

Roger T. Howe

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ACADEMIC POSITIONS

(2005 –) *Stanford University*

William E. Ayer Professor (2009 –)
Professor (2005 –)
Department of Electrical Engineering

(1987 –) *University of California, Berkeley*

Robert S. Pepper Distinguished Professor (2004 – 2005)
Chair, Electrical Engineering Division and Associate Chair, EECS Dept. (2002 – 2005)
Professor (1993 –), Associate Professor (1989 – 1993), Assistant Professor (1987 – 1989)
Department of Electrical Engineering and Computer Sciences
Professor (1997 –), Department of Mechanical Engineering (0% FTE)
Director (1993 –), Associate Director (1987 – 1993), Berkeley Sensor & Actuator Center

(1985 – 1987): *Massachusetts Institute of Technology*

Assistant Professor, Dept. of Electrical Engineering and Computer Science

(1984 – 1985): *Carnegie-Mellon University*

Assistant Professor, Dept. of Electrical and Computer Engineering

RESEARCH INTERESTS

The design and fabrication of micro and nano sensors, actuators, and signal processing devices.

EDUCATION

University of California, Berkeley: Ph.D., December 1984, M.S., December 1981.

Engineering Science, Dept. of Electrical Engineering and Computer Sciences.

Harvey Mudd College, Claremont, California, B.S., May 1979.

Major: physics, applied option.

HONORS

U.S. National Academy of Engineering: 2005.

Citation: “for contributions to the development of microelectromechanical systems in processes, devices and systems.”

IEEE Cleo Brunetti Award (with R. S. Muller): 1998

Citation: “for leadership and pioneering contributions to the field of microelectromechanical systems.”

Fellow, IEEE: 1996.

Citation: “for seminal contributions to microfabrication technologies, devices, and microelectromechanical systems.”

Analog Devices Career Development Professorship, 1988 – 1991

NSF Presidential Young Investigator Award, 1986

IBM Faculty Development Award, 1984 – 1986

David J. Sakrison Memorial Prize and Demetri Angelakos Memorial Achievement Award, Dept. of Electrical Engineering and Computer Sciences, Univ. of California, Berkeley, 1984

ADMINISTRATIVE SERVICE

Member, Strategic Planning Committee: Dept. of Electrical Engineering, 2005-2006

Chair, MSEE Program Reform Committee: Dept. of Electrical Engineering, 2006-2007

Head of Undergraduate Affairs: Dept. of EECS, 1992 – 1993.

Chair, Undergraduate Curriculum Reform Committee: Dept. of EECS, 1992 – 1993.

Member, Strategic Planning Committee: Dept. of EECS, 1993 – 1995

College of Engineering, 1994 – 1995

Co-Chair, Curriculum Revision Committee: Dept. of EECS, 1997 – 1998

Associate Chair, Dept. of Electrical Engineering, 2002 – 2005

PROFESSIONAL SERVICE

Chair: MEMS Technical Committee, IEEE Electron Devices Society, 1998 - 2001

Trustee: Transducer Research Foundation, Inc. Cleveland, Ohio, 1995 –

Technical Program Chair: 12th International Conference on Solid-State Sensors, Actuators, and Microsystems (Transducers '03), Boston, Mass., June 8-12, 2003

General Chair: Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, June 1996.

Technical Program Chair: Solid-State Sensor and Actuator Workshop, Hilton Head Island, South Carolina, June 1994.

General Co-Chair: 3rd IEEE Micro Electro Mechanical Systems Workshop, Napa Valley, California, February 1990.

Technical Program Co-Chair: IEEE Micro Electro Mechanical Systems Workshop, Salt Lake City, Utah, February 1989.

Member of Editorial Boards:

IEEE/ASME Journal of Microelectromechanical Systems, 1998 – 2002, 2006 –

Microsystem Technology, 1994 –

Sensors and Actuators A, 1988 –

ADVISORY AND CONSULTING RELATIONSHIPS

ACLARA BioSciences, Mountain View, Calif., 1996 – 2001

Analog Devices, Cambridge, Mass., 1989 –

Ardesta LLC, Ann Arbor, Mich., 2001 –

Becton Dickinson, Sandy, Utah, 1989 – 1991

DaimlerChrysler, Circle Member Group, Stuttgart, Germany, 1997 – 2001

Discera, Ann Arbor, Michigan 2001 – 2004

Federal Products Corp., Providence, R.I., 1987 – 1988

General Motors Research, Warren, Mich., 1986 – 1990

Gerson Lehrman Group, Council of Communications and Technology Advisors, 2000 – 2004

Medcam, Bellevue, Wash., 1998 – 1999

MEMSIC, Andover, Mass., 1999 – 2004

MicroReactor Systems, Mt. View, Calif., 2003 – 2005

Motion Sense, Fremont, Calif., 2000 – 2002

Sandia National Laboratories, Albuquerque, N.M., 1996 –

Silicon Clocks, Inc., Fremont, Calif., 2004 –

Silicon Light Machines, Sunnyvale, Calif., 1995-98

SiWave (now Siimpel Corp.) Arcadia, Calif., 2000 – 2003

SRI International, Menlo Park, Calif., 2008 –

Sundstrand Data Control, Redmond, Wash., 1989 – 1990

U.S. Air Force Scientific Advisory Board, 2004 – 2008