Energy Materials Science Panel on The Liquid-Solid Interface and Its Role in Ceramic Processing, September, 1988
Program Committee--47th Annual Pittsburgh Diffraction Conference, November, 1989
Organizing Committee--Pennsylvania Summer Surface Science Workshop, August, 1989 and August 1991

Panel Member--Workshop on Interfacial Phenomena and Rheology of Fluid Dispersions sponsored by NSF and U.S. Bureau of Engraving and Printing, January 1991

Panel Member -- NSF/SBIR Proposal Review, 1992, 1993

Organizer -- Future Scientists Day at March Meeting of the American Physical Society, March 1994.

Co-Founder -- Pittsburgh Public School/Carnegie Mellon Outreach Program for Mentoring in Science

Panel Member -- NSF Young Investigator Proposal Review, 2000

Co-Chair -- 2001 American Chemical Society Colloid and Surface Science Symposium

Member -- Microgravity Science and Applications Council, Universities Space Research Association, 2002-2005

Member – Symposium Committee, Colloid and Surface Science Division, American Chemical Society, 2008-2010.

Participant – NSF workshop on the Science and Technology of Dispersants Relevant to Deep Sea Floor Oil Releases, 2010.

Organizer, Symposium on Wetting, American Chemical Society, Colloid and Surface Science Symposium, Johns Hopkins, June 2013

Co-Chair -- 2015 American Chemical Society Colloid and Surface Science Symposium

Member – Scientific Advisory Board for the Max Planck Institute for Polymer Research (2017-present)

Co-Organizer and Co-Chair – Workshop: Physics to Pharma: using surfactant driven flows to improve inhaled therapies – a translational workshop 2019

Member – DFG Panel on Dynamic wetting of flexible, adaptive and switchable surfaces 2019

Organizer – Session at American Chemical Society National Meeting, spring 2024