Xinyu Zhang, PhD, Associate Professor
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Curriculum Vitae

Education

- **2001-2005**, **Ph. D in Chemistry,** Alan G. MacDiarmid Center for Innovations, Department of Chemistry, The University of Texas at Dallas. Advisor: Professor Alan G. MacDiarmid and Dr. Sanjeev K. Manohar.
- **1996--1999, Master of Engineering;** Tianjin University, Tianjin, China. Advisor: Professor Dongpu Fang.
- **1992--1996, Bachelor of Engineering;** Tianjin University, Tianjin, China.

Research Interests

1) Polymers:

- Conducting polymer nanotubes/nanofibers and composites with noble metals for catalysis, energy and hydrogen storage.
- Multifunctional polymer coating for anti-corrosion and anti-microbial applications.
- Macromolecular self-assembly.
- Polymer/hydrogels for drug delivery and water retention.
- Polymer devices for chemical vapor or analyte sensors.

2) Microwave initiated ultrafast nano-manufacturing for hierarchical, multifunctional materials:

- Rapid growth of carbon nanotubes
- Nanostructured metal chalcogenides, Fe, Zn, W, Mo etc.

3) Transparent Conductors:

- Optically transparent, conducting films for electrodes.

Working Experience

- **August, 2015--present, Associate Professor,** Department of Chemical Engineering, Auburn University.
- **August, 2013--August, 2015, Associate Professor,** Department of Polymer and Fiber Engineering, Auburn University.
- **August, 2008--August, 2013, Assistant Professor,** Department of Polymer and Fiber Engineering, Auburn University.
- **September, 2006--August, 2008, *Research Associate*,** Center for Green Chemistry, Department of Chemical Engineering, University of Massachusetts Lowell. Advisor: Professor. Sanjeev K. Manohar.
- **January--August, 2006**, ***Research Associate,*** Alan G. MacDiarmid Center for Innovations, Department of Chemistry, The University of Texas at Dallas. Advisor: Professors Alan. G. MacDiarmid and Sanjeev. K. Manohar.
- **August, 2000--August 2001, *Project Manager,*** Super Channel (Beijing) Limited.

Teaching and Mentoring

- 2012-present, Supervising PFEN 4820 Senior Design projects
- 2009-present, Teaching PFEN 4100 Polymer Characterizations, PFEN 7700 Advanced Methods in

Polymer Characterization, PFEN 5510/6510 Polymer Chemistry, PFEN 7770 Introduction to Conducting Polymers and ENGR 1100

- 2009 – present, serving as faculty advisor for student organization “Journal Club”
- 2009 – present, serving as supervisor and committee member for 20+ PhD and Master’s students
- 2009, serving as mentor of German undergraduate student intern
- Dec. 3, 2008, Polymer Chemistry class lecture to graduate students
- Sept. 04, 2008, Graduate seminar (Consumer Affairs & Polymer and Fiber Engineering)
- 2005-2006, training junior graduate students in lab safety, polymer synthesis and characterization
- 2004-2005, CHEM 4335 Polymer Chemistry lectures to senior undergraduates
- 2003-2004, training Welch Scholar (high school students) interns
- 2002, CHEM 1111 and CHEM 1112 General Chemistry Laboratory to freshmen
- 2001, CHEM 3472 Instrumental Analysis to junior undergraduates

Awards and Honors

- AU-IGP award, 2016
- Research paper highlighted by Nature, vol. 477, 7362, 8 (Sep. 01, 2011); Chemical & Engineering News, vol. 89, 33, 30 (Aug. 15, 2011); CERN Courier (web, Sep 23, 2011) and Technical Textile (web, Sep. 09, 2011)
- AU-IGP award, 2011
- Collaborative research was reported by major newspaper in Alabama, Birmingham News (Jan 16, 2012)
- One of the top 10 highly cited chemistry papers, by Science Watch, 2006.
- One of the top 20 Most-Accessed Articles in Macromolecules, 2006
- Outstanding Overseas Chinese Students Scholarship, 2004 - This award is presented annually by China to recognize top talented Chinese students of all disciplines overseas and sponsored by the Ministry of Education of China.
- First place (out of 103) in "Strategic Partnership for Research in Nanotechnology" (SPRING-II) conference in UT-Dallas, 2004.

Book Chapters

1. Yang, Jinlong; Gao, Chunmei; Lv, Shaoyu; Liu, Mingzhu; Zhang, Xinyu and Liu, Zhen, Cationic Starch Nanoparticles, in ***Microencapsulation and Microspheres for Food Applications*** (pp. 57-77), Elsevier, 2015

Journal Publications (>2200 total citations based on Google Scholar)

1. Zhang, Lin; Liu, Zhen; Lu, Xu; Yang, Guang; Zhang, Xinyu* and Cheng, Z.-Y., Nano-clip based composites with a low percolation threshold and high dielectric constant, ***Nano Energy***, 2016, 26, 550. (3 citations)
2. Liu, Zhen; Zhang, Lin; Wang, Ruigang; Poyraz, Selcuk; Cook, Jonathan; Bozack, Michael; Das, Siddhartha; Zhang, Xinyu* and Hu, Liangbing, Ultrafast Microwave Nano-manufacturing of Fullerene-Like Metal Chalcogenides, ***Scientific Reports***, 2016, 6, 22503. (1 citation)
3. Spearmana, Benjamin; Hodge, Alexander; Porter, John; Hardy, John; Davis, Zenda; Xu, Teng; Zhang, Xinyu; Schmidt, Christine; Hamilton, Michael and Lipke, Elizabeth; Conductive interpenetrating networks of polypyrrole and polycaprolactone encourage electrophysiological development of cardiac cells, ***Acta***

Biomaterialia 2015, 28, 109–120. (7 citations)

4. Poyraz, Selcuk; Zhang, Lin; Schroder, Albrecht and Zhang, Xinyu*; Ultrafast Microwave Welding/Reinforcing Approach at the Interface of Thermoplastic Materials, ***ACS Appl. Mater. Interfaces***, 2015, 7 (40), 22469–22477. (2 citations)
5. Zhang, Xi; Yan, Xingru; Guo, Jiang; Liu, Zhen; Jiang, Dawei; He, Qingliang; Wei, Huige; Gu, Hongbo; Colorado, Henry A.; Zhang, Xinyu; Suying Wei and Guo, Zhanhu, Polypyrrole Doped Epoxy Resin Nanocomposites with Enhanced Mechanical Properties and Reduced Flammability, ***J. Mater. Chem. C.***, 2015,3, 162-176. (27 citations)
6. Kang, Litao; Xie, Lingli; Li, Peiyang; Liu, Tiejun; Zhang, Xinyu; Luo, Jujie and Liang, Wei, One-step combustion synthesis of CNTs doped Fe2O3/C nanocomposites as electrode materials for supercapacitors, ***FULLER NANOTUB CAR N***, (2014) 23, 715–720. (1 citation)
7. Kang, Litao; Deng, Jiachun; Liu, Tiejun; Cui, Mangwei; Zhang, Xinyu; Li, Peiyang; Li, Ying; Liu, Xuguang and Liang, Wei, One-step solution combustion synthesis of cobalt-nickel oxides/C/Ni/CNTs nanocomposites as electrochemical capacitors electrode materials, ***J. Power Sources*** 275 (2015) 126e135. (13 citations)
8. Poyraz, Selcuk; Cerkez, Idris; Huang, Tung Shi; Liu, Zhen; Kang, Litao; Luo, Jujie and Zhang, Xinyu*, One-step Synthesis and Characterization of Polyaniline Nanofiber/Silver Nanoparticle Composite Networks as Anti-bacterial Agents, ***ACS Appl. Mater. Interfaces***, 2014, 6 (22), 20025–20034. (6 citations)
9. Chen, Chen; Duan, Haogang; Gao, Chunmei; Liu, Mingzhu; Wu, Xin'an; Wei, Yuhui; Zhang, Xinyu* and Liu, Zhen Non-covalent modification of thrombolytic agent nattokinase: simultaneous improvement of fibrinolysis activity and enzymatic stability, ***RSC Adv.***, 2014, 4, 27422-27429. (2 citations)
10. Liu, Zhen; Chen, Long; Zhang, Lin; Poyraz, Selcuk; Zhang, Xinyu* and Zhu, Jiahua, Ultrafast Cr(VI) Removal from Polluted Water by Microwave Synthesized Iron Oxide Submicron Wires, ***Chem. Commun.***, 2014, 50, 8036-8039. (12 citations)
11. Poyraz, Selcuk; Liu, Zhen; Liu, Yang; Lu, Ning; Kim, Moon J. and Zhang, Xinyu* One-step Synthesis and Characterization of Poly(o-toluidine) Nanofiber/Metal Nanoparticle Composite Networks as Non-enzymatic Biosensors, ***Sensors & Actuators B***, 2014, 201, 65-74. (10 citations)
12. Liu, Yang; Poyraz, Selcuk; Xin, John H. and Zhang, Xinyu* Shape Control of Novel Platinum Nanostructures, ***J. Mater. Chem. A***, 2014, 2, 7152-7155. (1 citation)
13. Liu, Zhen; Zhang, Lin; Poyraz, Selcuk; Smith, James; Kushvaha, Vinod; Tippur, Hareesh and Zhang, Xinyu* Ultrafast Microwave Approach towards Multi-Component and Multi-Dimensional Nanomaterials, ***RSC Adv.***, 2014, 4, 9308-9313. (4 citations)
14. Xie, Hui; Poyraz, Selcuk; Thu, Mya; Liu, Yang; Snyder, Evan Y.; Smith, Jeffrey W. and Zhang, Xinyu* Microwave-assisted fabrication of carbon nanotubes decorated polymeric nano-medical platforms for simultaneous drug delivery and magnetic resonance imaging, ***RSC Adv.***, 2014, 4, 5649-5652 (7 citations)
15. Poyraz, Selcuk; Liu, Zhen; Liu, Yang and Zhang, Xinyu* Devulcanization of Scrap Ground Tire Rubber and Successive Carbon Nanotube Growth by Microwave Irradiation, ***Current Organic Chemistry***, 2013, 17(20), 2243-2248. (6 citations)
16. Liu, Zhen; Zhang, Lin; Poyraz, Selcuk and Zhang, Xinyu* Conducting Polymer - Metal Nanocomposites Synthesis and Their Sensory Applications, ***Current Organic Chemistry***, 2013, 17(20), 2256-2267. (14 citations)
17. Chen, Jiucun; Liu, Mingzhu; Gao, Chunmei; Lü, Shaoyu; Zhang, Xinyu*; and Liu, Zhen Self-Assembly Behaviors of pH- and Thermo-Responsive Hydrophilic ABCBA-Type Pentablock Copolymers

Synthesized by Consecutive RAFT Polymerization, ***RSC Adv.***, 2013, 3, 15085-15093 (20 citations)

18. Huang, Yinjuan; Liu, Mingzhu; Gao, Chunmei; Yang, Jinlong; Zhang, Xinyu*; Zhang, Xinjie and Liu, Zhen Ultra-small and innocuous cationic starch nanospheres: Preparation, characterization and drug delivery study, ***Int. J. Biol. Macromol.***, 2013, 58, 231 (8 citations)
19. Liu, Yang; Lu, Ning; Poyraz, Selcuk; Wang, Xiaolong; Yu, Yajiao; Scott, Julie; Smith, James; Kim, Moon J. and Zhang, Xinyu* One-pot Formation of Multifunctional Pt-Conducting Polymer Intercalated Nanostructures, ***Nanoscale***, 2013, 5, 3872 (12 citations)
20. Chen, Jiucun; Liu, Minzhu; Gong, Honghong; Cui, Guangjun; Lü, Shaoyu; Gao, Chunmei; Huang, Feng; Chen, Tongtong; Zhang, Xinyu* and Liu, Zhen Synthesis of linear amphiphilic tetrablock quaterpolymers with dual stimulus-response through the combination of ATRP and RAFT by a click chemistry site transformation approach, ***Polymer Chemistry***, 2013, 4, 1815-1825 (20 citations)
21. Liu, Zhen; Liu, Yang; Zhang, Lin; Poyraz, Selcuk; Lu, Ning; Kim, Moon; Smith, James; Wang, Xiaolong; Yu, Yajiao and Zhang, Xinyu* Controlled synthesis of transition metal/conducting polymer nanocomposites, **Nanotechnology,** 2012, 23, 335603 (15 citations)
22. Liu, Yang; Liu, Zhen, Lu, Ning; Preiss, Elisabeth; Poyraz, Selcuk; Kim, Moon J.; Zhang, Xinyu* Facile synthesis of polypyrrole coated copper nanowires: a new concept to engineered core–shell structures, ***Chem. Commun.***, 2012, 48, 2621 (28 citations)
23. Zhang, Xinyu* and Liu, Zhen Recent advances in microwave initiated synthesis of nanocarbon materials, ***Nanoscale***, 2012, 2012, 4, 707 (invited Feature Article, 20 citations)
24. Liu, Zhen; Poyraz, Selcuk; Liu, Yang and Zhang, Xinyu* Seeding approach to noble metal decorated conducting polymer nanofiber network, ***Nanoscale***, 2012, 4, 106. (16 citations)
25. Liu, Zhen; Wang, Jialai; Kushvaha, Vinod; Poyraz, Selcuk; Tippur, Hareesh; Park, Seongyong; Kim, Moon; Liu, Yang; Bar, Johannes; Chen, Hang and Zhang, Xinyu* Poptube approach for ultrafast carbon nanotube growth, ***Chem. Commun.***, 2011, 47, 9912 (highlighted by Nature, September 1 issue, page 8; and Chemical & Engineering News, August 15 2011 issue, page 30, 31 citations)
26. Liu, Zhen; Poyraz, Selcuk; Liu, Yang; Zhang, Xinyu* Green-Nano Approach to Nanostructured Polypyrrole, ***Chem. Commun.***, 2011, 47 (15), 4421 (32 citations)
27. Liu, Zhen; Zhang, Xinyu*; Poyraz, Selcuk; Surwade, Sumedh P.; Manohar, Sanjeev K., Oxidative Template for Conducting Polymer Nanoclips, ***J. Am. Chem. Soc.,*** 2010, 132 (38), 13158. (77 citations)
28. Dua, Vineet; Surwade, Sumedh P.; Ammu, Srikanth; Zhang, Xinyu; Jain, Sujit; Manohar, Sanjeev K. Chemical Vapor Detection Using Parent Polythiophene Nanofibers, ***Macromolecules,*** 2009, 42(15), 5414. (19 citations)
29. Surwade, Sumedh P.; Agnihotra, Srikanth Rao; Dua, Vineet; Kolla, Harsha S.; Zhang, Xinyu; Manohar, Sanjeev K. Chromism and molecular weight of polyaniline derivatives, ***Synthetic Metals,*** 2009, 159(19-20), 2153. (12 citations)
30. Zhang, Xinyu; Surwade, Sumedh P.; Dua, Vineet; Bouldin, Ryan; Manohar, Sanjeev K. Parent polythiophene nanofibers, ***Chemistry Letters,*** 2008, 37(5), 526. (11 citations)
31. Zhang, Xinyu; Manohar, Sanjeev K. Microwave Synthesis of Nanocarbons from Conducting Polymers, ***Chem. Commun.,*** 2006, 23, 2477. (45 citations)
32. Zhang, Xinyu; Kolla, Harsha S.; Wang, Xianghui; Raja, Kirtana; Manohar, Sanjeev K. Fibrillar Growth in Polyaniline, ***Advanced Functional Materials,*** 2006, 16(9), 1145. (104 citations)

33. Zhang, Xinyu; Lee, Jeong-Soo; Lee, Gil S.; Cha, Dong-Kyu; Kim, Moon J.; Yang, Duck J.; Manohar, Sanjeev K. Chemical Synthesis of PEDOT Nanotubes, ***Macromolecules,*** 2006, 39(2), 470. (122 citations, *Most-Accessed Articles in Macromolecules, 2006*)
34. Kolla, Harsha S.; Surwade, Sumedh; Zhang, Xinyu; MacDiarmid, Alan G.; Manohar, Sanjeev K. Absolute Molecular Weight of Polyaniline, ***J. Am. Chem. Soc.,*** 2005, 127(48), 16770. (104 citations)
35. Zhang, Xinyu; Manohar, Sanjeev K. Narrow Pore-Diameter Polypyrrole Nanotubes, ***J. Am. Chem. Soc.,*** 2005, 127(41) 14156. (149 citations)
36. Zhang, Xinyu; MacDiarmid, Alan G.; Manohar, Sanjeev K. Chemical synthesis of PEDOT nanofibers, ***Chem. Commun.,*** 2005, 42, 5328. (60 citations)
37. Zhang, Xinyu; Manohar, Sanjeev K. Bulk Synthesis of Polypyrrole Nanofibers by a Seeding Approach, ***J. Am. Chem. Soc.,*** 2004, 126(40), 12714. (197 citations)
38. Zhang, Xinyu; Goux, Warren J.; Manohar, Sanjeev K. Synthesis of Polyaniline Nanofibers by "Nanofiber Seeding", ***J. Am. Chem. Soc.,*** 2004, 126(14), 4502. (691 citations, top 10 highly cited chemistry papers by *Science Watch*)
39. Zhang, Xinyu; Manohar, Sanjeev K. Polyaniline Nanofibers: Chemical Synthesis using Surfactants, ***Chem. Commun.,*** *2004,* 20, 2360. (138 citations)
40. Zhang, Xinyu; Chan-Yu-King, Roch; Jose, Anil; Manohar, Sanjeev K. Nanofibers of Polyaniline Synthesized by Interfacial Polymerization, ***Synthetic Metals***, 2004, 145, 23 (cover story). (164 citations)
41. Zhang, Xinyu; Zeng, Xiangyun; Fang, Dongpu; Chen, Yirui The Study of Polyaniline Composite as Microwave Absorption Material, ***Chemical Industry&Engineering*** (in Chinese), 1998, 15, 3. (12 citations)

Conference Publications

42. Guin, Will; Wang, Jialai; Zhang, Xinyu; Smith, James, Carbon Nanotube-reinforced Hybrid Composites Enabled by the PopTube Approach, American Society of Composites 29th Technical Conference, Sep. 2014, La Jolla, CA
43. Wang, Jialai, Zhang, Xinyu; Poptube Technology-Transforming Nanoreinforcement of Structural Composites, ASCE Earth and Space 2012 Conference, April 15-18, 2012, Pasadena, CA
44. Zhang, Xinyu; Wang, Jialai; Pan, Shanlin, Ultrafast Carbon Nanotube (CNT) Growth on Engineering Materials, 2011 NSF-CMMI grantee conference proceeding, Jan 4-7, 2011, Atlanta GA
45. Zhang, Xinyu; Crespilho, Frank N.; Zucolotto, Valtencir; Manohar, Sanjeev K.; Mattoso, Luiz Henrique C.; Bergamaski, Kleber. Development of Pt Nanoparticles/Popypyrrole Nanocomposites: Applications Towards Oxygen Reduction. ***FUEL Preprints*** 2009, 54(1), 165.
46. Zhang, Xinyu; Ebron, H.; Ferraris, John P.; MacDiarmid, Alan G.; Manohar, Sanjeev K. Nanostructured conducting polymer supercapacitors. ***PMSE Preprints*** 2006, 95, 676.
47. Manohar, Sanjeev K.; Zhang, Xinyu; Wu, Aimei Nanostructured Soft Organic Materials, ***Polymer Preprints,*** 2006, 47(1), 186.

48. Manohar, Sanjeev K.; Zhang, Xinyu; Wu, Aimei; Kolla, Harsha S. Emergent Nanostructures in Conducting Polymers, ***Polymer Preprints***, 2004, 45(2), 587-588. (2 citations)

Patent Applications

1. Wang, Jialai; Zhang, Xinyu Novel Nanocomposite for Sustainability of Infrastructure, Non-Provisional Patent Application, Auburn University jointly with The University of Alabama. Application serial numbers: 13/038,205 (US) and PCT/US2011/026721, filed date, 03/01/2011.
2. Manohar, Sanjeev K.; Zhang, Xinyu Controlled Nanofiber Seeding, ***US Patent Application,*** US 2006051401.
3. Manohar, Sanjeev K.; MacDiarmid, A. G.; Zhang, Xinyu Non-covalent Solubilization of Carbon Nanotubes, ***Provisional Patent Application,*** UTD # 03-004. Date filed 12/03/2002.

Invited Talks

- Oct. 14, 2016, NanoBio Summit conference, Auburn, AL
- June 30, 2016, School of Science, Northwestern Polytechnical University, Xi'an, China
- June 29, 2016, School of Science, Xi'an Jiaotong University, Xi'an, China
- June 29, 2016, School of Science, Xi'an University of Technology, Xi'an, China
- June 29, 2016, School of Materials Science and Engineering, Chang'an University, Xi'an, China
- June 28, 2016, College of Chemistry & Chemical Engineering, Shaanxi Normal University, Xi'an, China
- June 28, 2016, School of Chemistry and Material Science, Northwest University, Xi'an, China
- June 27, 2016, College of Chemistry and Chemical Engineering, Shaanxi University of Science and Technology, Xi'an, China
- May 29, 2016, 1st Polymeric Materials Forum, Xi'an, China
- Dec. 26, 2014, College of Chemistry and Environmental Science, Hebei University, Baoding, China
- Nov. 23, 2014, The 8th Energy, Materials, and Nanotechnology (EMN) Meeting, Orlando, FL
- June 19, 2014, A. James Clark School of Engineering, University of Maryland, College Park
- May 19, 2014, School of Medicine, Tsinghua University, Beijing, China
- May 15, 2014, School of Materials Science and Engineering, Taiyuan University of Technology, Taiyuan, China
- May 12, 2014, School of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, China
- May 12, 2014, School of Chemistry and Chemical Engineering, Northwest Normal University, Lanzhou, China
- March 17, 2014, American Chemical Society Meeting, Dallas, TX
- February 28, 2014, Smart Coatings Conference, Orlando, FL
- February 25, 2013, Materials Science and Engineering, Auburn University
- May 22, 2012, Central Research Institute, Dongfang Electric, Chengdu, China
- May 22, 2012, Chengdu Green Energy and Green Manufacturing Technology R&D Center, Chengdu, China
- May 21, 2012, The State Key Lab of Oil and Gas Reservoir Geology and Exploitation & New Energy Center, Southwest Petroleum University, Chengdu, China
- May 20, 2012, School of Chemistry and Chemical Engineering, Northwest Normal University, Lanzhou, China
- May 19, 2012, School of Petrochemical Engineering, Lanzhou University of Technology, Lanzhou, China
- May 17, 2012, School of Chemistry and Chemical Engineering, Lanzhou University, Lanzhou, China

- March 31, 2011, Materials Science and Engineering, University of Alabama at Birmingham
- November 16, 2010, Civil Engineering, Auburn University
- November 10, 2008, Materials Engineering, Auburn University, Auburn, Alabama
- March, 2008, Materials Engineering, Auburn University, Auburn, Alabama
- February 25, 2008, Chemistry, University of Tulsa, Tulsa, Oklahoma
- February 7, 2008, Chemical Engineering, University of Waterloo, Waterloo, Canada
- August 22, 2007, Materials Engineering, University of Idaho, Moscow, Idaho
- March 14, 2007, Chemical Engineering, Rensselaer Polytechnic Institute, Troy, New York
- November 8, 2006, CYTEC Industries Inc. Research & Development, Stamford, Connecticut
- October 26, 2006, DuPont Central Research and Development, Wilmington, Delaware

Poster Presentations

1. Selcuk Poyraz, Lin Zhang, Albrecht Schroder, Xinyu Zhang, Ultrafast Microwave Welding/Reinforcing Approach at the Interface of Thermoplastic Materials, *ACS National Meeting*, March 2016, San Diego, CA, US
2. Cook, Jonathan and Zhang, Xinyu; Functionalized Polyanilines as Novel Curing Agents for Epoxy Resins, *ACS Southeast Regional Meeting*, November 2015, Memphis, TN, US
3. Liu, Yang; Zhang, Xinyu and Xin, John H.; Microwave fabrication of hierarchical carbon nanotube/carbon fiber nanocomposite, Fiber Society Spring Conference, May 2015, Shanghai, China
4. Zhang, Xinyu Toward Roll-to-Roll Production of Nanomaterials Using Microwave, *Gordon Research Conferences-Nanomaterials for Applications in Energy Technology*, February 2015, Ventura, CA, US
5. Liu, Yang; Zhang, Xinyu; Fei Bin; Xin, John H. Robust superhydrophobic thin film by nanowire network, *MATA (Materials Today Asia) 2014*, December 2014, Kowloon, HK
6. Guin, Will; Wang, Jialai; Zhang, Xinyu; Carbon nanotube-reinforced structural composites for spacecraft applications enabled by the poptube approach, *65th International Astronautical Congress 2014*, Toronto, Canada
7. Zhang, Xinyu Microwave initiated ultrafast carbon nanotube growth, *247th ACS National meeting*, March 2014, Dallas, TX, US.
8. Zhang, Xinyu Microwave approach to ultrafast synthesis of nanomaterials, *ACS Southeast Regional Meeting*, November 2013, Atlanta, GA, US
9. Zhang, Xinyu Microwave Initiated Nano-Carbonization, *Fiber Society Fall Meeting*, Oct. 2013, Clemson, SC, US
10. McGehee, Ryan; Poyraz, Selcuk; Zhang, Xinyu Microwave Decomposition of Polypyrrole Coated Lignin Carbon Nano-Composites for Lithium-Ion Battery Applications, 2013 ASABE Annual International Meeting, July 2013, Kansas City, MO, US.
11. Zhang, Xinyu; Liu, Zhen; Liu, Yang; Poyraz, Selcuk Ultrafast Synthesis of Nanomaterials Using Microwave, TechConnect World, May, 2013, Washington DC, US.
12. Zhang, Xinyu Ultrafast synthesis of nanomaterials using microwave *245th ACS National Meeting*, March 2013, New Orleans, LA, US.
13. Zhang, Xinyu; Liu, Zhen; Liu, Yang Microwave Initiated Ultrafast Carbon Nanotube Growth, Materials

Research Society - 2nd Global Congress on Microwave Energy Applications Registration, July, 2012, Long Beach, CA, US.

14. Wang, Jialai; Zhang, Xinyu; Pan Shanlin Collaborative Research: Geopolymeric Nanocomposite, A Next Generation Material For Infrastructure Sustainability, NSF-CMMI grantee conference, July, 2012, Boston, MA, US.
15. Zhang, Xinyu; Liu, Zhen; Poyraz, Selcuk; Liu, Yang Microwave initiated ultrafast carbon nanotube growth, *243th ACS National Meeting*, March 2012, San Diego, CA, US.
16. Poyraz, Selcuk; Liu, Zhen; Liu Yang; Zhang, Xinyu Synthesis and characterization of nanostructured conducting polymers and their composites with noble metal nanoparticles, *243th ACS National Meeting*, March 2012, San Diego, CA, US.
17. Poyraz, Selcuk; Liu, Zhen; Zhang, Xinyu Devulcanization of scrap ground tire rubber and successive carbon nanotube growth by microwave irradiation, *243th ACS National Meeting*, March 2012, San Diego, CA, US.
18. Liu, Yang; Liu, Zhen; Zhang, Xinyu Synthesis of polypyrrole coated copper nanowire and its application as hydrogen peroxide sensor, *243th ACS National Meeting*, March 2012, San Diego, CA, US.
19. Zhang, Xinyu Microwave Initiated Carbon Nanotube Growth on Textile Fabrics, The 4th International R&D Project Proposals Brokerage Event in Textiles and Clothing, Feb 2-3, Bursa, Turkey.
20. Zhang, Xinyu Antistatic Coating of Nanofibers of Conducting Polymers on Textile Fabrics, The 4th International R&D Project Proposals Brokerage Event in Textiles and Clothing, Feb 2-3, Bursa, Turkey.
21. Zhang, Xinyu; Wang, Jialai, Pan, Shanlin, Ultrafast Carbon Nanotube (CNT) Growth on Engineering Materials, 2011 NSF-CMMI grantee conference, Jan 4-7, 2011, Atlanta GA, US.
22. Zhang, Xinyu; Liu, Zhen; Manohar, Sanjeev K.; Surwade, Sumedh P. Conductive Polymer Nanoclips from Oxidative Templates. Joint 66th Southwest and 62nd Southeast Regional ACS meeting, December, 2010, New Orleans, LA, US.
23. John, Gerald F.; Zhang, Xinyu; Twarakavi, Navin K. A Multidisciplinary Approach to Optimize Hydrogels for Improving Field Capacity of Agricultural Soils. ASA-CSSA-SSSA International Annual Meeting, October 2010, Long Beach, CA, US.
24. Zhang, Xinyu; Liu, Zhen; Poyraz, Selcuk; Surwade, Sumedh P.; Manohar, Sanjeev K. Oxidative template for conducting polymer nanoclips. *240th ACS National Meeting,* August 2010, Boston, MA, US.
25. Liu, Zhen; Zhang, Xinyu. Green seeding approach to produce polypyrrole nanofibers. *239th ACS National Meeting,* March 21-25, 2010, San Francisco, CA, US.
26. Dua, Vineet; Surwade, Sumedh P.; Zhang, Xinyu; Jain, Sujit; Manohar, Sanjeev K.. Polythiophene films synthesized by in situ adsorption polymerization. *238th ACS National Meeting,* August 16-20, 2009, Washington, DC, US.
27. Zhang, Xinyu; Crespilho, Frank N.; Zucolotto, Valtencir; Manohar, Sanjeev K.; Mattoso, Luiz Henrique C.; Bergamaski, Kleber. Development of Pt Nanoparticles/Polypyrrole Nanocomposites: Applications Towards Oxygen Reduction. *237th ACS National Meeting,* March 22-26, 2009, Salt Lake City, UT, US.

28. Surwade, Sumedh, Zhang, Xinyu; Dua, Vineet and Manohar, Sanjeev K. Surface Phenomena in Control of Nanofiber Morphology in Conducting Polymers. MRS Fall Meeting, December 2008, Boston, MA, US.
29. Zhang, Xinyu; Surwade, Sumedh; Dua, Vineet; Bouldin, Ryan; Manohar, Neha; Manohar, Sanjeev K. Conducting parent polythiophene nanofibers. *235th ACS National Meeting,* April 6-10, 2008, New Orleans, LA, US.
30. Dua, Vineet; Zhang, Xinyu; Manohar, Sanjeev K. Nanocomposites of carbon nanotubes and polyanilines. *235th ACS National Meeting,* April 6-10, 2008, New Orleans, LA, US.
31. Manohar, Sanjeev K.; Surwade, Sumedh; Dua, Vineet; Anandakathir, Robinson; Zhang, Xinyu. Green chemistry synthesis of polyaniline nanofibers. *235th ACS National Meeting,* April 6-10, 2008, New Orleans, LA, US.
32. Zhang, Xinyu; Ebron, Von H.; Ferraris, John P.; MacDiarmid, Alan G.; Manohar, Sanjeev K.. Nanostructured conducting polymer supercapacitors. *232nd ACS National Meeting,* September 10-14, 2006, San Francisco, CA, US.
33. Zhang, Xinyu; Manohar, Sanjeev. Green Approach to Nanocarbons. *62nd Southwest Regional ACS Meeting*, October 19-22, 2006, Houston, TX, US.
34. Manohar, Sanjeev K.; Zhang, Xinyu; Kolla, Harsha S. Emergent Nanostructures in Conducting Polymers. *MRS Fall Meeting,* 2005, Boston, MA, US.
35. Kolla, Harsha S.; Zhang, Xinyu; Mallikarjuna, Nadagouda N.; Manohar, Sanjeev K. Reaction Profiling and Absolute Molecular Weight Determination of Polyaniline Using Laser Light Scattering. *229th ACS National Meeting,* March 13-17, 2005, San Diego, CA, US.
36. Mallikarjuna, Nadagouda N.; Zhang, Xinyu; Wu, Aimei; Kolla, Harsha S.; Manohar, Sanjeev K. Green Chemistry Approach to Silver and Palladium Nanoparticles Using Coffee/Tea Extracts. *229th ACS National Meeting,* March 13-17, 2005, San Diego, CA, US.
37. Mallikarjuna, Nadagouda N.; Zhang, Xinyu; Wu, Aimei; Kolla, Harsha S.; Manohar, Sanjeev K. Green Chemistry Approach to Noble Metal Nanostructures Using Turmeric (Curcumin) Extract. *229th ACS National Meeting,* March 13-17, 2005, San Diego, CA, US.
38. Zhang, Xinyu; Manohar, Sanjeev K. Line-Patterned Magnetic Coating *SPRING-II*, Richardson TX, November, 2004.
39. Zhang, Xinyu; Lee, Jeong-Soo; Manohar, Sanjeev K. Poly(3,4-ethylenedioxythiophene) Nanotubes: A Reverse Microemulsion Approach *SPRING-II,* Richardson TX, November, 2004.
40. Wang, Xianghui; Zhang, Xinyu; Raja, Kirtana; Manohar, Sanjeev K. Poly-N-methylaniline: Morphology and Applications *SPRING-II,* Richardson TX, November, 2004.
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Professional Membership and Services

- Program Organizer and Chair, Southeastern Regional ACS meeting, Atlanta, GA, 2013
- Treasurer: ACS Auburn Section, since 2011
- ACS member since 2004
- AIChE member since 2015
- MRS membership since 2011
- Fiber Society membership since 2011
- Serving as referee for 40+ journals from ACS, Wiley, Elsevier, RSC etc.
- Serving as panel reviewer for proposals from US federal agency such as NSF, NASA, DOE etc.