

CARMEN L. HUFFMAN

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EDUCATION

- Aug 2001 to Aug 2005 **University of Maryland**, College Park, MD
Ph. D. Chemistry
Thesis: *The role of charge in solvation at liquid/liquid interfaces*
Focus: Physical Chemistry, Advisor: Dr. Robert A. Walker
- Aug 1997 to May 2001 **University of Rhode Island**, Kingston, RI
B. S. Chemistry
Area of focus: Organic chemistry, *Thermochromic properties of alkyl-substituted polythiophenes*

PROFESSIONAL EXPERIENCE

Western Carolina University, Cullowhee, NC

- Fall 2006 to present *Assistant Professor* - Introductory chemistry, introductory chemistry laboratory, introductory chemistry laboratory coordination, physical chemistry (thermodynamics, quantum mechanics, and kinetics), physical chemistry laboratory
- Spring 2006 *Visiting Assistant Professor* - Introductory chemistry, physical chemistry (thermodynamics), physical chemistry laboratory
- Fall 2005 *Visiting Instructor* - Introductory chemistry, introductory chemistry laboratory, introductory chemistry laboratory coordination

University of Maryland, College Park, MD

- Fall 2003 and Fall 2004 *Physical Chemistry Tutor*
- Spring 2003 to Fall 2004 *Mentor for four undergraduate research students*
- Fall 2003 *Teaching assistant* - Physical chemistry discussion (quantum mechanics and kinetics)
- Spring 2002 to Spring 2003 *Teaching assistant* - Physical chemistry laboratory (thermodynamics)
- Fall 2001 *Teaching assistant* - Introductory chemistry laboratory

University of Rhode Island, Kingston, RI

- Spring 2001 *Teaching assistant* - Organic chemistry laboratory

RESEARCH INTERESTS

Surface chemistry, physical chemistry, silica/water interfaces, surface binding energies, surface-solute interactions, admicellization, adsolubilization, and heavy metal remediation

GRANTS

- March 2007 \$495.10 proposal to The Honors College at Western Carolina University for the *Undergraduate Projects Grant* entitled "Ions at the air/water interface: Inhibition or enhancement of neutral solute absorption?" (*Note: This proposal was presented by and awarded to Kelly Lawrence, an undergraduate student working in my research laboratory.*)
- March 2007 \$1,000 proposal to Western Carolina University for the *Chancellor's Travel Award* entitled "Ions at the air/water interface: Inhibition or enhancement of neutral solute absorption?"
- May 2006 \$500 proposal to Western Carolina University for the *Provost's Instructional Improvement Grant* entitled "Demonstrating Chemical Concepts."

AWARDS & HONOR SOCIETIES

- 2004 to 2005 **HHMI "Seeing is Believing" Fellowship** for research in chemical education issued by the Howard Hughes Medical Institute and the College of Life Sciences at the University of Maryland, College Park, MD
- May 2004 **James M. Stewart Excellence in Teaching Award** issued by the Department of Chemistry and Biochemistry, University of Maryland, College Park, MD
- August 2003 **Jacob K. Goldhaber Travel Grant** issued by the Research Graduate School Fellowship Finance Office, University of Maryland, College Park, MD
- Spring 2003 **Rollinson Graduate Mentor Fellowship** for the mentoring of undergraduate research in chemistry issued by the College of Life Sciences, University of Maryland, College Park, MD
- 2002 to 2003 **Gilbert Castellan Fellowship** issued by the Department of Chemistry and Biochemistry, University of Maryland, College Park, MD
- 2001 to 2002 **Block Grant Fellowship** issued by the Department of Chemistry and Biochemistry, University of Maryland, College Park, MD
- May 2001 **ACS Undergraduate Award** issued by the Rhode Island Section of the American Chemical Society

May 2001	1st Prize for Outstanding Research Project at the 4 th Annual Sensors and Surface Technology Partnership Poster Session issued by the Sensors and Surface Technology Partnership
May 2000	Chemistry Department Award issued by the Department of Chemistry, University of Rhode Island, Kingston, RI
Spring 2000	Student Fellow of the Sensors and Surface Technology Partnership at the University of Rhode Island, Kingston, RI
1999 to 2000	Undergraduate Materials Research Initiative (UMRI) Grantee issued by the UMRI for the investigation of the thermochromic properties of poly(3- <i>n</i> -alkylthiophene)s
December 1999	Recipient of an Undergraduate Research Grant issued by the Office of the Provost, the Sea Grant Office, and the Honors Program at the University of Rhode Island, Kingston, RI
Spring 1998	Member of the National Society of Collegiate Scholars , an honor society
Spring 1997	Member of Phi Eta Sigma , an honor society

PUBLICATIONS

(Please note that several publications are under my maiden name, Beildeck.)

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1. Beildeck, Carmen L.; Liu, Milton J.; Brindza, Michael R.; Walker, Robert A. Solvation of *p*-nitrophenol at a water/alkane interface: The role of ionic strength and salt identity. *J. Phys. Chem. B*: **2005**, *109*, 14604-14610.
 2. Beildeck, C. L.; Steel, W. H. and Walker, R. A. Surface charge effects on solvation across liquid/liquid and model liquid/liquid interfaces. **Invited paper** *Faraday Discussion*: **2005**, *129*, 69-80.
 3. Steel, W. H.; Beildeck, C. L. and Walker, R. A. Solvent polarity across strongly associating interfaces. *J. Phys. Chem. B*: **2004**, *108*, 16107-16116.
 4. Steel, W. H.; Lau, Y. Y.; Beildeck, C. L. and Walker, R. A. Solvent polarity across weakly associating interfaces. *J. Phys. Chem. B*: **2004**, *108*, 13370-13378.
 5. Beildeck, C. L.; Steel, W. H. and Walker, R. A. Cationic molecular rulers: Synthesis, characterization, and intramolecular complications. *Langmuir*: **2003**, *19*, 4933-4939.
 6. Beildeck, C.; Lucht, B. L. and Euler, W. B. Comparison of analytical methods for characterization of the thermochromic transition of poly(3-alkylthiophene)s. *Polymer Preprints*: **2001**, *42*, 211-212.

PRESENTATIONS

(Please note that several publications are under my maiden name, Beildeck.)

1. **Lawrence, Kelly A.**; Huffman, Carmen L. Ions at the air/water interface: Inhibition or enhancement of neutral solute adsorption? *233rd ACS National Meeting*: Chicago, IL March **2007**. (poster)
2. **Walker, Robert A.**; Huffman, Carmen; Liu, Milton; Burden, Daniel. The Influence of Surface Charge on Interfacial Polarity: Does It Matter? *37th Middle Atlantic Regional Meeting of the American Chemical Society*: New Brunswick, NJ May **2005**. (oral)
3. **Beildeck, C. L.** Physical chemist seeking to research chemical education at a PUI. *228th ACS National Meeting*: Philadelphia, PA August **2004**. (*Sci-Mix* poster)
4. **Beildeck, C. L.**; Steel, W. H. and R. A. Walker. Effects of surface charge and ionic strength on polarity at liquid surfaces. *228th ACS National Meeting*: Philadelphia, PA August **2004**. (*Sci-Mix* poster)
5. **Beildeck, C. L.**; Steel, W. H. and Walker, R. A. Probing polarity at liquid/liquid interfaces with cationic molecular rulers. *226th ACS National Meeting*: New York, NY September **2003**. (*Sci-Mix* poster)
6. **Beildeck, C. L.**; Steel, W. H. and Walker, R. A. Investigation of polarity at liquid/liquid interfaces: Cationic molecular rulers. *Gordon Research Conference*: Lewiston, ME July **2003**. (poster)
7. Beildeck, C. L.; **Lucht, B. L.** and Euler, W. B. Synthesis and investigation of the thermochromic properties of poly(3-*n*-alkylthiophene)s. *ACS Northeast Regional Meeting*: Storrs, CT July **2000**. (poster)

OTHER NOTEWORTHY SERVICE ACTIVITIES & AFFILIATIONS

Spring 2010	Biochemistry Faculty Search Committee Chair in the Department of Chemistry and Physics at Western Carolina University
Fall 2007 to present	Dean's Advisory Council member in the College of Arts and Sciences at Western Carolina University (elected position)
Fall 2006 to Fall 2007	Chair, Recruitment Committee in the Department of Chemistry and Physics at Western Carolina University
Fall 2007	Science Education Coordinator Search Committee member in the College of Arts and Sciences at Western Carolina University
Fall 2006 to present	Chemistry Club Faculty Advisor in the Department of Chemistry and Physics at Western Carolina University

Fall 2006 to present	Secondary Science Education Advisory Council member in the College of Arts and Sciences at Western Carolina University
Summer 2006	Biotechnology Faculty Search Committee member in the Department of Chemistry and Physics at Western Carolina University
Fall 2005 to Spring 2009	Teacher Education Committee member in the College of Arts and Sciences at Western Carolina University
Fall 2005 to Spring 2008	Curriculum Committee member in the Department of Chemistry and Physics at Western Carolina University
Fall 2004 to Spring 2005	Graduate Representative for the Recruitment Committee in the Department of Chemistry and Biochemistry at the University of Maryland, College Park
November 2003	Attendance of the Eastern Analytical Symposium's Academic Careers in Chemistry Workshop to plan for a profession in academia
Summer 2003	NSF-MRSEC REU mentor (National Science Foundation-Materials Research Science and Engineering Center's Research Experiences for Undergraduates)
2001 to present	American Chemical Society member
2000 to 2001	President, Student Affiliates of the American Chemical Society , University of Rhode Island chapter

REFERENCES

Available upon request.