

**BIOGRAPHICAL SKETCH**

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NAME: Rabitz, Herschel A.

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Professor, Experimental & Theoretical

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of California, Berkeley	BS	1966	Chemistry
Harvard University	PhD	1970	Chemical Physics
University of Wisconsin	Post-Doc	1971	

**A. Personal Statement**

Herschel Rabitz graduated from Harvard University in 1970, earning his Ph.D. in chemical physics. Professor Rabitz joined the faculty of the Princeton University Department of Chemistry, and from July 1993 to July 1996 he was chair of the department. He is also an affiliated member of Princeton University's Program in Applied and Computational Mathematics. Professor Rabitz's research interests lie at the interface of chemistry, physics, and engineering, with principal areas of focus including molecular dynamics, biophysical chemistry, chemical kinetics, and optical interactions with matter. An overriding theme throughout his research is the emphasis on molecular scale systems analysis. Professor Rabitz has nearly 900 publications in the general area of chemical physics. The Rabitz Group research consists of coordinated experimental and theoretical activities in the general domains of physical chemistry and systems biology.

**B. Positions, Scientific Appointments, and Honors**

- Assistant Professor of Chemistry, Princeton University, 1971 – 1976
- Affiliated Member and Acting Director (1981), Program in Applied and Computational Mathematics, Princeton University, 1974 - Present
- Associate Professor of Chemistry, Princeton University, 1976 - 1980
- Professor of Chemistry, Princeton University, 1980 – Present
- Chairman, Department of Chemistry, Princeton University, July 1993 - June, 1996
- Andlinger Center for Energy and the Environment, 2013

## Honors

- Alfred P. Sloan Fellow, 1975 – 1979
- Camille and Henry Dreyfus Teacher-Scholar, 1974 – 1979
- Alexander von Humboldt Award, 2000
- Charles Phelps Smyth Professor of Chemistry, 2000
- Willis E. Lamb Medal for Laser Science and Quantum Optics, 2003
- Fellow of the American Association for the Advancement of Science 2004
- Genetic and Evolutionary Computation Gold Award 2005
- Honorary member of the International Physics and Control Society (IPACS) 2006
- Alexander von Humboldt Award, 2014

## C. Contributions to Science

Kernel-based global sensitivity analysis obtained from a single data set

J Barr, H Rabitz

Reliability Engineering & System Safety 235, 109173

Two-photon excitations of the water molecule studied by time-resolved ion momentum spectroscopy

J Searles, A Venkatachalam, Z Phelps, HVS Lam, I Ben-Itzhak, D Rolles, ...

Bulletin of the American Physical Society

Sampling-Based Learning Control of Quantum Systems with Uncertainties

D Dong, IR Petersen

Learning and Robust Control in Quantum Technology, 65-92

Effective and Scalable Control of Quantum Processors—Insight and Perspective

B Lienhard, S Khan, R Kosut, H Tureci, H Rabitz

Bulletin of the American Physical Society

More for LESS: Optimal Control of Open Quantum Systems Within the Born approximation

M Grace, C Brif, H Rabitz, R Kosut

Bulletin of the American Physical Society