

# Abbreviated Curriculum Vitae for Alec M. Wodtke

## Personal

Date of Birth: July 10, 1959

Place of Birth: Salt Lake City, Utah

## Professional Preparation

Post-doctoral research Associate Max Planck Institute, Göttingen Germany 1986  
Doctor of Philosophy (U.C. Berkeley) 1986  
Bachelor of Arts (University of Utah), Magna cum Laude 1981

## Appointments

Professeur Titulaire, Ecole Polytechnique Fédérale Lausanne, Lausanne Switzerland 2015  
Director and Scientific Member of the Max Planck Society for the Advancement of Science,  
Max Planck Institute for Biophysical Chemistry, Göttingen Germany 2010  
Professor, Institute for Physical Chemistry, University of Göttingen, Göttingen Germany 2010  
Director, Partnership for International Research and Education 2005-10  
Associate Director, Institute for Quantum and Complex Dynamics 2003  
Chairperson, Department of Chemistry and Biochemistry 2003-9  
Full Professor, UCSB 1996  
Assoc. Professor with Tenure, Dept. of Chemistry, UCSB 1993  
Visiting Scientist, Catholic University of Nijmegen, the Netherlands 1993  
Guest Scientist, Dept. of Physics, University of Kaiserslautern, Kaiserslautern, Germany 1991  
Asst. Professor, Dept. of Chemistry, UCSB 1988

## Awards and Honors

ERC Advance Grant Awardee 2017  
Alexander von Humboldt Professorship 2010  
Elected Fellow of the American Physical Society 2009  
Elected Fellow of the American Association for the Advancement of Science 2007  
Alexander von Humboldt Research Award to Senior US Scientists 1998  
Alfred P. Sloan Research Fellow 1992  
Camille and Henry Dreyfus Teacher Scholar Award 1992  
NSF Presidential Young Investigator 1989  
U.C. Regents Junior Faculty Fellow 1989  
ACS Outstanding Graduate Student Award 1984  
NSF Predoctoral Fellow 1982

## Selected Research Publications:

More than 240 research articles in peer reviewed Journals: 'ISI-Web of Science' reports 7930 cumulative citations, h-index of 47.

1. *Transporting and concentrating vibrational energy to promote isomerization*, J. A. Lau, C. Li, A. Choudhury, D. Schwarzer, V. B. Verma and A. M. Wodtke, **Nature**, 2020, 589, 391, DOI: 10.1038/s41586-020-03081-y
2. *Observation of an isomerizing double-well quantum system in the condensed phase*, J. A. Lau, A. Choudhury, C. Li, D. Schwarzer, V. B. Verma and A. M. Wodtke, **Science**, 2020, 367, 175, DOI: 10.1126/science.aaz3407.
3. *Following the microscopic pathway to adsorption through chemisorption and physisorption wells*, D. Borodin, I. Rahinov, P. R. Shirhatti, M. Huang, A. Kandratsenka, D. J. Auerbach, T. Zhong, H. Guo, D. Schwarzer, T. N. Kitsopoulos and A. M. Wodtke, **Science**, 2020, 369, 1461-1465, DOI: 10.1126/science.abc9581.
4. *Imaging covalent bond formation by H atom scattering from graphene*, H. Y. Jiang, M. Kammler, F. Z. Ding, Y. Dorenkamp, F. R. Manby, A. M. Wodtke, T. F. Miller, A. Kandratsenka and O. Bunermann, **Science**, 2019, 364, 379, DOI: 10.1126/science.aaw6378.
5. *The Sommerfeld ground-wave limit for a molecule adsorbed at a surface*, L. Chen, J. A. Lau, D. Schwarzer, J. Meyer, V. B. Verma and A. M. Wodtke, **Science**, 2019, 363, 158-161, DOI: 10.1126/science.aav4278.
6. *Velocity-resolved kinetics of site-specific carbon monoxide oxidation on platinum surfaces*, J. Neugeboren, D. Borodin, H. W. Hahn, J. Altschaffel, A. Kandratsenka, D. J. Auerbach, C. T. Campbell, D. Schwarzer, D. J. Harding, A. M. Wodtke and T. N. Kitsopoulos, **Nature**, 2018, 558, 280, DOI: 10.1038/s41586-018-0188-x.
7. *Electron-hole pair excitation determines the mechanism of hydrogen atom adsorption*, Oliver Bünermann\*, Yvonne Dorenkamp, Hongyan Jiang, Alexander Kandratsenka, Svenja Janke, Daniel J. Auerbach, AM Wodtke, **Science** **350**(6266) 1346-9 (2015)
8. *Inverse velocity dependence of vibrationally promoted electron emission from a metal surface*, Hendrik Nahler, Jerry Larue, Jason White, Daniel J. Auerbach and Alec M. Wodtke, **Science**, **321**, 1191-1194 (2008)
9. *Conversion of large amplitude vibration to electron excitation at a metal surface*, J. White, J. Chen, D. Matsiev, D.J. Auerbach and A.M. Wodtke, **Nature** **433**(7025),503-505, (2005).
10. *Vibrational promotion of electron transfer*, Y. H. Huang, C. T. Rettner, D. J. Auerbach and A. M. Wodtke, **Science**, 2000, 290, 111-114, DOI: 10.1126/science.290.5489.111.

**Graduate advisor:** Prof. Dr. Yuan T. Lee, UC Berkeley, Nobel Laureate in Chemistry 1986

**Postdoctoral advisor:** Prof. Dr. Peter Andresen University of Bielefeld Germany.