Curriculum Vitae

Jianjun Wei
Associate Professor (tenured)
The Department of Nanoscience
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EDUCATION

2005 - 2005	Postdoctoral Research Associate in Chemistry, University of Pittsburgh, PA, USA
2000 - 2004	Ph.D., Chemistry, University of Pittsburgh, Pittsburgh, PA, USA
1992 - 1995	M.S., Applied Chemistry East China University of Science & Technology (ECUST), Shanghai, China
1988 - 1992	B.S., Corrosion and Protection (Applied Chemistry) East China University of Chemical Technologies, Shanghai, China

APPOINTMENT

2013–Present	Associate Professor, the Department of Nanoscience, Joint School of Nanoscience and Nanoengineering (JSNN), UNC Greensboro, NC
2014–Present	Adjunct Professor, the Department of Nanoengineering, Joint School of Nanoscience and Nanoengineering (JSNN), UNC Greensboro, NC
2015–2016	Director of Graduate Studies (DGS) of Nanoscience, JSNN, UNC Greensboro, NC
2010–2013	Principal Scientist, Biomedical and Energy Technology, CFD Research Corporation, Huntsville, AL
2006–2010	Senior Scientist/Research Scientist, Biomedical and Energy Technology CFD Research Corporation, Huntsville, AL
2000–2004	Teaching & Research Assistant, Andrew Mellon Predoctoral Research Fellow in Chemistry, University of Pittsburgh, Pittsburgh, PA,
1995-2000	Lecturer, Researcher. Department of Environmental Science and Engineering, Shanghai University, Shanghai, China

HONORS & AWARDS

- 2018: Nomination of UNCG Research Excellence
- 2013: NASA Technical Innovation Brief Award: LEW-18967-1
- 2008: The US DOD SBIR Achievement Award (DoD SBIR Phase II)
- 2003-2004: Andrew Mellon Predoctoral fellowship, University of Pittsburgh
- 2003: Travel Grant Award from Electrochemical Society for the 204th National Meeting, Orlando, FL
- 2002: Wallace Prize; Outstanding Poster Presentation, Dept. of Chemistry and Industrial Committee, University of Pittsburgh

RESEARCH INTEREST

Convergence of nanomaterials, nanoscience & biology, with a particular emphasis on nanoscale reactions under electrical, optical and/or magnetic fields, and applications in bioanalysis, biosensors, biomedicine, electro/catalysis and energy storage/conversion. Both fundamentals of structure-correlated electron/energy transfer, electrocatalysis and nanoscale plasmonics with a motivating philosophy of exploiting synergies between functional systems and nanoscale materials or structures.

RESEARCH GRANT

After Joining JSNN/UNCG (2013-present)

2018-	US NSF #1824872, $50,000, "I-Corps: A Chip-based Nano-Opto-Fluidic Biosensor". **Role: PI**
2015-2018	US NSF #1511194, $306,001, "A Versatile Nano-Optofluidic Platform for Multiplexed Detection of Cardiac Biomarkers in Blood", **Role: PI**
2016-2019	US NIH/R15 award $455,243, (PI Jia-Biology), "Novel Carbon Nanodots against Vascular Inflammation", **Role: Co-I**.
2017-2018	Strategic Seed Grant Award of UNCG, $25,000, "New Upconversion Nanoparticles for Photodynamic Cancer Therapy" **Co-PI**
2016-2017	UNCG First Faculty Research Award, $5,000, "A bio-chip to monitor biomarkers in saliva for organ toxicity/failure", **PI**
2014-2015	A chip-based nanoplasmonics biosensor for proteins, Gateway Research Park, Greensboro, NC, NIC seed fund, $5000, **PI**

Pending Proposals

1. NIH/R21: Methods Development for Determining Adulteration of Human Milk with Cow Milk, **Role: M-PI**, potion of $175,614 (direct cost) out of $275,000. Submitted on June 16, 2018.
2. NSF/EiR: Smart polymer-carbon nanodots systems and radical scavenging interactions, **Role: Co-PI**, potion $225,000 out of $1M (leading institute: NCCU) for three years.
3. NSF/NRT-INFEWS: Transdisciplinary Research and Education Network for Discoveries in FEW, PI-Rathnayake, **Role: Senior Investigator**. submitted on Feb. 6, 2018.
4. NSF/IGE: Integrating Data Analytics into Graduate STEM Education, $499,945, submitted on Oct. 20, 2017, **Role: Co-PI**, (PI: X. Gao)

Before Joining JSNN/UNCG

2013-2014	"Nanocomposite Cascaded Enzymatic Electrodes for Energy Conversion from Biofuels" Army STTR Phase II, $350,000, **Co-PI**
2012-2013	"Developing A Point-of-Care Electrochemical Detector for Reagent-free detection of Pathogens", NASA/STTR Phase I, $125,000, NNX12CG02P, **PI**
2012-2012	"Piezo-nanomaterials for Harvesting Radiative Energy for a High-Efficiency Portable Battery Charger/Storage Unit", DoD SBIR Phase I, $100,000, W911QY-12-P-0077, **PI**
2011-2012	"Carbon Nanotube-Piezoelectric Film for Harvesting Multiple Ambient Energy Sources", DoD/Navy, SBIR Phase I, $100,000, Contract: N68335-11-C-0496, **PI**
2010-2011	"A Nanofluidic Nanoplasmonic Platform for Multiplexing Detection of Cancer Biomarkers", NIH/NCI SBIR: $180,000; Contract: 1R43CA153899-01, **PI**
2010-2012	"Novel MicroPower Source for Insect Based Sensor and Communication." DOD SBIR Phase II: $780,000; Contract: W911NF-10-C-0055, **Co-PI**
2009-2012	"Nanoelectrokinetic, Label-free Sensor for Toxic Industrial Chemical Detection DOD SBIR Phase II: $750,000, Contract: W31P4Q-09-C-0560, **Co-PI**
2009-2011	"An On-Chip Nano-plasmonics Based Urine Protein Assay Cartridge." NASA, STTR Phase II, $600,000; Contract: NNX09CB64C, **PI**
2009-2010	"A Piezoelectric Power Chip for Opportunistic Energy Harvesting on Submarines." DoD/NAVY SBIR Phase I, $100,000; Contract: N65538-10-M-0067, **PI**
2009-2009	"MicroPower Source for Insect Based Sensor and Communication Platforms." DOD SBIR Phase I: $70,000; Contract: W911NF-09-C-0068, **Co-PI**
2008-2009	"Near-Infrared Nanopolymer Agents for Imaging of Tumor Margins." NIH/NCI SBIR Phase I: $100,000; Contract: 1R43CA134039-01, **PI**
2008-2009	"An On-Chip Nano-plasmonics Based Urine Protein Assay Cartridge." NASA, STTR Phase I, $100,000; Contract: NNX08CCD36P, **PI**

2006-2009 "Nanocomposite Enzymatic Electrode in Bio-Battery Platform for Energy Conversion." DOD Phase IIIA: $1,040,000; Contract: W15P7T-06-CT203, **Co-PI (tech Lead)**

PUBLICATIONS

Peer-reviewed Articles *Corresponding Authors, (blue colored are students from my research group at JSNN, 1equal contributors)

Since joining JSNN/UNCG in 2013

Manuscripts under revision/review or submitted

1. Z. Zeng, T. Mabe, W. Zhang, B. Bagra, Z. Ji, Z. Yin, K. Allado, **J. Wei***, Plasmon-exciton coupling in photosystem I based biohybrid photoelectrochemical cells, *ACS Photonics*, **2018**, revision under review.
2. Z. Zeng, W. Zhang, Z. Ji, Z. Yin, **J. Wei**,* Magnetically enhanced electron transfer (MEET) of galvinoxyl radicals, *J. Phys. Chem. C.* **2018**, under review.
3. Y. Liu, Z. Zeng, R. Sharma, S. Gbewonyo, K. Allado, L. Zhang,* **J. Wei**,* A separator-free configuration for a metal-oxide film supercapacitor, **2018**, submitted.

Published/Accepted

4. W. Zhang, J. Chavez, Z. Zeng, B. Bloom, A. Sheardy, Z. Ji, Z. Yin, D. H. Waldeck, Z. Jia, **J. Wei**,* Antioxidant capacity of Nitrogen, Sulfur co-doped carbon nanodots, *ACS Applied Nano Materials*, **2018**, DOI: 10.1021/acsanm.8b00404.
5. P. Lu, H. Yue, Y. Xing*, **J. Wei***, Z. Zeng, R. Li, W. Wu, Low-temperature co-purification of NO_x and Hg^0 from simulated flue gas by $Ce_xZr_yMn_zO_2$/r-Al_2O_3: the performance and its mechanism, *Environ. Sci. Pollut. Res.* **2018**, DOI: 10.1007/s11356-018-2199-4. (Impact factor: **2.741**)
6. A. Aboagye, Y. Liu, J. Ryan, **J. Wei,*** L. Zhang,* Hierarchical Carbon Composite Nanofibrous Electrode Material for High-Performance Aqueous Supercapacitors. *Materials Chemistry and Physics.* **2018**, 10.1016/j.matchemphys.2018.05.009.
7. Z. Zeng, **J. Wei**,* Y. Liu, W. Zhang, T. Mabe, Magnetoreception of photoactivated cryptochrome 1 in electrochemistry and electron transfer, *ACS Omega*, **2018**, 3 (5), 4752-4759.
8. R. Chandran,[1] H. Chevva,[1] Z. Zeng, Y. Liu, W. Zhang, **J. Wei**,* D. LaJeunesse,* Solid State Synthesis of Silver Nanowires by Biopolymer Thin Films, *Materials Today-Nano*, **2018**, 1, 22-28.
9. T. Mabe, Z. Zeng, B. Bagra, J. Ryan, **J. Wei,*** Surface Plasmon Resonance of A Bimetallic Nanostructured Film for Enhanced Optical Sensitivity, *ChemistrySelect.* **2018**, 3, 3018-3023.
10. W. Wu, Z. Zeng, P. Lu*, Y. Xing, **J. Wei**, H. Yue, R. Li, Simultaneous oxidation of Hg^0 and NH_3-SCR of NO by nanophase CexZryMnzO2 at low temperature: the interaction and mechanism, *Environ. Sci. Pollut. Res.*, **2018**, DOI: 10.1007/s11356-018-1657-3. (Impact factor: **2.741**)
11. Y. Liu[1], Z. Zeng[1], B. Bloom, D. Waldeck, **J. Wei**,* Stable Low-current Electrodeposition of α-MnO_2 on Super-aligned Electrospun Carbon Nanofibers for High-performance Energy Storage, *Small* **2018**, 14(3) 201703237. (Impact factor: **8.643**)
12. Z. Zeng, T. Zhang, Y. Liu, W. Zhang, Z. Yin, Z. Ji, **J. Wei**,* Magnetic Field Enhanced 4-electron Pathway of Well-aligned Co_3O_4/ECNFs in the Oxygen Reduction Reaction, *ChemSusChem.* **2018**, 11, 580-588. (Impact factor: **7.226**)
13. A. D. Covell,[1] Z. Zeng[1], T. Mabe, **J. Wei**, A. Adamson, D. LaJeunesse,* Alternative SiO_2 surface energies direct MCDK epithelial behavior, *ACS Biomater. Sci. Eng.*, **2017**, 3(12) 3307-3317. (Impact factor: **3.234**)
14. Z. Zeng, W. Zhang, Y. Liu, P. Lu, **J. Wei,*** Uniformly electrodeposited α-MnO_2 film on super-aligned electrospun carbon nanofibers as a bifunctional catalyst for the oxygen reduction reaction, *Electrochimica Acta*, **2017**, 256, 232-240, DOI: 10.1016/j.electacta.2017.10.057. (Impact factor: **4.798**)
15. W. Zhang[1], Z. Zeng[1], **J. Wei**,* Electrochemical Study of DPPH Radical Scavenging for Evaluating the Antioxidant Capacity of Carbon Nanodots, *J. Phys. Chem. C.* **2017**, 121 (34), 18635–18642. (Impact factor: **4.536**)

16. Z. Zeng[1], W. Zhang[1], D. Arvapalli, B. Bloom, A. Sheardy, T. Mabe, Y. Liu, Z. Ji, H. Chevva, D. Waldeck, **J. Wei**,* A Fluorescence-Electrochemical Study of Carbon Nanodots (CNDs) for Bio- and Photoelectronic Application and Energy Gap Investigation, *Phys. Chem. Chem. Phys.* **2017**, 19, 20101-20109. (Impact factor: **4.123**)
17. Z. Zeng[1], X. Shi[1], T. Mabe[1], S. Christie, G. Gilmore, A. Smith, **J. Wei**,* Protein Trapping in Plasmonic Nanoslit and Nanoledge Cavities: The Behavior and Sensing, *Analytical Chemistry*, **2017**, 89 (10), 5221–5229. (Impact factor: **6.320**)
18. S. Kaye[1], Z. Zeng[1], M. Sanders, K. Chittur, P. Koelle, R. Lindquist, U. Manne, Y. Lin, **J. Wei**,* Label Free Detection of DNA Hybridization with A Compact LSPR-based Fiber-Optic Sensor, *The Analyst*, **2017**, 142, 1974-1981. (Impact factor: **3.885**)
19. Z. Zeng[1], Y. Liu[1], W. Zhang, H. Chevva, **J. Wei**,* Improved Supercapacitor Performance of MnO_2-Electrospun Carbon Nanofibers Electrodes by mT Magnetic Field, *Journal of Power Sources*, **2017**, 358, 22-28. (Impact factor: **6.395**)
20. H. Chevva, R. Chandran, D. LaJeunesse, **J. Wei**,* Silver Nanowires (AgNWs) Growth in-situ on Chitosan Polymer Matrix Film for SERS Application, *Proceedings of 17th IEEE International Conference on Nanotech*. **2017**, pp. 885-889
21. Y. Xu, Z. Li,* F. Zhang, X. Zhuang,* Z. Zeng, **J. Wei**,* New nitrogen-rich azo-bridged porphyrin conjugated microporous networks for high performance of gas capture and storage, *RSC Advances*, **2016**, 6 (36), 30048-30055, (Impact factor: **3.108**)
22. P. Lu, W. Wen, Y. Huang, Z. Zeng, **J. Wei**,* New insight into advection of organic contaminate plume at drain outlet areas, *Environmental Nanotechnology, Monitoring & Management*, **2016**, 6, 76-82. (Impact factor: **1.797**)
23. Z. Zeng, Y. Liu, **J. Wei***, Recent advances in surface enhanced Raman spectroscopy (SERS): finite difference time domain (FDTD) method for SERS and sensing applications. *Trend in Analytical Chemistry*. **2016**, 75, 162–173. (Impact factor: **8.442**)
24. Z. Zeng, M.N. Mendis, D.H. Waldeck, **J. Wei***, A semi-analytical decomposition analysis of surface plasmon generation and the optimal nanoledge plasmonic device, *RSC Advances*, **2016**, 6, 17196 – 17203. (Impact factor: **3.108**)
25. Y. Liu, Z. Zeng, **J. Wei***, Frontiers in nano-architectured carbon–metal oxide electrodes for supercapacitance energy storage, *Front. Nanosci. Nanotech*, **2016**, 2, 78-85.
26. Y. Liu, T. D. Dolidze, S. Singhal, D. E. Khoshtariya, **J. Wei***, New evidence for a quasi-simultaneous proton-coupled two-electron transfer and direct wiring for glucose oxidase captured by the carbon nanotube-polymer matrix. *J. Phys. Chem. C*. **2015**, 119 (27), 14900–14910. (Impact factor: **4.536**)
27. M. Sanders, Y. Lin*, **J. Wei***, T. Bono, R. Lindquist, An enhanced LSPR fiber-optic nanoprobe for ultrasensitive detection of protein biomarkers, *Biosensors and Bioelectronics*, **2014**, 61, 95-101. (Impact factor: **7.780**)
    Note: Listed as ScienceDirect's 10 most downloaded Chemistry articles published by the end of 2015.
28. **J. Wei***, M. Kofke, S. Singhal, D.H. Waldeck, A study of localized surface plasmon resonance nanoslit array and applications for chip-based protein detection, *JSM Nanotech. and Nanomed.*, **2014**, 2(2): 1024.
29. Li Z.*, J. Zhang, et al and **J. Wei***, A Nanocomposite of copper (II) functionalized graphene and application for sensing sulfurated organophosphorus pesticides, *New Journal of Chemistry*, **2013**, 37 (12), 3956 – 3963. (Impact factor: **3.269**)

Before Joining JSNN/UNCG

30. S. Zhu, J. Zhang, G. Vegesna, A. Tiwari, F-T. Luo, H. Li, **J. Wei*** and H. Y. Liu*, Highly water-soluble, near-infrared emissive copolymeric BODIPY dye bearing RGD peptide residues for cancer imaging, *Analytica Chimica Acta*, **2013**, 758, 138–144.
31. T. H. Zhang; Y. He; **J. Wei**; L. Que, Nanostructured optical microchips for cancer biomarker detection, *Biosensors and Bioelectronics*, **2012**, 38, 382-388.

32. X. Shi, Z. Li, X. Ge, C. Yang, B. Fang, **J. Wei**, H. Xie, K. Zhang, X. An and Ch. Qin, "Water-soluble noncovalently engineered graphene-neutral red nanocomposite with photocurrent generating capacity," *J. of Nanoscience and Nanotechnology,* **2012,** 12, 1792-1798
33. Z. Li, X.J. Shi, X.P. Ge, **J. Wei**, C. Z. Yang, B. Fang, H. F. Xie, X. C. An, "Electron interaction among the noncovalently engineered graphene-methylene blue nanocomposites" *Chemical Research In Chinese Universities*, **2012**, 28 (3) 520-523.
34. **J. Wei***, M. Kofke, M. Mendis, H. Song, S. Singhal, DH. Waldeck*, An In-Plane Nanofluidic Nanoplasmonics-Based Platform for Biodetection, *Proceedings of the ASME 2012 3rd Micro/Nanoscale Heat & Mass Transfer International Conference*, MNHMT**2012, 1-7**
35. **J. Wei,*** M. Rexius, M. Kofke, Y. Wang, S. Singhal, D. H. Waldeck, Nano-plasmonics sensing and integration with microfluidics for a lab-on-chip biosensor, *Nanotech.* **2011**, 3, 79-82
36. **J. Wei***, M. Kofke, S. Singhal, and D. H. Waldeck, "Transmission SPR of Gold Nanoslit and Ultrasenstive Detection of Proteins", *IEEE Xplore*, **2010**, 1-4.
37. V. Kotipalli, Z. Gong; Y. He; S. Yadav; S. Penmetsa, **J. Wei**, L. Que, "Carbon nanotube film-based cantilever for light and thermal energy harvesting", *Sensors, IEEE,* **2010**, 1165 – 1168.
38. **J. Wei**, G. Bird, C. Schafmeister, A. Paul, and D. H. Waldeck, "Molecular chirality and charge transfer through self-assembled scaffold monolayers". *J. Phys. Chem. B.;* **2006**; 110(3); 1301-1308.
39. **J. Wei**, H.Y. Liu, K. Niki, E. Margoliash, and D. H. Waldeck, "Probing electron transfer pathway of cytochrome c and its mutant immobilized at surface" *J. Phys. Chem. B,* **2004**, 108, 16912-16917.
40. D. Murgida, **J. Wei**, P. Hildebrandt, Y. F. He, H. Y. Liu, and D. H. Waldeck, "SERR and Electrochemical Study of Cytochrome c Bound on Electrodes through Coordination with Pyridinyl-terminated SAMs" *J. Phys. Chem. B,* **2004**,108, 2261-2269.
41. D. E. Khoshtariya, **J. Wei**, H. Y. Liu, H. J. Yue, and D. H. Waldeck, "The Charge-Transfer Mechanism for Cytochrome C Adsorbed on Nanometer Thick Films. Distinguishing Frictional Control from Conformational Gating" *J. of American Chemical Society*, **2003**, 125, 7704-7714.
42. H. Y. Liu, H. Yamamoto, **J. Wei,** and D. H. Waldeck, "Control of the Electron Transfer Rate between Cytochrome c and Gold Electrodes by the Manipulation of the Electrode's Hydrogen Bonding Character" *Langmuir*, **2003**, 19(6), 2378-2387.
43. **J. Wei**, H. Y. Liu, D. E. Khoshtariya, H. Yamamoto, and D. H. Waldeck, "Electron Transfer Dynamics of Cytochrome C. A Change in the Reaction Mechanism with Distance". *Angewandte Chemie International Edition*, **2002**, 41 (24), 4700-4703.
44. **J. Wei**, H. Y. Liu, A. R. Dick, H Yamamoto, Y. F. He, and D. H. Waldeck, "Direct wiring of cytochrome c's heme unit to an electrode: Electrochemical studies", *Journal of American Chemical Society*, **2002**, 124 (32), 9591-9599.
45. H. Y He, **J. Wei***, and G. Y. Zhang, "Preparation of Modified Melamino-Formaldehyde Resin and Study of Its Flocculation Property" *Journal of Shanghai University* (Science Edition, English), **2000**, 4 (1), 260-282. ISSN 1007-6417;
46. H. Y. He, and **J. Wei***, "The Flocculation of Melamino-Formaldehyde polymer in highly turbid water" *Shanghai Environmental Science,* **2000**, 19 (3) 432-433.
47. **J. Wei*,** Z. Li, and C. Xu, "The Galvanic Corrosion of Cast Aluminum-Carbon Steel and Inhibition of PBTCA in Aqueous Environment" *Journal Shanghai University*, **1999** 5 (3) 326, ISSN 1007-2861
48. Z. Li, X. H. Guo, **J. Wei**, and M. Qian, "Synthesis and Fouling Inhibition Ability studies of Sulfonated AA-AM copolymers", *J. of East China University of Science and Technology*. **1999**, 25 (6) 622-624.
49. **J. Wei,** Y. Q. Qin, H. Y. Liu, and J. Q. Deng. "Direct Electron Transfer Reactions of Glucose Oxidase and D-Amino Acid Oxidase at a Glass Carbon Electrode in Organic Media" *Journal. Shanghai University* (Science Edition, English), **1998**, 2 (1) 77-80. ISSN 1007-6417;
50. H. Y. Liu, Z. N. Zhang, M. Dai, Y. B. Fan, **J. Wei,** Z. N. Qiu, H. B. Li, X. Wu, J. Q. Deng, and D. Y. Qi, "Reagentless Amperometric Biosensor Highly Sensitive to Hydrogen Peroxide Based on the Incorporation of Meldola Blue, Fumed Silica and Horseradish Peroxidase into Carbon Paste" *Fresenius Journal Analytical Chemistry*, **1997**, 357 (3): 297-301.

51. H. Y. Liu, X. Zhang, **J. Wei**, X. Wu, D. Qi, Y. Liu, M. Dai, T. Yu, and J. Q. Deng, "An Amperometric Meldola Blue-mediated Sensor: High Sensitive to Hydrogen Peroxide Based on Immobilization of Horseradish Peroxidase in a Composite Membrane of Regenerated Silk Fibroin and Poly (vinyl alcohol)" *Analytica Chimica Acta*, **1996**, 329, 97-103.
52. **J. Wei**, and S. Z. Zheng, "An Inhibitor Complex for Corrosion and Fouling Prevention in Internal Combustion Engine Cooling Water System" *Corrosion & Protection* **1995**. 16 (6), 257-261.

BOOK CHAPTERS

1. T. Mabe, J. Ryan, **J. Wei**,* "Functional Thin Films and Nanostructures for Sensors", for Handbook of Nanoparticles and Architectural Nanostructured Materials, Editor-in-Chief: Ahmed Barhoum, Elsevier Publisher, **2018**, In Press.
2. Y. Liu, Z. Zeng, **J. Wei**,* "Nano-architectured Carbon-metal Oxide Electrodes for Supercapacitance Energy Storage" for Handbook of Nanoparticles and Architectural Nanostructured Materials, Editor-in-Chief: Ahmed Barhoum, Elsevier Publisher, **2018**, In Press.
3. **J. Wei**,* Z. Zeng, Y. Lin "A LSPR-Coupled Fiber-Optic Nanoprobe for the Detection of Protein Biomarkers", Chapter 1 in Methods in Molecular Biology Series 1571, Biosensors and Biodetection 2017: Optical-based Detectors Volume 1: Methods and Protocols, 2nd Edt. Editors: Avraham Rasooly and Ben Prickril, Humana Press (Springer Copyright), Totowa, NJ, US, ISBN13: 9781493968466, **2017**.

PATENTS & IP DISCLOSURE

1. US Application #: 15/639,891, **2018**. "*Nanoplasmonic devices and applications thereof*" (full patent), US Patent pub.: 2018/0003632, Inventor: **J. Wei**
2. US Application: 2017/62/478,773, "Separator-Free Energy Storage Devices and Methods", filed on March 30, **2017**, EFS ID: 28785044, Inventor: **J. Wei**, Y. Liu, Z. Zeng
3. US 9509009, approved on 11/29/2016, Enzyme catalyzed oxidation of hydrocarbons, Inventors: Y. Ulyanova, S. Minteer, S. Singhal, V. Svoboda, **J. Wei**. Issued 11/29/2016
4. UNCG Disclosure #D15-0018, Morphology controllable deposition of metal oxide for enhanced energy storage, June 15, **2015**
5. *US 8703022*, 04/22/**2014**. Electrically conductive ink and uses thereof. Inventors: V. Svoboda, **J. Wei**, S. Singhal
6. *US 8685286*, 04/02/**2014**. Electrically conductive ink and uses thereof. Inventors: V. Svoboda, **J. Wei**, S. Singhal
7. *US 8158409*, 04/17/2012 Nanoscale Surface Plasmonics Sensors with Nanofluidic Control, Inventors: J. **J. Wei**, S. Singhal, D. H. Waldeck, M. Kofke
8. *20080213631*: Hybrid Power Strip, U.S. Patent Application No. 60/858,590
9. *20090120843*: Filtration Apparatus and Method, US Patent Application No.: 11/930,819

INVITED TALKS/SEMINARS

1. 07/24/2017, invited talk: "Nanoplasmonics and Integrated Biosensors", Department of Chemistry, University of Akron, hosted by Dr. Adam Smith.
2. 07/03/2017, invited talk: "*Integrated Nanoplasmonic Sensing and Improving Energy Storage of MnO2-based Carbon Fiber Electrodes*", at the Joint Institute of University of Michigan-Shanghai Jiaotong University, Shanghai, China.
3. 06/30/2017, invited talk: "*Nanoplasmonics and Integrated Biosensors*", at the Department of Chemistry, Tongji University, Shanghai, China.
4. 06/26-29/2017, invited a series of seminars: "*Novel Nanomaterials and Nano-structures for Functional Applications*" at the University of Science and Technology-Beijing, China

5. 02/03/2017, invited talk: "Nanoscale Interactions: Nanoplasmonics for sensing and fluorescence origin from Carbon nanodots", at The Department of Chemistry, UNC Greensboro, NC
6. 04/14/2016, invited talk: "*Nanoplasmonic Sensing and A Nano-opto-fluidic Platform*", Department of Chemistry, North Carolina A&T State University, Greensboro, NC.
7. 03/02/2016, invited talk: "*Nano-plasmonic biosensors and an analysis of surface plasmon resonance towards an optimal nano-optofluidic device*", the Fitzpatrick Institute for Photonics (FIP, involving over 120 faculty members from 37 departments), Duke University, Durham, North Carolina, USA.
8. 01/09/2016, invited talk: "*Plasmonic and Polymeric Nanoprobes Toward Cancer Diagnosis*", at the International Summit for Biological Targeting Diagnosis and Therapy, Nanning, Guangxi Province, China,
9. 01/08/2016, invited talk: "*Enhanced nanoplasmonic nanoprobes for cancer biomarker detection and polymer imaging agent for cancer cells*" Guangxi National University, Nanning, China,
10. 8/21/2015, "*LSPR-based biosensors*", Department Mechanical Engineering (H. Cho Lab), UNC charlotte, NC
11. 3/18/2014 "*Nano-bioelectronics & Nano-plasmonics: Studies of nanoengineered biointerface and applications in energy and sensing*", Biological and Agricultural Engineering, North Carolina State University (NCSU)
12. 12/2013, "Nanoplasmonics and Nanoelectronics" Invited talk to the Board Directors of Gateway Research Park, Greensboro, NC

CONFERENCES PRESENTATIONS OR POSTERS (*Corresponding author or presenter)

1. H. Chevva, **J. Wei**, Nature inspired and Green synthesis of self-grown silver(Ag) nanowires(NWs) on biopolymer film, UNCG Graduate Research and Creativity Expo program, April 11th, **2018**
2. M. Anike, S. Khan, J. Chavez, N. Chiu, **J. Wei**, W. Zhang, H, Zhu, R, Y. Li, Z, Jia. Carbon nanodots increase cellular NADPH: quinone oxidoreductase-1 activities and reduce TNF-alpha-induced inflammation in human endothelial cells. Society of Toxicology (SOT) 57th Meeting, March 11–15, **2018**, San Antonio, Texas.
3. J. Chavez, S. Khan, K. Watson, S.a Thomas, N. Chiu, W. Zhang, **J. Wei**, H. Zhu, R. Y. Li , Z. Jia. Carbon nanodots cellular uptake and modulation of Tumor Necrosis Factor α-induced endothelial dysfunction. UNCG Graduate Research and Creativity Expo program, April 11th, **2018**
4. S. Khan, J. Chavez, N. Chiu, **J. Wei**, H. Zhu, R.Y. Li, Z. Jia. Carbon Nanodots in endothelial cells and C57BL/6 mice: A study of toxicity and biodistribution. UNCG Graduate Research and Creativity Expo program, April 11th, **2018**
5. M. Anike, S. Khan, J. Chavez, N. Chiu, **J. Wei**, W. Zhang, H. Zhu, R. Y. Li, Z. Jia. Novel carbon nanodots increase cellular NADPH: quinone oxidoreductase-1 activities and inhibit inflammation in human endothelial cells. 2017 Emory University Laney Graduate School STEM Research and Career Symposium, Oct 1-3, **2017**, Atlanta, GA
6. D. M. Arvapalli, **J. Wei**, "Carbon nanodots (CNDs) based Nanotheranostics for Treatment of Hepatocellular Carcinoma" The Nanomanufacturing Conference **2017**, Greensboro, NC. 9/27/2017,
7. T. Mabe, **J. Wei**,* "A Point of Care Biosensor", The Nanomanufacturing Conference **2017**, Greensboro, NC. 9/27/2017, The poster won the 1st place in the poster session.
8. W. Zhang, J. Wei,* "Carbon nanodots as a new free radical scavenger for nanomedicine application" The Nanomanufacturing Conference **2017**, Greensboro, NC. 9/27/2017
9. A. Sheardy, **J. Wei**,* Carbon Nanodot-Copper Sulfide Core-Shell Nanoparticle for Photothermal Therapy, CALCON 2017, Colorado Springs, CO August 3, 2017
10. **J. Wei**,* H. Chevva, R. Chandran, D. LaJeunesse, Silver Nanowires (AgNWs) Growth in-situ on Chitosan Polymer Matrix Film for SERS Application, *17th IEEE International Conference on Nanotech*. July 25-28, **2017**, Pittsburgh, PA, USA.

11. A. Sheardy, **J. Wei**,* Carbon Nanodot-Copper Sulfide Core-Shell Nanoparticle for Photothermal Therapy, The 17th Annual Poster & Vendor Night, Central NC ACS, March 24, 2017, Greensboro, NC.
12. W. Zhang, Z. Zeng, **J. Wei**,* A Fluorescence-Electrochemical Study of Microwave-assisted Synthesis of Carbon Nanodots (CNDs) and Their Potential Applications, The 17th Annual Poster & Vendor Night, Central NC ACS, March 24, 2017, Greensboro, NC.
13. Y. Lin, **J. Wei**, K. Chittur, R. Lindquist, U. Manne, A LSPR Fiber Optic Biosensor for Point-of-Care Diagnostics, SPIE Photonics West, San Francisco, CA, Jan 31-Feb. 2, **2017**
14. T. Mabe, **J. Wei**,* Bimetallic Nanostructured Arrays in SPR Biosensing, MRS/ASM/AVS Joint Symposium at NCSU, Raleigh, NC 27695, Nov. **2016**.
15. Y. Liu, **J. Wei**,* A Nanoarchitectured Electrode for A High Performance Pseudocapacitor, MRS/ASM/AVS Joint Symposium at NCSU, Raleigh, NC 27695, Nov. **2016**.
16. T. Mabe, Z. Zeng, **J. Wei**,* Bimetallic Nanostructured Arrays in Surface Plasmon Resonance Sensing, September 28, JSNN Nanomanufacturing **2016** conference, Greensboro, NC (the best poster award).
17. **J. Wei**,* Z. Zeng, T. Mabe, J. Starobin, "A Versatile Plasmonic Nano-Opto-Fluidic (p-NOF) Platform", Plasmonics and Nanophotonics, the Gordon Research Conferences, July 10-15, **2016**, Sunday River in Newry, ME, USA
18. Z. Zeng, **J. Wei***, "A Versatile Nano-biosensor for Blood Biomarkers: Analysis of surface plasmon (SP) generation and an optimal nano-optofluidic device for sensing applications", The 16th Annual Poster & Vendor Night, Central NC ACS, April 12, **2016**, Greensboro, NC, USA
19. T. Mabe, **J. Wei***, "Enhanced Sensitivity of Plasmonic Devices using Nanostructures and Bimetallic Layers", The 16th Annual Poster & Vendor Night, Central NC ACS, April 12, **2016**, Greensboro, NC.
20. T. Mabe, Z. Zeng, **J. Wei***, "Thin film Gold Nanoslit Arrays for Protein Sensing and A Bimetallic Nanoslit Array Development" September 30, **2015**, JSNN Nanomanufacturing 2015 conference, Greensboro, NC
21. Y. Liu, T. D. Dolidze, S. Singhal, D. E. Khoshtariya and **J. Wei***, "Direct wiring and two-electron exchange mechanism for glucose oxidase at GC/nanotube electrodes", the 10th European Biophysics Congress, July 18-22, **2015**, Dresden (Germany)
22. Y. Liu, A. Aboagye, L. Zhang, **J. Wei***, "A nano-architectured electrode for a high-performance supercapacitor", Quantifying Exposure to Engineered Nanomaterials (QEEN) from Manufactured Products" workshop, July 7-8, **2015**, Washington DC.
23. Y. Liu, A. Aboagye, L. Zhang, **J. Wei***, "An electrospun carbon nanofiber electrode for supercapacitive energy storage", September 24, **2014**, JSNN Nanomanufacturing 2014 conference, Greensboro, NC
24. J. Smith, R. K. Sharma, L. Zhang, **J. Wei***, "Inspection of Nanostructure Inspired Photonic Devices for Sensor Applications", SRC TECHCON 2014, Sep. 7-9, **2014,** Austin, TX

SUPERVISING, TRAINING AND MENTORING

JSNN/UNCG:

***Advisees*: (current graduate students and post doc)**

- Zheng Zeng (Post doc, 2018-present): Nanoplasmonics and electron transfer, fundamentals and applications
- Taylor Mabe (PhD, fall 2014-present): Bimetallic LSPR and SPR for biosensor
- Alex Sheardy (PhD, fall 2015-present): Hybrid nanoparticles and cancer thermal therapy
- Durga M. Arvapalli (PHD, fall 2015-present): On-chip Nanotheranostics for Liver cancers
- Harish Chevva (PhD, fall 2015-present): SERS and Nanobiosensors
- Wendy Zhang (PhD, fall 2015-present): Carbon nanodots (CNDs) and antioxidation, nanomedicine
- Kokougan Allado Yawovi, (fall 2016-present): Energy conversion and storage
- Zuowei Ji (PhD, fall 2016-present): Nanomaterials and biomedical applications
- Bhawna Nagra (PhD, fall 2016-present): SERS and SPR biosensing

- Ziyu Yin (PhD, fall 2017-present): Magnetic field effect on cryptochrome in electron transfer

***Thesis committee member*:**

- De'Andre J. Cherry (MS in Nanoengineering, 2013-2014, graduated), Thesis title: *Smart Polyacrylonitrile (PAN) Nanofibers with Thermal Energy Storage & Retrieval Functionality*.
- Richard Vestal (PHD in Nanoscience, 2013-2014, graduated), Thesis title: *Targeting the atypical chemokine receptor ACKR3/CXCR7 for the treatment of cancer and infectious diseases*
- Karshak Kosaraju (PHD in Nanoscience, 2013-2015, graduated), Thesis title: *Study of Toxicity and Uptake of Nanoparticles towards understanding Biotic-Abiotic Interactions*
- Stephen R. Meier (PHD in Nanoscience, 2013-2016, graduated), Thesis title: *The Investigation of Variable Nernst Equilibria on Isolated Neurons and Coupled Neurons Forming Discrete and Continuous Networks*
- Rakkiyappan Chandran (PHD in Nanoscience, 2013-2017, graduated), Thesis title: *Bio-mimicking Multimodal Nanostructured Surfaces using a Self-Assembly Biopolymer*
- Afraa A. Abusalih (PHD in Nanoengineering, 2015-2017, graduated), Thesis title: *Detection and Measurement of Carbon Nanotubes in Industrial Wastewater*
- Reynaldo Diaz (PHD in Nanoscience, 2014-present), Thesis: *Bio-interfaces of nanostructures and cells.*
- Scott Jalovec (PHD in Nanoscience, 2015-present)
- Michael Azad (PHD in Nanoscience, 2015-present) Thesis title: *Microwave assisted polymerization*
- Henry Ochije (PHD in Nanoscience, 2015-present), Thesis title: *Differential effect of alkali metal ions on the structure and stability of DNA G-quadruplexes with potential roles in the regulation of gene expression*
- Vandana Garikipati (PHD in Nanoscience, 2015-present) Thesis title: *Localization and mechanism of action (MoA) of gold nanoparticles (CNM-Au8) in Oligodendrocytes as an in-vitro model for re-myelination.*
- Matthew Carnaghi, (PHD in Nanosciece, 2016-present)
- Safeera Khan, (MS in Biology, 2016-present) Thesis title: *Carbon nanodots in endothelial cells and C57BL/6 Mice: A study of toxicity and anti-inflammatory effect.*
- Jessica Chavez, (MS in Biology, 2016-present) Thesis title: *Carbon nanodot cellular uptake and modulation of tumor Necrosis Factor alpha-induced endothelial dysfunction*.
- Divya Iyer, (PhD in Nanoscience, 2015-present). Thesis title: *Biological interactions of E. coli to nanostructured materials*.

***Alumni at JSNN*:**

- Yiyang Liu (PhD, 2014-2017), currently faculty in chemistry at Zhenzhou University, Henan, China.
- Zheng Zeng (PhD, 2014-2017), currently a post doc at JSNN.
- Ashutosh Shah (MS in Nanoengineering, 2014-2016, co-advisor): simulation/modeling for energy storage
- Alex Aboagye (PhD in Nanoengineering, 2014, Co-advisor), Thesis title: *Carbon Nanofibers from Electrospinning and their Applications*
- Jay Wilhelmi (undergraduate, Forsyth Technical Community College, spring 2014),
- Jake Smith (undergraduate, Chemistry, Elon University, summer 2014)
- Justin Campbell (undergraduate, Forsyth Technical Community College, spring 2015)
- Juan Peñaranda (undergraduate, Chemistry, UNCG, spring 2016)
- Nilay Doshi (MS Nanoscience, 2013-2014)
- Shuayl Alotaibi (MS in Nanoscience, spring 2016)
- Yingying Xu (PHD, 2014, visiting student)

RESEARCH GROUP ACHIEVEMENT & AWARD AND MEDIA REPORTS

- 2018 Zheng Zeng, nomination of the 2017-2018 Outstanding Dissertation of UNCG

- 2017 Yiyang Liu, Zheng Zeng passed the defenses of their PHD dissertation in Oct. 2017.
- 2017 Taylor Mabe, First Prize of UNCG 3MT received $1,000 award and travel to the regional 3MT competition.
- 2017 Winner of the worldwide Jove Film your research contest for the Plasmonic device fabrication video on Sept 1st 2017, https://www.jove.com/blog/2017/09/01/from-space-exploration-to-disease-treatments-watch-the-winning-videos-from-joves-film-your-research-contest/
- 2017 Winner the 1st place for the national NNCI and Nano.gov contest for their nanotech initiative contest, https://www.nano.gov/node/1767, http://www.nnci.net/blog/national-nanotechnology-initiative-multimedia-contests-open-submissions
- 2017 Selected to be one of National Science Foundation NSF iCorp teams at UNCG site, **2017** (with Taylor Mabe). www.bizjournals.com/triad/news/2017/08/07/uncg-n-c-a-t-launch-program-to-support.html
- 2017 Winner of the world-wide Jove "film your research" contest. 1st Place by Popular Vote, www.jove.com/blog/2017/09/01/from-space-exploration-to-disease-treatments-watch-the-winning-videos-from-joves-film-your-research-contest/
- 2017 Fox 8 News Interview, "Buckley Report", http://myfox8.com/2017/09/06/local-scientist-creates-handheld-chemistry-lab/
- 2017 National Prize Winner of Nano.gov annual video contest for Nanotechnology, www.nano.gov/node/1767
- 2017 Taylor Mabe, Winner of the 2017 Research and Creativity Expo, https://grs.uncg.edu/winners-2017-graduate-research-creativity-expo/, https://newsandfeatures.uncg.edu/5th-annual-graduate-research-creativity-expo/
- 2017 Taylor Mabe, Session with Alan Alda from the 'Alan Alda Center for Communicating Science at Stony Brook' due to winning the "Scientific Communication Workshop" at UNCG. alda.taylormabe.com
- 2017 Alex, Durga, Harish, Taylor, Zheng, awards of the Graduate School's Summer Research Fellowship Award, $2000
- 2016 Taylor Mabe, NanoManufacturing Conf., Best Poster Presentation, 2nd Place, www.nanomanufacturingconference.org/poster.php
- 2016 Taylor Mabe, Winner of the Graduate School's Summer Research Fellowship Award, $2000, https://sites.google.com/a/uncg.edu/wei-s-group-jsnn/news
- 2016 Taylor Mabe, Winner of 2016 Research and Creativity Expo, https://grs.uncg.edu/grc-expo http://research.uncg.edu/researchperspectives/handheld-biosensors-for-disease-diagnosis,
- '15-16 Taylor Mabe GEMs (Growing Entrepreneurs through Mentorship) Finalist and Mentee,
- 2015 Fox8 News Buckley Report on, The Magic of Nanotech, http://myfox8.com/2015/08/05/buckley-report-looks-at-the-magic-of-nanotechnology/, www.youtube.com/watch?v=KdA1MfbYfy0
- '14-16 Taylor Mabe "2 Minutes to Win It" business pitch contest among NC college students. 1st place 2014, 3rd 2015, and 2nd 2016, https://startup.uncg.edu/2_minutes-html
- 2015 Yiyang Liu, travel award to Quantifying Exposure to Engineered Nanomaterials (QEEN) workshop, July 2015, Arlington, VA

TEACHING

JSNN/UNC at Greensboro (UNCG, since fall 2013; Student climate survey: avg. 4.50/5)

NAN-601: Nanochemistry (Foundational course, Instructor and developer, fall semester, 3 credit hours)
NAN-611-01: Analytical Chemistry (Laboratory rotation, Course developer, fall and spring semesters, 1 credit hour)
NAN-611-06: Nano-Electrochemistry (Laboratory rotation, Course developer, fall and spring semesters, 1 credit hour)

NAN-611-26: Biosensors and Bioelectronics (Laboratory rotation, Course developer, fall and spring semesters, 1 credit hour)
NAN-692-08: Directed graduate studies (seminar-based, course developer, fall semester, 1 credit hour)
NAN-630: Advance in Nanobiosensors (course developer, spring semester, 3 credit hours)
NAN-724: Nanoscale Reaction (course developer, spring semester, 3 credit hours)
NAN-799: Dissertation Research. 2013-present, student rating of class 100%

JOURNAL EDITORIAL BOARD

- Molecules, Member of the Editorial Board of Nanochemistry Section (*MDPI*, Impact Factor: 2.861)

JOURNAL REVIEWER

1. ACS Applied Materials and Interfaces (*ACS*, Impact Factor: 7.504)
2. Applied Nanoscience (*Springer*, Impact Factor: 3.325)
3. Applied Surface Science (*Elsevier*, Impact Factor: 3.387)
4. Biosensor and Bioelectronics (*Elsevier Publisher*, Impact Factor: 7.780)
5. Biomedical Microdevices (*Springer Link*, Impact Factor: 2.062)
6. ChemSusChem (*Wiley-VCH*, Impact Factor: 7.226)
7. Electrochimica Acta (*Elsevier*, Impact Factor: 4.798)
8. Electrophoresis (*Wiley Online Library*, Impact Factor: 2.744)
9. Green Chemistry (*RSC*, Impact Factor: 9.125)
10. IEEE Electronic Device Letters (*IEEE*, Impact Factor: 3.048)
11. International Journal of Molecular Sciences (*MDPI Publisher*, Impact Factor: 3.226)
12. Journal of Electroanalytical Chemistry (*ScienceDirect Publisher*, Impact Factor: 3.012)
13. Journal of Materials Chemistry A (*RSC*, Impact factor: 8.867)
14. Journal of Nanophotonics (*SPIE Digital Library*)
15. Journal of Physical Chemistry C (*ACS*, Impact factor: 4.453)
16. Materials Today Nano (*Elsevier publisher*)
17. Micromachine (*MDPI Publisher*, Impact Factor: 1.833)
18. Molecules (*MDPI Publisher*, Impact Factor: 2.861)
19. Nanoscale (*RSC*, Impact Factor: 7.367)
20. Physica B Condensed Matter (*ScienceDirect Publisher*, Impact Factor: 1.386)
21. Physical Chemistry Chemical Physics (*RSC*, Impact Factor: 4.123)
22. Sensors & Actuators: B. Chemical (*Elsevier Publisher*, Impact Factor: 5.401)

UNIVERSITY SERVICE

UNC Greensboro

April 2018-present. Co-advisor of Chinese Student and Scholar Association at UNCG

August 2015-present. UNCG Graduate Studies Committee Member. (1 meeting/month on main campus)

- ✓ Served as liaison between graduate school and JSNN on issues related to UNCG's curriculum, policies and procedures, etc.
- ✓ Aided in developing and adapting UNCG Graduate School Guidelines, Best Practices in Advising and Mentoring Graduate Students.

August 2015-present: UNCG Graduate Studies Committee Member, Subcommittee on Curriculum. (1-2 meetings/month on main campus).

- ✓ Reviewed all new course proposals, course minor changes, etc. for SACs- compliance.
- ✓ Served as a conduit between UNCG faculty submitting new graduate courses and the Gradate Studies Curriculum Committee to facilitate proper Student Learning Outcomes, course content, and correct syllabus structure.

- ✓ Average 15-20 new proposal reviews per month.
- ✓ Aided nanoscience faculty in submissions of new or change of course proposals
- ✓ Attended workshops, e.g. Substantive Change Workshop (annually)

September 2015-present: JSNN Nanochemistry Laboratory Director

- ✓ Oversee all students, personnel, and faculty using the chemistry facility and instrument (UV-vis, fluorimeter, chemical hood, SPRi instrument, etc.)
- ✓ In charge of ensuring all safety training with all aspects of using the instrument

August 2015-Sept. 2016: Director of Graduate Studies, Department of Nanoscience, JSNN (1 meeting a month on main campus)

- ✓ Monitoring student learning objectives, outcomes, and measures for Nanoscience PhD and Masters programs
- ✓ Communicated UNCG Graduate School meeting information to Nanoscience administration and faculty.
- ✓ Leading efforts for prospective students recruiting, admission and enrollment.
- ✓ Relaying new course offerings/changes of JSNN to UNCG graduate school.

September 2015-June 2016: member of COACHE Surveys Committee (ad hoc by provost), UNCG (1 meeting a month on main campus)

- ✓ Reviewing faculty responses to the recent COACHE faculty satisfaction survey
- ✓ Developing actionable recommendations for changes to improve satisfaction
- ✓ Summary report to provost

Jan.2015-June 2016: Lead of Professional Master of Science (PMS) in Nanoscience online program

- ✓ Prepared the package to change the Professional Master of Science (PMS, business concentration) program to online mode delivery program.
- ✓ The first online PMS program in Nanoscience at UNC system was approved on 01/26/2016
- ✓ Lead the launching of the online PMS for fall 2016 (online course scheduling and coordination, etc.).

September 2014-Sept. 2016: Admissions Committee Head, Department of Nanoscience, JSNN

- ✓ Arranged face-to-face and skype-based interviews.
- ✓ Facilitated the distribution of application packets to faculty and headed the voting on applicant acceptance.
- ✓ Coordinated the acceptance/rejection of applicants in Apply Yourself Online

September 2013-Sept. 2016: JSNN Analytical Laboratory manager

- ✓ Oversee all students, personnel, and faculty using the analytical instrument (GC-MS, HPLC, LC-MS, Raman Confocal Optical System, Electrochemical workstation, XRD, FTIR, etc.)
- ✓ In charge of ensuring all personnel training with all aspects of using the instrument

January 2014-June 2016: JSNN/gateway safety committee (1 meeting/quarter)

Spring - fall 2014: JSNN Seminar organizer/coordinator

- ✓ Organized JSNN invited seminars on Fridays and of all student presentations at JSNN
- ✓ Invited and hosted >10 outside speakers for seminars at JSNN

September 2014-Present: Admissions Committee Member, Department of Nanoscience, JSNN

Appointed as a member of Graduate Faculty UNCG since 2013

Appointed to chair doctoral advisor/dissertation committees since 2014

2014-2015, Search committee member of new faculty search in Nanoengineering at JSNN/NC A&T, (position filled successfully),

2015-2016, Search committee member of a new faculty in Nanoscience at JSNN (filled)

2016-2017, Search committee member of an Assistant Professor in Nanoscience at JSNN (filled)

2016-2017, Search committee member of an Assistant Professor in Biology at UNCG (filled)
2017-2018, Search committee member of an Assistant Professor in Nanoscience at JSNN/UNCG

COMMUNITY OUTREACH & SERVICE

- NanoDays, Raleigh NC, 2014, 2015, 2016
- NC Festival of Science, 2014, 2015, 2016, 2017
- Gateway Nano-science festival, 2014, 2015, 2016, 2017
- Industrial collaboration: AxNano, LLC, Zymeron, LLC