

Zhehui LI

Personal Info:

Email: ljir@bc.edu

Address: Department of Chemistry, Merkert Chemistry Center, Boston College, 2609 Beacon St. Chestnut Hill, MA 02467-3860

Education:

Boston College, US

PhD Candidate

2013.9-Present

Major: Chemistry

The University of Akron (UA), US

Master of Science

2011.8-2013.5

Major: Polymer Engineering

Main courses: Rheology, Engineering properties of Solid Polymers, Polymeric Materials and Engineering Science, etc.

Soochow University (SU), China

Bachelor of Science

2008.9-2011.7

Major: Materials Science and Engineering

Main courses: Organic Chemistry, Inorganic Chemistry, Foundation of Materials Science and Engineering, etc.

Research Experience:

The heterogeneous catalyst

Advisors: Dr. Chia-Kuang (Frank) Tsung and Dr. Jeffery A. Byers, Department of Chemistry, Boston College

- Developing methods of putting the homogeneous catalysis into porous networks to achieve gas storage and conversion

The polymer solar cell

Advisor: Dr. Xiong Gong, Department of Polymer Engineering, The University of Akron

- Studied a series of fullerene derivatives with liquid crystal properties and their performance in the solar cell as acceptor materials.
- Investigated inverted tandem solar cells with a focus on the intermediate layer, functions of buffer layers and surface engineering for high performance.

Akron Automatic Alignment System (3AS) for parking assistance (DELHPI Innovation Competition)

Advisor: Dr Robert Weiss, Department of Polymer Engineering, University of Akron

- Developed an innovative solution to help electric vehicles (EVs) park well by aligning the relative positions of power sources resonator and power capture resonator precisely

Graphene Oxide (Innovation Project for College Students)

Advisor: Dr Yingfeng Tu, College of Chemistry and Materials' Science, Soochow University

- Synthesized reduced graphene oxide and functionalized to increase solubility.

Selected Awards, articles and experience:

2013-2014

- 1) Poster in 2014 Fall MRS section FF: Materials as Tools for Sustainability
- 2) Morabito, J. V.; Chou, L.-Y.; Li, Z.; Manna, C. M.; Petroff, C. A.; Kyada, R. J.; Palomba, J. M.; Byers, J. A.; Tsung, C.-K., Molecular Encapsulation beyond the Aperture Size Limit through Dissociative Linker Exchange in Metal–Organic Framework Crystals. *Journal of the American Chemical Society* **2014**, *136* (36), 12540-12543.

2011-2013

- 1) 'Outstanding Student for 2012' Selected by the 'Polymer Link Annual Newsletter' at UA.
- 2) Second place & \$3000+ funding in **DELPHI Innovation Competition**

2010-2009

- 1) Best project of 2010 Soochow University Student Creativity Projects.
- 2) Academic Excellent Scholarship awarded by SU (three continuous years).
- 3) Third place in the '21st Century English Speech Contest' sponsored by *China Daily*.
- 4) Excellent officer for 2010 awarded by the Association of Science and Technology of SU.