### JACOB XIN WEI

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### A. PROFESSIONAL PREPARATION

Nanjing University Materials Chemistry B.S., 1993 Nanjing University Polymer Chemistry and Physics Ph.D., 1998

### B. PROFESSIONAL EXPERIENCE

09/2014-Present	Professor of Chemistry, Texas Southern University
09/2008-08/2014	Associate Professor of Chemistry, Texas Southern University
09/2002-08/2008	Assistant Professor of Chemistry, Texas Southern University
07/2000-08/2002	Postdoctoral Fellow, Electroanalytical Chemistry, U. of Texas at San Antonio
01/1999-06/2000	Postdoctoral Fellow, Colloid and Surface Chemistry, University of Oklahoma
07/1998-12/1999	Postdoctoral Fellow, Nanocomposites, Nanjing U. of Science & Technology

## C. SELECT JOURNAL PUBLICATIONS

- Naga V. Naidu, Dadi Arman, Yuanjian Deng, and Xin Wei, "Preparation and Characterization of 4-Amino-2-anilinopyridine and Its Chlorodiruthenium(III,II) Complex", *Journal of Coordination Chemistry*, **67**, 3006 (2014).
- Jing Fang, Xin Wei, John B. Sapp, and Yuanjian Deng, "Novel Platinum(II) Complexes Containing Diaminocyclohexane and Thiourea Derivative Ligands: Synthesis and X-Ray Crystal Structure of (Trans-1,2-diaminocyclohexane)dithioureaplatinum(II) Nitrate Monohydrate", *Inorganic Chimica Acta*, **411**, 5, (2014).
- Xiaomei Bian, Su Liang, Jyothy John, Cheng-Hui Hsiao, Xin Wei, Dong Liang, and Huan Xie, "Development of PLGA-Based Itraconazole Injectable Nanospheres for Sustained Release", *International Journal of Nanomedicine*, **8**, 4521 (2013).
- Paul Clemens, Xin Wei, Bobby L. Wilson, and Renard L. Thomas, "Anatase Titanium Dioxide Coated Single Wall Carbon Nanotubes Manufactured by Sonochemical-Hydrothermal Technique", *Open Journal of Composite Materials*, **3**, 21 (2013) (Cover Article)
- Isis E. Mejias Carpio, Catherine M. Santos, Xin Wei, and Debora F. Rodrigues, "Toxicity of a Polymer-Graphene Oxide Composite against Bacterial Planktonic Cells, Biofilms, and Mammalian Cells", *Nanoscale*, **4**, 4746 (2012).
- Jian You, Ruping Shao, Xin Wei, Sanjay Gupta, and Chun Li, "Near-Infrared Light Triggers Release of Paclitaxel from Biodegradable Microspheres: Photothermal Effect and Enhanced Antitumor Activity", *Small*, **6**, 1022 (2010).
- Merlyn X. Pulikkathara, Oleksandr V. Kuznetsov, Ivana R. G. Peralta, Xin Wei, and Valery N. Khabashesku, "Medium Density Polyethylene Composites with Functionalized Carbon Nanotubes", Nanotechnology, 20, 195602 (2009).
- Hassan Mahfuz, Mohammad Hasan, Vinod Dhanak, Graham Beamson, Justin Stewart, Vijaya Rangari, Xin Wei, Valery Khabashesku and Shaik Jeelani, "Reinforcement of Nylon 6 with Functionalized Silica Nanoparticles for Enhanced Tensile Strength and Modulus", Nanotechnology, 19, 445702 (2008).
- Minh Nguyen, Tuan Phan, Eric Van Caemelbecke, Xin Wei, John L. Bear, and Karl M. Kadish. "Synthesis and Characterization of (3,1) Ru2(F3ap)4(NCS) and (3,1) Ru2(F3ap)3(F2Oap)(NCS)

- Where F3ap Is the 2-(2,4,6-Trifluoroanilino)pyridinate Anion", *Inorganic Chemistry*, **47**, 4392 (2008).
- Jianxin Lin, Guangyi Lu, Lee M. Daniels, Xin Wei, John B. Sapp, and Yuanjian Deng. "Synthesis and Characterization of Platinum(II) Complexes with 2-Imidazolidinethione. X-ray Crystal Structure of Tetra(2-imidazolidinethione-S) Platinum(II) Iodide Dimethylsulfoxide Solvate Monohydrate", *Journal of Coordination Chemistry*, **61**, 2457 (2008).
- Xin Wei, Yuanjian Deng, Renard L. Thomas, and Bobby L. Wilson. "Instantaneous Electrodeposition of Metal Nanostructures on Carbon Nanotubes", *International Patent Application*, PCT/US07/88843 (2007).
- Yetunde E. Sorunmu, Mindy Nguyen, John B. Sapp, Waldemar Gorski, Tuan D. Phan, and Xin Wei. "Study of Factors Affecting Molecular Behaviors in Phenothiazine-Mediated Biosensing by Electrochemical and Spectroscopic Methods", *Electroanalysis*, **18**, 2375 (2006).
- Kun Tao, Shuying Yang, Jaime C. Grunlan, Yeon-Seok Kim, Bachlien Dang, Yuanjian Deng, Renard L. Thomas, Bobby L. Wilson, and Xin Wei. "Effects of Carbon Nanotube Fillers on the Curing Processes of Epoxy Resin-Based Composites", *Journal of Applied Polymer Science*, **102**, 5248 (2006).
- Jaime C. Grunlan, Yeon-Seok Kim, Saeed Ziaee, Xin Wei, Beckry Abdel-Magid, and Kun Tao. "Thermal and Mechanical Behavior of Carbon Nanotube-Filled Latex", *Macromolecular Materials and Engineering*, **291**, 1035 (2006). (Cover Article)
- Xin Wei, Maogen Zhang, and Waldemar Gorski. "Coupling the Lactate Oxidase to Electrodes by Ionotropic Gelation of Biopolymer", *Analytical Chemistry*, **75**(9), 2060 (2003).
- Xin Wei, Andrew D. W. Carswell, Walter Alvarez, and Brian P. Grady. "X-Ray Photoelectron Spectroscopic Studies of Hydrophilic Surfaces Modified Via Admicellar Polymerization", *Journal of Colloid and Interface Science*, **264**, 296 (2003).
- Andrew D. W. Carswell, Aaron M. Lowe, Xin Wei, and Brian P. Grady. "CMC Determination in the Presence of Surfactant-Adsorbing Inorganic Particulates", *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, **212**, 147 (2003).
- Xin Wei, Juan Cruz, and Waldemar Gorski. "Integration of Enzymes and Electrodes: Spectroscopic and Electrochemical Studies of Chitosan-Enzyme Films", *Analytical Chemistry*, **74**(19), 5039 (2002).
- Xin Wei, Yan Ying, and Xuehai Yu. "A Novel Synthetic Strategy to Aromatic-Diisocyanate-Based Waterborne Polyurethanes", *Journal of Applied Polymer Science*, **70**(8), 1621 (1998).
- Xin Wei, Quan He, and Xuehai Yu. "Synthesis and Properties of Polyoxyethylated Amine Polyurethane Ionomers", *Journal of Applied Polymer Science*, **67**(13), 2179 (1998).
- Xin Wei, Bo Jin, and Xuehai Yu. "Hot-Stage Wide-Angle X-Ray Diffraction Studies of the Morphology of a Polyurethane Ionomer", *Polymer Bulletin*, **39**(6), 729 (1997).
- Xin Wei, and Xuehai Yu. "Synthesis and Properties of Sulfonated Polyurethane Ionomers with Anions in the Polyether Soft Segments", *Journal of Polymer Science*, *Part B: Polymer Physics*, **35**(2), 225 (1997).

### D. SYNERGISTIC ACTIVITIES

Filed an international patent application in the area of nanotechnology and successfully licensed it to NanoRidge, Inc. for further product development and commercialization

2007 Development of a new senior-level chemistry course: Polymer Chemistry

Faculty advisor in the summer outreach program sponsored by AFRL's Minority Leaders Program for minority science teachers at high schools

Faculty advisor in the Qualified Scientist Outreach Program sponsored by NASA's University Research Center for minority students at Barbara Jordan High School

# E. Research Support

- Fabrication and Characterization of Advanced Nanocomposite Materials (PI: Dr. Bobby L. Wilson, Co-PIs: Drs. Xin Wei and Renard L. Thomas, Air Force Research Laboratory/Universal Technology Corporation/Clarkson Aerospace Minority Leaders Program, 2005-2013, Total: \$1,250,000 approx.).
- Center of Research on Complex Networks, Subproject II: Urban Transportation Environmental Networks (Center Director/PI: Dr. Wei Li, Subproject II Co-PI: Lei Yu, Subproject Investigators: Xin Wei, Fengxiang Qiao, and Yi Qi, NSF-CREST, 2011-2016, Subproject Total: \$ 1,250,000 approx.).
- MRI Consortium: Acquisition of a Small Angle X-ray Scattering System for Materials Characterization (PI: Dr. Ramanan Krishnamoorti, Co-PIs: Drs. Matteo Pasquali, Gila E. Stein, Xin Wei, and Michael Wang, NSF-MRI Program, 2010-2011, Total: \$412,772).
- Biosensor and Biomarker Technology Core Facility (Subproject Director: Mahmoud A. Saleh, Co-Director: Xin Wei, NIH/NCRR-RCMI Program, 2004-2010, Subproject Total: \$1,750,000 approx.).
- Development of Advanced Electrochemical Biosensors (PI: Xin Wei, NASA/TSGC-New Investigations Program, 2004-2006, Total: \$10,000).
- Development of Glucose Biosensor Electrodes (PI: Xin Wei, NASA/Wyle Laboratories, 2004-2005, Total: \$2,750).
- TSU Bridge Grant (PI: Xin Wei, Texas Southern University, 2004 Summer, Total: \$5,000).