

# Curriculum Vita

**Qianying Zhang**  
**Instructor/Lab coordinator**  
**Chemistry department**  
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## **EDUCATION**

2008,8-2010,8 Master degree in Chemistry department, Texas A&M University-Commerce, Commerce, TX  
2000,9-2003,3 Master degree in Organic Chemistry, Department of Chemistry, Shanghai University, Shanghai, P. R. China  
1996,9-2000,7 B.S. in Applied Chemistry, Department of Chemistry, Shanghai Shanghai University, P.R. China

## **APPOINTMENT**

2010,8-present Instructor/Lab coordinator, Texas A&M University-Commerce, Commerce, TX  
2006,2-2008,2 Research technician at Department of Chemistry, Texas A&M University-Commerce, Commerce, TX  
2003,4-2006,2 Scientist at Shanghai ChemExplorer Co.,Ltd (pharmaceutical research company of Eli Lilly company in China)

## **TEACHING EXPERIENCE**

(1) CHEM 1411: General and quantitative chemistry I  
(2) CHEM 1412: General and quantitative chemistry II  
(3) CHEM 1411L: General and quantitative chemistry Lab I  
(4) CHEM 1412L: General and quantitative chemistry Lab II  
(5) CHEM 211L: Organic chemistry Lab I  
(6) CHEM 212L: Organic chemistry Lab II  
(7) CHEM 201: Organic chemistry tutorial  
(8) CHEM 101: General chemistry tutorial I  
(9) CHEM 102: General chemistry tutorial II

## **RESEARCH EXPERIENCE**

**2008-2010 Master research with Professor Ben W. Jang**

**Chemistry Department, Texas A&M University-Commerce, Commerce, TX**

(1) *Development of heterogeneous carbohydrate-based catalysts and their application for the biofuel synthesis from crops*  
(2) *Development and implementation of GC and GC-MS methods for use in Biofuel purity assessment and qualitative analysis*

**2006,2-2008,2 Research technician at Department of Chemistry, Texas A&M University-Commerce, Commerce, TX**

- (1) *Design and synthesis of pyrrolidine-based organophosphorus catalysts for the symmetric organic reactions (Michael addition and Aldol reaction)*
- (2) *Design and synthesis of a class of ionic liquid-supported catalysts and their use as recyclable organocatalysts for the asymmetric Michael reactions*
- (3) *Works with organic chemists and other team members to conduct various bench level experiments to provide analytical chemistry support*
- (4) *Operates and maintains analytical instrumentation (IR, GC, GC-MS, and HPLC) to complete investigations*

**2003,4-2006,2 Scientist at Shanghai ChemExplorer Co.,Ltd (pharmaceutical research company of Eli Lilly company in China)**

- (1) *Design and synthesis of active pharmaceutical ingredients (APIs) and drug intermediates*

**2000,9-2003,3 Master research in Organic Chemistry with Professor Jiaqi Pu  
Department of Chemistry, Shanghai University, Shanghai, P. R. China**

- (1) *Preparation of D-and L-Penicillamine Using Aniline through resolution*

### **HONOUR AND REWARDS**

2009, 4-2010,5 Jai & Susan Nagarkatti Chemistry Scholarship

2009,9-2010,8 S-Stem Scholarship

2009, 6-8 Welch Scholarship

2009, 1 Money for me Scholarship

2002.11 Second Grade Scholarship of Guanghua

2000.10 Excellent graduation thesis of Shanghai University (1999-2000)

2000.6 First Prize of graduation thesis in the sixth Shanghai high education academic conference

1998 -1999 Top Grade Scholarship

1997 - 1998 First Grade Scholarship

1996 - 1997 First Grade Scholarship

### **SPECIAL SKILLS**

- Experience in the operation of FTIR, UV-vis, LC-MS, GC-MS, HPLC, and NMR analytical instrumentation and their data analysis.
- Knowledge of analytical instrumentation maintenance (FTIR, UV-vis, LC-MS, GC-MS, and HPLC)
- Knowledge of organic chemistry and organic synthesis
- Experience in Lab scale formulation design
- Experience in HPLC, TLC, and column chromatography separation techniques
- Strong analytical skills and the ability to work independently
- Good communication skills and the ability to interact collaboratively with all staff levels
- Efficient organizational and time management skills and the ability to multi-task in a fast paced environment
- Experience in data and statistical analysis and literature search for supporting documentation
- Experience in handling water sensitive reagents and chemicals.
- Computer skills (ChemDraw, SciFinder, MS Word, MS Excel)

## LIST OF PUBLICATIONS

1. A Practical and Highly Efficient Hydroacylation Reaction of Aldehydes with Azodicarboxylates in Water  
**Qianying Zhang**, Erica Parker, Allan D. Headley\*, and Bukuo Ni\* *Synlett*, **2010**, in press.
2. Highly Efficient Hydroacylation Reaction of Aldehydes with Azodicarboxylates in Ionic Liquid as Media  
Bukuo Ni,\* **Qianying Zhang**, and Allan D. Headley\* *Advanced Synthesis & Catalysis*. **2009**, 351, 875.
3. Ionic Liquid-Supported (ILS) (S)-Pyrrolidine Sulfonamide, a Recyclable Organocatalyst for the Highly Enantioselective Michael Addition to Nitroolefins  
Bukuo Ni,\* **Qianying Zhang**, Kritanjali Dhungana, and Allan D. Headley\* *Org. Lett.* **2009**, 11, 1037.
3. Asymmetric Michael Addition Reactions of Aldehydes with Nitrostyrenes Catalyzed by Functionalized Chiral Ionic Liquids  
**Qianying Zhang**, Bukuo Ni,\* and Allan D. Headley\* *Tetrahedron* **2008**, 64, 5091.
4. Pyrrolidine-Based Chiral Pyridinium Ionic Liquids (ILs) as Recyclable and Highly Efficient Organocatalysts for the Asymmetric Michael Addition Reactions.  
Bukuo Ni, **Qianying Zhang**, and Allan D. Headley\* *Tetrahedron Lett.* **2008**, 49, 1249.
5. Functionalized Chiral Ionic Liquid as Recyclable Organocatalyst for Asymmetric Michael Addition to Nitrostyrenes.  
Bukuo Ni, **Qianying Zhang**, and Allan D. Headley\* *Green Chem.* **2007**, 9, 737.
6. Highly Enantioselective Michael Addition of Ketones to Nitroolefins Catalyzed by (S)-Pyrrolidine Arenesulfonamide  
Bukuo Ni, **Qianying Zhang**, and Allan D. Headley\* *Tetrahedron: Asymmetry* **2007**, 18, 1443.
7. Design and Synthesis of Novel Pyridinium Chiral Ionic Liquids Tethered to a Urea Functionality.  
Bukuo Ni, **Qianying Zhang**, and Allan D. Headley\* *J. Org. Chem.* **2006**, 71, 9857.

## PRESENTATIONS, COLLOQUIA, AND INVITED TALKS

1. **Qianying Zhang**, Nate Hanson, Ben Jang\* 66th Southwest and 62nd Southeast Regional Meeting of the American Chemical Society, New Orleans, LA, United States, December 1-4, 2010.
2. Bukuo Ni,\* **Qianying Zhang**, Kritanjali Dhungana, and Allan, D. Headley\* 238th ACS National Meeting, Washington, DC. August 16-20, 2009.
3. Erica Parker, **Qianying, Zhang**, Satish Garre, Bukuo Ni,\* Allan D. Headley\* 64th SWR Meeting of the ACS, Little Rock, AR, United States, October 1-4, 2008.
4. Bukuo Ni,\* **Qianying, Zhang**; Satish, Garre; Allan D. Headley\* 64th SWR Meeting of the ACS, Little Rock, AR, United States, October 1-4, 2008
5. Bukuo Ni, **Qianying Zhang**, and Allan D. Headley 63rd SWR Meeting of the ACS, Lubbock, TX, United States, November 4-7, 2007.
6. **Qianying Zhang**, Bukuo Ni, and Allan, D. Headley 63rd SWR Meeting of the ACS, Lubbock, TX, United States, November 4-7, 2007.
7. Bukuo Ni, **Qianying Zhang**, and Allan D. Headley 62nd SWR Meeting of the ACS, Houston, TX, United States, October 19-22, 2006.