

Curriculum Vitae

Wei Zhao

PERSONAL INFORMATION

Name Wei Zhao
Date of birth 28 Oct.1981
Sex Male
Citizenship Chinese

Contact Information

King Abdullah University Of Science and Technology(KAUST), Bldg Ibn Sina(#3) West, Level 4, Room 4216, Thuwal 23955-690 Kingdom Of Saudi Arabia

Mobile: +966(0)544700459

E-mail Wei.Zhao@kaust.edu.sa; zhwgah1028@126.com



RESEARCH EXPERIENCE

- Design of Organometallic in Particular Lanthanoide Compounds for Polymerization Catalysis;
- Controlled Polymerization of Bio-friendly Monomers (Lactide, Lactones, Carbonates, and Functionalized Carbonates etc.) with Designed Organometallic Catalysts.
- Stereoselective Polymerization of Prechiral Monomers.
- Design and Precise Synthesis of Polymers with Novel Topologies;
- Design and Synthesis of Functionalized Polymers

SKILLS AND QUALIFICATIONS

- Schlenk technique, Glovebox manipulation, Operation of autoclave.
- Design and synthesis of organometallic complexes; Adept in structure characterizations of organometallic complexes using SHELXTL97, NMR (^1H , ^{13}C , ^1H - ^1H COSY, ^1H - ^{13}C HMQC, ^{13}C - DEPT, DOSY), IR, elemental analysis, ICP, MS etc.
- Specific selective coordination polymerization.
- Design and synthesis of biocompatible (or functional) polymers with reliable properties and their structure characterizations by using NMR, EI-MS, MALDI-TOF, GC-MS, SEC, DSC, TGA, SEM, TEM, AFM, SAXS, WAXD, UV-Vis., Spectrofluorimeter etc.
- Topologic Polymer characterizations with triple-detection gel permeation chromatography (GPC) equipped with a triple-detection array comprising of a differential refractive index (DRI) detector, a multi-angle light scattering (LS) detector and a four-bridge capillary viscosity detector.
- Manipulation of Bruker AVANCE300 NMR.
- The ability to write patent and scientific article in both Chinese and English;

EDUCATION & EXPERIENCE

2013.04—present Postdoctoral Fellow in King Abdullah University of Science and Technology, Saudi Arabia with Prof. Nikos Hadjichristidis

2007.09—2012.12 PhD in Polymer Chemistry and Physics in Changchun Institute of Applied Chemistry, Chinese Academy of Science.

2006.07—2007.09 Research Fellow in Shanxi Taihua Industry & Trade Co., Ltd

2004.07—2006.07 Research Fellow in China Research Institute of Daily Chemical Industry (CRIDCI).

2000.09—2004.07 B.S. in College of Material science and Engineering at North University of China.

AWARDS & ACHIEVEMENT

2004.05 Zhihai First-Class Scholarship for Graduate

2003.07 First-Class Scholarship of North University of China

2003.05 Moral, Academic and Physical Excellence of academic year of North University of China

2002.07 First-Class Scholarship of North University of China

2001.05 Excellent League member of Shanxi Province

2000.10 Special Scholarship for excellent new students

REPRESENTATIVE PUBLICATIONS DURING STUDYING FOR PhD

➤ Journal Publications

(1) **W. Zhao**, Y. Wang, X. Liu, X. Chen, D. Cui, Eugene Y.-X. Chen, “Protic Compounds Mediated Living Cross-Chain-Transfer Polymerization of *rac*-Lactide: Synthesis of Isotactic(Crystalline) - Heterotactic(Amorphous) Stereomultiblock Polylactide”, *Chem. Commun.*, **2012**, *48*, 6375–6377.

(2) **W. Zhao**, Y. Wang, X. Liu, D. Cui, “Facile Synthesis of Pendant- and α , ω -Chain-End Functionalized Polycarbonates via Immortal Polymerization by Using A Salan Lutetium Alkyl Precursor”, *Chem. Commun.*, **2012**, *48*, 4588–4590.

(3) **W. Zhao**, Y. Wang, X. Liu, D. Cui, “Facile Synthesis of Fluorescent Dye Labeled Biocompatible Polymers via Immortal Ring-Opening Polymerization”, *Chem. Commun.*, **2012**, *48*, 4483–4485.

(4) **W. Zhao**, Y. Wang, X. Liu, X. Chen, D. Cui, “ Synthesis of Isotactic-Heterotactic Stereoblock (Hard-Soft) Poly(lactide) and Tacticity Control via Immortal Coordination Polymerization” *Chemistry–An Asian Journal*, **2012**, *7*, 2403-2410.

(5) **W. Zhao**, D. Cui, X. Liu, X. Chen, “Facile Synthesis of Hydroxyl-ended, Highly Stereoregular, Star-shaped Poly(lactide) from Immortal ROP of *rac*-Lactide and Kinetics Study”, *Macromolecules* **2010**, *43*, 6678–6684.

(6) Y. Wang, **W. Zhao**, X. Liu, D. Cui, Eugene Y.-X. Chen, “Rapid Immortal Ring-Opening Polymerization of L-Lactide by a Ligand-Free Magnesium Catalyst System with Record-High Catalyst Efficiency”, *Macromolecules* **2012**, *45*, 6957-6965.

(7) Y. Wang, **W. Zhao**, D. Liu, S. Li, X. Liu, D. Cui, X. Chen, “Magnesium and Zinc Complexes Supported by N,O-Bidentate Pyridyl Functionalized Alkoxy Ligands: Synthesis and Immortal ROP of ϵ -CL and L-LA”, *Organometallics*, **2012**, *31*, 4182-4190.

(8) Z. Jian, **W. Zhao**, X. Liu, X. Chen, T. Tang, D. Cui, "Synthesis of Linked Half Sandwich Rare-Earth Metal Chlorido and Borohydrido Complexes and Their Catalytic Behavior Towards MMA Polymerization" *Dalton Trans.*, **2010**, *39*, **6871-6876**.

(9) L. Yan, W. Wu, **W. Zhao**, R. Qi, D. Cui, Z. Xie, Y. Huang, T. Tong, X. Jing, "Reduction-sensitive core-cross-linked mPEG-poly(ester-carbonate) micelles for glutathione-triggered intracellular drug release", *Polymer Chemistry* **2012**, *3*, **2403-2412**.

➤ **Conference Publications**

(13) **W. Zhao**, Dongmei Cui, "Immortal Ring-Opening Polymerization of Allyl-Functional Carbonate Catalyzed by Salan-Ligated Lutetium Alkyl Complex" *The symposium of national conference on polymer*, **2011**, Dalian, China.

(14) **W. Zhao**, Dongmei Cui, "One-Pot Synthesis of Star-Shaped, Hard-Soft Stereoblock Poly(lactide) via Ring-Opening Polymerization (ROP) of *rac*-Lactide", *The 2nd FAPS-Polymer Congress*, **2011**, Beijing, China.

(15) **W. Zhao**, Dongmei Cui, "Facile Synthesis of Highly Stereoregular, Star-Shaped Poly (Lactide) From Immortal ROP of *rac*-Lactide and the Kinetic Study", *International Symposium on Polymer Chemistry*, **2010**, Suzhou, China.

➤ **Patents**

(16) **W. Zhao**, Dongmei Cui, "A Novel Catalysis Combination Used for the Synthesis of Polylactide Materials with Tunable Stereoregularity", *Chinese Patent*, **2012. No. 201210107158.X**

(17) **W. Zhao**, Dongmei Cui, "A Novel Catalysis Combination Used for the Synthesis of functional Polycarbonates Materials", *Chinese Patent*, **2012. No. 201210295515.X**