Allan D. Headley
Professor of Chemistry
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Education	**Major**	**Degree & Year**
University of California, Irvine, CA	Chemistry	Postdoc, 1982-1983
Howard University, Washington, D.C.	Chemistry	Ph.D., 1982
Columbia Union College, Maryland	Chemistry	B. A., 1974

Academic and Professional Appointments

Professor of Chemistry, Texas A&M University-Commerce	2004 - present
Interim Department Head, Chemistry, Texas A&M University-Commerce	2014 - 2015
Dean, Graduate Studies & Research, Texas A&M-Commerce	2004 - 2012
Professor of Chemistry, Texas Tech University	2002 - 2004
Associate Graduate Dean, Texas Tech University	1999 - 2004
Program Director, The National Science Foundation, Arlington, VA	2002 - 2003
Associate Professor of Chemistry, Texas Tech University	1995 - 2002
Assistant Professor of Chemistry, Texas Tech University	1989 - 1995
Lecturer of Chemistry, University of California, Irvine, CA	1987 - 1989
Lecturer of Chemistry, University of the West Indies, Jamaica	1983 - 1987

Professional Involvement:

- Faculty Advisor: ACS Student Affiliate Texas A&M University-Commerce chapter
- Research Mentor of the Year, 2015 – Texas A&M University-Commerce
- Above & Beyond Faculty Mentor Award, 2015 - Trio-McNair Program, Texas A&M University-Commerce
- Distinguished Mentor of the Year, 2013 – Texas A&M University-Commerce
- Outstanding Professor of the Year 2001, Alpha Epsilon Delta (Premedical Honor Society)
- Member: Graduate Record Examination (GRE) Board Minority Graduate Education Committee (2009 - 2012*)*: provide advice to the GRE Board on fairness in GRE testing, access and equality of opportunity.
- Member: Texas Higher Education Coordinating Board, Graduate Education Advisory Committee (2005-2008*)*: provided advice to the Texas Higher Education Coordinating Board on matters that relate to the quality and future directions of all doctoral programs in the State.
- American Chemical Society (South Plains Local Section): Chair-Elect (1993); Chair (1994); Immediate Past-Chair (1995); Member (1980 – 2016).
- National Organization for the Professional Advancement of Black Chemist and Chemical Engineers, Member (1981 – 2016).
- Ad hoc reviewer for various chemistry journals, including the Journal of Organic Chemistry, Tetrahedron, Tetrahedron Letters, Organic Letters, Chemical Reviews, Journal of Molecular Liquids.
- Ad hoc reviewer for various funding agencies, including the National Science Foundation, US Department of Defense, Department of Energy, American Chemical Society Petroleum Research Fund.
- Ad hoc reviewer for various fellowship programs, including the Graduate Research Fellowship Program (NSF), National Defense Science and Engineering Graduate Fellowship

(Department of Defense); Science, Mathematics & Research for Transformation (National Defense Education Program).

Research Interests

- Design and synthesis of novel chiral ionic liquids; organic catalysis and asymmetric synthesis; quantitative structure-property/activity relationships; *ab Initio* calculations and molecular modeling.

Teaching Experience

Undergraduate Courses

General Chemistry
Organic Chemistry (Honors and non-Honors)
Physical Chemistry
Biochemistry

Graduate Courses

Advanced Organic Chemistry
Physical Organic Chemistry
Reaction Mechanism (Special Topics)

Significant Publications

- Qiao, Y.; Headley, A. D. *Green Chemistry* **2013**, 15 (10), 2690-2694. *A Simple and Highly Effective Water-Compatible Organocatalysts for Asymmetric Direct Michael Reactions of Linear aldehydes to Maleimides in Aqueous Media*.
- Qiao, Y.; Chen, Q.; Lin, S.; Ni, B.; Headley, A. D. *J. Org. Chem.* **2013**, 78, 2693-2697. *Organocatalytic Direct Asymmetric Crossed-Aldol Reactions of Acetaldehyde in Aqueous Media.*
- Ghosh, S. K; Qiao, Y, Ni, B.; Headley, A. D. *Org. Biomol. Chem.* **2013**, 11, 1801-1804. *Asymmetric Michael Reactions Catalyzed by a Highly Efficient and Recyclable Quaternary Ammonium Ionic Liquid Supported Organocatalyst in Aqueous Media.*
- Ghosh, S. K.; Dhungana, K.; Headley, A. D.; Ni, B. *Org. Biomol. Chem.* **2012**, 10, 8322-8325. *Highly Enantioselective and Recyclable Organocatalytic Michael Addition of Malalonates to □□□-Unsaturated Aldehydes in Aqueous Media.*
- Qiao, Y,; He, J.; Ni, B.; Headley, A. D. Adv. Syn. & Cat. **2012**, 354, 2849-2853. *Asymmetric Michael Reaction of Acetaldehyde with Nitroolefins Catalyzed by Highly Water-Soluble Organocatalysts in Aqueous Media.*
- Qiao, Y.; Headley, A. D. *Catalysts* **2013**, 3, 709-725. *Ionic Liquid Immobilized Organocatalysts for Asymmetric Reactions in Aqueous Media.*
- Chintala, P.; Ghosh, S. K.; Long, E.; Headley, A. D.; Ni, B. *Advanced Synthesis & Catalysis*, **2011**, 353, 2905-2909. *The Application of a Tunable Recyclable Organocatalytic System to the Domino Michael/Henry Reaction in Aqueous Media*.
- Sarkar, D.; Bhattarai, R.; Headley, A. D.; Ni, B. *SynLett*, **2011**, 12, 1993-2997. *A Novel Recyclable Organocatalytic System for the Highly Asymmetric Michael Addition of Aldehydes to Nitroolefins in Water*.
- Headley, A. D.; Ni, B. *Chem. Eur. Jour*. **2010**, 16, 4426-4436. *Ionic Liquid-Supported (ILS) Catalysts for Asymmetric Organic Synthesis*.
- Ni, B.; Zhang, Q.; Dhungana, K.; Headley, A. D. *Org. Let***. 2009**, 11(4), 1037-1040. *Ionic Liquid-Supported (ILS) (S)-Pyrrolidine Sulfonamide, a Recyclable Organocatalyst for the Highly Enantioselective Michael Addition to Nitroolefins*.