Curriculum Vitae

Bin Li, Ph.D.

Associate Professor Department of Mechanical Engineering Wichita State University 1845 Fairmount St, Wichita, KS 67260-0133

Email: Bin.Li@wichita.edu Phone: 316-978-6337

I am currently an associate professor of Department of Mechanical Engineering at Wichita State University. My active research and teaching areas include design, fabrication and characterization of polymers, protein- based biopolymers, and their nanocomposites for electronic and biomedical applications.

EDUCATION

• **Ph.D.**, **Mechanical Engineering**, Washington State University, Pullman, WA 08/2008 - 08/2012 *Advisor: Prof. Weihong (Katie) Zhong*

<u>Thesis:</u> Fabrication and Characterization of Multifunctional Polyetherimide/Carbon Nanofiller Composites

• M.E., Polymer Processing Engineering, Sichuan University, China 09/2005 - 07/2008, Advisors: Prof. Banghu Xie and Dr. Guan Gong

<u>Thesis:</u> Influences of Molecular Weight and Molecular Weight Distribution on Processing Rheological and Fracture Behaviour of High Density Polyethylene

• **B.E.**, **Polymer Science and Engineering**, Sichuan University, China 09/2001-07/2005 *Advisors: Prof. Banghu Xie and Dr. Guan Gong*

Thesis: The Crack Propagation and Fracture Behaviour of Polypropylene Filled with Untreated and Epoxidized Natural Rubber Treated Coal Gangue Powder

ACADEMIC APPOINTMENTS

- Associate Professor, Wichita State University, KS, 08/2019-
- Assistant Professor, Wichita State University, KS, 08/2013-08/2019
- Assistant Research Professor, Washington State University, WA, 08/2012-08/2013
- Graduate Research Assistant, Washington State University, Pullman, WA,08/2008 08/2012
- **Graduate Teaching Assistant**, Materials Science (MSE 201), Washington state University, Pullman, WA, 01/2010-05/2010
- Graduate Research Assistant, Sichuan University, China, 08/2005-07/2008

TEACHING EXPERIENCES

• **Instructor:** ME 660 Polymer Materials and Engineering, Wichita State University, Kansas, Fall 2015 - present

- **Instructor:** ME728 Advanced Electronic Materials, Wichita State University, Kansas, Fall 2014-Present.
- **Instructor**: ME 251 Materials Engineering Lab, Wichita State University, Wichita, Kansas, Spring 2020- Present
- Instructor: ME 250 Materials Engineering, Wichita State University, Wichita, Kansas, Fall 2013-Present
- **Instructor:** MSE 404 Engineering Composites, Washington State University, Pullman, WA, Spring 2013
- **Instructor**: MSE 508, Polymer nanocomposites and Functionalities, Washington State University, Pullman, WA, Spring 2013.
- **Substitute Instructor:** MSE 402, Polymer Materials, for Prof. W. H. Zhong, Washington State University, Pullman, WA, Fall, 2011
- **Substitute Instructor:** MSE 201, Materials Science, for Prof. I. Dutta, Washington State University, Pullman, WA, Spring 2010

STUDENT SUPERVISING

• Doctoral Dissertation Advising:

- Paige Feikert, Wichita State University, Wichita, KS, 01/2021-present
- Manish A. Shinde, Wichita State University, Wichita, KS, 09/2018- present
- *McCord Cox*, Wichita State University, Wichita, KS, 06/2014- 12/2018 (Currently, Design Engineer at Spirit Aerosystems, Inc.)
- *Zhuoyuan Zheng*, Wichita State University, Wichita, KS, 08/2014-05/2018 (Currently, Post-doctoral researcher at University of Illinois Urbana-Champaign)

• Master Thesis / Project Advising:

- Paige Feikert, (Thesis), Wichita State University, Wichita, KS, 09/2018-12/2020
- Wenging Wang, (Thesis), Wichita State University, Wichita, KS, 08/2018-08/2019
- Soheil Rashidi, (Thesis), Wichita State University, Wichita, KS, 08/2015-11/2016
- Aasish Jaiswal, (Thesis), Wichita State University, Wichita, KS, 11/2013-05/2015
- Ransilu Pattiyage, (Project), Wichita State University, Wichita, KS, 11/2013-01/2015
- Min Wei, (Project), Wichita State University, Wichita, KS, 01/2015-05/2015

• Undergraduate Research Supervising:

- Zhao Heng Tan, Wichita State University, KS, 01/2020 present
- Chao Woon Zhe, Wichita State University, KS, 08/2019 / 05/2020
- *Da Ma*, Wichita State University, Wichita, KS, 01/2015- 12/2016 (Currently, phd student at Virginia Tech)
- Olaseeni Olayinka, Wichita State University, Wichita, KS, 01/2015 present

• Senior Thesis/Project Supervising:

- Veronica Perez, Washington State University, Pullman, WA, 08/2012 05/2013
- Loren Baker, Anthony Perugini and Erik Olson, with Prof. W.H. Zhong, Washington State University, Pullman, WA, 08/2008- Present
- Lu Dai, Jin He, Yaxin Zheng, Xiongwei Shu and Qingsong Zhang, with Prof. B.H. Xie, Sichuan University, Chengdu, Sichuan, China, 02/2006-06/2008

• REU Student Supervising:

- Michelle Tsui from University of California, Berkeley, summer, 2012
- George Goering from Washington State University, June-July, 2012
- Veronica Perez from Washington State University, summer, 2013

RESEARCH INTERESTS

- Polymers and polymer nanocomposites.
- Plant-protein based functional materials, composites and hydrogels.
- Dielectric relaxation of polymer materials.
- Applied polymer rheology.

AWARDED GRANT PROPOSAL

- 1. <u>Multi-Disciplinary Research Project (MURPA)</u>, PI: Yao Li; Co-PI: Bin Li " Soy Protein-Based Composite Hydrogel for Neural Regeneration", 05/2021 08/31/2021, \$7,500.
- 2. <u>USDA-AFRI Nanotechnology program</u>, **PI: Bin Li** "Engineering Plant Proteins to Achieve Dielectric Materials with High Energy Density and High Energy Efficiency, 05/2017-06/2021, \$340,000.
- 3. <u>Award for Research/Creative Projects in Summer (ARCS)</u>, **PI: Bin Li** "Surface Engineering of Nanomaterials via Renewable Biomass for Advanced Nanocomposites" 05/2015-08/2015, \$ 4000.
- 4. <u>Kansas NSF EPSCoR</u>, **PI: Bin Li** "New Solid Polymer Electrolyte Materials for Next Generation Lithium Batteries" 06/2014 09/2015, \$126,777

PATENT APPLICATION

- W.H. Zhong, J.Y. Ji and B. Li, Flexible Solid State Conductors Including Polymer Mixed with Protein, Patent No. US 9,614,250 B2, April, 2017
- W.H. Zhong, Y. Wang, and B. Li, Functional Porous Polymer Nanocomposites, US 2016/0104554 A1, April, 2016
- W.H. Zhong, Y. Wang, and Bin Li, Gum-Like Electrolytes and Methods on Making the Same, US 2016/0028112 A1, January, 2016

PUBLICATIONS

Book and Book Chapters

- **Book 1: B. Li (as lead author and co-editor)** and W. H. Zhong: *Polymer Nanocomposites for Dielectrics*, Pan Stanford Publishing Pte. Ltd. December, 2016
- **B. Li**, W. H. Zhong, <u>Chapter 1 Basics of Polymers & Polymer Nanocomposites as Dielectric</u> Materials
- **B. Li**, W. H. Zhong, <u>Chapter 2 Theoretical Analysis of Dielectric Relaxation in Polymer Nanocomposites</u>
- B. Li, W. H. Zhong, Chapter 3 Perovskite Ceramics and Their Polymer Nanocomposites
- **B. Li**, W. H. Zhong, <u>Chapter</u> 4 Graphitic Nanomaterials and Their Polymer Nanocomposites for Dielectric Applications
- B. Li, W. H. Zhong, Chapter 5 Polyvinylidene Fluoride in Dielectric Nanocomposites
- B. Li, W. H. Zhong, Chapter 6 Copolymers in Dielectric Polymer Nanocomposites
- G.Gong; B. Li., Chapter 7 Dielectric Properties of Bionanocomposites
- B. Li. W. H. Zhong, Chapter 8 Hybrid Polymer Nanocomposites

- **Book 2: as the lead author for 7 chapters of the 12-chapter book** "*Nanoscience and Nanomaterials: Lab to Society*, DEStech publications, Inc., July, 2011. (ISBN: 978-1-60595-013-6)
- B. Li, W. H. Zhong, Chapter 1 Introduction
- B. Li, W. H. Zhong, Chapter 2 Vapor-Phase Synthesis
- B. Li, W. H. Zhong, Chapter 3 Liquid-Phase synthesis
- **B. Li**, W. H. Zhong, Chapter 4 Solid-Phase Synthesis
- B. Li, W. H. Zhong, Chapter 5 Biological System-Assisted Synthesis
- B. Li, W. H. Zhong, Chapter 6 Synthesis of Nanocarbon
- B. Li. W. H. Zhong, Chapter 7 Nanoscale Processing and Nanopatterning Techniques

Special Issue of Research Journals

1. **Leading guest editor** for Journal of Nanomaterials, Special Issue "Applications of Nanomaterials in Multifunctional Polymer Nanocomposites", January 2016.

Peer-reviewed Journal Papers

Published Papers (undergraduate students)

- 1. S. P. Burugupally*, B. Koppolu, N. Danesh, Y. K. Lee, Vidisha Indeewari and **B. Li,** Enhancing the performance of dielectric elastomer actuators through the approach of distributed electrode array with fractal interconnects architecture, Journal of Micromechanics and Microengineering, Accepted, 2021. (https://doi.org/10.1088/1361-6439/abf632)
- 2. Z. Zheng, O. Olayinka, and B. Li*, 2S-Soy Protein as a Non-Covalent Surfactant and its Effects on Electrical Conduction and Dielectric Relaxation of Polymer Nanocomposites, Engineered Science, 2018, 4, 87.
- 3. Z. Zheng and **B. Li***, Modified Dielectric Properties of Poly(vinylidene fluoride) via 2S Fraction of Soy Protein, Journal of Applied Polymer Science, 2018, 135, 46882.
- 4. Z. Zheng, M. Cox and **B. Li***, Effective Structure Regulation of Poly(vinylidene fluoride) via Soy Protein Isolate, 2018, 134, 46706
- 5. Z. Zheng, S. Ma, S. Rashidi, and B. Li*, Study of Denaturation and Composition Dependent Poly(ethylene oxide)-Soy protein Interactions: Structures and Dielectric Polarization, Journal of Applied Polymer Science, 2018, 135, 46561. (Featured on the Cover, Vol.135, Issue 31, 2018) (Role: Corresponding Author)
- 6. Z. Zheng and **B. Li***, Surface Modification of Hexagonal Boron Nitride Nanomaterials: A Review, Journal of Materials Science, 2018, 53, 66.
- 7. S. Rashidi, Z. Zheng and **B. Li*** Enhancement of Discharged Energy Density of Poly(ethylene oxide) by Soy Protein Isolate, Journal of Applied Polymer Science, 2017, 134. 45214.
- 8. A. Eyler, Y. Wang, **B. Li***, W. H. Zhong, Ion-induced Effective Control of Morphologies of Soy Protein Biocomposites, *Journal of Materials Science*, 2015, 50, 2691.
- 9. B. Geng, Y. Wang, **B. Li*** and W. H. Zhong, Segregated polymeric nanocomposites with tunable three-dimensional network of nanoparticles by controlling the dispersion and distribution, *RSC Advances*, 2014, 4, 51872

- 10. Y. Wang; W.H. Katie Zhong, <u>T. Schiff</u> A. Eyler; **B. Li**; Particle-controlled high performance gumlike electrolyte for safe and flexible energy storage devices, *Advanced Energy Materials*, **2014**, 5.1400463
- 11. T. Liu, **B. Li**, B. Lively, A. Eyler and W. H. Zhong, Enhanced Wear Resistance of High-Density Polyethylene Composites Reinforced by Organosilane-Graphitic Nanoplatelets, *Wear*, 2014, 309, 43
- 12. Y. Wang, **B. Li**, J. Y. Ji and W. H. Zhong, Controlled Li+ conduction pathway to achieve enhanced ionic conductivity in polymer electrolytes, *Journal of Power Sources*, 2014, 247, 492
- 13. Y. Wang, **B. Li**, J. Y. Ji, A. Eyler and W. H. Zhong, A "Gummy" Electrolyte: Safety of a Solid, Performance of a Liquid, *Advanced Energy Materials*, 2013, 3, 1557.
- 14. **B. Li**, C. W. Tang, T. Liu and W. H. Zhong, Fabrication and Characterization of Flexible High Performance Thermoplastic Foam Derived from Rigid Polyetherketoneketone via a VOC- Free Foaming Technique, *Journal of Materials Science*, 2013, 48, 3517.
- 15. T. Liu, W. Wood, **B. Li**, B. Lively and W.H. Zhong, Effect of Reinforcement on Wear Debris of Carbon Nanofiber/High Density Polyethylene Composites: Morphological Study and Quantitative Analysis, *Wear*, 2012, 294-295, 326.
- 16. C. W. Tang, **B. Li**, L. L. Sun, B. Lively and W. H. Zhong, The Effects of Nanofillers, Stretching and Recrystallization on Microstructure, Phase Transformation, and Dielectric Properties in PVDF Nanocomposites, *European Polymer Journal*, 2012, 48, 1062.
- 17. J. Y. Ji, **B. Li**, W. H. Zhong, Effect of Soy Protein on the Crystallization and Dielectric Properties of PEG and PEG Copolymer, *Macromolecular Chemistry and Physics*, 2012,213,757
- 18. J. Y. Ji, **B. Li**, W. H. Zhong, An Ultra Elastic Poly(ethylene oxide)/Soy Protein Film with Fully Amorphous Structure, *Macromolecules*, 2012,45, 602.
- E. Ten, D. Bahr, B. Li, L. Jiang and M. P. Wolcott, Effects of Celllulose Nanowhiskers on Mechanical, Dielectric, and Rheological Properties of Poly(3-hydroxybutyrate-co-3 hydroxyvalerate)/Cellulose Nanowhisker Compoistes, *Industrial & Engineering Chemistry Research*, 2012, 51, 2941
- 20. C.W. Tang, L. L. Sun, **B. Li**, and W.H. Zhong, Structurally Induced Dielectric Constant Promotion and Loss Suppression for Poly(vinylidene fluoride) Nanocomposites. *Macromolecular and Materials Engineering*, published online, 2012, 297, 420.
- 21. **B. Li**, <u>E. Olson</u>, A. Perugini and W. H. Zhong, Simultaneous Enhancement in Damping and Static Dissipation Capability of Polyetherimide Composites with Organosilane Surface Modified Graphene Nanoplatelets, *Polymer*, 2010, 52, 5606.
- 22. **B. Li**, T. Liu and W. H. Zhong, High Modulus Aliphatic Polyimide from 1, 3-Diaminopropane and Ethylenediaminetetraacetic Dianhydride: Water Soluble to Self-Patterning, *Polymer*, 2011, 52, 5186.
- 23. **B. Li**, T. Liu, C.W. Tang, J. Y. Ji and W. H. Zhong, Novel Hydration Induced Flexible Sulfonated Poly(etherketoneketone) Foam with Super Dielectric Characteristics, *Journal of Materials Chemistry*, 2011, 21, 13546. (**Highlighted by Health and Medicine Week**, September, 19th, 2011, Page 1792.
- 24. T. Liu, W. Wood, **B. Li**, B. Lively and W.H. Zhong, Electrical and Dielectric Sensitivity to Thermal Processes in Carbon Nanofiber/High-Density Polyethylene Composites, *Science and Engineering of Composie Materials*. 2011, 18, 51.
- 25. **B. Li** and W. H. Zhong, Review on Polymer/Graphite Nanoplatelet (GNP) Nanocomposites, *Journal of Materials Science*, 2011, 46, 5595. (**Invited anniversary review**)
- 26. B. Lively, S. Kumar, T. Liu, **B. Li**, W. H. Zhong, Mechanical, Thermal and Morphological Characterization of Polycarbonate / Oxidized Carbon Nanofiber Composites Produced with a Lean 2-Step Manufacturing Process, *Journal of Nanotechnology and Nanoscience*, 2010, 11, 1.
- 27. L. L. Sun, **B. Li**, Z. G. Zhang and W. H. Zhong, Achieving Very High Fraction of β-Crystal PVDF and PVDF/CNF Composites and Their Effect on AC Conductivity and Microstructure through a Stretching Process, *European Polymer Journal*, 2010, 46, 2112.

- 28. **B. Li** and W. H. Zhong, Effective Static Dissipation of Bi-layer Thermoplastic Composites with Low Carbon Nanofiber Loading. *Macromolecular and Materials Engineering*, 2010, 295, 1136.
- 29. J. Y. Ji, **B. Li** and W. H. Zhong, Simultaneously Enhancing Ionic Conductivity and Mechanical Properties of Solid Polymer Electrolytes via a Copolymer Multi-functional Filler, *Electrochimica Acta*, 2010, 55, 9075.
- 30. J. Y. Ji, **B. Li** and W. H. Zhong, Effects of a Block Copolymer as Multifunctional Fillers on Ionic Conductivity, Mechanical Properties and Dimensional Stability of Solid Polymer, *The Journal of Polymer Chemistry B*, 2010, 114, 13637.
- 31. S. Kumar, B. Lively, L. L. Sun, **B. Li** and W. H. Zhong, Highly dispersed and electrically conductive polycarbonate/oxidized carbon nanofiber composites for electrostatic dissipation applications, *Carbon*, 2010, 48, 3846.
- 32. L. L. Sun, **B. Li**, <u>G. Mitchell</u>, W. H. Zhong and Y. Zhao, Structure-induced High Dielectric Constant and Low Loss of CNF/PVDF Composites with Heterogeneous CNF Distribution, *Nanotechnology*, 2010, 10, 305702.
- 33. L. L. Sun, **B. Li**, Y. Zhao and W. H. Zhong, Suppression of AC Conductivity by Crystalline Transformation in Poly(vinylidene fluoride)/Carbon Nanofiber Composites, *Polymer*, 2010, 51, 3230.
- 34. **B. Li** and W.H. Zhong, Influence of Carbon Nanofiber Network Variability on the Pronounced AC Conductivity of the Polyetherimide Composite Films, *Macromolecules and Materials Engineering*, 2010, 295, 310.
- 35. **B. Li,** W. Wood, <u>L. Baker</u>, G. Sui, C. Leer and W. H. Zhong, Effectual Dispersion of Carbon Nanofibers in Polyetherimide Composites and Their Mechanical and Tribological Properties, *Polymer Engineering and Science*, 2010, 50, 1914. (**Featured on** *SPE research online*, **Society of Plastics Engineers**, **July 21**st, **2010**)
- 36. W. Wood, **B. Li** and W. H. Zhong, Influence of Phase Morphology on the Sliding Wear of UHMWPE/HDPE Blends Filled with Carbon Nanofibers, *Polymer Engineering and Science*, 2010, 50, 613.
- 37. G. Gong, **B. Li**, B. H. Xie, W. Yang and M. B. Yang, Anomalous Melt Rheological Properties of Unimodal-MWD HDPE Blends, *Polymer-Plastics Technology and Engineering*, 2010, 49, 487.
- 38. S. Kumar, L. L. Sun, S. Caceres, **B. Li**, W. Wood, A. Perugini, R. G. Maguire and W. H. Zhong, Dynamic Synergy of Graphitic Nanoplatelets and Multi-walled Carbon Nanotubes in Polyetherimide Nanocomposites, *Nanotechnology*, 2010, 21, 105702.
- **39. B. Li**, G. Sui and W. H. Zhong, Single Negative Metamaterials in Unstructured Polymer Nanocomposites toward Selectable and Controllable Negative Permittivity, *Advanced Materials*, 2009, 21, 4176. (**Featured as "Advances in Advance"**)
- 40. G. Sui, **B. Li**, W. H. Zhong, G. Bratzel and X. P. Yang, Carbon Nanofiber/Polyetherimide Composite Membranes with Special Dielectric Properties, *Soft Matter*, 2009, 5, 3593.
- 41. S. Kumar, **B. Li**, S. Caceres and W. H. Zhong, Dispersion and Dramatic Property Enhancement in Polyetherimide/Functionalized Multiwall Carbon Nanotube Composites via Facile Solution Processing Method, *Nanotechnology*, 2009, 20, 465708.
- 42. **B. Li**, G. Gong, B. H. Xie, W. Yang and M. B. Yang, Influence of Molecular Weight on Impact Fracture Behaviour of High Density Polyethylene: Scanning Electron Micrograph Observations, *Journal of Applied Polymer Science*, 2008, 109, 1161.
- 43. B. R. Sheng, **B. Li**, B. H. Xie, W. Yang, J. M. Feng and M. B. Yang, Influences of Molecular Weight and Crystalline Structure on Fracture Behavior of Controlled-Rheology-Polypropylene Prepared by Reactive Extrusion, *Polymer Degradation and Stability*, 2008, 93, 225.
- 44. **B. Li**, G. Gong, B. H. Xie, W. Yang, M. B. Yang and S. M. Lai, Fracture Behaviour of Polypropylene Sheets Filled with Epoxidized Natural Rubber (ENR)-Treated Coal Gangue Powder, *Journal of Materials Science*, 2007, 42, 3856.

Conference Papers / Presentations

- 1. P. Feikert and **B. Li***, Tailoring interfacial properties of polyethylene oxide/boron nitride nanocomposites via polydopamine, ANTEC Conference 2020. San Antonio, TX, Apr., 2020. (Full paper accepted for oral presentation)
- 2. P. Feikert and **B. Li***, Effects of Soy Proteins on Dynamic Relaxation of Polymer Materials toward Design and Fabrication of Functional Polymer/Plant Protein Composites, ACS MWRM Regional Meeting, Wichita, KS, Oct., 2019. (Oral presentation)
- 3. P. Feikert, W. Wang, Z. Zheng and B. Li*, Effects of Nanoscale Soy Protein on Dynamic Relaxation of Dielectric Polymer Nanocomposites, USDA-NIFA Grantee Meeting, Nashville, TN, May, 2019 (Oral presentation)
- **4.** P. Feikert, W. Wang, Z. Zheng and **B. Li***, Dielectric and Rheological Analysis of Soy Protein-Modified Polymer Nanocomposites Poster presentation, USDA-NIFA Grantee Meeting, Nashville, TN, May, 2019 (Poster presentation)
- 5. Z. Zheng, M. Cox and **B. Li***; A Study of Soy Protein in Polymer Dielectric Film Applications, Gordon Research Conference on Nanoscale Science & Engineering for Agriculture & Food, South Hadley, MA, 2018
- 6. Z. Zheng and **B. Li***, Structures and Dielectric Properties of Soy Protein Modified Poly(vinylindene fluoride) Films, ANTEC Conference 2018, Orlando, FL, May, 2018.
- 7. Z. Zheng and **B. Li***, Effects of Protein Aggregation on the Structures and Dielectric Energy Storage Performances of Polymer Films, MRS Spring Meeting & Exhibition, Phoenix, AZ, April, 2018
- 8. O. Olayinka, Z. Zheng and **B. Li***, Effects of Denaturation of Soy Protein on Electrical and Dielectric Properties of PVDF/Soy Protein Membranes, ANTEC Conference 2017, Anaheim, CA, May, 2017.
- 9. M. Cox, and Z. Zheng and **B. Li***, Dielectric Properties of Soy Protein Isolate and Its Nanocomposites, 2017 ACS, Midwest Regional Meeting, Lawrence, KS, Oct.2017
- 10. Z. Zheng and **B. Li***, Study of Soy Protein Isolate as a Functional Modifier for Polymer Materials, 2017 ACS, Midwest Regional Meeting, Lawrence, KS, Oct.2017
- 11. Z. Zheng and **B. Li***, Enhancing Electric Energy Storage In Polymers Via Soy Protein Isolate, Chemistry Colloquia Series, Department of Chemistry, Wichita State University, Feb. 2016 (Invited)
- 12. Z. Zheng and **B. Li***, Enhancing Energy Storage in Polymer Materials Via Soy Protein, MRS Fall Meeting, Boston, 2015
- 13. **B. Li***, Multifunctional Polymer Nanocomposites: Design and Applications, 2014 US-EU Frontiers in Engineering Symposium, National Academy of Engineering, Seattle, Nov. 2014. (Invitation only)
- 14. **B. Li***, Multifunctional Nanocomposites: Development, Assessment and Sustainability, 2014, SAMPE Wichita Chapter, April 22nd
- 15. W. H. Zhong, R. Maguire and **B. Li**, Nano-materials Technologies and for Next Generation Composites Applicable in Aerospace and Automotive Industries, Nanomaterials for Industry, San Diego, April 7th, 2014. (Invited)
- 16. **B. Li** and W. H. Zhong, Flexible Sulfonated Poly (etherketoneketone) for Energy Efficient Applications, 2011 World Materials Summit, October 8th-12th, Washington D.C.. (Poster presentation)
- 17. **B. Li** and W. H. Zhong, Porous Sulfonated Poly(etherketoneketone) with Extremely High Dielectric Constant and Low Loss, *ANTEC conference 2011*, May 1st, Boston, MA. (Poster Presentation)
- 18. E. Olson, **B. Li** and W. H. Zhong, Study on Damping Properties and Static Dissipation Properties of Polyetherimide/Graphite Nanoplatelets Nanocomposites, *ANTEC conference 2011*, May 1st, Boston, MA. (Poster Presentation, tutor of E. Olson)
- 19. E. Olson, **B. Li**, and W.H. Zhong, Effect of Surface Treatment of Graphite Nanoplatelet on Damping Properties of Polyetherimide Nanocomposites, *161st Meeting of the Acoustical Society of America*, May 23rd, 2011, Seattle, WA. (**Invited talk**, tutor of E. Olson)

- 20. **B. Li**, and W. H. Zhong, Bi-layer Thermoplastic Nanocomposites with High Static Dissipation Efficiency, *2010 NSF CMMI Grantee Conference*, January 4th -7th, Atlanta, GA. (**Full paper** and poster presentation)
- 21. **B. Li**, G. Sui and W. H. Zhong, Investigation on Mechanisms of Negative Permittivity in Polyetherimide/Carbon Nanofiber Composites, *SAMPE conference 2010*, May 17th-20th, Seattle, WA. (**Full paper**)
- 22. **B. Li**, W. Wood, G. Sui, L. Baker and W. H. Zhong, Flexural and Tribological Properties of Carbon Nanofiber Reinforced Polyetherimide Composites, *SAMPE conference 2010*, May 17-20, 2010, Seattle, WA. (**Full paper**)
- 23. B. Lively, S. Kumar, **B. Li,** C. Ren, W. H. Zhong, Relationship of Mixing Method-Dispersion-Property of Oxidized Carbon Nanofiber/Graphite Nanoplatelet Composites, *SAMPE conference* 2010, May 17th-20th, Seattle, WA. (**Full paper**)
- 24. H. Han, **B. Li**, Q. Yao, W.H. Zhong, Y. Qiang, Negative Permittivity and Permeability Metamaterials of Polymer- Based Nanocomposite, *Bulletin of the American Physical Society, APS March Meeting*, 2010, V55, No. 2. (**Full paper and oral presentation**)
- 25. **B. Li**, W. H. Zhong, Negative Permittivity in Polymer Nanocomposites: Influences of Size Distribution of Carbon Nanofiber Networks, *139th TMS Annual Meeting & Exhibition*, February 14th-18th, 2010, Seattle, WA. (**Invited talk, full Paper**)
- 26. A. Perugini, **B. Li** and W. H. Zhong, Study on Damping Properties of Polyetherimide/Graphite Nano-Platelet Composites, 139th TMS Annual Meeting & Exhibition, February 14th -18th, 2010, Seattle, WA. (**Invited talk**, tutor of A. Perugini)
- 27. L. L. Sun, **B. Li**, W.H. Zhong and Y. Zhao, Study on AC Conductivity Affected by Crystallization and CNFs for PVDF/CNF Thin Films, *139th TMS Annual Meeting & Exhibition*, February 14th -18th, 2010, Seattle, WA.
- 28. N. J. Vaccaro, W. Li, **B. Li** and W. H. Zhong, Nanofoamed High Performance Polymer Nanocomposites, *37*th *North American Manufacturing Research Conference*, May 19th -22th, 2009, Greenville, SC. (**Full paper**)
- 29. **B. Li** and W. H. Zhong, A Resonance-invigorated Negative Permittivity Polymeric Nanocomposite with Greatly Enhanced AC/DC Conductivity Ratio, *2009 NSF CMMI Grantee Conference*, June 22th-25th, Honolulu, HI. (**Full paper** and poster)
- 30. **B. Li** and W. H. Zhong, Mechanical and Physical Properties of Polyetherimide/CNF Composites Fabricated by Different Method, *17*th annual International Conference on Composites /Nano Engineering (ICCE -17), July 26th August 1st, 2009, Honolulu, HI. (**Expanded abstract**, Speaker: Weston Wood)
- 31. W. Li, N. J. Vaccaro, W. H. Zhong and **B. Li,** Nanofoamed High Performance Polymer Nanocomposites, *2009 NSF CMMI Grantee Conference*, June 22th-25th, Honolulu, HI. (**Full paper** and poster)
- 32. N. J. Vaccaro, W. Li, **B. Li** and W. H. Zhong, The Effects of Mixing and Loading of Carbon Nanofiber on Mechanical Properties of Polyetherimide Nanofoams, *38th North American Manufacturing Research Conference*, May 25th-28th, 2010, Kingston, Ontario, Canada. (**Full paper**)
- 33. **B. Li**, B. H. Xie, W. Yang and M. B. Yang, Essential Work of Fracture of Compression Molded Polyethylene Materials, 2007 National Polymer Conference of China, October 9th 13th, Chengdu, China. (Post Presentation)

Internal presentations/seminars

- 1. **B. Li***, Soy Protein as Functional Materials, ME Seminar, Wichita State University, Oct. 2017
- 2. Z. Zheng and **B. Li***, Enhancing Electric Energy Storage In Polymers Via Soy Protein Isolate, Chemistry Colloquia Series, Department of Chemistry, Wichita State University, Feb. 2016 (**Invited**)

- 3. **B. Li**, Successful Investiture of Nanofiller Dispersion in Nanocomposites, MME Symposia, Washington State University, Feb.24th, 2011.(by **invitation**)
- 4. **B. Li**, Successful Investiture of Nanofiller Dispersion in Nanocomposites, Materials Science and Engineering Program Colloquia, Washington State University, Feb. 4th, 2011. (**Invited seminar**)
- 5. **B. Li**, W. H. Zhong, Bi-layer Thermoplastic Nanocomposites with High Static Dissipation Efficiency, Wiley Exposition of Graduate and Professional Studies, Washington State University, November, 2010.
- 6. **B. Li**, W. H. Zhong, A Novel Approach to Study the Dispersion of Polymer Nanocomposites via AC/DC Conductivity Ratio, Wiley Exposition of Graduate and Professional Studies, Washington State University, November. 2010.
- 7. J. Y. Ji, **B. Li**, W. H. Zhong, A Solid Polymer Electrolyte for Lithium Ion Battery Application, Wiley Exposition of Graduate and Professional Studies, Washington State university, November, 2010.
- 8. **B. Li** and W. H. Zhong, Strong Influence of Carbon Nanofiber Network Variability on the Pronounced Permittivity and AC Conductivity of PEI Composite Films, Wiley Exposition of Graduate and Professional Studies Washington State University, November, 2009.
- 9. **B. Li** and W. H. Zhong, Novel Polymer Nanocomposites with Negative Permittivity, Wiley Exposition of Graduate and Professional Studies, Washington State University, November, 2008.

PROFESSIONAL MEMBERSHIP

- Member, Society of Plastics Engineers, 2011- Present
- Member, American Chemical Society (ACS), 2010- Present
- Member, Materials Research Society (MRS), 2010-Present

UNIVERCITY SERVICES

- Faculty Judge, the Graduate Research and Scholarly Program (GRASP) (2015-present)
- Faculty Judge, Wallace Invitational for Scholarships in Engineering (WISE) program, College of Engineering (2015- present)
- Faculty Judge, WSU Engineering Open House (2014-present)
- Faculty Judge, Shocker MINDSTORM program (2014)
- Member, ME Curriculum Committee (2015-2017)
- Chair, ME Faculty Search Committee (2016-2017)
- Member, ME Faculty Search Committees (2014-2015)
- Member, ME Chair Search Committee (2013-2014)

JOURNAL REFEREE

- Science
- Advanced Materials
- Chemical Communications
- RSC advances
- Polymer
- Small
- Journal of Electrochemical Society
- Journal of Materials Chemistry- A
- Journal of Materials Chemistry- C
- Materials

- Journal of Applied Polymer Science
- Journal of Intelligent Material Systems and Structures
- Journal of Sandwich Structures and Materials
- New Journal of Chemistry
- Science and Engineering of Composite Materials
- Journal of Materials Science
- Materials Chemistry and Physics
- Composite Science and Technology
- Composites Part B
- Surface and Coatings Technology
- Journal of Thermal Engineering
- Proceedings of the Institution of Mechanical Engineers, Part J, Journal of Engineering Tribology
- Wear

HONORS AND AWARDS

- Worldwide Top 50 PhD students/post-docs in the fields of energy and environmental materials, Material Research Society, invited to attend 2011 World Materials Summit Student Congress, Washington D.C., October 8-12, 2011
- 2nd place, Boeing Flightglobal Achievement Awards: Boeing Engineering Student of the Year, 2010
- WSU Graduate School Doctoral Scholarship, Washington State University, 2010
- **Highest rating in TA evaluation (among 5 levels)**, Washington State University, School of Mechanical and Materials Engineering, Spring, 2010
- Outstanding PhD Student Researcher Award 2009-2010, Washington State University, School of Mechanical and Materials Engineering, 2010
- Grfdaduate School Travel Grant Award, Washington State University, 2009
- Excellent Graduate (Master) Student Award, Sichuan University, 2008
- Annual Award of Excellent Graduate Student, First (Highest) Grade, Sichuan University, 2007
- Annual "General Electric" (China) Scholarship, Sichuan University, 2006
- Annual Award of Excellent Students, Sichuan University, 2004
- Annual Award of Excellent Students, Sichuan University, 2002