

Robert Paul Parson

Degrees:

Sc.B. 1979, Brown University
M.S. 1980, University of Michigan
Ph.D. 1984, University of Michigan

Appointments:

Undergraduate, Summer 1978, University of Chicago
Postdoctoral, University of Washington
Assistant Professor, Department of Chemistry and Biochemistry, 1986-1993
Associate Professor, Department of Chemistry and Biochemistry, 1993-2000
Professor, Department of Chemistry and Biochemistry, 2000- present
Fellow of the Joint Institute for Laboratory Astrophysics, 1987-present

Honors and Awards:

Junior Chemistry Prize, 1978
Dreyfus Summer Scholar, University of Chicago, 1978
Graduated Magna Cum Laude with Distinction in Chemistry, 1979
Samuel H. Baer Fellowship, 1979-1984
Junior Faculty Development Award, University of Colorado, 1987

Research Interests:

Theoretical chemical physics: Molecular dynamics in gas and condensed phase.
Chemistry Education (especially General and Physical Chemistry)

Recent Publications of Robert Parson

"Graduate Teaching Assistant Training That Fosters Student-Centered Instruction and Professional Development", Thomas C. Pentecost, Laurie S. Langdon, Margaret Asirvatham, Hannah Robus, and Robert Parson, *Journal of College Science Teaching* **41**, 6, 68-75 (2012).

"Insights from Using PhET's Design Principles for Interactive Chemistry Simulations"
Kelly Lancaster, Emily B. Moore, Robert Parson, and Katherine K. Perkins, *ACS Symposium Series* **1142**, 5, 97-126 (2013).

"How guidance affects student engagement with an interactive simulation"
Julia M. Chamberlain, Kelly Lancaster, Robert Parson and Katherine K. Perkins
Chem. Educ. Res. Pract., DOI: 10.1039/C4RP00009. Published online 18 Jun 2014

"PhET Interactive Simulations: Transformative Tools for Teaching Chemistry"
Emily B. Moore, Julia M. Chamberlain, Robert Parson, and Katherine K. Perkins
J. Chem. Educ., DOI: 10.1021/ed4005084. Published online 2 July 2014

Recent Postdocs (co-advised with Katherine Perkins), with their current positions:

Emily B. Moore (Director of Research and Accessibility, PhET Interactive Simulations)

Julia M. Chamberlain (Assistant Professor, UC Davis)

Yuen-ying Carpenter (Instructor, University of Calgary)

Summary of Service for Robert Parson during 2017-2022

Department Service:

Associate Chair, to June 2022

Chemistry Executive Committee (Ex Officio) to June 2022

Co-chair, Shared Undergraduate Instruction Committee

Member, General Chemistry Coordinating Committee

College and Campus Service:

Fellow, Center for STEM Learning (CSL)

Chemistry Department Representative to Arts and Sciences Honors Program

Chemistry Department Representative, Arts and Sciences Faculty Senate

Member, Arts and Sciences Undergraduate Curriculum Committee (Chair to June 2022)

Chemistry Education advisor, PhET Interactive Simulations