

**Chancellor's Distinguished Fellows Program
2004-2005
Selective Bibliography
UC Irvine Libraries**

George H. Atkinson

October 25, 2004

Prepared by:
Julia Gelfand
Applied Sciences Librarian
jgelfand@uci.edu

Book Chapters

"Coherent Anti-Stokes Raman Spectroscopy," in *Handbook of Vibrational Spectroscopy*, J.M. Chalmers and P.R. Griffiths, eds. New York: Wiley, 2002: 585-595.

Selective Recent Scientific Journal Articles & Conference Proceedings (usually co-authored, with a total of >170)

"Picosecond Time-Resolved Coherent Anti-Stokes Raman Spectroscopy of the Artificial Bacteriorhodopsin Pigment, BR6.11," *Journal of Physical Chemistry* (2003), 107: 10787-10797.

"Picosecond Coherent Vibrational Spectroscopy (CARS) of a DNA-Intercalating Ru Complex," *Journal of Physical Chemistry* (2002), 106:4854-4862.

"Dynamics and Retinal Structural Changes in the Photocycle of the Artificial Bacteriorhodopsin Pigment BR6.9," *Journal of Physical Chemistry A* (2002), 106 (14), 3325-3336.

"Vibrational Spectrum of the J-625 Intermediate in the Room Temperature Bacteriorhodopsin Photocycle," *Journal of Physical Chemistry A* (2001), 104 (18), 4130-4139.

"Absolute Intensities and Pressure Broadening Coefficients of 2- μm CO₂ of Absorption Features at Low Temperatures: Intracavity Laser Spectroscopy. *Applied Optics* (2001), 40: 2551-2560.

"Intracavity Laser Spectroscopy with an Ion-doped, Solid-state Tm³⁺: YAG Laser," *Journal of Quantitative Spectroscopy and Radiative Transfer* (2001), 68: 453-465.

"Ultra-sensitive Trace Gas Detection by Intracavity Laser Spectroscopy and Dynamic Calibration," Presentation at the Electrochemical Society, 198th Meeting, (October 24, 2000), Phoenix, AZ.

"Coherent Anti-Stokes Vibrational Raman Spectra of Artificial Rhodopsin Pigments Containing Ring Structuring Blocking 11-*cis* Isomerization," *Journal of Molecular Structures* (1999), 48: 107-119.

"Vibrational Spectroscopy of a Picosecond, Structurally-restricted Intermediate Containing a Seven-Membered Ring in the Room-Temperature Photo-reaction of an Artificial Rhodopsin," *Journal of the American Chemical Society* (1998), 120: 3739-3747.

"Bathorhodopsin Structure in the Room-Temperature Rhodopsin Photo-Sequence: Picosecond Time-Resolved Coherent Anti-Stokes Raman Scattering," *Proceedings of the National Academy of Sciences* (1996), 93:372-376.

"Picosecond Dynamics of the Batho Intermediate in the Room-Temperature Rhodopsin Photosequence," *Journal of Physical Chemistry* (1995), 99: 10043-10045.

"Picosecond-resonance Coherent Anti-Stokes Raman Scattering in Biophysics: Power Dependence in the Bacteriorhodopsin Photocycle." *Springer Proceedings in Physics* (1994) from Time-Resolved Vibrational Spectroscopy VI, 153-157.

Selective Patents - Recipient of more than 65 U.S. and International Patents

Selective Press Releases & Interviews

U.S. Department of State Announcement
<http://www.state.gov/r/pa/prs/ps/2003/24341.htm>

"Atkinson Arrives as State Department Science Advisor,"
Physics Today (September 2003), 56 (9):32.

"When Science Meets Diplomacy in a Globalized World: Dr. George Atkinson, Science and Technology Advisor to the Secretary of State."
Bridges: The OST's Publication on Science & Technology Policy (October 5, 2004), vol. 3.
http://www.ostina.org/html/bridges_archive/article.htm?article=1165

Chemical & Engineering News Press Release
<http://pubs.acs.org/isubscribe/journals/cen/81/i43/html/8143gov1.html>

Embassy Events 2004: A Conversation with Dr. Atkinson

<http://warsaw.usembassy.gov/poland/atkinson.html>

Dissertation

"Spectroscopic and Relaxation Properties of Odd Singlet-B(2) Benzene"
Indiana University, 1971.

Honors

Eckerd College, Honorary Degree Recipient, 2004
<http://www.eckerd.edu/commencement/c04.php?f=recap>

Indiana University's Highest Alumni Award
<http://alumni.indiana.edu/about/news/release-20040601.html>
<http://newsinfo.iu.edu/news/page/normal/1474.html>

Elected titular Board Member, Physical and Biophysical Chemistry Division,
International Union of Pure and Applied Chemistry, 2002-2006
http://www.iupac.org/division/I/I_01min.pdf

First AIP Scientist/Diplomat, U.S. Department of State, 2001.
<http://www.aip.org/eneews/fyi/2003/123.html>

Time-Resolved Vibrational Spectroscopy, Senior Awardee for lifetime contributions,
2001

University of Arizona, Five-Star Teaching Award, Outstanding Teacher, 1992.

Lady Davis Professorship, Hebrew University and the Technion, Israel, 1990-1992

Federal Republic of Germany, Senior Fulbright Award, 1990

Senior Alexander von Humboldt Award, Technical University of Munich, 1989-

Eckerd College, Outstanding Alumni Award, 1985

SERC Senior Visiting Fellow, Oxford University and the Royal Institution of Great
Britain, 1983

Personal Websites:

US Department of State Biography
<http://www.state.gov/r/pa/ei/biog/24359.htm>

University of Arizona Research Summary

http://www.chem.arizona.edu/faculty/profile/profile.php?fid_call=atki

University of Arizona, Personal CV

<http://www.optics.arizona.edu/Faculty/Resumes/Atkinson.htm>