

Chuanbing Tang

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Education

- June 2006-July 2009 Postdoctoral Scholar, University of California Santa Barbara
Advisors – Profs. Craig J. Hawker and Edward J. Kramer
- Aug 2001-June 2006 M.S. and Ph.D. Chemistry, Carnegie Mellon University
Advisors – Profs. Krzysztof Matyjaszewski & Tomasz Kowalewski
- Sep 1993-July 1997 B.S. Polymer Science and Engineering, Nanjing University

Professional Experience

- Jan 2017- Distinguished Professor, College of Arts and Sciences
Department of Chemistry & Biochemistry, Univ. of South Carolina
- Aug 2014-Dec 2016 Associate Professor with Tenure, College of Arts and Sciences
Distinguished Professor, Department of Chemistry and Biochemistry,
University of South Carolina
- Aug 2009-July 2014 Assistant Professor, Department of Chemistry and Biochemistry,
University of South Carolina
- Aug 2000-May 2001 Research Assistant, Illinois Institute of Technology
- Aug 1997-July 2000 Assistant Scientist, Chinese Academy of Forestry

Editors and Editorial Boards

- *Associate Editor*: Polymer Reviews (IF ranked 2nd among 86 polymer journals)
- *Guest Editor*: Macromolecular Rapid Communications; Green Materials
- *Editorial Advisory Boards*: Macromolecules, ACS Macro Letters; Macromolecular Rapid Communications, Macromolecular Chemistry and Physics, Polymer, Scientific Reports, PLOS One, Green Materials, International Journal of Polymeric Materials and Polymeric Biomaterials

Awards and Honor

- Fellow, Polymer Chemistry Division, American Chemical Society (2018)
- ACS Local Section Outreach Volunteer of the Year Award (2018)
- Kavli Fellow, National Academy of Sciences (2018)
- Fellow, the Royal Society of Chemistry (FRSC) (2017)
- BM-CAB Young Investigator Award (2017)
- Presidential Early Career Award for Scientists and Engineers (PECASE) (2017)
- SC Governor's Young Scientist Award for Excellence in Scientific Research (2016)
- Finalist for Ada B. Thomas Outstanding Faculty Advisor Award (2015)
- USC Distinguished Undergraduate Research Mentor Award (2015)
- ACS Polymeric Materials Science & Engineering (PMSE) Young Investigator (2014)

- NIH CAM Pilot Project Award (2013)
- USC Breakthrough Rising Star (2013)
- NSF Career Award (2013-2018)
- Thieme Chemistry Journal Award (2013)
- ACS Leadership Development Award Alternate (2013)
- Emerging Investigator Themed Issue “*Chemical Communications*” (2013)
- ACS Committee on Project Seed (2012-2015)
- ACS PRF Doctoral New Investigator Award (2012)
- Polymer Science: The Next Generation, “*Macromol. Rapid Communications*” (2012)
- USDA US-China Agriculture Scientific Exchange Team (2011)
- USC Magellan Scholar Award (Undergraduate Research, 2010, 2011, 2013, 2014, 2016)
- Singapore National Research Foundation Research Fellow (2009)

Teaching Experience

Lecture Courses

CHEM 739: Advances in Polymer Science and Nanotechnology

CHEM 333: Organic Chemistry

Research Courses

CHEM 496: Undergraduate Research

CHEM 790: Introduction to Research

CHEM 791: Introduction to Research

CHEM 898: Research in Chemistry II

CHEM 899: Dissertation Preparation

Research Interest

Themes: Sustainable synthetic polymer chemistry interfaced with medicinal chemistry and advanced materials.

Sustainable biobased polymers and biomaterials from renewable biomass; organometallics and metallopolymers; functional polymers for biomedical and energy applications.

Professional Service

(1) Review Panelist for NSF, NIH, DOE, DOD and ACS

(2) Reviewer for > 40 scientific journals, book publishers (Wiley, Pearson, CRC, ACS, etc.) and funding agencies (NSF, NIH, DOE, DOD, ACS, PRF, Singapore Agency for Science, Technology & Research, Portuguese FCT, etc.)

(3) Organizer (with Hoyong Chung), ACS National Meeting – Division of Polymer Chemistry: “Advances in Lignin: Chemicals, Polymers & Materials”, Washington, DC (August 2017)

(4) Organizer, “New Chemistry toward Functional Polymeric Materials”, the 68th Southeastern Regional Meeting of the American Chemical Society, Columbia, SC (October 2016)

(5) Organizer (with Marc Hillmyer), “Environment: Sustainable Resources and Renewable Resources”, the 14th Pacific Polymer Conference, Kauai, Hawaii (December 2015)

(6) Organizer, “Advanced Energy Materials and Processing”, 31st International Conference of the Polymer Processing Society, Jeju Island, Korea (June 7-11, 2015)

- (7) Co-Organizer (with Megan Robertson), “Physics of Polymers Derived from Sustainable Resources”, American Physical Society Meeting, San Antonio, TX (March 2015)
- (8) Session Chair, 2nd International Symposium on Polymer Ecomaterials (PEM2014), Kunming, China (August 2014)
- (9) Session Chair, International Symposium on Polymer Chemistry, Shanghai, China (June 2014)
- (10) Session Chair, 3rd Grubbs Symposium on Polymers and Green Industry, Ningbo, China (April 2014)
- (11) International Scientific Committee, 3rd Grubbs Symposium on Polymers and Green Industry, Ningbo, China (April 2014)
- (12) Committee on Project Seed, American Chemical Society (2012-2015)
- (13) Session Chair, Symposium on “Symposium: Recent Developments in Synthesis II”, IUPAC World Polymer Congress, Virginia Tech, Blacksburg (June 2012)
- (14) Organizer (with Marc Hillmyer and Geoff Coates), ACS Symposium – Divisions of Polymeric Materials: Science and Engineering: “Next-Generation Renewable Polymers”, San Diego (March 2012)
- (15) Session Chair, the 12th Pacific Polymer Conference-Symposium on Advances in Polymer Synthesis and Characterization, Jeju, South Korea (November 2011)
- (16) Organizer (with John Lavigne and Peter Iovine), ACS Symposium – Division of Polymer Chemistry: “from Molecules to Macromolecules: towards Self-Assembling Materials”, Boston (August 2010)
- (17) International Scientific Committee, “International Conference on Chemical and Biological Utilization of Biomass Resources 2010”, Nanjing, China (October 2010)

Books

“Sustainable Polymers from Biomass”, **Tang C.**; Ryu C. ed. Wiley-VCH, Weinheim, Germany, May 2017 (13 Chapters, 376 pages).

Book Chapters

- (1) Ganewatta M.S.; **Tang C.***; Ryu C. Y. Introduction, in “*Sustainable Polymers from Biomass*”, Tang C. and Ryu C., Eds. Wiley-VCH, Weinheim, Germany, **2017**, Chapter 1, pp 1-10.
- (2) Yuan L.; Wang Z.; Trenor N. M.; **Tang C.*** Preparation and Applications of Polymers with Pendant Fatty Chains from Plant Oils, in “*Sustainable Polymers from Biomass*”, Tang C. and Ryu C., Eds. Wiley-VCH, Weinheim, Germany, **2017**, Chapter 8, pp 181-208.
- (3) Wang J.; Yao K.; Wilbon P.; Wang P.; Chu F.; **Tang C.*** Rosin-Derived Polymers and Their Progress in Controlled Polymerization, in “*Rosin-based Chemicals and Polymers*” Zhang J., Ed. ISmithers. Shawbury, UK, **2012**, pp 85-127.
- (4) Kowalewski T.; **Tang C.**; Kruk M.; Dufour B.; Matyjaszewski K. Advances in Nanostructured Carbons from Block Copolymers Prepared by Controlled Radical Polymerization Techniques, in *Controlled/Living Radical Polymerization: From Synthesis to Materials*, ACS Symposium Series. Matyjaszewski K. Ed. American Chemical Society: Washington, DC. **2006**, 944, pp 295-310.
- (5) Korth, B.D.; Keng, P.; Shim. I.; **Tang, C.**; Kowalewski, T.; Pyun, J. Synthesis, Assembly and Functionalization of Polymer Coated Ferromagnetic Nanoparticles, in

“Nanoparticles: Synthesis, Stabilization, Passivation and Functionalization, ACS Symposium Series. Nagarajan R. and Hatton T. A. Eds. American Chemical Society: Washington, DC. 2008, 996, pp 272-285.

Peer-Reviewed Journal Publications

- (1) Lamm M. E.; Wang Z.; Zhou J.; Yuan L.; Zhang X.; **Tang C.*** Sustainable Epoxy Resins Derived from Plant Oils with Thermo- and Chemo-Responsive Shape Memory Behavior, *Polymer*, **2018**, submitted.
- (2) Pageni, P.; Yang P.; Bam M.; Zhu T.; Chen Y. P.; Decho A. W.; Nagarkatti M.; **Tang C.*** Recyclable Magnetic Nanoparticles Grafted with Antimicrobial Metallopolymer-Antibiotic Bioconjugates, *Biomaterials*, **2018**, submitted.
- (3) Kopeć M.; Lamson M.; Yuan R.; **Tang C.**; Kruk M.; Matyjaszewski K.; Kowalewski T. Polyacrylonitrile Templated Nanostructured Carbon Materials. *Prog. Polym. Sci.* **2018**, to be submitted.
- (4) Ganewatta M. S.; Rahman M. A.; Mercado L.; Shokfai T.; Decho A. W.; Reineke T. M.; **Tang C.*** Facially amphiphilic polyionene biocidal polymers derived from lithocholic acid. *Bioact. Mater.* **2018**, 3, 186–193.
- (5) Qiao Y.; Yin X.; Zhu T.; Li H.; **Tang C.*** Dielectric Polymers with Novel Chemistry, Compositions and Architectures, *Prog. Polym. Sci.* **2018**, DOI: 10.1016/j.progpolymsci.2018.01.003 (Invited Review).
- (6) Zhu T.; Xu S.; Rahman Md. A.; Dogdibegovic E.; Yang P.; Pageni P.; Kabir Md P.; Zhou X.; **Tang C.*** Cationic Metallo-Polyelectrolytes for Robust Alkaline Anion-Exchange Membranes. *Angew. Chem. Int. Ed.*, **2018**, 57, 2388-2392. **Inside Back Cover**
- (7) Pageni, P.; Yang P.; Chen Y. P.; Huang Y.; Bam M.; Zhu T.; Nagarkatti M.; Benicewicz B. C.; Decho A. W.; **Tang C.*** Charged Metallopolymer-Grafted Silica Nanoparticles for Antimicrobial Applications. *Biomacromolecules* **2018**, 19, 417-425.
- (8) Booth W. T.; Schlachter C.; Pote S.; Ussin N.; Mank N. J.; Klapper V.; Offermann L. R.; Tang C.; Hurlburt B. K.; Chruszcz M. The Impact of an N-terminal Poly-Histidine Tag on Protein Thermal Stability. *ACS Omega*, **2018**, 3, 760–768.
- (9) Yuan L.; Wang Z.; Wang Z.; Xu Y.; Han Y.; **Tang C.*** Bio-Elastomers from Plant Oil Polymers and Lignin through Thermal Azide-Alkyne Cyclization. **2017**, in preparation.
- (10) Xu S.; Lamm M. E.; Rahman M. A.; Zhang X.; Zhu T.; **Tang C.*** Renewable Atom-Efficient Polyesters and Thermosetting Resins Derived from High Oleic Soybean Oil. *Green Chem.* **2018**, DOI: 10.1039/C7GC03774K.
- (11) Li H.; Yang P.; Pageni P.; Chen Y. P.; Decho A. W.; **Tang C.*** Tough, Antifouling and Antimicrobial Metallopolymer Double-Network Hydrogels. **2017**, in preparation.
- (12) Yang P.; Bam M.; Pageni, P.; Zhu T.; Chen Y. P.; Nagarkatti M.; Decho A. W.; **Tang C.*** Trio Act of Boronolectin with Antibiotic-Metal Complexed Macromolecules toward Broad-Spectrum Antimicrobial Efficacy. *ACS Infect. Dis.* **2017**, 3, 845-853.
- (13) Song L.; Wang Z.; Lamm M. E.; Yuan L.; **Tang C.*** Supramolecular Polymer Nanocomposites Derived from Plant Oils and Cellulose Nanocrystals, *Macromolecules*, **2017**, 50, 7475-7483.
- (14) Wang Z.;* Yuan L.; **Tang C.*** Sustainable Elastomers from Renewable Biomass, *Acc. Chem. Res.* **2017**, 50, 1762-1773.

- (15) Ding W.; Wang S.; Yao K.; Ganewatta M.; **Tang C.***; Robertson M.* Physical Behavior of Triblock Copolymer Thermoplastic Elastomers Containing Sustainable Rosin-Derived Polymethacrylate Endblocks, *2017, ACS Sustainable Chem. Eng.* 5, 11470-11480.
- (16) Merhpouya-Bahrami P.; Chitrala K.; Ganewatta M. S.; **Tang C.**; Murphy E. A.; Enos R.; Velazquez K.; McCellan J.; Nagarkatti M. Blockade of CB1 cannabinoid receptor alters gut microbiota and attenuates inflammation and diet-induced obesity, *Sci. Rep.* **2017**, 15645.
- (17) Chitrala K.; Guan H.; Singh N.; Busbee B.; Gandy A.; Bahrami P.; Ganewatta M.; **Tang C.**; Nagarkatti P.; Nagarkatti M. CD44 deletion leading to attenuation of EAE results from alterations in gut microbiome and short-chain fatty acids, *Eur. J. Immunol.* **2017**, 47, 1188-1199.
- (18) Li H.; Yang P.; Pageni P.; **Tang C.*** Recent Advances in Metal-Containing Polymer Hydrogels, *Macromol. Rapid Commun.* **2017**, 38, 1700109 (Review article).
- (19) Wang Z.; Yuan L.; Ganewatta M.; Rahman M. A.; Wang J.; Liu S.; **Tang C.*** Plant Oil-Derived Epoxy Polymers toward Sustainable Biobased Thermosets, *Macromol. Rapid Commun.* **2017**, 38, 1700009.
- (20) Pageni P.; Kabir P.; Yang P.; **Tang C.*** Binding of Cobaltocenium-containing Polyelectrolytes with Anionic Probes, *J. Inorg. Organomet. Polym. Mater.* **2017**, 27, 1100-1109. Invited article for a special issue in honour of Professor Pierre D. Harvey.
- (21) Ganewatta M.; Rahman A.; **Tang C.*** Emerging Antimicrobial Research against Superbugs: Perspectives from a Polymer Laboratory, *Journal of the South Carolina Academy of Science*, **2017**, 15, 8-11. 2016 Governor's Young Scientist Award for Excellence in Scientific Research for a Governor's Awards Issue.
- (22) Rahman M. A.; Lokupitiya H.; Ganewatta M.; Yuan L.; Stefik M.; **Tang C.*** Designing Block Copolymer Architectures toward Tough Bioplastics from Natural Rosin, *Macromolecules*, **2017**, 50, 2069-2077.
- (23) Yang P.; Luo X.; Wang S.; Jin S.; Wang F.; Guo J.; **Tang C.**; Wang C.* Biodegradable Yolk-Shell Microspheres for Ultrasound/MR Dual-Modality Imaging and Controlled Drug Delivery, *Colloids Surf. B Biointerfaces*, **2017**, 151, 333-343.
- (24) Yuan L.; Wang Z.; Ganewatta M.; Rahman M. A.; Lamm M.; **Tang C.*** A Biomass Approach to Mendable Bio-Elastomers, *Soft Matter*, **2017**, 13, 1306-1313.
- (25) Yang P.; Pageni P.; Kabir P.; Zhu T.; **Tang C.*** Metallocene-containing Homopolymers and Heterobimetallic Block Copolymers via Photo-induced RAFT Polymerization. *ACS Macro Lett.* **2016**, 5, 1293-1300.
- (26) Wang J.; Yuan L.; Wang Z.; Rahman M. A.; Huang Y.; Zhu T.; Wang R.; Cheng J.; Wang C.; Chu F.; **Tang C.*** Photoinduced Metal-Free Atom Transfer Radical Polymerization of Biomass Based Monomers. *Macromolecules*, **2016**, 49, 7709-7717.
- (27) Ganewatta M. S.; Ding W.; Rahman M. A.; Yuan L.; Wang Z.; Hamidi N.; Robertson M. L.*; **Tang C.*** Biobased Plastics and Elastomers from Renewable Rosin via "Living" Ring-Opening Metathesis Polymerization, *Macromolecules*, **2016**, 49, 7155-7164.
- (28) An S. Y.; Hong S. W.; **Tang C.**; Oh J. W. Rosin-based Block Copolymer Intracellular Delivery Nanocarriers with Reduction-Responsive Sheddable Coronas for Cancer Therapy. *Polym. Chem.* **2016**, 7, 4751-4760.

- (29) Xu Y.; Yuan L.; Wang Z.; Wilbon P.; Wang C.; Chu F.*; **Tang C.*** Lignin and Soy Oil-Derived Polymeric Biocomposites by “Grafting from” RAFT Polymerization. *Green Chem.* **2016**, 18, 4974-4981.
- (30) Lu L.; Yuan L.; Yan J.; **Tang C.***; Wang Q.*, Development of core-shell nanostructures by in situ assembly of pyridine-grafted diblock copolymer and transferrin for drug delivery applications. *Biomacromolecules*, **2016**, 17, 2321–2328.
- (31) Yin X.; Qiao Y.; Gadinski M. R.; Wang Q.; **Tang C.*** Flexible Thiophene Polymers: A Concerted Macromolecular Architecture for Dielectrics. *Polym. Chem.* **2016**, 7, 2929-2933. **Back Cover**
- (32) Yan Y.; Zhang J.; Ren L.; **Tang C.*** Metal-Containing and Related Polymers for Biomedical Applications. *Chem. Soc. Rev.* **2016**, 45, 5232-5263. **Front Cover**
- (33) Yuan L.; Wang Z.; Trenor N. M.; **Tang C.*** Amidation of Triglycerides by Amino Alcohols and Their Impact on Plant Oil-Derived Polymers. *Polym. Chem.* **2016**, 7, 2790-2798. **Front Cover**
- (34) Wang Z. K.; Zhang Y.; Yuan L.; Hayat J.; Trenor N. M.; Lamm M.; Vlaminc L.; Billiet S.; Du Prez F. E.; Wang Z. G.; **Tang C.*** Biomass Approach toward Robust, Sustainable Multiple Shape-Memory Materials, *ACS Macro Lett.* **2016**, 5, 602–606.
- (35) Wang Z. K.; Yuan L.; Jiang F.; Zhang Y.; Wang Z. G.* **Tang C.*** Bioinspired High Resilient Elastomers to Mimic Resilin, *ACS Macro Lett.* **2016**, 5, 220–223.
- (36) Yan Y.; Pageni, P.; Kabir, Md. P.; **Tang C.*** Cationic Metallocenium Derivatives: Synthesis and Their Emerging Macromolecular Chemistry, *SynLett*, **2016**, 27, 984–1005 (invited Account article).
- (37) Han Y.; Yuan L.; Li G.; Huang, L.; Qin T.; Chu F.; **Tang C.*** Renewable Polymers from Lignin via Copper-free and Solvent-free Thermal Click Chemistry, *Polymer*, **2016**, 86, 92-100.
- (38) Qiao Y.; Yin X.; Wang L.; Islam M. S.; Benicewicz B.; Ploehn H. J.; **Tang C.*** Bimodal Polymer-Brush Core-Shell Barium Titanate Nanoparticles: A Strategy for High-Permittivity Polymer Nanocomposites, *Macromolecules*, **2015**, 48, 8998–9006.
- (39) Hayat J.; Mitra I.; Qiao Y.; Stein G. S.* **Tang C.*** Improving Humidity-Controlled Solvent Annealing Processes for Block Copolymer Poly(Ethylene Oxide)-b-Polystyrene. *Eur. Polym. J.*, **2015**, 71, 476-489.
- (40) Ganewatta M. S.; Miller K. P.; Singleton S. P.; Mehrpouya P.; Chen Y.-P.; Yan Y.; Nagarkatti M.; Nagarkatti P.; Decho A. W.* **Tang C.*** Bacterial Biofilm Disrupting Sustainable Antimicrobial Coatings from Resin Acid Derived Materials. *Biomacromolecules*, **2015**, 16, 3336–3344.
- (41) Wang Z.; Yuan L.; Trenor N. M.; Vlaminc L.; Billiet S.; Sarkar A.; Du Prez F. E.; Stefik M.; **Tang C.*** Sustainable Thermoplastic Elastomers Derived from Plant Oil and Their “Click-Coupling” via TAD Chemistry. *Green Chem.* **2015**, 17, 3806 - 3818.
- (42) Zhang J.; Yan J.; Pageni P.; Yan Y.; Wirth A.; Chen Y-P.; Qiao Y.; Wang Q.; Decho A. W.; **Tang C.*** Anion-Responsive Metallopolymer Hydrogels for Healthcare Applications, *Sci. Rep.* **2015**, 5, 11914.
- (43) Qiao Y.; Yin X.; **Tang C.*** Progress in side-chain thiophene-containing polymers: synthesis, properties and applications, *Sci. CHINA Chem.* **2015**, 58, 1641-1650.
- (44) Yan Y.; Deaton T.; Zhang J.; He H.; Hayat J.; Pageni P.; Matyjaszewski K.; **Tang C.*** Syntheses of Monosubstituted Rhodocenium Derivatives, Monomers and Polymers, *Macromolecules* **2015**, 48, 1644-1650.

- (45) Akhani R. K.; Clark R. W.; Yuan L.; Wang L.; **Tang C.**; Wiskur S. L.* Polystyrene-Supported Triphenylsilyl Chloride for the Silylation-Based Kinetic Resolution of Secondary Alcohols, *ChemCatChem* **2015**, *7*, 1527-1530.
- (46) Ganewatta, M. S.; **Tang C.*** Controlling Macromolecular Structures towards Effective Antimicrobial Polymers, *Polymer*, **2015**, *63*, A1-A29 (Feature Article). **Cover**
- (47) Yuan L.; Wang Z.; Trenor N. M.; **Tang C.*** Robust Amidation Transformation of Plant Oils into Fatty Derivatives for Sustainable Monomers and Polymers, *Macromolecules*, **2015**, *48*, 1320-1328.
- (48) Qiao Y.; Islam M.S.; Yin X.; Han K.; Yan Y.; Zhang J.; Wang Q.; Ploehn H. J.; Tang C.* Oligothiophene-Containing Polymer Brushes by ROMP and RAFT: Synthesis, Characterization and Dielectric Properties, *Polymer*, **2015**, *72*, 428-435. A special issue in honor of Prof. Krzysztof Matyjaszewski's 65th birthday.
- (49) Yan Y.; Zhang J.; **Tang C.*** Side-Chain Cobaltocenium-Containing Polymers: Controlled Polymerization and Applications, in *Controlled Radical Polymerization: Materials*, ACS Symposium Series. Matyjaszewski K. Ed. American Chemical Society: Washington, DC. **2015**, pp 15–27.
- (50) Islam M. S.; Qiao Y.; **Tang C.**; Ploehn H. J.* Terthiophene-Containing Copolymers and Homopolymer Blends as High Performance Dielectric Materials, *ACS Appl. Mater. Interf.* **2015**, *7*, 1967-1977.
- (51) Li D.; Zhang Y.; Li R.; An Q.; Yu M.; Guo J.; Wang C.;* **Tang C.*** Selective Capture and Quick Detection of Targeting Cells Based on Liquid Suspension Chips, *Small*, **2015**, *11*, 2200-2208.
- (52) Yu J.; Wang C.; Wang J.*; **Tang C.***; Chu F.* UV-absorbent Lignin-Based Multi-Arm Star Thermoplastic Elastomers, *Macromol. Rapid Commun.*, **2015**, *36*, 398–404.
- (53) Li H.; Huang Y.; Wang L.; Qiao Y.; **Tang C.**; Jung C.; Yoon Y.; Yu M.* Graphene Oxide Membranes with Hierarchical Roughness for Anti-Fouling Oil/Water Separation. *Adv. Mater. Interf.* **2015**, *2*.
- (54) Yuan L.; Hamidi N.*; Smith S.; Clemons F.; Hamidi A.; **Tang C.*** Molecular Characterization of Biodegradable Natural Resin Acid-substituted Polycaprolactone, *Euro. Polym. J.* **2015**, *62*, 43-50.
- (55) Qiao Y.; Ferebee R.; Lee B.; Mitra I.; Lynd N. A.; Hayat J.; Stein G.*; Bockstaller M. R.*; **Tang C.*** Symmetric Poly(ethylene oxide-b-styrene-b-isoprene) Triblock Copolymers: Synthesis, Characterization and Self-Assembly in Bulk and Thin Film. *Macromolecules* **2014**, *47*, 6373-6381.
- (56) Yan Y.; Zhang J.; Wilbon P.; Qiao Y.; **Tang C.*** Ring-Opening Metathesis Polymerization of 18-e Cobalt(I)-Containing Norbornene and Application as Heterogeneous Macromolecular Catalyst in Atom Transfer Radical Polymerization. *Macromol. Rapid Commun.* **2014**, *35*, 1840–1845. **Back Cover**
- (57) Qiao Y.; Islam M. S.; Wang L.; Yan Y.; Zhang J.; Benicewicz B. C.; Ploehn H. J.*; **Tang C.*** Thiophene Polymer-Grafted Barium Titanate Nanoparticles toward Nanodielectric Composites. *Chem. Mater.* **2014**, *26*, 5319-5326.
- (58) Wei J.; Ren L.; Tang C.; **Su Z.*** Electric-stimulus-responsive multilayer films based on a cobaltocenium-containing polymer, *Polym. Chem.* **2014**, *5*, 6480-6488.
- (59) Zhang J.; Yan Y.; Chen J.; Chance M.; Hayat J.; Gai Z.; **Tang C.*** Nanostructured Metal/Carbon Composites from Heterobimetallic Block Copolymers with Controlled Magnetic Properties. *Chem. Mater.* **2014**, *26*, 3185-3190.

- (60) Zhang J.; Chen Y.-P.; Miller K. P.; Ganewatta M. S. Bam M.; Yan Y.; Nagarkatti M.; Decho A. W.; **Tang C.*** Antimicrobial Metallopolymers and Their Bioconjugates with Antibiotics against Multidrug Resistant Bacteria, *J. Am. Chem. Soc.* **2014**, 136, 4873-4876.
- (61) Hardy C. G.; Zhang J.; Yan Y.; Ren L.; **Tang C.*** Metallopolymers with Transition Metal in Side Chain by Living and Controlled Polymerization Techniques, *Prog. Polym. Sci.* **2014**, 39, 1742-1796.
- (62) Ganewatta M. S.; Chen Y.-P.; Wang J.; Zhou J.; Ebalunde J.; Nagarkatti M.; Decho A. W.*; **Tang C.*** Bio-inspired Resin Acid-Derived Materials as Anti-Bacterial Resistance Agents with Unexpected Activities. *Chem. Sci.*, **2014**, 5, 2011 - 2016.
- (63) Liu Y.; Yao K.; Chen X.; Wang J.; Wang J.; Ploehn H.; Wang C.; Chu F.; **Tang C.*** Sustainable Thermoplastic Elastomers Derived from Renewable Cellulose, Rosin and Fatty Acids, *Polym. Chem.* **2014**, 5, 3170 - 3181. **Inside Front Cover**
- (64) Zhong M.; **Tang C.;*** Kim E. K.; Kruk M.; Celer E. B.; Jaroniec M.; Matyjaszewski K.*; Kowalewski T.* Preparation of porous nanocarbons with tunable morphology and pore size from copolymer templated precursors. *Mater. Horiz.*, **2014**, 1, 121-124.
- (65) Yu J.; Liu Y.; Liu X.; Wang C.; Wang J.*; Chu F.*; **Tang C.*** Integration of Renewable Cellulose and Rosin towards Sustainable Copolymers by “Grafting From” ATRP, *Green Chem.* **2014**, 16, 1854-1864.
- (66) Yan Y.; Zhang J.; Qiao Y.; **Tang C.*** Facile Preparation of Cobaltocenium-containing Polyelectrolyte via Click Chemistry and RAFT Polymerization, *Macromol. Rapid Commun.* **2014**, 35, 254-259.
- (67) Yan Y.; Zhang J.; Qiao Y.; Ganewatta M. S.; **Tang C.*** Ruthenocene-containing Homopolymers and Block Copolymers via ATRP and RAFT Polymerization. *Macromolecules*, **2013**, 46, 8816-8823.
- (68) Zhang J.; Yan Y.; Chance W. M.; Chen J.; Hayat J.; Ma S.; **Tang C.*** Charged Metallopolymers as Universal Precursors for Versatile Cobalt Materials, *Angew. Chem. Int. Ed.* **2013**, 52, 13387–13391.
- (69) Jiang F.; Wang Z.; Qiao Y.; Wang Z. G.*; **Tang C.*** A Novel Architecture toward 3rd-Generation Thermoplastic Elastomers by a Grafting Strategy, *Macromolecules* **2013**, 46, 4772–4780.
- (70) Qiao Y.; Islam M. D.; Han G.; Leonhardt E.; Zhang J.; Wang Q.; Ploehn H. J.; **Tang C.*** Polymers Containing Highly Polarizable Conjugated Side Chains as High Performance All-Organic Nanodielectric Materials, *Adv. Funct. Mater.*, **2013**, 23, 5638–5646. **Inside Front Cover**
- (71) Wang J.; Yao K.; Wang C.; **Tang C.*;** Jiang X.* Synthesis and Drug Delivery of Novel Amphiphilic Block Copolymers Containing Hydrophobic Dehydroabietic Moiety. *J. Mater. Chem. B*, **2013**, 1, 2324-2332.
- (72) Yao K.; Chen Y.; Zhang J.; Bunyard C.; **Tang C.*** Cationic Salt-Responsive Bottle-Brush Polymers. *Macromol. Rapid Commun.* **2013**, 34, 645-651. **Cover**
- (73) **Tang C.*** Editorial: Next-Generation Renewable Polymers (Special Issue on Renewable Polymers), *Green Materials* **2013**, 1, 62-63.
- (74) Yao K.; **Tang C.*** Controlled Polymerization of Next-Generation Renewable Monomers and Beyond. *Macromolecules (Perspective)* **2013**, 46, 1689-1712. **Cover** (top 3 most accessed paper in 2013 *Macromolecules*).

- (75) Hardy C. G.; Islam M. S.; Gonzalez-Delozier D.; Morgan J. E.; Cash B.; Benicewicz B. C.; Ploehn H. J., **Tang C.*** Converting an Electrical Insulator into a Dielectric Capacitor: End-Capping Polystyrene with Oligoaniline. *Chem. Mater.* **2013**, *25*, 799-807.
- (76) Zhang J.; Pellechia P. J.; Hayat J.; **Tang C.*** Quantitative and Qualitative Counterion Exchange in Cationic Metallocene Polyelectrolytes. *Macromolecules* **2013**, *46*, 1618-1624.
- (77) Wilbon P.; Gullledge A. L.; Benicewicz B. C.; **Tang C.*** Renewable Rosin-Fatty Acid Polyesters: the Effect of Backbone Structure on Thermal Properties. *Green Materials* **2013**, *1*, 96-104.
- (78) Wang J.; Yu J.; Liu Y.; Chen Y.; Wang C.; Tang C.; Chu F.* Synthesis and Characterization of a Novel Rosin-Based Monomer: Free Radical Polymerization and Epoxy Curing, *Green Materials* **2013**, *1*, 105-113.
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Patents and Applications

- (1) Tang C.; Yang P. Metallocene-Boronic Acid-Containing Compounds and Copolymers as Antimicrobial Agents, U.S. Provisional Patent Application, Serial No. 62/467,438.
- (2) Tang C.; Wang Z.; Yuan L. Preparation of Thermoplastic Epoxidized Polymers and Thermosetting Materials from Triglycerides, U.S. Provisional Patent Application, Serial No. 15/488,798.
- (3) U.S. Patent 9,872,917. Tang C.; Zhang J.; Chen Y. P.; Decho A. W. Anion-Paired Cationic Metallocene-Containing Compounds and Polymers as Antimicrobial Agents..
- (4) U.S. Patent 9,890,109. Tang C.; Yuan L. Preparation of Chemicals, Monomers and Polymers from Plant Oils.
- (5) U.S. Patent 9,798,232. Tang C.; Hardy C.; Nese A.; Hayat J. Multiple Copolymer Systems as Templates for Block Copolymer Nanolithography.
- (6) U.S. Patent 9,725,544. Tang C.; Qiao Y.; Ploehn H. J.; Islam M. S. Preparation of conjugated aromatic/heteroaromatic oligomer-containing dielectric polymers and their applications.
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- (9) U.S. Patent 9,357,775. Tang C.; Wang J.; Decho A. W.; Chen Y. P. Rosin-Derived Cationic Compounds and Polymers.

- (10) **U.S. Patent 8,901,245.** Tang C.; Wang J.; Decho A. W.; Chen Y. P. Rosin-Derived Cationic Compounds and Polymers.
- (11) **U.S. Patent 8,809,466.** Tang C.; Yao K. Degradable Polymers, Methods of Making the Same, and Uses Thereof.
- (12) **U.S. Patent 8,604,128.** Tang C.; Wang J.; Decho A. W.; Chen Y. P. Rosin-Derived Cationic Compounds and Polymers along with Their Methods of Preparation.
- (13) **US Patent 8,592,539.** Tang C.; Ren L. Preparation of Cobaltocenium-Containing Monomers and Their Polymers.
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Invited Oral Presentations

- (1) Next-Generation Biobased Polymers by Controlling Macromolecular Architectures, 12th SPSJ International Polymer Conference (IPC2018), Hiroshima, Japan, December 4-7, 2018.
- (2) Macromolecular Engineering of Plant Oils: from Robust Synthesis to Functional Materials, the 16th Euro Fed Lipid Congress, Belfast, UK, September 16-19, 2018.
- (3) Constructing Novel Macromolecular Compositions toward Robust Antimicrobial Biomaterials, Central Michigan University, April 16, 2018.
- (4) Metallo-Polyelectrolytes: from Chemoselective Synthesis to Antimicrobial and Energy Applications, the International Conference on Organic and Polymer Synthesis, Guangzhou, China, April 6-9, 2018.
- (5) Next-Generation Sustainable Polymers and Biomaterials from Renewable Natural Resources, Florida State University, March 29, 2018.
- (6) Controlling Macromolecular Structures Towards Robust Antimicrobial Biomaterials, Biomedical Engineering Department, Penn State University, March 15, 2018
- (7) Metallo-Polyelectrolytes: from Chemoselective Synthesis to Antimicrobials and Membranes, Chemistry Department, Penn State University, March 14, 2018
- (8) Multifunctional Metallo-Polyelectrolytes: from Chemoselective Synthesis to Antimicrobials and Membranes, Chemistry Department, University of North Carolina Chapel Hill, March 1, 2018.
- (9) Sustainable Polymers from Renewable Biomass, Kavli Frontiers of Science Symposium, National Academy of Sciences, Irvine, CA, February 15-17, 2018.
- (10) Multifunctional Metallo-Polyelectrolytes: from Chemoselective Synthesis to Robust Antimicrobials & Beyond, Northwestern Polytechnical University, December 14, 2017.
- (11) Bioorganic and Bioorganic Pathways via Multi-Component Macromolecules against Multidrug-Resistant Bacteria, The 15th Pacific Polymer Conference, Xiamen, China, December 10-12, 2017.
- (12) Functional and Nanostructured Macromolecules for Antimicrobials, SERMACS, Charlotte, NC, November 7-11, 2017.
- (13) Multifunctional Polyelectrolytes with Cationic Metallocenes: from Chemoselective Synthesis to Robust Antimicrobials & Beyond, Clemson University, November 2, 2017.
- (14) Sustainable Use of Antibiotics Against MDR Bacteria via Charged Metallopolymers, American Chemical Society Fall Meeting, Washington D.C., August 20-24, 2017.

- (15) Sustainable Polymers by Controlled Polymerization of Biobased Monomers, American Chemical Society Fall Meeting, Washington D.C., August 20-24, 2017.
- (16) Synthetic Methodologies toward Cationic Metallocene Derivatives and Polymers, American Chemical Society Fall Meeting, Washington D.C., August 20-24, 2017.
- (17) Toward Mechanically Robust Bioplastics by Controlling Macromolecular Architectures, American Chemical Society Fall Meeting, Washington D.C., August 20-24, 2017.
- (18) Lignin Functionalization via Controlled Graft Polymerization and Click Chemistry, American Chemical Society Fall Meeting, Washington D.C., August 20-24, 2017.
- (19) Metallocene Polymers by Controlled Polymerization and Their Applications as Antimicrobial, the 100th Canadian Society for Chemistry meeting, May 28-June 1, Toronto, Canada.
- (20) Synthetic Metallopolymers Revitalize Sustainable Use of Antibiotics Against Multidrug-Resistant Bacteria, The 6th Grubbs Symposium, Shenzhen, China, May 29-30, 2017.
- (21) Sustainable Biobased Polymers from Agricultural and Forestry Products, Anhui Agricultural University, May 24, 2017.
- (22) Sustainable Biobased Polymers and Antimicrobial Metallopolymers, University of Konstanz, Germany, May 2, 2017.
- (23) Synthetic Metallopolymers for Precision Antimicrobials, University of Bristol, U.K., April 26, 2017.
- (24) Sustainable Biobased Polymers and Antimicrobial Metallopolymers, University of Ghent, Belgium, April 24, 2017.
- (25) Sustainable Polymers from Biomass and Antimicrobial Metallopolymers, Georgia Institute of Technology, March 1, 2017.
- (26) Sustainable Polymers from Biomass and Antimicrobial Metallopolymers, University of Houston, February 9, 2017.
- (27) Metallopolymer-Antibiotic Bioconjugates toward Robust Antimicrobials, the 4th International Conference on Cellular & Molecular Bioengineering, Singapore, January 4-6, 2017.
- (28) Sustainable Polymers from Biomass and Antimicrobial Metallopolymers, National Chiao Tung University, December 21, 2016.
- (29) Sustainable Polymers from Biomass and Antimicrobial Metallopolymers, National Tsing Hua University, Taiwan, December 20, 2016.
- (30) Sustainable Polymers from Biomass and Antimicrobial Metallopolymers, National Chung Hsing University, Taiwan, December 19, 2016.
- (31) Sustainable Bio-plastics, Elastomers and Antimicrobial Metallopolymers, University of Connecticut, October 27, 2016.
- (32) Sustainable Thermoplastics and Elastomers Containing Plant Oils and Lignin, Thermoplastic Elastomers 12th Topical Conference (TOPCON 2016), Akron, OH, September 20-22, 2016.
- (33) Monomer to Polymers for the Production of Thermoplastic Elastomers, United Soybean Board Fibers & Thermoplastic Technical Advisory Panel Meeting, Charlotte, NC, August 16, 2016.
- (34) Metallopolymer Polyelectrolytes toward Robust Antimicrobials, Precision Nanomedicine Symposium, Beijing, China, July 8-11, 2016.

- (35) Sustainable Bio-plastics, Elastomers and Antimicrobial Metallopolymers, Zhejiang University, Hangzhou, China, July 5, 2016.
- (36) Metallopolymer Polyelectrolytes toward Robust Antimicrobials, Wenzhou Institute of Biomaterials and Engineering, Wenzhou, China, July 4, 2016.
- (37) Designer New Chemistry and Applications of Plant Oil-Derived Polymers and Advanced Materials, ACS Workshop on Sustainable Polymers, Safety Harbor, Florida, May 25, 2016.
- (38) Biomass Chemistry and Antimicrobial Polymers, Center for Environmental NanoScience and Risk, University of South Carolina, March 30, 2016.
- (39) Functional Polymeric Materials: A Journey Learning from BB, ACS National Meeting, San Diego, March 13-17, 2016.
- (40) Metallopolymer Polyelectrolytes: from Chemoselective Synthesis to Biomedical Applications, The National Center for Nanoscience and Technology, Beijing, China, March 8, 2016.
- (41) Cationic Metallocenes: from Chemoselective Synthesis to Biomedical Applications, Inorganic Polymers Conference-Zing Conferencessm San Diego, February 12-15, 2016.
- (42) Metallocenium polymers: from chemoselective synthesis to biomedical application, International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, Hawaii, December 15-20, 2015.
- (43) Conceptualizing sustainable thermoplastic elastomers from hydrocarbon-rich biomass, International Chemical Congress of Pacific Basin Societies (Pacifichem), Honolulu, Hawaii, December 15-20, 2015.
- (44) Emerging Chemistries and Applications of Plant Oil-Derived Polymers and Composites, Pacific Polymer Conference, December 9-13, 2015.
- (45) Plant Oil Chemistry: What Can Be Done Beyond? the 23rd annual meeting of the Bio-Environmental Polymer Society, Karlsruhe, Germany, October 14, 2015.
- (46) Metallocene Polyelectrolytes: from Chemoselective Synthesis to Biomedical Applications, the 4th Sino-French Workshop on Macromolecules and Soft Matter, Strasbourg, France, Oct 12, 2015.
- (47) On the Emerging Chemistry and Application of Sustainable Polymers from Biomass, MeadWestvaco, Charleston, August 26, 2015.
- (48) Biofilm-Disrupting Antimicrobial Coatings Derived from Natural Resin Acids, ACS National Meeting, Boston, August 16, 2015. (Contributed)
- (49) Sustainable Antimicrobial Polymers and Nano-Assemblies for Killing MRSA, ACS National Meeting, Boston, August 15, 2015.
- (50) Next-Generation Sustainable Polymers from Biomass: Emerging Chemistry and Applications, Fudan University, Shanghai, July 21, 2015.
- (51) On the Emerging Chemistry and Application of Sustainable Polymers from Biomass, Soochow University, Suzhou, July 19, 2015.
- (52) On the Preparation of Emerging Chemicals and Polymers from Rosin and Plant Oils, the 5th International Conference on Bio-based Polymers, Singapore, June 25, 2015.
- (53) Cationic Metallocene Polyelectrolytes: Controlled Polymerization & Applications, Sogang University, Seoul, South Korea, June 12, 2015.
- (54) Designer Next-Generation Sustainable Polymers from Hydrocarbon-Rich Biomass, Korea Advanced Institute of Science and Technology, Daejeon, Korea, June 11, 2015.

- (55) Cationic Metallocene Polyelectrolytes: Controlled Polymerization & Applications, Korea University, Seoul, South Korea, June 10, 2015.
- (56) Thiophene Polymers and Nanocomposites as Nanodielectric Materials for Energy Storage, 31st International Conference of the Polymer Processing Society, Jeju Island, Korea, June 9, 2015.
- (57) Designer Next-Generation Sustainable Polymers from Hydrocarbon-Rich Biomass, Western University, London, Canada, May 20, 2015.
- (58) Designer Next-Generation Sustainable Polymers from Hydrocarbon-Rich Biomass, Washington State University, Pullman WA, April 30, 2015.
- (59) From “M” to “m”: Continuing Controlled Polymerization and More, Macromolecular Engineering: A Symposium Honoring the Impact and 65th Birthday of Prof. Kris Matyjaszewski, Pittsburgh, PA, March 28, 2015.
- (60) Cationic Metallocene Polymers: Controlled Polymerization and Biomedical Applications, Virginia Tech, November 21, 2014.
- (61) Sustainable Thermoplastics, Thermoplastic Elastomers and Biomaterials from Hydrocarbon-Rich Biomass, Rensselaer Polytechnic Institute, September 2, 2014.
- (62) Sustainable Polymers and Biomaterials from Natural Resin Acids and Fatty Acids. International Symposium on Polymer Ecomaterials, Kunming, China, August 22-26, 2014.
- (63) Polymers containing cationic metallocene centers for biomedical applications, ACS National Fall Meeting in San Francisco, CA, August 10-14, 2014.
- (64) Metallocene-containing polymers by controlled and living polymerization, ACS National Fall Meeting in San Francisco, CA, August 10-14, 2014.
- (65) Designing New Cationic Polymers towards Robust Antimicrobial Biomaterials, the International Society of Biomedical Polymers & Polymeric Biomaterials (ISBPPB) Annual Conference, Washington D.C., July 9-12, 2014.
- (66) Sustainable Thermoplastic Elastomers and Antimicrobial Biomaterials Derived from Renewable Hydrocarbon-Rich Biomass, MACRO2014, Chiang Mai, Thailand, July 6-11, 2014.
- (67) Designing Novel Functional Moieties toward Robust Antimicrobial Polymers against Multi-Drug Resistant Bacteria, International Symposium on Polymer Chemistry, Shanghai, China, June 4-7, 2014.
- (68) Macromolecular Engineering toward Sustainable Chemicals, Monomers, Polymers and Advanced Materials from Hydrocarbon-Rich Natural Biomass, the 3rd Grubbs Symposium: Polymers and Green Industry, Ningbo, China, April 18-20, 2014.
- (69) Cationic Metallocene Polymers: from Controlled Polymerization to Electrolyte Chemistry & Medicinal Chemistry, University of South Florida, April 14, 2014.
- (70) Cationic Metallocene Polymers: from Controlled Polymerization to Electrolyte Chemistry & Medicinal Chemistry, ESPCI ParisTech, France, March 28, 2014.
- (71) Hydrocarbon-Rich Biomass-Derived Thermoplastics, Thermoplastic Elastomers and Biomaterials, 7th Workshop on Fats and Oils as Renewable Feedstock for the Chemical Industry, Karlsruhe, Germany, March 23-25, 2014.
- (72) Conceptualizing Novel Macromolecular Architectures towards Robust Antimicrobial Agents, ACS National Spring Meeting in Dallas, Texas, March 16-20, 2014.

- (73) Macromolecular Design toward Sustainable Natural Biomass-Derived Polymers and Functional Cationic Metallocene Polyelectrolytes, University of Georgia, September 19, 2013.
- (74) Sustainable Thermoplastics and Biomaterials by Combining Functions and Macromolecular Architectures, ACS National Spring Meeting in Indianapolis, Indiana, September 8-12, 2013.
- (75) Advancing Metallocene Polymers: from Controlled Polymerization to Macromolecular Templates and Medicinal Chemistry, University of Delaware, August 21, 2013.
- (76) Robust Antimicrobial Agents Containing Natural Hydrocarbon Biomass, Gordon Research Conference on “Adhesion, Science of”, South Hadley, MA, July 14-19, 2013.
- (77) Functional Metallocene-Containing Polymers: Progress and Challenges, Nanjing University, Nanjing China, July 2, 2013.
- (78) Functional Metallocene-Containing Polymers: Progress and Challenges, University of Science and Technology of China, Hefei China, July 1, 2013.
- (79) Functional Metallocene-Containing Polymers: Progress and Challenges, Soochow University, Suzhou China, June 27, 2013.
- (80) Functional and Sustainable Polymers for Advanced Applications, Fudan University, Shanghai China, June 26, 2013.
- (81) Functional and Sustainable Polymers for Advanced Applications, Nanjing University of Technology, Nanjing China, June 25, 2013.
- (82) Tuning Macromolecular Architectures toward Sustainable Thermoplastics and Functional Biomaterials, Institute of Chemical Industry of Forestry Products, Nanjing China, June 24, 2013.
- (83) Functional Nanodielectric Polymers for Energy Storage, Xi’an Jiaotong University, Xi’an China, June 21, 2013.
- (84) Functional Metallocene-Containing Polymers: Progress and Challenges, Tsinghua University, Beijing China, June 18, 2013.
- (85) Tuning Macromolecular Architectures toward Sustainable Thermoplastics and Functional Biomaterials, Chinese Academy of Forestry, Beijing China, June 17, 2013.
- (86) Tuning Macromolecular Architectures toward Sustainable Thermoplastics and Functional Biomaterials, ACS Workshop on Sustainable Polymers, Safety Harbor, Florida, May 20-23, 2013.
- (87) Functional Cationic Metallocene Polymers and Renewable Bio-based Polymers, University of Tennessee Knoxville, May 8, 2013.
- (88) Functional Cationic Metallocene Polymers and Renewable Bio-based Polymers, Oak Ridge National Laboratory, May 7, 2013.
- (89) Functional Cationic Metallocene Polymers and Renewable Bio-based Polymers, Case Western Reserve University, April 26, 2013.
- (90) Advancing Metallocene Polymers: from Controlled Polymerization to Macromolecular Templates and Medicinal Chemistry, Carnegie Mellon University, April 24, 2013.
- (91) Novel Metallocene-Containing Polymers: Progress and Challenges, ACS National Spring Meeting in New Orleans, April 7-11, 2013.
- (92) Functional Cationic Metallocene Polymers and Renewable Bio-based Polymers, University of Massachusetts Amherst, February 15, 2013.

- (93) Metallocene Polymers and Renewable Bio-based Polymers: Combining Functions and Architectures via Macromolecular Engineering, University of Illinois Urbana Champaign, February 12, 2013.
- (94) Metallocene Polymers and Renewable Bio-based Polymers: Combining Functions and Architectures via Macromolecular Engineering, North Carolina State University, January 14, 2013.
- (95) Metallocene Polymers and Renewable Bio-based Polymers: Combining Functions and Architectures via Macromolecular Engineering, Rutgers University, January 4, 2013.
- (96) American Chemical Society Project Seed Program at the University of South Carolina, Southeastern Regional Meeting of ACS in Raleigh NC, November 17, 2012.
- (97) Metallocene Polymers and Renewable Bio-based Polymers: Macromolecular Engineering towards Function-Driven Applications, Duke University, November 16, 2012.
- (98) Novel Metallocene-Containing Polymers: Synthesis, Self-Assembly and Applications, ACS Southwest Regional Meeting, November 06, 2012.
- (99) Metallocene-Containing Polymers and Renewable Bio-based Polymers: Macromolecular Engineering towards Function-Driven Applications, University of Texas Dallas, October 19, 2012.
- (100) Counter-ion Dependent Self-assembly of Cobaltocenium Block Copolymer Polyelectrolytes, ACS National Fall Meeting in Philadelphia, August 21, 2012.
- (101) Highly Ordered Block Copolymers in Thin Films by Unidirectional Solvent Processing Techniques, ACS National Fall Meeting in Philadelphia, August 21, 2012.
- (102) Biodegradable and Water Soluble Polymers as Binder Compositions: Synthesis and Applications, Kimberly Clark, Inc. July 10, 2012.
- (103) Redox-Active Cobaltocenium-Containing Polymers by Controlled Polymerization, IUPAC World Polymer Congress, Virginia Tech, Blacksburgh, June 26, 2012.
- (104) Cobaltocenium-Containing Polymers by Controlled Polymerization. International Symposium on Polymer Chemistry, Changchun, China, June 4, 2012.
- (105) Metallocene-Containing Polymers by Controlled Polymerization, Tongji University, Shanghai, May 28, 2012.
- (106) Sustainable Chemicals and Polymers from Natural Resources, Chinese Academy of Forestry, May 21, 2012.
- (107) Rosin chemicals and polymers: new chemistry, properties and applications. Arizona Chemical Company, May 1, 2012.
- (108) Natural rosin-derived polymers: Beyond conventional functions, ACS National Spring Meeting in San Diego, March 28, 2012.
- (109) Ordering Control of Self-Assembled Block Copolymers in Thin Films, Department of Math, University of South Carolina, March 12, 2012.
- (110) Renewable Biobased Polymers from Rosin and Soy Oil, Chinese Academy of Forestry, February 20-23, 2012.
- (111) Renewable Biobased Polymers and Metal-Containing Polymers: Building Chemical Functions toward Advanced Applications, National University of Singapore, February 24, 2012.
- (112) Antimicrobial Polymers Derived from Natural Resin Acids, The 14th Asia Pacific Confederation of Chemical Engineering, Singapore, February 21 – 24, 2012.

- (113)** Renewable Biobased Polymers Derived from Resin Acids: from Biodegradables to Antimicrobials. International Young Scientist Symposium on Polymeric Materials, Korea University, Seoul, South Korea, November 17, 2011.
- (114)** Cationic Cobaltocenium-Containing Polymers: Synthesis, Self-Assembly and Applications. 12th Pacific Polymer Conference, Jeju Island, Korea, November 14, 2011.
- (115)** Metal-Containing Polymers and Renewable Biobased Polymers: Building Chemical Functions toward Advanced Applications. Louisiana State University, November 9, 2011.
- (116)** Well-defined Side-Chain Cobaltocenium-Containing Homopolymers and Block Copolymers by Controlled Polymerization, ACS National Meeting, Denver Co, September 1, 2011.
- (117)** Gum Rosin-derived Renewable Polymers: from Biodegradable Polymers to Antimicrobial Materials. US-China Scientific Exchange Program. 7 talks at Chinese Academy of Forestry, Institute of Chemistry at Chinese Academy of Sciences, Beijing University, Institute of Chemical Processing of Forest Products, University of Science and Technology of China, Tongji University.
- (118)** Rosin-derived Biopolymers: from Biodegradable Thermoplastics to Antimicrobials, International Conference on Materials for Advanced Technologies, Singapore, June 29, 2011.
- (119)** Biodegradable Renewable Polymers and Metallocene-Containing Polymers: Building Chemical Functions toward Advanced Applications, 3M, Minneapolis, MN, June 1, 2011.
- (120)** Rosin-derived Biopolymers: from Biodegradable Thermoplastics to Antimicrobials, University of Minnesota, Minneapolis, MN, May 31, 2011.
- (121)** Advances in Renewable Polymers from Gum Rosin, International Conference on Chemical and Biological Utilization of Biomass Resources, Nanjing, China, October 24, 2010 (keynote speech).
- (122)** Side-chain Cobaltocenium Polymers: A New Class Of Organometallic Polymers, ACS Meeting, Boston, MA, August 22, 2010.
- (123)** Multifunctional Polymers: From Synthesis to Applications, Nanjing University, Nanjing, China, April 14, 2010.
- (124)** Multifunctional Polymers: From Synthesis to Applications, Institute of Chemical Processing of Forest Products, Nanjing, China, April 13, 2010.
- (125)** Multifunctional Polymers: From Synthesis to Applications, Chinese Academy of Forestry, Beijing, China, April 12, 2010.
- (126)** Block Copolymers - A Platform for Advanced Materials, Army Research Laboratory, Aberdeen Proving Ground, MD, May 6, 2010.
- (127)** Side-chain Cobaltocenium-Containing Block Copolymers, ACS Meeting, Anaheim, CA, March 29, 2010.