#### WENFANG SUN, Ph. D.

Robert Ramsay Chair, Professor, Department of Chemistry and Biochemistry, The University of Alabama, 3068 Shelby Hall, Tuscaloosa, AL 35487. Phone: (205) 348-5807; Fax: (205) 348-9104; E-mail: wsun15@ua.edu. https://chemistry.ua.edu/people/wenfang-sun/

#### **EDUCATION**

Ph.D. Organic Chemistry, Institute of Photographic Chemistry, Chinese Academy of Sciences, Beijing, China, July 1995

Ph.D. Dissertation: Asymmetric Pentaazadentate Porphyrin-like Metal Complexes: Synthesis, Excited-State Properties, and Applications for Optical Limiting and Photodynamic Therapy

B.S. Organic Chemistry, Wuhan University, Wuhan, China, July 1990

#### **RESEARCH INTERESTS**

- Organometallic nonlinear optical materials
- Organic/organometallic light emitting materials
- Photosensitizers for phototherapy
- Optical sensors

#### PROFESSIONAL EXPERIENCE

2022 – present	Professor and Robert Ramsay Chair, Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, AL	
2021 - present	Editorial Board Member, Inorganics	
2016 - 2019	James A. Meier Senior Professor, Department of Chemistry and Biochemistry, North Dakota State University, Fargo, ND	
2016 - present	Editorial Board Member, Journal of Materials Science Research	
2011 - 2022	<i>Professor</i> , Department of Chemistry and Biochemistry, North Dakota State University, Fargo, ND	
2013 - present	Editorial Board Member, JSM Chemistry	
2011 - 2013	Walter F. and Verna Gehrts Professor, Department of Chemistry and Biochemistry, North Dakota State University, Fargo, ND	
2011 - 2017	Editorial Board Member, Research and Reports in Chemistry	
2011 - present	Editorial Board Member, Organic Chemistry: Current Research	
2011 - 2019	Editorial Board Member, Mediterranean Journal of Chemistry	
July – Aug. 2009	Visiting Professor, College of Physics, Peking University, China	
2007 - 2011	Associate Professor, Department of Chemistry and Biochemistry, North Dakota State University, Fargo, ND	
2001 - 2007	Assistant Professor, Department of Chemistry and Molecular Biology, North Dakota State University, Fargo, ND	

- Synthesis and characterization of transition-metal complexes (Pt(II), Ir(III), Ru(II)), expanded metalloporphyrins, polypyridine derivatives, and stilbazolium derivatives for optical limiting, chemical sensing, OLED, or photodynamic therapy applications.
- Development of rare-earth expanded porphyrins and transition-metal complexes for photodynamic therapy and near-IR diagnosis applications.
- Investigation of the two-photon absorption and two-photon induced upconverted emission of transition-metal complexes.
- Investigation of optical properties of semiconductor nanoparticles and single functionalized gold nanoparticle/polymer hybrid materials.
- Synthesis and photophysical studies of transition-metal complexes for optical sensing, OLED, and bioimaging applications.
- Supervised 14 postdoctors, 15 visiting scholars/researchers, 14 graduate students, 14 undergraduate students, 1 high school teacher, and 3 high school students.
- Taught undergraduate and graduate organic chemistry courses.
- 1997 2001 Department of Physics, University of Alabama at Birmingham, Birmingham, AL

Research Assistant Professor	Aug. 1999 – July 2001
Postdoctoral Research Associate	Aug. 1997 – July 1999

- Investigated and characterized third-order nonlinearities of metal-organic complexes, such as molybdenum-phosphine related complexes, metallo-porphyrin-like complexes, for optical power limiting applications using degenerate four wave mixing (DFWM), Z-scan and nonlinear absorption techniques.
- Explored the relationship between chemical structure and optical limiting properties of the metallo-porphyrin-like complexes in nanosecond time scale.
- Found the oxidative enhancement of the third-order nonlinearity of molybdenumphosphine related complexes, and demonstrated that degenerate four wave mixing spectroscopy can be used as a very sensitive technique to monitor trace chemical changes in solutions.
- Supervised two graduate students in material characterization and one undergraduate student in organic synthesis.
- 1990 1997 Institute of Photographic Chemistry, Chinese Academy of Sciences, Beijing, China

Associate Professor	Oct. 1996 – July 1997
Assistant Professor	Aug. 1995 – Sept. 1996
Graduate Research Assistant	Sept. 1990 – July 1995

- Designed and synthesized thirteen novel pentaazadentate porphyrin-like metal complexes. Characterized these complexes by IR, UV-VIS, <sup>1</sup>H-NMR, MS and elemental analysis.
- Systematically studied the photophysical properties of the synthesized complexes by UV-Vis spectroscopy, fluorescence spectroscopy and laser flash photolysis technique. Explored the relationship between chemical structure and electronic absorption spectra as well as excited state properties of these complexes.
- Investigated the photosensitizing damage of porphyrin-like rare-earth complexes to murine ascitic hepatoma (AH) cells and AH solid tumors in *vitro* and in *vivo*, respectively. Discovered the photosensitization mechanism for photodynamic therapy using ESR spectroscopy.
- Characterized the third-order nonlinear optical (NLO) properties of the synthesized complexes using degenerate four wave mixing (DFWM), Z-scan, and nonlinear

absorption techniques in nanosecond, picosecond and femtosecond time scales, respectively. Performed the optical power limiting of some of the promising complexes based on the reverse saturable absorption and transverse nonlinear refraction characteristics. Explored the relationship between chemical structures and the third-order nonlinearities of the synthesized complexes in femtosecond time scale.

• Supervised one graduate student and three undergraduate students in organic synthesis and material characterization.

Jan. – July 1990 Department of Chemistry, Wuhan University, Wuhan, China

Undergraduate Research Assistant

• Modified the structure of natural stevioside. Characterized the new product by IR, <sup>1</sup>H-NMR, MS spectroscopies and elemental analysis.

### **TEACHING EXPERIENCE**

- CH637/437, Spectroscopic Techniques in Organic Chemistry, Fall 2023
- CHEM 341, Organic Chemistry I, Spring 2008, Fall 2008, Spring 2010, Fall 2013, Spring 2018, Spring 2019
- CHEM 342, Spring 2011, Spring 2012, Spring 2015, Spring 2017, Spring 2021, Spring 2022
- CHEM 744, Organic Spectroscopy, Spring 2004, 2005, 2006, 2007, 2009, 2014, Fall 2016
- CHEM 754, Organic Spectroscopy Lab., Spring 2004, 2005, 2006, 2007, 2009, 2014, Fall 2016
- CHEM 240, Survey of Organic Chemistry, Fall 2003, 2004, 2006
- CHEM 741, Physical Organic Chemistry, Fall 2002, 2005, 2007, 2010, 2011, 2012, 2014, 2017, 2018, 2019, 2020, 2021, 2022
- CHEM 743, Special Topics in Materials Chemistry, Spring 2002
- CHEM 341L, Organic Chemistry I Lab, Spring 2002, 2003, 2004, 2005, 2006, Fall 2003, 2004, 2005, 2017
- CHEM 353, Organic Chemistry I Lab for Chemistry Majors, Fall 2003, 2004, 2005
- CHEM 342L, Organic Chemistry II Lab, Spring 2011, 2020
- CHEM 354, Organic Chemistry II Lab for Chemistry Majors, Spring 2011, 2016

#### **AWARDS/HONORS**

- Fellow of International Association of Advanced Materials (IAAM) (2023)
- Robert Ramsay Chair Professor, The University of Alabama (2022-present)
- International Association of Advanced Materials (IAAM) Award/Fellow Lecture (2020)
- James A. Meier Senior Professor, NDSU (2016 2019)
- Diversity Impact Award, NDSU (2014)
- Waldron Award for Outstanding Research, NDSU (2012)
- Walter F. and Verna Gehrts Presidential Professor (2011-2013)
- Sudhir Mehta Memorial Faculty International Travel Award, NDSU (2011)
- NDSU Bison Ambassadors Apple Polisher Honoree ("an event created and sponsored by the Bison Ambassadors, serves to honor distinguished NDSU faculty and staff") (2009)
- NDSU FORWARD Leap Research Award (2009)
- Member of the ND Delegation to the National EPSCoR/IDeA Coalition Conference (2008)
- NDSU College of Science and Mathematics Award for Excellence in Research (2007)
- NSF CAREER Award, 2005 2010
- NDSU Featured Faculty (April 2006)

- Sigma Pi Sigma (National Physics Honor Society)
- Sigma Xi (The International Honor Society for Science and Technology)
- Chinese Academy of Sciences Natural Science Award, 2<sup>nd</sup>-Class (2001)
- Outstanding Visiting Scholar Award at the University of Alabama at Birmingham (1999)
- Excellent Presidential Award of Chinese Academy of Sciences (1995)
- YILIDA Prize of Chinese Academy of Sciences (1995)
- First Prize at the Youth Academic Symposium of Institute of Photographic Chemistry, Chinese Academy of Sciences (1994 and 1996)
- Outstanding Undergraduate Student Award at Wuhan University (1987, 1988 and 1989)
- First-class Scholarship for undergraduate students at Wuhan University (1987, 1988 and 1989)

#### **PROFESSIONAL AFFILIATIONS**

- American Chemical Society
- Materials Research Society
- International Association of Advanced Materials
- Inter-American Photochemical Society
- Chinese-American Chemistry and Chemical Biology Professor Association
- American Society of Photobiology

**PUBLICATIONS (Peer-Reviewed)** (\* indicates the corresponding author. Student / Postdoctor / Visiting Researcher co-authors from my group are underlined. The numbers of citations are listed in parenthesis in red. H-index: 41; i10-index: 109)

https://www.ncbi.nlm.nih.gov/myncbi/1JKnWdp7kQvYKL/bibliography/public/

- A. Karuth, G. M. Casanola-Martin, L. Lystrom, <u>W. Sun</u>, D. Kilin, S. Kilina, B. Rasulev\*, "Combined Machine Learning, Computational and Experimental Analysis of the Iridium(III) Complexes with Red to Near-IR Emission", *J. Phys. Chem. Lett.* 15, 471-480 (2024). <u>https://doi.org/10.1021/acs.jpclett.3c02533</u>
- A. MacRae, Z. Armstrong, M. Lenertz, Q. Li, A. Forge, M. Wang, L. Feng, <u>W. Sun</u>, Z. Yang\*, "Application of High-Pressure Electron Paramagnetic Resonance (EPR) Spectroscopy in Protein Science", *Appl. Magn. Reason.* 55(1-3), 45-59 (2024).
- <u>B. Liu</u>, X. Yang, M. Jabed, S. Kilina, Z. Yang, <u>W. Sun</u>\*, "Water-soluble Dinuclear Iridium(III) and Ruthenium(II) Bis-terdentate Complexes: Photophysics and Electrochemiluminescence", *Dalton Trans.* 51, 13858-13866 (2022). (2)
- A. Forde, L. Lystrom, <u>W. Sun</u>, D. Kilin, S. Kilina\*, "Improving Near-Infrared Emission of *meso-*Aryldipyrrin Indium(III) Complexes via Annulation Bridging: Excited-State Dynamics", *J. Phys. Chem. Lett.* **13**(39), 9210-9220 (2022). (2)
- <u>B. Liu</u>, J. Jiao, <u>W. Xu</u>, M. Zhang, P. Cui, Z. Guo, Y. Deng,\* H. Chen,\* <u>W. Sun</u>\*, "Highly Efficient Far-Red/NIR-Absorbing Neutral Ir(III) Complex Micelles for Potent Photodynamic/Photothermal Therapy", *Adv. Mater.* 33(32), 2100795 (2021). (59)
- <u>W. Xu</u>, L. Lystrom, Y. Pan, <u>X. Sun</u>, S. A. Thomas, S. Kilina, Z. Yang, H. Wang, E. Hobbie, <u>W. Sun</u>\*, "Mono-/Bi-metallic neutral iridium(III) complexes bearing diketopyrrolopyrrole–substituted *N*–heterocyclic carbene (NHC) ligands: synthesis and photophysics", *Inorg. Chem.* **60**(20), 15278– 15290 (2021). (8)

- C. Lu, T. Lu, P. Cui, S. Kilina, W. Sun\*, "Photophysics and Reverse Saturable Absorption of Cationic Dinuclear Iridium(III) Complexes Bearing Fluorenyl-Tethered 2-(Quinolin-2-yl)quinoxaline Ligand", *Dalton Trans.* 50, 14309–14319 (2021). (6)
- T. Lu, C. Lu, P. Cui, S. Kilina, W. Sun<sup>\*</sup>, "Impacts of Extending π-Conjugation of the 2,2'-Biquinoline Ligand on Photophysics and Reverse Saturable Absorption of the Heteroleptic Cationic Iridium(III) Complexes", J. Mater. Chem. C 9, 15932–15941 (2021). (6)
- L. Lystrom, M. Shukla, <u>W. Sun</u>, S. Kilina\*, "Extending Fluorescence of meso-Aryldipyrrin Indium(III) Complexes to Near-Infrared Regions via Electron Withdrawing or π-Expansive Groups", *J. Phys. Chem. Lett.* **12**(33), 8009-8015 (2021). (2)
- <u>B. Liu</u>, M. A. Jabed, S. Kilina, <u>W. Sun</u>,\* "Synthesis, Photophysics, and Reverse Saturable Absorption of trans-Biscyclometalated Iridium(III) Complexes (C^N^C)Ir(R-tpy)<sup>+</sup> (tpy = 2,2':6',2"-Terpyridine) with Broadband Excited-State Absorption", *Inorg. Chem.* **59**(12), 8532-8542 (2020). (20)
- <u>H. Li</u>, <u>S. Liu</u>, L. Lystrom, S. Kilina, <u>W. Sun</u>,\* "Improving triplet excited-state absorption and lifetime of cationic Ir(III) complexes by extending *π*-conjugation of the 2-(2-quniolinyl)quinoxaline ligand", *J. Photochem. Photobiol. A* **400**, 112609 (2020). (16)
- <u>L. Wang</u>, P. Cui, L. Lystrom, <u>J. Lu</u>, S. Kilina, <u>W. Sun</u>,\* "Heteroleptic Cationic Iridium(III) Complexes Bearing Phenanthroline Derivatives with Extended *π*-Conjugation as Potential Broadband Reverse Saturable Absorbers", *New J. Chem.* 44, 456-465 (2020). (11)
- Y. Zhang, H. Fu, S. Chen, <u>B. Liu</u>, <u>W. Sun</u>, H. Gao\*, "Construction of iridium(III)-complex-loaded MOF nanoplatform mediated with a dual-responsive polycationic polymer for photodynamic therapy and cell imaging", *Chem. Commun.* 56(5), 762-765 (2020). (50)
- 14. <u>W. Sun</u>,\* "Nonlinear absorption and optical limiting of platinum(II) terpyridine complexes", *Infrared Laser Eng.* **49**(12), 20201078 (2020). (invited review)
- Q. Zhang, Z. Sun, L. Zhang, M. Li, Z. Liu, B. Zhen, <u>W. Sun</u>, X. Liu,\* "Synthesis, structures, and properties of BN-dinaphthothiophenes: influence of the B and N placement on photophysical properties and aromaticity", *J. Org. Chem.* 85(12), 7877-7883 (2020). (10)
- B. Liu, Y. Gao, M. A. Jabed, S. Kilina, G. Liu,\* <u>W. Sun</u>,\* "Lysosome-Targeting Bis-terpyridine Ruthenium(II) Complexes: Photophysical Properties and in vitro Photodynamic Activities", *ACS Appl. Bio Mater.* 3(9), 6025-6038 (2020). <u>https://doi.org/10.1021/acsabm.0c00647</u> (26)
- Y. Li, G.-F. Huo, <u>B. Liu</u>, B. Song, Y. Zhang, X. Qian, H. Wang, G.-Q. Yin, A. Filosa, <u>W. Sun</u>, S. W. Hla, H.-B. Yang, X. Li,\* "Giant Concentric Metallo-Supramolecule with Aggregation-Induced Phosphorescent Emission", *J. Am. Chem. Soc.* **142**(34), 14638–14648 (2020). (24)
- <u>C. Lu</u>, <u>W. Xu</u>, H. Shah, <u>B. Liu</u>, <u>W. Xu</u>, <u>L. Sun</u>, S. Y. Qian, <u>W. Sun</u>\*, "*In vitro* Photodynamic Therapy of Mononuclear and Dinuclear Iridium(III) Bis(terpyridine) Complexes", ACS Appl. Bio Mater. 3(10), 6865-6875 (2020). <u>https://doi.org/10.1021/acsabm.0c00784</u> (12)
- X. Zhu, B. Liu, P. Cui, S. Kilina, W. Sun,\* "Multinuclear 2-(Quinolin-2-yl)quinoxaline Coordinated Iridium(III) Complexes Tethered by Carbazoles Derivatives: Synthesis and Photophysics", *Inorg. Chem.* 59(23), 17096-17108 (2020). (11)
- Y. Huang, D.-E. Liu, J. An, <u>B. Liu</u>, <u>L. Sun</u>, H. Fu, S. Yan, <u>W. Sun</u>, \* H. Gao, \* "Reactive Oxygen Species Self-Sufficient Multifunctional Nanoplatform for Synergistic Chemo-Photodynamic Therapy with Red/Near-Infrared Dual-Imaging", *ACS Appl. Bio Mater.* 3(12), 9135-9144 (2020). (7)

- W. Hua, G. Xu, J. Zhao,\* J. Lu, Z. Wang, <u>W. Sun</u>,\* S. Gou\*, "DNA Targeting Ru(II)-Polypyridyl Complex with Long-Lived <sup>3</sup>IL Excited State as Potential Photodynamic Therapy Agent", *Chem. Eur.* J. 26(72), 17495-17503 (2020). (11)
- <u>B. Liu</u>, L. Lystrom, S. Kilina, <u>W. Sun</u>\*, "Effects of Varying the Benzannulation Site and π Conjugation of the Cyclometalating Ligand on the Photophysics and Reverse Saturable Absorption of Monocationic Iridium(III) Complexes", *Inorg. Chem.* 58(1), 476-488 (2019). (34)
- L. Wang, S. Monro, P. Cui, H. Yin, <u>B. Liu</u>, C. G. Cameron, <u>W. Xu</u>, M. Hetu, A. Fuller, S. Kilina, S. A. McFarland,\* <u>W. Sun</u>\*, "Heteroleptic Ir(III)N<sub>6</sub> Complexes with Long-Lived Triplet Excited States and *In Vitro* Photobiological Activities", *ACS Appl. Mater. Interfaces* **11**(4), 3629-3644 (2019). (42)
- 24. S. Monro, C. G. Cameron, <u>X. Zhu</u>, K. L. Colón, H. Yin, T. Saniddin, M. Hetu, M. Pinto, A. Fuller, L. Bennett, J. Roque III, <u>W. Sun</u>,<sup>\*</sup> S. A. McFarland,<sup>\*</sup> "Synthesis, Characterization, and Photobiological Studies of Ru(II) Dyads Derived from α-Oligothiophene Derivatives of 1,10-Phenanthroline", *Photochem. Photobiol.* **95**, 267-279 (2019). (18)
- <u>B. Liu</u>, L. Lystrom, S. L. Brown, E. K. Hobbie, S. Kilina, <u>W. Sun</u>\*, "Impact of Benzannulation Site at the Diimine (N^N) Ligand on the Excited-State Properties and Reverse Saturable Absorption of Biscyclometalated Iridium(III) Complexes", *Inorg. Chem.* 58(9), 5483-5493 (2019). (30)
- <u>B. Liu</u>, L. Lystrom, C. G. Cameron, S. Kilina, S. A. McFarland, <u>W. Sun</u>\*, "Monocationic Iridium(III) Complexes with Far-Red Charge Transfer Absorption and Near-IR Emission: Synthesis, Photophysics, and Reverse Saturable Absorption", *Eur. J. Inorg. Chem.* **2019**(16), 2208-2215 (2019). (16)
- 27. C. Zhang, L. Zhang, C. Sun, <u>W. Sun</u>, X. Liu\*, "New BN-Phenanthrenes: Synthesis, Reactivity and Optical Properties", *Org. Lett.* **21**(10), 3476-3480 (2019). (26)
- B. Liu, S. Monro, M. A. Jabed, C. G. Cameron, K. Colón, S. Kilina, S. A. McFarland\*, <u>W. Sun</u>\*, "Neutral Iridium(III) Complexes Bearing BODIPY–Substituted *N*–Heterocyclic Carbene (NHC) Ligands: Synthesis, Photophysics, and Photobiological Activities", *Photochem. Photobiol. Sci.* 18, 2381-2396 (2019). (26)
- <u>B. Liu</u>, S. Monro, Z. Li, M. A. Jabed, D. Ramirez, C. G. Cameron, K. Colon, J. Roque III, S. Kilina, J. Tian,\* S. A. McFarland\*, <u>W. Sun</u>\*, "A New Class of Homoleptic and Heteroleptic Bis(terpyridine) Iridium(III) Complexes with Strong Photodynamic Therapy Effects", *ACS Appl. Bio Mater.* 2(7), 2964-2977 (2019). (43)
- B. Liu, M. A. Jabed, J. Guo, <u>W. Xu</u>, S. L. Brown, A. Ugrinov, E. Hobbie, S. Kilina, A. Qin, <u>W. Sun</u>,\* "Neutral Cyclometalated Iridium(III) Complexes Bearing Substituted N-Heterocyclic Carbene (NHC) Ligands for High-Performance Yellow OLED Application", *Inorg. Chem.* 58(21), 14377-14388 (2019). (37)
- B. Liu, S. Monro, L. Lystrom, C. G. Cameron, K. Colon, H. Yin, S. Kilina, S. A. McFarland,\* <u>W. Sun</u>,\* "Photophysical and Photobiological Properties of Dinuclear Iridium(III) Bis-tridentate Complexes", *Inorg. Chem.* 57(16), 9859–9872 (2018). (42)
- Z. Wang, J. Li, Q. Wang, G. Dai, <u>B. Liu</u>, <u>X. Zhu</u>, Z. Li, C. Kolodziej, C. McCleese, C. Burda, <u>W. Sun</u>, L. Chen, "Stable 2D Bisthienoacenes: Synthesis, Crystal Packing and Photophysical Properties", *Chem. Eur. J.* 24, 14442-14447 (2018). (8)
- 33. <u>L. Wang</u>, P. Cui, <u>B. Liu</u>, S. Kilina, <u>W. Sun</u>,\* "Novel N<sub>6</sub> trisbidentate ligand coordinated Ir(III) complexes and their Ru(II) analogs", *Dalton Trans.* **47**, 13776-13780 (2018). **(6)**
- 34. <u>L. Wang</u>, P. Cui, S. Kilina, <u>W. Sun</u>, \* "Toward Broadband Reverse Saturable Absorption: Investigating the Impact of Cyclometalating Ligand  $\pi$ -Conjugation on the Photophysics and Reverse

Saturable Absorption of Cationic Heteroleptic Iridium Complexes", J. Phys. Chem. C 121(10), 5719-5730 (2017). (31)

- <u>L. Wang</u>, H. Yin, M. A. Jabed, M. Hetu, S. Monro, <u>C. Wang</u>, S. Kilina, S. A. McFarland\*, <u>W. Sun</u>,\* "*π*-Expansive Heteroleptic Ruthenium(II) Complexes as Reverse Saturable Absorbers and Photosensitizers for Photodynamic Therapy", *Inorg. Chem.* **56**(6), 3245-3259 (2017). (64)
- <u>B. Liu</u>, L. Lystrom, S. Kilina, <u>W. Sun</u>\*, "Tuning the Ground State and Excited State Properties of Monocationic Iridium(III) Complexes by Varying the Site of Benzannulation on Diimine Ligand", *Inorg. Chem.* 56(9), 5361-5370 (2017). (39)
- L. Wang, H. Yin, P. Cui, M. Hetu, <u>C. Wang</u>, S. Monro, R. D. Schaller, C. G. Cameron, <u>B. Liu</u>, S. Kilina, S. A. McFarland,\* <u>W. Sun</u>\*, "Near-Infrared-Emitting Heteroleptic Cationic Iridium Complexes Derived from 2,3-Diphenylbenzo[g]quinoxaline as *In Vitro* Theranostic PDT Agents", *Dalton. Trans.* 46, 8091-8103 (2017). (59)
- X. Zhu, P. Cui, S. Kilina, <u>W. Sun</u>\*, "Multifunctional Cationic Iridium(III) Complexes Bearing 2-Aryloxazolo[4,5-f][1,10]phenanthroline (N^N) Ligand: Synthesis, Crystal Structure, Photophysics, Mechanochromic/Vapochromic Effects, and Reverse Saturable Absorption", *Inorg. Chem.* 56(22), 13715-13731 (2017). (40)
- Y. Pan, S. Neupane, J. Farmakes, <u>B. Liu, W. Sun</u>, Z. Yang,\* "Spin-labeling of Polymeric Micelles and Application in Probing Micelle Swelling Using EPR Spectroscopy", *J. Polym. Sci., Part B: Polym. Phys.* 55(23), 1770-1782 (2017). (16)
- 40. <u>Z. Li, H. Li</u>, B. J. Gifford, W. D. N. Peiris, S. Kilina, <u>W. Sun</u>\*, "Synthesis, Photophysics, and Reverse Saturable Absorption of 7-(Benzothiazol-2-yl)-9,9- di(2-ethylhexyl)-9*H*-fluoren-2-yl Tethered [Ir(bpy)(ppy)<sub>2</sub>]PF<sub>6</sub> and Ir(ppy)<sub>3</sub> Complexes (bpy = 2,2'-Bipyridine, ppy = 2-Phenylpyridine)", *RSC Adv.* 6, 41214-41228 (2016). (19)
- <u>W. Sun</u>,<sup>\*</sup> <u>C. Pei, T. Lu</u>, P. Cui, Z. Li, C. McCleese, Y. Fang, S. Kilina, Y. Song, C. Burda, "Reverse saturable absorbing cationic iridium(III) complexes bearing 2-(2-quinolinyl)quinoxaline ligand: Effects of different cyclometalating ligands on the linear and nonlinear absorption", *J. Mater. Chem. C* **4**, 5059-5072 (2016). (40)
- <u>T. Lu</u>, <u>C. Wang</u>, L. Lystrom, C. Pei, S. Kilina, <u>W. Sun</u>\*, "Effects of extending the π-conjugation of the acetylide ligand on the photophysics and reverse saturable absorption of Pt(II) bipyridine bis(acetylide) complexes", *Phys. Chem. Chem. Phys.* **18**, 28674-28687 (2016). (20)
- <u>C. Wang</u>, L. Lystrom, H. Yin, M. Hetu, S. Kilina, S. A. McFarland\*, <u>W. Sun</u>\*, "Increasing the triplet lifetime and extending the ground-state absorption of biscyclometalated Ir(III) complexes for reverse saturable absorption and photodynamic therapy applications", *Dalton Trans.* 45, 16366-16378 (2016). (93)
- X. Zhu, L. Lystrom, S. Kilina, <u>W. Sun</u>\*, "Tuning the Photophysics and Reverse Saturable Absorption of Heteroleptic Cationic Iridium(III) Complexes via Substituents on the 6,6'-Bis(fluoren-2-yl)-2,2'-biquinoline Ligand", *Inorg. Chem.* 55(22), 11908–11919 (2016). (37)
- 45. <u>R. Liu</u>, N. Dandu, C. McCleese, <u>Y. Li</u>, <u>T. Lu</u>, <u>H. Li</u>, D. Yost, <u>C. Wang</u>, S. Kilina, C. Burda, <u>W. Sun</u>,<sup>\*</sup> "Influence of Naphthaldiimide Substituent at the Diimine Ligand on the Photophysics and Reverse Saturable Absorption of Pt(II) Diimine Complexes and Cationic Ir(III) Complexes", *Eur. J. Inorg. Chem.* Issue 31, 5241-5253 (2015). (15)
- <u>C. Pei</u>, P. Cui, C. McCleese, S. Kilina, C. Burda, <u>W. Sun</u>,\* "Heteroleptic Cationic Iridium(III) Complexes Bearing Naphthalimidyl Substituents: Synthesis, Photophysics and Reverse Saturable Absorption", *Dalton Trans.* 44, 2176-2190 (2015). (28)

- T. M. Pritchett,\* M. J. Ferry, W. M. Shensky III, A. G. Mott, D. J. Stewart, S. L. Long, J. E. Haley, <u>Z.</u> <u>Li, W. Sun</u>, "Strong triplet excited-state absorption in a phenanthrolinyl iridium(III) complex with benzothiazolylfluorenyl-substituted ligands", *Opt. Lett.* **40**(2), 186–189 (2015). (17)
- T. M. Pritchett,\* M. J. Ferry, A. G. Mott, W. Shensky III, J. E. Haley, <u>R. Liu</u>, <u>W. Sun</u>, "Long-lifetime reverse saturable absorption in a bipyridyl platinum(II) complex bearing naphthalimidylethynyl-substituted fluorenylacetylide ligands", *Opt. Mater.* **39**, 195-198 (2015). (13)
- Y. Li, N. Dandu, <u>R. Liu</u>, S. Kilina, <u>W. Sun</u>,\* "Synthesis and Photophysics of Reverse Saturable Absorbing Heteroleptic Iridium(III) Complexes Bearing 2-(7-R-Fluoren-2'-yl)pyridine Ligands", *Dalton Trans.* 43(4), 1724-1735 (2014). (24)
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#### **CONFERENCE PRESENTATIONS** (Presenters are underlined)

- <u>W. Sun</u>, "Far-Red/NIR Iridium(III) Complexes as Theranostic Photodynamic Therapy (PDT) Reagents", presented at the *International Association of Advanced Materials (IAAM) Fellow Summit*, Nov. 12-14, Orlando, FL (2023). (Invited)
- <u>W. Sun</u>, "Emissive Transition-Metal Complexes and Their Applications for Optical Sensing and Bioimaging", presented at the 244<sup>th</sup> ECS (Electrochemical Society) Meeting, Oct. 8-12, Gothenburg, Sweden (2023). (Invited)
- 3. <u>W. Sun</u>, "Far-Red/NIR Iridium(III) Complexes as Theranostic Photodynamic Therapy (PDT) Reagents", presented at the 16<sup>th</sup> Chinese American Chemistry and Chemical Biology Professor Conference, June 23-25, Shenzhen, China (2023). (Invited)
- <u>W. Sun</u>,\* B. Liu, L. Lystrom, S. Kilina, "Impacts of Extending π-Conjugation of the Diimine or Cyclometalating Ligands via Benzannulation on the Photophysics and Reverse Saturable Absorption of Monocationic Iridium(II) Complexes: A Combined Experimental and Theoretical Study", presented at *Telluride Workshop on Nanomaterials: Computation, Theory, Machine Learning and Experiment*, June 10-14, Telluride, CO (2023). (Invited)
- <u>W. Sun</u>,\* "AIE-Active and Multi-Stimuli Responsive Pt(II) and Ir(III) Complexes", presented at the 4<sup>th</sup> International Conference on Materials Science and Engineering, April 24-26, Houston, TX (2023). (Invited)
- <u>W. Sun</u>,\* B. Liu, L. Wang, C. Wang, J. Jiao, H. Yin, W. Xu, S. Monro, M. Zhang, M. Hetu, S. A. McFarland, Yibin Deng, Huabing Chen, "Near-IR Absorbing Ir(III) Complexes as Theranostic Photosensitizers for Phototherapy", presented at the 24<sup>th</sup> International Symposium on Photochemistry and Photophysics of Coordination Compounds (ISPPCC), July 24-29, Vancouver, Canada, (2022).
- <u>W. Sun</u>,\* "Developing Ir(III) Complexes as Photosensitizers for Photodynamic Therapy", presented at the 3<sup>rd</sup> International Conference on Materials Science & Engineering, April 18-22, Boston, MA (2022).

- H. Wood, <u>W. Sun</u>, S. Kilina,\* "Influence of Metals, Ligand π-Conjugation and Electron Donating/Withdrawing Groups on Photophysical Properties of Organometallic Complexes", presented at the *61<sup>st</sup> Sanibel Symposium*, February 13-18, Sanibel, FL (2022).
- <u>Wenfang Sun</u>,\* Bingqing Liu, Jian Jiao, Wan Xu, Yibin Deng, Huabing Chen, "Developing Far-Red/Near-IR Absorbing Ir(III) Complexes for Photodynamic Therapy", presented at the 1<sup>st</sup> Winter In-Person Organic Symposium, Dec. 16-18, Honolulu, HI (2021). (Invited)
- Wenfang Sun,\* Bingqing Liu, Jian Jiao, Wan Xu, Miya Zhang, Peng Cui, Zhengqing Guo, Yibin Deng, Huabing Chen, "Far-Red/Near-Infrared Absorbing Neutral Ir(III) Complex Micelle as Dual-Mode Anticancer Therapeutic Agent for Photodynamic/Photothermal Therapy", presented at the 4<sup>th</sup> International Symposium on Photofunctional Chemistry of Complex Systems (ISPCCS2021), Dec. 11-15, Kona, HI (2021). (Invited)
- 11. <u>Wenfang Sun</u>,\* Xiaolin Zhu, Hui Li, Li Wang, "Multi-stimuli responsive Pt(II) and Ir(III) complexes", presented at *Pacifichem 2021 Symposium #254*, Dec. 16-21 (2021). (Invited).
- 12. <u>Wenfang Sun</u>,\* Li Wang, Chengzhe Wang, Susan Monro, Huimin Yin, Sherri A. McFarland, "Cationic Ir(III) Complexes as Potential Theranostic Photodynamic Therapy Agents", presented at *Pacifichem 2021 Symposium #236*, Dec. 16-21 (2021).
- <u>Wenfang Sun</u>,\* <u>Bingqing Liu</u>, Levi Lystrom, Svetlana Kilina, "Impacts of extending π-conjugation of the diimine or cyclometalating ligands via benzannulation on the photophysics and reverse saturable absorption of monocationic iridium(III) complexes: A combined experimental and theoretical study", presented at *Pacifichem 2021 Symposium #230*, Dec. 16-21 (2021).
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- <u>Wenfang Sun</u>,\* "Development of Iridium(III) Complexes as Theranostic Photodynamic Therapy (PDT) Reagents", presented at the *American Society of Photobiology Presidential Evening Symposium*, May 9-10, Chicago, IL (2019). (Invited)
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- Wenfang Sun,\* "Tuning the photophysical properties of monocationic iridium(III) complexes by varying the site of benzannulation on diimine or cyclometalating ligands: A combined experimental and theoretical study", presented at the 256<sup>th</sup> ACS National Meeting, August 19-23, Boston, MA (2018). (Invited)
- Wenfang Sun,\* "Iridium(III) Complexes as *in vitro* Theranostic Photodynamic Therapy (PDT) Reagents", presented at the *International Conference on Science and Technology of Synthetic Metals* 2018 (ICSM 2018), July 1-6, Busan, South Korea (2018). (Invited)
- Wenfang Sun,\* "Iridium(III) Complexes as *in vitro* Theranostic Photodynamic Therapy (PDT) Reagents", presented at the 14<sup>th</sup> Sino-US Chemistry Professor Conference, June 20-22, Wuhan, China (2018).

- 21. <u>Wenfang Sun</u>,\* "Iridium(III) Complexes as *in vitro* Theranostic Photodynamic Therapy (PDT) Reagents", presented at the *Sino-US Symposium on Frontiers of Chemistry*, June 17-19, Tianjin, China (2018). (Invited)
- 22. <u>Wenfang Sun</u>,\* Bingqing Liu, Li Wang, Chengzhe Wang, Huimin Yin, Susan Monro, Marc Hetu, Colin G. Cameron, K. Colon, Sherri A. McFarland, "Cationic Iridium(III) Complexes as in vitro Theranostic Photodynamic Therapy Agents", presented at the *2018 American Society for Photobiology Biennial Meeting*, May 12-15, Tampa, FL (2018). (Invited)
- <u>Wenfang Sun</u>\*, Li Wang, Bingqing Liu, Rui Liu, Yuhao Li, Taotao Lu, "Impact of Ligand π-Conjugation on the Photophysics and Reverse Saturable Absorption Based Optical Limiting of Cationic Iridium(III) Complexes", presented at the 2018 MRS Spring Meeting, April 2-6, Pheonix, AZ (2018).
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- 25. <u>Bingqing Liu</u>, Levi, Lystrom, Svetlana Kilina, Wenfang Sun,\* "Impact of benzannulation site at the diimine ligand on the photophysics of monocationic Ir(III) complexes", presented at the *2018 I-APS Annual Conference*, Jan. 2-5, Sarasota, FL (2018).
- 26. Wenfang Sun,\* L. Wang, C. Wang, H. Yin, M. Hetu, S. Monro, C. G. Cameron, S. A. McFarland, "Ir(III)/Ru(II) Complexes as Reverse Saturable Absorbers and Theranostic PDT Agents", presented at the 6<sup>th</sup> Asian Conference on Coordination Chemistry, July 24-28, Melbourne, Austrian (2017). (Invited)
- 27. <u>Wenfang Sun</u>,\* "Texaphyrin and derivatives: Synthesis, photophysics and applications", presented at *the 4<sup>th</sup> National Conference on Porphyrins and Phthalocyanines*, July 7-9, Qingdao, P.R. China (2017). (Plenary Talk)
- Wenfang Sun,\* "Cationic Iridium(III) Complexes as in vitro Theranostic Photodynamic Therapy Agents", presented at the 13<sup>th</sup> US-Sino Chemistry Professor Conference, June 17-20, Rudong, Jiangsu Province, China (2017). (Invited)
- 29. <u>Wenfang Sun</u>\*, Bingqing Liu, Chengzhe Wang, Xiaolin Zhu, L. Lystrom, S. Kilina, "Tuning the Ground-state Absorption and Triplet Excited-state Absorption and Lifetime via Ligand π-Conjugation: Exploration of Cationic Ir(III) Complexes as Broadband Reverse Saturable Absorbers", presented at the 14<sup>th</sup> International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM), Oct. 31 Nov. 4, Daejeon, Korea (2016). (Invited)
- <u>Wenfang Sun</u>\*, Rui Liu, Yuhao Li, Taotao Lu, "Reverse Saturable Absorption of Cationic Iridium(III) Complexes", presented at the 2016 International Conference on Synthetic Metals (ICSM2016), June 25-July 1, Guangzhou, P.R. China (2016).
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- 32. <u>Bingqing Liu</u>, Wenfang Sun\*, "Reverse saturable absorption and photophysics of cationic Ir complexes bearing different degrees of π-conjugated diimine (N^N) and cyclometalating (C^N) ligands", presented at the 2016 MRS Spring Meeting, March 28-April 1, Phoenix, Arizona (2016).
- 33. <u>Chengzhe Wang</u>, Wenfang Sun\*, "Increasing the triplet lifetime of cationic bis-cyclometalated Ir(III) complexes by tuning ligand  $\pi$ -conjugation for application as reverse saturable absorbers", presented at the 2016 MRS Spring Meeting, March 28-April 1, Phoenix, Arizona (2016).

- Li Wang, Wenfang Sun\*, "Synthesis, Characterization and Reverse Saturable Absorption of a Series of Trisbidentate Heteroleptic Ruthenium (II) Complexes", presented at the 2016 MRS Spring Meeting, March 28-April 1, Phoenix, Arizona (2016).
- 35. <u>Wenfang Sun</u>,\* "Effects of the extended  $\pi$ -conjugation of diimine and cyclometalating ligands on the photophysics and reverse saturable absorption of heteroleptic cationic Ir(III) complexes", presented at the *Pacifichem 2015*, Dec. 15-20, Honolulu, Hawaii (2015). (Invited)
- 36. <u>Wenfang Sun</u>,\* "Photophysics and reverse saturable absorption of Pt(II) bipyridyl bisacetylide complexes with extended  $\pi$ -conjugation", presented at the *Pacifichem 2015*, Dec. 15-20, Honolulu, Hawaii (2015).
- Wenfang Sun,\* "Cationic Ir(III) complexes as broadband reverse saturable absorbers: The influence of ligand π-conjugation on the photophysics and excited-state absorption", presented at the *Third International Symposium on the Photofunctional Chemistry of Complex Systems (ISPCCS2015)*, Dec. 12-14, Maui, Hawaii (2015). (Invited)
- <u>Wenfang Sun</u>,\* Taotao Lu, Xiaolin Zhu, "Development of Ir(III) complexes with long-lived broadband excited-state absorption", presented at the 11<sup>th</sup> Sino-US Chemistry Professor Symposium, June 21-23, Suzhou, China (2015). (Invited)
- 39. <u>L. Lystrom</u>, W. Sun, S. Kilina, "First Principle Calculations of Optical Properties of Platinum(II) Diimine Complexes: Effects of the *N*-Methylnaphthalimide Substituents and the  $\cdot$  -Conjugation", presented at *the 249<sup>th</sup> ACS National Meeting*, March 22-26, Denver, CO (2015).
- 40. <u>L. Lystrom</u>, W. Sun, S. Kilina, "First principle calculations of optical properties of platinum(II) diimine complexes: Effects of the *N*-Methylnaphthalimide Substituents and the  $\cdot \pi$ -Conjugation", presented at *the ND EPSCoR Annual Meeting*, April 22, Fargo, ND (2015).
- 41. <u>Wenfang Sun</u>,\* Rui Liu, Yuhao Li, Zhongjing Li, Naveen Dandu, Svetlana Kilina, "Nonlinear absorbing heteroleptic cationic iridium complexes", presented at *the International Symposium on Electrooptics and Nonlinear Optics (ISENO)*, Sept. 2-4, Harbin, China (2014). (Invited).
- 42. <u>Wenfang Sun</u>,\* Yuhao Li, Rui Liu, Zhongjing Li, Naveen Dandu, Svetlana Kilina, "Iridium complexes as nonlinear absorbing materials", presented at the *Progress in Electromagnetic Research and Photonics* (PIERS 2014), August 25-28, Guangzhou, China (2014). (Invited)
- 43. <u>Wenfang Sun</u>,\* Rui Liu, Yuhao Li, Zhongjing Li, Naveen Dandu, Peng Cui, Svetlana Kilina, "Heteroleptic cationic iridium complexes: Synthesis, photophysics and nonlinear absorption", presented at the 10<sup>th</sup> Sino-US Chemistry Professor Symposium, June 15-17, Jinan, China (2014). (Invited)
- 44. <u>Wenfang Sun</u>,\* Rui Liu, Yuhao Li, Naveen Dandu, Svetlana Kilina, "Platinum(II) bipyridyl bisacetylide complexes as nonlinear absorbing materials", presented at the *Purple Mountain Research Conference: Supramolecular Chemistry and Functional Materials*, June 12-14, Nanjing, China (2014). (Keynote)
- 45. <u>Wenfang Sun</u>,\* Rui Liu, Bingguang Zhang, Yuhao Li, Yunjing Li, "Understanding the photophysics and nonlinear absorption of platinum bipyridyl bisacetylide complexes via spectroscopic characterization and theoretical calculation", presented at *The International Symposium on Advances in Computational Materials on Catalysis and Photovoltaics*, May 25-28, Tianjin, China (2014). (Invited)
- 46. Rui Liu, Yuhao Li, Jin Chang, Eric R. Waclawik, <u>Wenfang Sun</u><sup>\*</sup>, "Novel Reverse Saturable Absorbing V-shaped and X-shaped Pt(II) Diimine Complexes: Synthesis, Photophysics and Nonlinear Absorbing Properties", presented at the 2014 MRS Spring Meeting Symposium JJ: Materials and Processes for Nonlinear Optics, April 22-24, San Francisco, CA (2014).

- 47. <u>Hongjun Zhu</u>,<sup>\*</sup> Rui Liu, Yuhao Li, Hongbin Chen, Jin Chang, <u>Wenfang Sun</u><sup>\*</sup>, "Pt(II) Diimine Complexes Bearing Carbazolyl-capped Acetylide Ligands: Synthesis, Tunable Photophysics and Nonlinear Absorption", presented at the 2014 MRS Spring Meeting Symposium JJ: Materials and Processes for Nonlinear Optics, April 22-24, San Francisco, CA (2014).
- 48. Yuhao Li, Rui Liu, Naveen Dandu, Zhongjing Li, Svetlana Kilina, <u>Wenfang Sun</u>\*, "Cationic Iridium(III) Complexes with Extended π-Conjugation on Phenanthroline (N^N) and/or Phenylpyridine (C^N) Ligands as Broadband Nonlinear Absorbing Materials", presented at the 2014 MRS Spring Meeting Symposium JJ: Materials and Processes for Nonlinear Optics, April 22-24, San Francisco, CA (2014).
- D. C. Yost, S. Kilina, K. Martin, <u>W. Sun</u>, "Rational design of platinum complexes with enhanced nonlinear optical properties", presented at *the 247<sup>th</sup> ACS National Meeting*, March 16-20, Dallas, TX (2014).
- W. Sun, Y. Li, R. Liu, N. Dandu, S. Kilina, "Photophysics and nonlinear absorption of Ir(III) complexes bearing 7-benzothiazolyl-fluoren-2-yl substituted bipyridine ligand", presented at *The 9<sup>th</sup> SINO-US Chemistry Professors Conference*, July 12-14, *Chengdu, China* (2013). (Invited)
- <u>W. Sun</u>, "Photophysics and Nonlinear Absorption of Platinum Diimine Complexes", presented at the 22<sup>nd</sup> Inter-American Photochemical Society Winter Conference, Jan. 2-5, Sarasota, FL (2013). (Invited)
- 52. <u>W. Sun</u>, "Platinum Diimine Acetylide Complexes as Broadband Nonlinear Absorbers", presented at the 2013 MRS Spring Meeting Symposium HH: Materials for High-Performance Photonics II, April 1-5, San Francisco, CA (2013). (Invited)
- 53. <u>W. Sun</u>, "Diimine Pt(II) Complexes as Broadband Nonlinear Absorbers", presented at *the Symposium on Sustainable Materials and Light Driven Processes*, Sept. 27, Fargo, ND (2012). (Invited)
- 54. <u>W. Sun</u>, Y. Li, R. Liu, N. Dandu, S. Killina, "Iridium(III) Complexes Bearing 7-Benzothiazolyl-fluoren-2-yl Motif: Photophysics and Nonlinear Absorption", presented at the 244<sup>th</sup> ACS National Meeting, August 19-24, Philadelphia, PA (2012).
- 55. <u>W. Sun</u>, "Modulation of Excited-State Properties of Platinum(II) Terdentate Complexes via Chemical Stimuli", presented at the 8<sup>th</sup> Sino-US Chemistry Professor Conference, July 2-4, Kunming, China (2012). (Invited)
- X. Liu, W. Sun, "Synthesis, Photophysics and Nonlinear Absorption of Pt (II) Complexes Bearing 2-Fluorenyl-1,10-phenanthroline Ligand", presented at the 244<sup>th</sup> ACS National Meeting, August 19-24, Philadelphia, PA (2012).
- 57. <u>Z. Li</u>, E. Badaeva, S. Killina, W. Sun, "Synthesis, Photophysics, and Nonlinear Transmission of Platinum Complexes Containing 6-[7-R-9,9-di(2-ethylhexyl)-9H-fluoren-2-yl]-2,2'-Bipyridinyl Ligands", presented at the 244<sup>th</sup> ACS National Meeting, August 19-24, Philadelphia, PA (2012).
- 58. <u>R. Liu</u>, A. Azenkeng, Y. Li, W. Sun, "Long-Lived Pt(II) Diimine Complexes with Broadband Excited-state Absorption: Efficient Nonlinear Absorbing Materials", presented at the 244<sup>th</sup> ACS National Meeting, August 19-24, Philadelphia, PA (2012).
- 59. <u>W. Sun</u>, "Development of Reverse Saturable Absorbing and Two-photon Absorbing Platinum(II) Complexes", presented at the "*Metal-Containing and Metallo-Supramolecular Polymers and Materials*" (*Part IV*) Symposium, August 28 Sept. 1, Denver, CO (2011). (Invited)
- 60. <u>W. Sun</u>, "Platinum Terdentate/Bidentate Complexes as Broadband Nonlinear Absorbing Materials", presented at the *US Air Force Research Laboratory Workshop on Nonlinear Optical Materials*, April 19-20, Dayton, Ohio (2011). (Invited)

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- <u>W. Sun</u>, Z. Ji, Y. Li, T. M. Pritchett, N. S. Makarov, J. E. Haley, A. Rebane, "Two-photon Absorbing 4-(9,9-Di(2-ethylhexyl)-7-diphenylaminofluoren-2-yl)-2,2':6',2"-terpyridine Platinum Complexes", presented at *Pacifichem 2010*, Dec. 15-20, Honolulu, Hawaii (2010).
- 64. <u>W. Sun</u>, "Nonlinear absorption of platinum(II) terdentate complexes", presented at the *International Symposium on Materials and Devices for Nonlinear Optics (ISOPL'5)*, IIe de Porquerolles, June 26 July 1, 2009. (Invited)
- 65. <u>W. Sun</u><sup>\*</sup>, H. Zhang, B. Zhang, Z. Ji, "Square-planar platinum(II) terdentate complexes as pH, anion, and cation sensors", presented at the 18<sup>th</sup> International Conference on Photochemistry and Photophysics of Coordination Compounds, July 4-9, Sapporo, Japan (2009).
- 66. <u>Z. Ji</u>, A. Azenkeng, M. R. Hoffmann, W. Sun,\* "Synthesis and photophysics of 4'-R-2,2';6',2''terpyridyl (R=Cl, CN, N(CH<sub>3</sub>)<sub>2</sub>) Platinum(II) Phenylacetylide Complexes", presented at *the Inter-America Photochemical Society Winter Conference*, St. Petersburg, FL, Jan. 2-5, 2009.
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- 69. <u>W. Sun</u>, T. Lu, P. Shao, I. Mathew, A. Sand, "Cadmium Benzotexaphyrin and lanthanide texaphyrins: Synthesis and photophysics", presented at the 4<sup>th</sup> Sino-US Symposium on Organic Chemistry, Beijing, China, June 12-13, 2008. (Invited)
- W. Sun, G. Wang, P. Shao, Q. Dai, Q. Huo, "Aggregation Effect on the Nonlinear Optical Properties of Gold Nanoparticles and Hybrids", presented at the 2008 OSA Topical Conference on Nanophotonics, Nanjing, China, May 26-29, 2008.
- 71. <u>W. Sun</u>, "Platinum terdentate complexes as broadband nonlinear transmission materials", presented at the *Tri-Service Information Exchange Conference*, Hilton Head Island, SC, April 13-16, 2008.
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- 75. <u>W. Sun</u>, P. Shao, Y. Li, "A square-planar platinum complex with large and broadband nonlinear optical response", presented at *the First Asian Conference on Coordination Chemistry*, Okazaki, Japan, July 31, 2007. (Invited)

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- 77. P. Shao, <u>W. Sun</u>, "Synthesis, photophysics, and optical limiting of a trinuclear cyclometalated Pt(II) complex", presented at the *233<sup>rd</sup> ACS Annual Meeting*, Chicago, IL, March 25-28, 2007.
- 78. P. Shao, <u>W. Sun</u>, "A new cyclometalated Pt(II) complex with strong optical limiting effect", presented at the 233<sup>rd</sup> ACS Annual Meeting, Chicago, IL, March 25-28, 2007.
- 79. I. Mathew, <u>W. Sun</u>, "Sensing property of MnTPPCI LB films and a dinuclear Pt(II) complex to organic vapors", presented at the 233<sup>rd</sup> ACS Annual Meeting, Chicago, IL, March 25-28, 2007.
- Y. Li, <u>W. Sun</u>, "Photophysical and optical limiting properties of silicon naphthalocyanines with peripheral bromo-substituents", presented at the 233<sup>rd</sup> ACS Annual Meeting, Chicago, IL, March 25-28, 2007.
- W. Sun, P. Shao, "Photophysics and nonlinear transmission of a cyclometalated platinum(II) 4,6diphenyl-2,2'-bipyridyl pentynyl complex", presented at the *MRS Annual Spring Meeting*, San Francisco, CA, April 9-13, 2007.
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- 83. <u>Q. Dai</u>, J. Zou, W. Sun, Q. Huo, "Nonlinear optical properties of gold nanoparticles/polylysine hybrid materials", presented at *NSTI 2007*, May 20, CA, 2007.
- 84. <u>W. Sun</u>, G. Wang, D. Dini, M. Hanack, "Axial ligand effect on photophysics and optical limiting of naphthalocyanines and phthalocyanines", presented at the *Fourth International Conference on Porphyrins and Phthalocyanines*, Rome, Italy, July 4, 2006.
- 85. <u>W. Sun</u>, G. Wang, F. Guo, P. Shao, Q. Dai, J. Worden, Q. Huo, W. Jia, E.P. Douglas, "Optical limiting of gold nanoparticle aggregates, gold nanoparticle/polylysine hybrid, and semiconductor nanoparticles", presented at the *International Symposium on Materials and Devices for Nonlinear Optics*, Dingle, Ireland, June 28, 2006. (Invited)
- W. Sun, G. Wang, D. Dini, M. Hanack, "Photophysics and optical limiting of indium naphthalocyanines with halide axial ligand", presented at the ACS Annual Spring Meeting, Atlanta, GA, March 30, 2006.
- 87. <u>W. Sun</u>, "Photophysics and optical limiting of mononuclear and dinuclear platinum(II) terdentate complexes", presented at the *First International Symposium on the Photofunctional Chemistry of Complex Systems*, Kona, Hawaii, Dec. 13, 2005. (Invited)
- W. Sun, H. Zhu, P.M. Barron, "Binuclear cyclometalated platinum(II) complexes: Luminescence and excited state absorption", presented at the ACS Annual Fall Meeting, Washington, DC, August 29, 2005.
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- W. Sun, F. Guo, H. Zhu, "Photophysics and optical limiting of mononuclear and binuclear platinum(II) 4'-Arylterdentate complexes", presented at the *International Symposium on Photonics*, *Biophotonics, and Nanophotonics*'2005 (ISPBN'05), Nanjing, China, May 14-18, 2005.
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- W. Sun, F. Guo, P.M. Barron, H. Zhu, "Photophysics and optical limiting of mononuclear and binuclear platinum(II) terdentate complexes", presented at the *Pacifichem 2005 Symposium*, Honolulu, Hawaii, Dec. 16, 2005.
- 93. <u>W. Sun</u>, F. Guo, "Photophysics and optical limiting of platinum(II) 4'-Arylterdentate acetylide complexes", presented at the 2004 Annual MRS Fall Meeting, Boston, Nov. 29, 2004.
- 94. <u>W. Sun</u>, Paul Barron, Fengqi Guo, "Photophysics and optical limiting of pentaazadentate porphyrinlike metal complexes", presented at the *Third International Conference on Porphyrins and Phthalocyanines*, New Orleans, LA, July 12, 2004.
- 95. P. M. Barron, F. Guo, <u>W. Sun</u>, "The Synthesis and characterization of a partially water-soluble pentaazadentate porphyrin-like gadolinium (III) complex for photodynamic therapy application", presented at the 227<sup>th</sup> American Chemical Society National Meeting, Anaheim, CA, March 31, 2004
- 96. <u>W. Sun</u>, F. Guo, D. Martyshkin, S. Mirov, C.-L. Zhan, D. Wang, "Wavelength dispersion of twophoton absorption and two-photon induced fluorescence of stilbazolium derivatives", presented at 48<sup>th</sup> SPIE Annual Conference, San Diego, CA, Aug. 3, 2003.
- W. Sun, F. Guo, "Photophysical properties and optical limiting of platinum (II) 4'-arylterpyridyl arylacetylide complexes", presented at the *Third International Symposium on Optical Power Limiting*, Sedona, AZ, Sept. 28 – Oct. 2, 2003.
- W. Sun, M. M. McKerns, A.G.V. Spivey, W. Qiu, C.M. Lawson, G.M. Gray, "Nonlinear optics and power limiting in expanded porphyrin-like metal complexes", presented at the *Third International Symposium on Optical Power Limiting*, Sedona, AZ, Sept. 28 – Oct. 2, 2003.
- F. Guo, <u>W. Sun</u>, "Synthesis, photophysical properties, and optical limiting of 4'-arylterpyridyl acetylide complexes", presented at 4<sup>th</sup> Biennial North Dakota/South Dakota Joint EPSCoR Conference, Sept. 5, Fargo, ND, 2003.
- P. M. Barron, F. Guo, <u>W. Sun</u>, "Synthesis and photophysical properties of pentaazadentate porphyrin-like gadolinium (III) complex", presented at 4<sup>th</sup> Biennial North Dakota/South Dakota Joint EPSCoR Conference, Sept. 5, Fargo, ND, 2003.
- 101. <u>W. Sun</u>, D. Martyshkin, S. Mirov, X.-J. Tang, L.-Z. Wu, C.-H. Tung, "Excited state absorption and two-photon induced fluorescence of novel organic dyes", presented at the 47<sup>th</sup> SPIE Annual Conference, Seattle, WA, July 9, 2002.
- Fengqi Guo, <u>Wenfang Sun</u>, "Synthesis and spectroscopic studies of platinum (II) terpyridyl arylacetylide complexes", presented at *ND EPSCoR 2002 State Conference*, Grand Folks, ND, Oct. 26, 2002.
- 103. <u>W. Sun</u>, G. Rohde, S. Wang, R. Advancula, "Photophysical properties and excited state absorption of azobenzene side-chain polymers", presented at *American Chemical Society Great Lakes Regional Meeting*, Minneapolis, MN, June 2-4, 2002.
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- 106. Paul Barron, Fengqi Guo, Wenfang Sun, "Synthesis and characterization of pentaazadentate porphyrin-like rare-earth complexes for photodynamic therapy applications", presented at 10th Annual North Dakota Undergraduate Research Poster Session, Grand Folks, July 24, 2002.

- 107. An Young, Fengqi Guo, Wenfang Sun, "Synthesis and characterization of platinum (II) bipyridyl phenylacetylide complex", presented at 10th Annual North Dakota Undergraduate Research Poster Session, Grand Folks, July 24, 2002.
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- Stultz, Laura K.; Patton, Thomas H.; Sun, Wenfang; Claude, Juan Pablo, "NLO properties of ruthenium dimmers", presented at 219th ACS National Meeting, San Francisco, CA, March 26-30, 2000.
- W. Sun, C.M. Lawson, G.M. Gray, C. Zhan, D. Wang, "Degenerate four wave mixing and Z-scan measurements of stilbazolium derivatives", presented at Optical Society of America Annual Meeting, Providence, RI, Oct. 21-26, 2000.
- 111. W. Sun, M.M. McKerns, C.M. Lawson, G.M. Gray, C. Zhan, D. Wang, "Solvent effect on the third-order nonlinearity and optical limiting ability of a stilbazolium-like dye", presented at Power Limiting Materials and Devices II, San Diego, CA, Aug. 2, 2000.
- 112. W. Sun, C.C. Byeon, M.M. McKerns, C.M. Lawson, S. Dong, D. Wang, G.M. Gray, "Characterization of third-order nonlinearity of [(CH3-TXP)Cd]Cl", presented at Power Limiting Materials and Devices, Denver, CO, July 21, 1999.
- 113. W. Sun, C.C. Byeon, C.M. Lawson, G. M. Gray, D. Wang, "Third-order susceptibilities of asymmetric pentaazadentate porphyrin-like metal complexes", presented at American Physical Society Centennial Symposium, Atlanta, GA, March 25, 1999.
- 114. C. C. Byeon, W. Sun, M. M. McKerns, C. M. Lawson, G. M. Gray, D. Wang, "Nonlinear Optical Characterization of asymmetric pentaazadentate porphyrin-like metal complexes in power limiting applications", presented at American Physical Society Centennial Symposium, Atlanta, GA, March 25, 1999.
- 115. W. Sun, C. C. Byeon, M. M. McKerns, C. M. Lawson, G. M. Gray, D. Wang, "Investigation of relationship between chemical structure and optical limiting properties of asymmetric pentaazadentate porphyrin-like metal complexes", presented at Nonlinear Optical Liquids for Power Limiting and Imaging, San Diego, CA, July 22, 1998.
- 116. W. Sun, C. C. Byeon, M. M. McKerns, C. M. Lawson, J. M. Dunn, M. Hariharasarma, G.M. Gray, "Enhancement of the third-order susceptibilities of cis-Mo(CO)4(PPh3)2 solution by oxygen in different solvents", presented at Nonlinear Optical Liquids for Power Limiting and Imaging, San Diego, CA, July 22, 1998.
- 117. C. C. Byeon, W. Sun, M. M. McKerns, C. M. Lawson, G. M. Gray, D. Wang, "Optical-limiting performances in asymmetric pentaazadentate porphyrinlike metal complexes", presented at 1998 OSA Annual Meeting & Exhibit, Baltimore, MD, Oct. 4 – 9, 1998.
- 118. D. Wang, <u>W. Sun</u>, S. Dong, J. Si, C. Li, "Nonlinear optical properties of pentaazadentate expanded porphyrins and application in optical limiting", presented at *Materials Research Society Symposium: Materials for Optical Limiting II*, San Francisco, CA, March 31 – April 2, 1997.
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- 120. F. Guo, <u>W. Sun</u>, J. Xie, D. Wang, "Photophysical properties of pentaazadentate conjugated macrocyclic metal complexes", presented at the *4th Sino-Japan Binational Symposium on Photochemistry*, Huangshan, China, Oct.5 9, 1997.

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- 122. D. Wang, S. Dong, <u>W. Sun</u>, J. Yue, J. Qin, S. Pang, "Photodynamic effect of asymmetric pentaazadentate porphyrin-like macrocyclic complexes", presented at *The Third International Symposium on Functional Dyes (Functional Dyes '95)*, Santa Cruz, CA, July, 1995.
- 123. D. Wang, S. Dong, <u>W. Sun</u>, J. Yue, J. Qin, S. Pang, "Photodynamic therapy of AH cell and solid tumors in mice with pentaazadentate rare earth metal complexes", presented at *The 9<sup>th</sup> National Conference on Photochemistry*, Chongqing, China, November, 1995.
- 124. <u>W. Sun</u>, S. Dong, D. Wang, Q. Wan, J. Yue, M. Li, S. Pang, "Studies of photosensitization of porphyrin-like rare-earth metal complexes to generate singlet oxygen by ESR", presented at *The 8<sup>th</sup> National Magnetic Resonance Conference*, Hangzhou, China, August, 1994.
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- Q. Gong, S. Yang, X. Gao, <u>W. Sun</u>, S. Dong, D. Wang, "Third-order susceptibility of new macrocyclic conjugated systems", presented at 1994 IEEE Nonlinear Optics: Materials, Fundamentals, and Applications, Waikoloa, HI, July 25-29, 1994.
- 129. <u>W. Sun</u>, D. Wang, "Synthesis and property investigation of asymmetric porphyrin-like cadmium complexes with different substituents", presented at *The Second National Symposium on Coordination Chemistry*, Nanjing, China, October, 1993.
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- 131. J. Si, M. Yang, C. Li, D. Wang, S. Dong, <u>W. Sun</u>, "Optical limiting using thermal self-defocusing of the [(CH<sub>3</sub>-TXP)Cd]Cl", presented at *ICNOPA'93*, Nanjing, China, October, 1993.
- 132. J. Si, M. Yang, Y. Wang, C. Li, D. Wang, S. Dong, <u>W. Sun</u>, "Optical limiting in solution of macrocyclic metallo-porphyrin-like", presented at *ICNOPA* '93, Nanjing, China, October, 1993.
- 133. <u>W. Sun</u>, D. Wang, "The synthesis of asymmetric porphyrin-like macrocyclic cadmium(II) complexes and the investigation of their nonlinear optical properties", presented at *The* 8<sup>th</sup> National Conference on Photochemistry, Beijing, China, August, 1993.

#### PATENT APPLICATIONS

1. Wenfang Sun, Bingqing Liu, "Neutral iridium(III) complexes bearing BODIPY-substituted N-heterocyclic carbene (NHC) ligands, their synthesis, and use thereof", provisional patent filed on 8/14/2018, Patent Serial No: 62/718,559.

- 2. Wenfang Sun, Xiaolin Zhu, "Synthesis of 2-aryl-oxazolo[4,5-f][1,10]phenanthrolines and their transition-metal complexes, and their potential applications in opto-electronic devices" provisional patent filed on 1/26/2018, Patent Serial No: 62/622,508.
- Wenfang Sun, Bingguang Zhang, Pin Shao, Yunjing Li, Zhiqiang Ji, "Metal Complexes as Broadband Nonlinear Absorbing Materials", provisional patent filed on 10/21/2010, Patent Serial No: 61/405,387.
- Wenfang Sun, Bingguang Zhang, Rui Liu, Pin Shao, Zhiqiang Ji, Zhongjing Li, "Emissive and Broadband Nonlinear Absorbing Metal Complexes and Ligands as OLED, Optical switching or Optical Sensing Materials", US Utility Patent filed on 10/21/2011, Patent Application No: 13/278,780.

### **RESEARCH PROPOSALS FUNDED**

#### **External Grants**

- PI (John Wilkinson is the Co-Investigator), "Developing cancer-specific, H<sub>2</sub>O<sub>2</sub>-activatable, and O<sub>2</sub>evolving micelles encapsulating near-IR photosensitizers for phototherapy of breast cancer", NIH 7R15CA264016-02, 7/1/2022-6/30/2025, \$431,850. (current)
- Co-PI (Svetlana Kilina is the PI with two other co-PIs), "Data-driven and computationally assisted design of near-infrared emissive metal-organic complexes with earth-abundant metals", DOE DE-SC0022239, 9/1/2021 – 8/31/2024, \$1,900,000 (My portion is ~\$720,000). (current)
- 3. **PI** (Sherri McFarland is the co-PI), "Collaborative research: Developing cancer-specific targeting near-IR photosensitizers for in vitro theranostic photodynamic therapy and photothermal therapy", **NSF DMR-2317606**, 8/15/2020 7/31/2024, **\$507,954**. (My portion is **\$340,509**, current)
- 4. User (Dongmao Zhang is the PI), "MRI: Track II Development of a Modular Optical Spectrometer for Multimodal Linearly Polarized, Circularly Polarized, and Integrating-Sphere-Assisted Spectroscopic Measurements", NSF MRI, 10/1/2023 9/30/2027, \$1,400,000. (current)
- Co-PI (Bakhtiyor Rasulev is the PI, and two other co-PIs), "D3SC: Integrated Studies on Designing Organometallic Complexes with Nonlinear Absorption and Near-Infrared Emission", NSF CHE-1800476, 8/1/2018 – 7/31/2022, \$468,030. (My portion is \$170,557)
- Co-PI (Ying Huang is the PI, and one other co-PI), "Colorimetric/Fluorescent Chemical Sensor Array For Detecting And Locating Pipeline Internal Corrosive Environments", DOT PHMSA 693JK31850008CAAP, 9/30/2018 – 7/31/2022, \$300,000. (My portion is \$128,659)
- 7. **PI** (Svetlana Kilina is the co-PI), "Broadband nonlinear absorbing iridium(III) complexes: optimizing the linear and nonlinear absorption via computation assisted rational design", 9/1/2014 8/31/2018, **NSF DMR-1411086**, **\$463,000**.
- 8. **PI**, "Heteroleptic iridium(III) and ruthenium(II) complexes with broadband nonlinear absorption", 8/5/2014 8/4/2016, **Army Research Lab W911NF-14-2-0081**, **\$300,000**.
- 9. **PI**, "Characterization of the Mechanochromic Effect of the Bipyridyl Platinum(II) Bis(arylfluorenylacetylide) Complexes under Different Pressures", Argonne National Laboratory Center for Nanoscale Materials user facility grant. (2016-2017).
- 10. PI, "Highly soluble platinum diimine or 6-phenyl-2,2'-bipyridine complexes as broadband nonlinear optical materials", 8/1/2010 3/31/2015, Army Research Lab W911NF-10-2-0055, \$935,869.

- 11. **Co-PI** (Dinesh Katti is PI, with three other co-PIs), "MRI: Acquisition of Data-Intensive Cyberinfrastructure for Research and Education (DICRE) at North Dakota State University", 9/1/2012 8/31/2015, **NSF CNS-1229316**, **\$400,000**.
- 12. **Co-PI** (John Hershberger is the PI, with three other co-PIs), "CRIF:MU Acquisition of a Single Crystal X-ray Diffractometer", 1/1/2010 12/31/2012, **NSF CHEM-0946990**, **\$300,000**.
- Senior Personnel (Erika Offerdahl is the PI, Mukund Sibi is the co-PI), "Research on the Prairies: Undergraduate Training in the Molecular Sciences", 6/1/2011 – 5/31/2014, NSF CHE-1062701, \$338,445.
- 14. PI, "Organic/organometallic hybrids as broadband nonlinear transmission materials", 7/1/2006 6/30/2010, Army Research Lab W911NF-06-2-0032, \$530,688.
- 15. **PI**, "CAREER: Transition-metal terdentate acetylide complexes and dendrimers: synthesis, photophysics and nonlinear optical studies", 7/1/2005 6/30/2011, **NSF CHE-0449598**, **\$565,000**.
- 16. **PI**, "NIRT: Total chemical synthesis, property and modeling studies of nanoparticle / polymer hybrid materials", 8/15/2005 7/31/2009, **NSF DMI-0506531**, **\$1,199,479**. (my portion is ~ **\$300,000**).
- 17. **Co-PI**, "Food safety risk assessment", 8/1/2006 7/31/2008, **USDA-CSREES 2006-34475-17127**, **\$359,204**. (my portion is **\$25,200**)
- 18. **Co-PI**, "Food safety and security sensor technology", 9/1/2005 8/31/2007, **USDA-CSREES** 2005-34475-15788, \$300,000. (my portion is \$49,500)
- 19. **PI**, "Nonlinear absorption of transition-metal arylacetylene", 9/1/2002 8/31/2004, The Petroleum Research Fund (Type G), **\$35,000**.
- Co-PI (Chris Lawson is PI), "Studies of Expanded Porphyrin Metal-Organic Complexes for Optical Power Limiting Applications", 3/10/1999 – 3/9/2002, Army Research Office Grant DAAD19-99-1-0119, \$329,955 (with \$164,989 of matching money, the total program value is \$494,944).
- PI, "Preparation of Novel Organic Materials for All-optical Switches and Studies of Their Properties", 1/1/1998 – 12/31/2000, National Natural Science Foundation of China Young Investigator Award, RMB 150,000. (This proposal was funded but was withdrawn because I was not in China at that time.)
- 22. **Co-PI** (Duoyuan Wang is PI), "Synthesis of Photofunctional Molecules for Optical Limiting Application and the Study of Their Properties", 1/1/1997 12/31/1999, National Natural Science Foundation of China Grant No. 29682001, **RMB 150,000**.
- 23. **Co-Investigator** (Duoyuan Wang is PI), "Investigation of Rare-earth Ion Doped Novel Organic Thin Films for Photochemical Hole Burning", 1/1/1993 12/31/1995, National Natural Science Foundation of China Grant No. 59283036, **RMB 70,000**.
- 24. **Co-Investigator** (Duoyuan Wang is PI), "Synthesis of Asymmetric Porphyrin-like Macrocyclic Metal Complexes and Investigation of Their Excited-state Properties", 1/1/1992 12/31/1994, National Natural Science Foundation of China Grant No. 29170085, **RMB 50,000**.

#### **EPSCoR Grants**

- 25. PI (John Wilkson and Zhongyu Yang are the co-PIs), "Developing near-IR photosensitizers for phototherapy", NDSU EPSCoR Seed Grant, 10/22/2020-5/31/2021, **\$10,000**.
- PI (Svetlana Kilina and Erik Hobbie are the co-PIs), "Thermally Activated Delayed Fluorescence of Terpyridine Derivatives for OLED Application", NDSU EPSCoR Seed Grant, 9/30/2019-5/31/2020, \$10,000.

- Co-PI (Xiangfa Wu is the PI, with four other co-PIs), "Acquisition of a Fuel Cell Test System for the Interdisciplinary Research and Education of Renewable Energy Conversion and Storage Technology", ND EPSCoR STEM Equipment Grant, 9/30/2019-5/31/2020, \$35,000.
- 28. EPSCoR Infrastructure Improvement Program Doctoral Dissertation Assistantship (IIP-DDA) for Bingqing Liu, 1/1/2019 7/31/2019, **\$12,340**.
- 29. EPSCoR Infrastructure Improvement Program Doctoral Dissertation Assistantship (IIP-DDA) for Zhongjing Li, 8/16/2012 8/31/2014, **\$28,021**.
- 30. State EPSCoR WISE Equipment Award, 5/15/2011 5/14/2012, \$9,000.
- PI, "Synthesis, photophysics and broadband nonlinear absorption of novel platinum(II) 6-phenyl-2,2'-bipyridine acetylide complexes", 9/1/2009 – 8/31/2010, ND EPSCoR/NDSU Advance FORWARD Leap Grant, \$25,000.
- 32. PI, "Acquisition of a nanosecond laser flash photolysis spectrometer for materials research and education", 3/25/2003 6/27/2003, ND EPSCoR Infrastructure Improvement Program, \$100,000.
- 33. PI, "Development and characterization of transition-metal aryldiacetylide dendrimers for third-order nonlinear optical applications", 6/1/2003 4/30/2004, NSF EPSCoR Seed Award, **\$24,675**.
- 34. PI, "Application for travel award to 48<sup>th</sup> SPIE annual conference", 8/2/2003 8/9/2003, NASA EPSCoR, **\$1,500**.
- 35. PI, "Multiphoton absorption of stilbazolium derivatives", 3/15/2002 7/15/2003, ND NASA EPSCoR, **\$16,256**.

#### **Internal Grants**

- 36. Travel Grant from the Provost's Office to the 2014 ACS Meeting, 8/10/2014 8/15/2014, **\$200**.
- 37. Travel Grant from the Provost's Office to the 2013 MRS Spring Meeting, 4/1/2013 4/5/2013, \$400.
- Travel Grant from the Provost's Office to the 244<sup>th</sup> ACS National Meeting, 8/18/2012 8/23/2012, \$400.
- 39. Presidential Travel Award to the 18<sup>th</sup> International Symposium on Photochemistry and Photophysics of Coordination Compounds, 7/4/2009 7/9/2009, **\$1,000**.
- 40. Presidential Travel Award to the SPIE Annual Conference, 8/11/2008 8/14/2008, \$1,000
- 41. Presidential Travel Award to the Inter-America Photochemical Society Winter Conference, 1/3/2008 1/6/2008, **\$1,000**.
- 42. Presidential Travel Award to the Fourth International Conference of Porphyrins and Phthalocyanines, 7/1/2006 7/7/2006, **\$1,000**.
- 43. Presidential Travel Award to the Optics and Photonics International Symposium, 7/31/2005 8/4/2005, **\$1,000**.
- 44. Faculty Travel Award from the Vice President Office, 8/27/2005 8/31/2005, \$750.
- 45. Presidential Travel Award to the Third International Conference on Porphyrins and Phthalocyanines, 7/10/2004 7/14/2004, **\$1,000**.
- 46. PI, "Nonlinear optical studies of metallo-organic nanoparticle composites", 6/1/2003 5/31/2004, NDSU Grant-in-Aid Program, **\$4,500**.
- 47. Presidential Travel Award to the Third International Symposium on Optical Power Limiting, 9/27/2003 10/2/2003, **\$1,000**.

- 48. Presidential Travel Award to 225<sup>rd</sup> ACS conference, 2/19/2003, **\$1,000**.
- 49. PI, "Synthesis and investigation of water-soluble pentaazadentate porphyrin-like rare-earth complexes for photodynamic therapy application", 2/1/2002 1/31/2003, NDSU Research Foundation, Research Development Support Program (Investment Award), **\$10,000**.
- 50. PI, The Centennial Endowment Fund, Faculty Development Award, 2002, \$2,900.
- 51. Presidential Travel Award to 223<sup>rd</sup> ACS conference, 2/25/2002, \$1,000.
- PI, "Single-Photon Counting Fluorescence Lifetime Measurement for Optical Limiting and Biophysics", 9/1/1999 – 8/31/2000, UAB Laser and Photonics Research Center Intramural Grant, \$15,000.

#### **RESEARCH PROPOSAL PENDING**

- Co-PI (Zhongyu Yang is the PI and Svetlana Kilina is the other co-PI), "Data-Driven Design of Optically Addressable Molecular Qubit Candidates", DOE EPSCoR, 11/01/2024 – 10/31/2028, \$1,000,000.
- 2. Participant as a Potential Mentor (Ryan Summers is the PI, Matt Thompson is the co-PI), "REU Site: Interdisciplinary convergence to advance the biotechnological and bioscience workforce", National Science Foundation, 05/01/2024 04/30/2027, \$475,690.

#### **RESEARCH PROPOSAL DECLINED OR WITHDRAWN**

- 1. PI, "Understanding the structure-function correlations in developing hypoxia-active near-IR absorbing Ir(III) complex photosensitizers for theranostic phototherapy", **NIH NIGMS MIRA**, 04/01/2025 03/31/2029, **\$2,022,795**. (Administrative withdrawn by NIH due to the mismatch with the NIGMS mission).
- 2. Initiating PI (Sherri McFarland is the Partnering PI), "Developing near-IR absorbing Ir(III)-based photosensitizers for intraoperative adjuvant phototherapy of melanomas to prevent recurrence and metastasis", **DoD Melanoma Research Program**, 04/01/2024 03/31/2027, **\$1,826,492**.
- 3. Co-PI (Shanlin Pan is the PI, with 7 other co-PIs), "Artificial Intelligence-Driven Sustainable Material for Solar Hydrogen Fuel", **DOE Office of Science**, 01/02/2024 01/01/2027, **\$6,000,000**.
- Initiating PI (Sherri McFarland and Zhongyu Yang are the Partnering PIs), "Developing nearinfrared dual-action iridium(III)-based photosensitizers for intraoperative adjuvant photodynamic/photothermal therapy of melanomas", **DoD Melanoma Research Program**, 4/1/2021-3/31/2024, \$1,015,000.
- PI (John Wilkinson is the Collaborator), "Developing cancer-specific, H<sub>2</sub>O<sub>2</sub>-activatable, and O<sub>2</sub>evolving micelles encapsulating near-IR photosensitizers for phototherapy of breast cancer", NIH R15, 7/1/2021-6/30/2024, \$431,850.
- 6. PI (Sherri McFarland is the co-PI), "NIR Ir(III) Complex Photosensitizers for Adjuvant Phototherapy of Melanoma", **Melanoma Research Foundation**, 10/1/2020-9/30/2022, **\$200,000**.
- PI (John Wilkinson is the Collaborator), "Developing Cancer-Specific Targeting, H<sub>2</sub>O<sub>2</sub>-Activatable, and O<sub>2</sub>-Evolving Micelles Encapsulating Near-IR Photosensitizers and Histone Deacetylase Inhibitors for Phototherapy", NIH NCI R15, 7/1/2020-6/30/2023, \$431,400.
- 8. PI (S. Qian is the Multiple PI), "Combining photodynamic therapy (PDT) using cancer-specific targeting and hypoxia active near-IR photosensitizer micelles with new COX-2 anti-cancer biology to improve the PDT efficiency", **NIH R01**, 4/1/2020 3/31/2025, **\$1,808,900**.

- PI (S. A. McFarland is the co-PI), "Developing cancer-specific targeting near-IR photosensitizers for in vitro theranostic photodynamic therapy and photothermal therapy", NSF DMR, 4/1/2019 – 3/31/2022, \$709,869.
- 10. PI (Z. Yang is the co-PI), "Developing near-IR photosensitizers for phototherapy", ND EPSCoR Seed Award, 10/1/2019-5/31/2020, \$10,000.
- 11. PI (Steven Qian is the Multiple PI), "Developing cancer-specific targeting and hypoxia activatable near-IR photosensitizers for photodynamic therapy (PDT) and improving the PDT efficiency via combination with new COX-2 anti-cancer biology", **NIH R01**, 7/1/2018 6/30/2023, **\$1,808,900**.
- 12. PI (Steven Qian is the partnering PI), "Development of A Novel Breast Cancer Treatment Strategy with the Combination of Near-IR Light Activatable Photodynamic Therapy and New COX-2 Cancer Biology", **USAMRAA DoD Breast Cancer Program**, 7/1/2018 6/30/2021, **\$866,400**.
- 13. Co-PI (Simone Ludwig is the PI, and three other co-PIs), "CDS&E: Software Tools for Advanced Data Mining of Chemical Data", NSF, 7/1/2018 6/30/2021, **\$616,989**.
- Co-PI (Erik Hobbie is the PI, with three other co-PIs), "NRT-INFEWS: Perovskite and Water: A New Template for Interdisciplinary Science and Engineering", NSF/DGE, 9/1/2018 - 8/31/2021, \$2,999,437.
- 15. Senior Personnel (Zhongyu Yang is the PI, and four co-PIs), "MRI: Acquisition of a CW/FT X-band Electron Paramagnetic Resonance Spectrometer", NSF-MRI, **\$741,647**, 8/1/2016 7/31/2019.
- Co-PI (Simone Ludwig is the PI), with two other co-PIs, "SI2-SSI: Software Tools for Advanced Data Mining of Chemical and Materials Science Data", National Science Foundation ACI, \$2,203,886 (7/1/2017 6/30/2021).
- 17. Co-PI (Simone Ludwig is the PI, with three other co-PIs), "SI2-SSI: Software Tools for Extraction and Advanced Data Mining of Chemical and Materials Science Data", National Science Foundation ACI, **\$2,578,121**, 1/1/2016 12/31/2019.
- 18. PI (Svetlana Kilina is co-PI), "Nonlinear absorbing Ir(III) complexes: Controlling optical properties via rational design", 5/1/2013 4/30/2016, NSF, **\$815,994**.
- 19. Co-PI (Hongshan He is PI), "Broadband Absorbers for High Efficiency Nanostructured Organic Solar Cells", 9/1/2011 8/31/2014, NSF, **\$516,959**.
- 20. Co-PI (Kalpana Katti is the PI and 3 other co-PIs), "Center for Engineered Living Non-Living Materials Interfaces" (pre-proposal), 8/1/2011 7/31/2017, NSF, **\$18,970,000.**
- 21. Senior Personnel (Erika Offerdahl is the PI, Mukund Sibi is the co-PI), "Research on the Prairies: Undergraduate Training in the Molecular Sciences", 09/01/11 08/31/14, NSF, **\$358,445**.
- 22. Co-PI, "Combined experimental-computational design of new third-order nonlinear optical materials", 7/1/2010 6/30/2015, DoD MURI, **\$7,500,000**. (My budget is **\$2,111,739**).
- 23. Co-PI, "Improved X-ray stimulated photodynamic therapy for cancer treatment", 7/1/2010 8/31/2014, American Cancer Society, **\$810,000**.
- 24. Senior Personnel (Erika Offerdahl is the PI, Mukund Sibi is the co-PI), "Research on the Prairies: Undergraduate Training in the Molecular Sciences", 5/1/2010 8/15/2013, NSF, **\$355,517**.
- 25. PI, "Novel Luminescent Organometallic Complex Based Continuous Nanowires: Synthesis, Fabrication, and Characterizations", 9/1/2009 – 8/31/2011, EPSCoR IIP Seed Pilot Program, **\$99,913**
- 26. Co-PI, "CRIF:MU Acquisition of a Single Crystal X-ray Diffractometer and Upgrade of Existing Powder X-ray Diffractometer", 9/1/2008 8/31/2011, NSF, **\$498,479**.

- 27. Co-PI, "Using nanotechnology to enable photodynamic therapy for deep cancer treatment", 12/1/2008 11/30/2010, NIH, **\$375,000**
- 28. Co-PI, "Center of Nanobiotechnolgical Research in Cancer Therapy", 7/1/2007 6/30/2012, NIH CoBRE Preproposal, **\$10,224,500**.
- 29. PI, "d<sup>8</sup> Transition-metal terdentate complexes based charge-transfer polyads and dendrimers: synthesis, photophysics and nonlinear optical studies", 7/1/2005 8/31/2008, ACS-PRF AC Grant, **\$120,000**. Withdrawn after CAREER proposal was funded.
- PI, "Organometallic complex / gold nanoparticle/ polymer hybrids as broadband nonlinear optical materials", 7/1/2005 – 6/30/2008, NSF Chemistry Division, \$638,848. Withdrawn after CAREER proposal was funded.
- PI, "Organometallic complex / gold nanoparticle hybrid polymeric materials for broadband optical limiting applications", 6/1/2005 – 5/31/2008, DEPSCoR (AFOSR, Chemistry and Life Science Division), \$633,248.
- 32. co-PI, "IGERT: Infrastructure and materials preservation", NSF, 7/1/2005 6/30/2010, **\$2,941,301**.
- 33. co-PI, "Multi-targeted approach in detection and treatment of breast cancer", NIH COBRE, **\$9,500,000**.
- 34. PI, "CAREER: Transition-metal aryldiacetylide dendrimers as nonlinear optical materials", 7/1/03 6/30/08, National Science Foundation, **\$667, 903**.
- 35. PI, "Acquisition of a nanosecond laser flash photolysis spectrometer system for optical limiting materials research and education", 4/1/03 3/31/04, DoD DURIP (Defense University Research Instrumentation Program), **\$142,515**.
- 36. PI, "Transition-Metal Triarylpyridyl Arylacetylide Polymers as Broadband Optical Limiting Materials", 6/1/03 5/31/06, DEPSCoR, **\$500,000**.
- 37. PI, "Development and Characterization of Transition-Metal Aryldiacetylide Dendrimers for Thirdorder Nonlinear Optical Applications", 9/1/2003 – 8/31/2006, Beckman Foundation Young Investigator Program, **\$240,000**.
- 38. PI, "Transition-metal aryldiacetylide Dendrimers for nonlinear optical applications", 1/1/03 12/31/04, Research Corporation, Research Innovation Awards, **\$35,000**.
- 39. PI, "Transition-metal arylacetylene polymers for optical limiting applications", 4/1/02 3/31/05, Army Research Office, **\$353,957** (with \$178,143 of matching money, the total program value is **\$532,100**).
- 40. PI, "Transition-metal arylacetylene polymers for optical limiting applications", 7/16/02 7/15/04, ND EPSCoR, **\$39,958**.
- PI, "Acquisition of a laser flash photolysis spectrometer for organic material and biophysics research and education", 8/1/02 – 7/31/04, National Science Foundation, Division of Material Research, \$104,555.
- 42. Co-PI, (Chris Lawson is the PI), "Theoretical and Experimental Studies of Nonlinear Optical Metal-Organic Complexes", 4/1/01 3/31/04, National Science Foundation, **\$430,940**.
- 43. Co-PI, (Chris Lawson is the PI), "Nonlinear Optical Studies of Expanded Porphyrin Metal-Organic Complexes", 4/1/99 3/31/02, National Science Foundation, **\$496,413**.

#### **INVITED SEMINARS**

- 1. International Association of Advanced Materials Fellow Lecture (Online), Dec. 11, 2023.
- 2. College of Chemistry, Capital Normal University, July 14, 2023. (Host: Prof. Li Wang).
- 3. College of Chemistry and Chemical Engineering, Tianjin University of Technology, July 13, 2023. (Host: Prof. Xuguang Liu).
- 4. College of Chemistry, Nanjing Tech University, July 11, 2023. (Host: Prof. Hongjun Zhu).
- 5. College of Chemistry and Chemical Engineering, Shaanxi Normal University, June 28, 2023. (Host: Prof. Xiaolin Zhu).
- 6. College of Chemistry and Environmental Sciences, Shenzhen University, June 26, 2023. (Host: Prof. Xiangzhong Ren)
- 7. College of Chemical Engineering, Dalian University of Technology, June 25, 2022. (Host: Prof. Tiexin Zhang).
- 8. Department of Chemistry and Biochemistry, The University of Alabama, Tuscaloosa, Jan. 29, 2022. (Host: Prof. Carolyn Cassady)
- 9. Department of Chemistry, University of Manitoba, Winnipeg, Canada, Feb. 14, 2020. (Host: Prof. David Herbert)
- 10. Department of Chemistry and Biochemistry, Texas Technology University, Lubbock, TX, Jan. 23, 2020. (Host: Prof. Bill Hase)
- 11. College of Chemistry and Chemical Engineering, Henan University, Kaifeng, China, Oct. 10, 2019. (Host: Prof. Hua Wang)
- 12. College of Pharmaceutical Sciences, Soochow University, Suzhou, China, Dec. 21, 2018. (Host: Prof. Huabing Chen)
- 13. College of Materials Science and Opto-Electronic Technology, University of Chinese Academy of Sciences, Beijing, China, Dec. 18, 2018. (Host: Prof. Hui Huang)
- 14. School of Chemistry and Chemical Engineering, Shanxi University, Taiyuan, China, Dec. 17, 2018. (Host: Prof. Wei Guo)
- 15. College of Science, Xi'an Jiaotong University, Xi'an, China, Dec. 13, 2018. (Host: Prof. Dongfeng Dang)
- 16. State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou, China, Dec. 11, 2018. (Host: Prof. Anjun Qin)
- 17. Department of Chemistry, Southern University of Science and Technology, Shenzhen, China, Dec. 10, 2018. (Host: Prof. Xumu Zhang)
- College of Chemistry, Nanjing Tech University, Nanjing, China, Dec. 6, 2018. (Host: Prof. Hongjun Zhu)
- 19. College of Pharmacy, East China University of Science and Technology, Shanghai, China, Dec. 5, 2018. (Host: Prof. Youjun Yang)
- 20. Department of Advanced Materials, Hanam University, Daejeon, Korea, July 9, 2018. (Host: Prof. Kwang-Sup Lee)
- 21. College of Pharmacy, Peking University, Beijing, China, July 1, 2018. (Host: Prof. Guoquan Liu)
- 22. Key Laboratory of Molecular Nanostructure and Nanotechnology, Institute of Chemistry, Chinese Academy of Sciences, June 30, 2018. (Host: Prof. Xiaohong Fang)
- 23. College of Chemical Engineering, Tianjin University, Tianjin, China, July 19, 2017. (Host: Prof. Jialiang Xu)
- 24. College of Chemistry, Beijing Normal University, Beijing, China, July 10, 2017. (Host: Prof. Zhishan Bo)
- 25. College of Bioengineering, Central China University of Science and Technology, Wuhan, China, July 5, 2017. (Host: Prof. Guang Yang)
- 26. College of Chemistry and Chemical Engineering, Central China Normal University, Wuhan, China, July 4, 2017. (Host: Prof. Guoqiang Feng)
- 27. College of Chemistry and Chemical Engineering, Hubei University, Wuhan, China, July 3, 2017. (Host: Prof. Cuifen Lu)

- 28. Institute of Chemistry, Chinese Academy of Sciences, Beijing, China, June 23, 2017. (Host: Prof. Chuanlang Zhan)
- 29. College of Chemistry and Chemical Engineering, Nanjing University, Nanjing, China, June 21, 2017. (Host: Prof. Jing Ma)
- 30. College of Chemistry, Nanjing Tech University, Nanjing, China, June 21, 2017. (Host: Prof. Hongjun Zhu)
- 31. College of Chemistry and Chemical Engineering, Tianjin University of Technology, Tianjin, China, June 15, 2017. (Host: Prof. Hui Gao)
- 32. College of Sciences, Tianjin University, Tianjin, China, June 13, 2017. (Host: Prof. Long Chen)
- 33. College of Physics, Peking University, Beijing, China, Nov. 25, 2016. (Host: Prof. Lixin Xiao)
- College of Materials Sciences, Tianjin University of Technology, Tianjin, China, Nov. 24, 2016. (Host: Prof. Tongbu Lu)
- 35. College of Sciences, China University of Petroleum, Qingdao, China, Nov. 21, 2016. (Host: Prof. Xiyou Li)
- Lanzhou Institute of Chemical Physics, Chinese Academy of Sciences, Suzhou, China, Nov. 18, 2016. (Host: Prof. Senmiao Xu)
- 37. College of Physics, Suzhou University, Suzhou, China, Nov. 17, 2016. (Host: Prof. Yinglin Song)
- 38. Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Shanghai, China, Nov. 16, 2016. (Host: Prof. Jun Wang)
- College of Chemistry and Chemical Engineering, Tongji University, Shanghai, China, Nov. 15, 2016. (Host: Chi Zhang)
- 40. College of Chemistry and Chemical Engineering, East China Normal University, Shanghai, China, Nov. 15, 2016. (Host: Prof. Haibo Yang)
- 41. College of Chemistry and Chemical Engineering, Nanjing Tech, Nanjing, China, Nov. 14, 2016. (Host: Prof. Hongjun Zhu)
- 42. College of Materials Sciences, Nanjing University of Posts and Telecommunications, Nanjing, China, Nov. 13, 2016. (Host: Prof. Qiang Zhao)
- 43. School of Chemistry and Chemical Engineering, Xiamen University, Xiamen, China, July 1, 2016. (Host: Prof. Haichao Xu)
- 44. School of Chemistry and Chemical Engineering, Sun Yat-Sen University, Guangzhou, China, June 26, 2016. (Host: Prof. Zongwan Mao)
- 45. State Key Laboratory of Luminescent Materials and Devices, South China University of Technology, Guangzhou, China, June 23, 2016. (Host: Prof. Anjun Qin)
- 46. Key Laboratory for Special Functional Materials of Ministry of Education, Henan University, Kaifeng, China, June 22, 2016. (Host: Prof. Hua Wang)
- 47. School of Materials Science and Engineering, Tianjin University, Tianjin, China, June 17, 2016. (Host: Prof. Yanhou Geng)
- 48. School of Chemistry and Chemical Engineering, Tianjin University of Technology, Tianjin, China, June 16, 2016. (Host: Prof. Xuguang Liu)
- 49. College of Chemistry, Nankai University, Tianjin, China, June 15, 2016. (Host: Prof. Xianhe Bu)
- 50. College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, June 26, 2015. (Host: Prof. Jingui Qin)
- Shanghai Institute of Organic Chemistry, Chinese Academy of Sciences, June 24, 2015. (Host: Prof. Min Shi)
- 52. College of Chemistry and Chemical Engineering, Shanghai Jiaotong University, June 24, 2015. (Host: Prof. Wanbin Zhang)
- College of Chemistry and Chemical Engineering, Tianjin University of Science and Technology, June 18, 2015. (Host: Prof. Xuguang Liu)
- 54. State Key Laboratory of Fine Chemicals, Dalian University of Science and Technology, Sept. 1, 2014. (Host: Prof. Jianzhang Zhao)
- 55. Department of Physics, Harbin Institute of Technology, August 29, 2014. (Host: Prof. Yinglin Song)

- 56. College of Chemistry, Jilin University, August 28, 2014. (Host: Prof. Yue Wang)
- 57. Changchun Institute of Applied Chemistry, Chinese Academy of Sciences, August 28, 2014. (Host: Prof. Zhongming Sun)
- 58. College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, June 19, 2014. (Host: Prof. Jingui Qin)
- 59. College of Chemistry and Chemical Engineering, June 16, 2014. (Host: Prof. Xiyou Li)
- 60. College of Physics, Suzhou University, China, June 14, 2014. (Host: Prof. Yinglin Song)
- 61. College of Chemistry and Chemical Engineering, Nanjing University, China, June 11, 2014. (Host: Prof. Jing Ma)
- 62. College of Science, Nanjing Tech University, China, June 11, 2014. (Host: Prof. Honjun Zhu)
- 63. College of Chemistry, Fuzhou University, China, May 30, 2014. (Host: Prof. Jiandong Huang)
- 64. Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, May 29, 2014. (Host: Prof. Qingdong Zheng)
- 65. Department of Chemistry, University of South Dakota, Vermillion, SD, April 28, 2014. (Host: Prof. Dimitri Kilin)
- 66. College of Science, Beijing University of Science and Technology, Beijing, China, July 19, 2013. (Host: Prof. Jianzhuang Jiang)
- 67. College of Chemistry, Sichuan University, Chengdu, China, July 12, 2013. (Host: Prof. Xiaoqi Yu)
- College of Chemical Engineering and Materials Science, Jiangnan University, Wuxi, China, July 5, 2013. (Host: Prof. Chi Zhang)
- 69. College of Chemistry, Fudan University, Shanghai, China, July 5, 2013. (Host: Prof. Tao Yi)
- 70. College of Science, Nanjing University of Technology, Nanjing, China, July 4, 2013.
- 71. College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, July 1, 2013. (Host: Prof. Jingui Qin)
- 72. College of Chemistry and Chemical Engineering, Hubei University, Wuhan, China, July 2 (2013).
- 73. College of Science, Beijing University of Science and Technology, Beijing, China, June 11, 2012. (Host: Prof. Jianzhuang Jiang)
- Technical Institute of Physics and Chemistry, Chinese Academy of Sciences, Beijing, China, June 12, 2012. (Host: Prof. Yi Li)
- 75. College of Physics, Peking University, Beijing, China, June 12, 2012. (Host: Prof. Lixin Xiao)
- 76. College of Chemistry and Chemical Engineering, Hunan University, Changsha, China, June 14, 2012. (Host: Prof. Jianhui Jiang)
- 77. College of Chemistry, Hunan Normal University, Changsha, China, June 15, 2012. (Host: Prof. Ming Ma)
- 78. College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, June 19, 2012. (Host: Prof. Jingui Qin)
- 79. College of Chemistry and Chemical Engineering, Central China University of Nationalities, Wuhan, China, June 20, 2012. (Host: Prof. Bingguang Zhang)
- 80. College of Chemistry, Southeast University of Science and Technology, Shanghai, China, May 31, 2011. (Host: Prof. Min Shi)
- 81. Institute of Technical Physics, Chinese Academy of Sciences, Shanghai, China, May 31, 2011. (Host: Prof. Xiangjian Meng)
- 82. School of Scientific Research, Jiangsu University, Zhenjiang, China, June 1, 2011. (Host: Prof. Chi Zhang)
- 83. College of Science and Mathematics, Nanjing University of Technology, Nanjing, China, June 3, 2011. (Host: Prof. Hongjun Zhu)
- 84. College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, June 7, 2011. (Host: Prof. Jingui Qin)
- 85. College of Chemistry and Chemical Engineering, Hubei University, Wuhan, China, June 7, 2011. (Host: Prof. Shengfu Wang)

- 86. Department of Chemistry, Zhengzhou University, Zhengzhou, China, June 9, 2011. (Host: Prof. Fengqi Guo)
- 87. College of Chemistry and Chemical Engineering, Shandong University, Jinan, China, June 10, 2011. (Host: Prof. Xiyou Li)
- 88. NDSU Women in Research (WIR) group presentation, March 10 (2011)
- 89. Department of Chemistry, University of New Mexico, Albuquerque, NM, May 20 (2010) (Host: Prof. Wei Wang)
- 90. College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, August 10, 2009. (Host: Prof. Jingui Qin)
- 91. Department of Chemistry, Beijing University of Technology, Beijing, China, August 3, 2009 (Host: Prof. Jianzhuang Jiang)
- 92. College of Chemistry and Chemical Engineering, Shandong University, Jinan, China, July 27, 2009. (Host: Prof. Xiyou Li)
- 93. Department of Chemistry, University of California Riverside, Riverside, CA, August 14, 2008. (Host: Prof. Pingyun Feng)
- 94. Department of Chemistry, Renmin University, Beijing, China, June 11, 2008. (Host: Prof. Zili Chen)
- 95. College of Physics, Peking University, Beijing, China, June 10, 2008. (Host: Prof. Qihuang Gong)
- College of Chemistry and Chemical Engineering, Shandong University, Jinan, China, June 4-5, 2008. (Host: Prof. Xiyou Li)
- 97. Department of Chemistry, University of Texas at Arlington, TX, Oct. 14, 2007. (Host: Prof. Purnanda Dasgupta)
- Department of Materials Science and Engineering, Osaka University, July 28, 2007. (Host: Prof. Fukuzumi)
- 99. Department of Materials Science, Kyoto University, July 27, 2007. (Host: Prof. Imahori)
- Department of Chemistry and Biochemistry, Kyushu University, July 25, 2007. (Host: Prof. Ken Sakai)
- 101. Department of Chemistry, Tsinghua University, Beijing, China, June 20, 2007. (Host: Prof. Yong Qiu)
- College of Chemistry and Molecular Sciences, Wuhan University, Wuhan, China, June 11, 2007. (Host: Prof. Jingui Qin)
- 103. College of Chemistry and Chemical Engineering, Shandong University, Jinan, China, June 4-6, 2007. (Host: Prof. Xiyou Li)
- 104. Department of Chemistry, University of Missouri Columbia, MO, Dec. 11, 2006. (Host: Prof. Michael Greenlief)
- 105. Department of Materials Science and Engineering, University of Washington, WA, Nov. 20, 2006. (Host: Prof. Guozhong Cao)
- 106. Department of Chemistry, University of Michigan, MI, Oct. 26, 2006. (Host: Prof. Theodore Goodson III)
- 107. Workshop on Nanocomposite and Nanohybrid Materials, hosted by NDSU NSF NIRT program, Fargo, Oct. 6, 2006.
- 108. Department of Chemistry, University of Illinois at Chicago, IL, Sept. 20, 2005. (Host: Prof. Luke Hanley)
- 109. Institute of Coordination Chemistry, Department of Chemistry, Nanjing University, China, May 2005 (Host: Prof. Chunying Duan)
- 110. Department of Chemistry, Nanjing University of Technology, China, May 2005 (Host: Prof. Hongjun Zhu)
- Department of Electronic Engineering, Southeast University, China, May 2005 (Host: Prof. Yiping Cui)
- 112. College of Chemistry and Molecualr Science, Wuhan University, China, May 2005 (Host: Prof. Jingui Qin)
- 113. Department of Chemistry, Beijing University, China, May 2005. (Host: Prof. Liangbing Gan)

- 114. Institute of Chemistry, Chinese Academy of Sciences, China, May 2005. (Host: Prof. Guoqiang Yang)
- 115. College of Chemistry, Fuzhou University, China, May 2005 (Host: Prof. Jiandong Huang)
- 116. Department of Chemical and Biomolecular Engineering, Tulane University, July, 2004 (Host: Prof. Yunfeng Lu)
- 117. Department of Physics, North Dakota State University, Nov. 2003 (Host: Prof. Alan Denton)
- 118. Department of Physics, University of North Dakota, Nov. 2001 (Host: Prof. Taiping Chen)
- 119. Department of Chemistry, University of Southern Mississippi, March 2001
- 120. Department of Chemistry, University of Alabama at Birmingham, March 2001
- 121. Department of Chemistry, North Dakota State University, March 2001

#### ADVISING

- *Major Advisor* for
  - Zilun Lian (graduate student), Sept. 2023 date
  - Jinsong Huang (graduate student), Sept. 2023 Jan. 2024
  - Finn Donovan (graduate student), Dec. 2022 June 2023
  - Habiba Afrin (graduate student), Aug. 2022 date
  - Kalara Develigoda Gamage (graduate student), Jan. 2022 date
  - Hamidul Islam (graduate student), Jan. 2022 date
  - Xinyang Sun (graduate student), Aug. 2020 date
  - Wei Xu (Ph.D. graduate student), Jan. 2018 Feb. 2019, left the program due to family reason.
  - Bingqing Liu (Ph.D. graduate student), Jan. 2015 2019, obtained his Ph.D. degree in May 2019.
  - Manqing Wei (M.S. graduate student), August 2014 Dec. 2015
  - Rahul Hegishte (Ph.D. graduate student), August 2013 Dec. 2013
  - Chengzhe Wang (Ph.D. graduate student), Jan. 2013 May 2018
  - Kamaljeet Singh (Ph.D. graduate student), August 2012 May 2013 (left program in May 2013).
  - Zhongjing Li, Jan 2009 July 2013, obtained his Ph.D. degree in July 2013.
  - Jing Yi, Sept. August 2008 May 2010, obtained her M.S. degree in May 2010
  - Zhiqiang Ji, August 2005 May 2009, obtained his Ph.D. in April 2009
  - Iswarya Mathew, Jan. 2005 May 2009, obtained her Ph.D. in May 2009
  - Tian Lv, August 2005 May 2008, obtained her M.S. degree in May 2008
  - Li Wen (Ph.D. graduate student), August 2003 Jan. 2004
  - Nichole Miller (M.S. graduate student), Jan. 2003 Dec. 2005
- *Examining Committee Member* for
  - Venskha Tomasoa, Ph. D. candidate, UA Chemistry (2023 present)
  - Sonya Manafe, Ph. D. candidate, UA Chemistry (2023 present)
  - Md Anwaruzzaman, Ph. D. candidate, UA Chemistry (2023 present)
  - Richard Frimpong, Ph. D. candidate, UA Chemistry (2023 present)
  - Rifat Ara Masud, Ph. D. candidate, UA Chemistry (2023 present)
  - Wenzhi Yao, Ph.D. candidate, UA Chemistry (2022 present)
  - Shuomang Shi, NDSU Civil Engineering (2020 2022, obtained his Ph.D. degree in Dec. 2022)
  - Charles McNeff, Ph.D. candidate, NDSU Chemistry (2019 2022)
  - Qiaobin Li, Ph.D. candidate, NDSU Chemistry (2019 2022)
  - Mahima Murali, Ph.D. candidate, NDSU Chemistry (2018 2022)
  - Kushal Das, Ph.D. candidate, NDSU Chemistry (2017 2022)
  - Sunil Acharya, Ph.D. candidate, NDSU Chemistry (2016 2022)
  - Levi Lystrom, NDSU Chemistry (2015 2020, obtained his Ph.D. degree in 2020)

- Jabed Mohammad, NDSU Chemistry (2014 2020, obtained his Ph.D. degree in 2020)
- Tilan Mudivans, NDSU Chemistry (2014 2018, obtained his Ph.D. degree in 2018)
- Kwaku Baryeh, NDSU Chemistry (2013 2019, obtained his Ph.D. degree in 2019)
- Anthony Clay, NDSU Chemistry (2013 2018, obtained his Ph.D. degree in 2018)
- Brendan Gifford, NDSU Chemistry (2013 2018, obtained his Ph.D. degree in 2018)
- Eid Almutairi, NDSU MNT (2016 2017, obtained his Master degree in 2017)
- Junru Yu, Ph.D., Biochemistry (2013 2016, obtained Ph.D. degree in 2016)
- Naveen Dandu, Ph.D., Chemistry (2011 2016, obtained Ph.D. degree in 2016)
- Xiaoguang Zhang, MS, Chemistry (2013 2017, obtained MS degree in 2017)
- Meenu Baloda, Ph.D., Chemistry (2009 2015, obtained Ph.D. degree in 2015)
- Anant Gurung, Ph.D., Chemistry (2009 2015, obtained Ph.D. degree in 2015)
- Barry Pemberton, Ph.D., Chemistry (2008 2012, obtained Ph.D. degree in 2012)
- Samim Alam, Ph.D., Coatings and Polymeric Materials (2007 2011, obtained Ph.D. degree in 2011)
- Shakila Tobwala, Ph.D., Biochemistry (2005 2009, obtained Ph.D. degree in Dec. 2009)
- Rajesh Subramaniam, Ph.D., Pharmacy (2004 2008, obtained Ph.D. degree in Dec. 2009)
- Alex Kugel, Ph.D., Coatings and Polymeric Materials (2006 2009, obtained Ph.D. degree in Dec. 2009)
- John Goering, M.S., Chemistry (2007 2008, obtained M.S. degree in July 2008)
- Zhigang Chen, Ph.D., Polymers and Coatings (2003 2006, obtained Ph.D. degree in May 2006)
- Biana Shilshtut, M.S., Mathematics (2004 2005, obtained M.S. degree in May 2005)
- Binita Chandra, M.S., Chemistry (2002 2004, obtained M.S. degree in May 2004)
- Rajesh Puthenkovilakom, M.S., Polymers and Coatings (2002 2003, obtained M.S. degree in Dec. 2003)
- Bratati Ganguly, Ph.D., Biochemistry (2007 2010)
- Tamer Alwaffai, M.S., Chemistry (2009 2010)
- Nitesh Sule, Ph.D., Biochemistry (2007 2014)
- Sumathra Manokaran, Ph.D., Biochemistry (2007 2010)
- Suad Nadi, Ph.D., Chemistry (Jan. 2006 2010)
- Manjusha Saraswathiamma, Chemistry (April 2006 2007, left chemistry program in 2007)
- Jason Smart, Chemistry (2002 2003, left chemistry program in 2003)
- Rahima Benhabbour, Chemistry (2002 2003, left chemistry program in 2003)
- Clare C. Byeon, Ph.D., Physics, University of Alabama at Birmingham (1999 2001)
- *Mentor* for
  - Elliot Kaye, UA undergraduate student research assistant (Jan. 2024 date)
  - Zach Meyer, UA undergraduate student research assistant (Sept. 2023 date)
  - Logan Baker, UA undergraduate student research assistant (May 2023 date)
  - Dr. Hang Wang, postdoctoral fellow (March 2023 date)
  - Curtis Thompson, undergraduate student research assistant (May August 2022)
  - Benjamin Lebeau, research assistant (May August 2022)
  - Lucas Bierscheid, undergraduate research assistant (May August 2021)
  - Dr. Cuifen Lu, visiting scholar (April 2019 May 2020)
  - Jiapeng Lu, visiting graduate student (August 2019 May 2020)
  - Xinyang Sun, visiting researcher (Oct. 2019 August 2020)
  - Elicia Martin, Native American undergraduate student (May July 2020)
  - Wan Xu, visiting graduate student (August 2018 August 2019)
  - Liya Sun, visiting graduate student (Dec. 2017 June 2018)
  - Senqiang Zhu, visiting graduate student (August 2017 Feb. 2018)

- Dr. Xiaolin Zhu, postdoctoral fellow (June 2015 May 2017)
- Wei Xu, visiting graduate student from Hubei University (Nov. 2015 Jan. 2017)
- Dr. Li Wang, postdoctoral fellow (Feb. 2015 Sept. 2016)
- Dr. Hui Li, postdoctoral fellow (Oct. 2014 May 2016)
- Xiaolin Zhu, visiting graduate student from Nanjing Tech University (Jan. 2015 May 2015)
- Dr. Shan Liu, visiting scholar (Sept. 2013 Sept. 2014)
- Dr. Chengkui Pei, postdoctoral fellow (May 2012 Jan. 2014)
- Prof. Ahmed Aamili, Fulbright Visiting Scholar (July October 2013)
- Dr. Rui Liu, postdoctoral fellow (Oct. 2010 August 2012)
- Dr. Xuguang Liu, postdoctoral fellow (May 2010 August 2012)
- Dr. Yuhao Li, postdoctoral fellow (August 2011 August 2012)
- Dr. Suyue Li, postdoctoral fellow (April 2009 March 2010)
- Dr. Yunjing Li, postdoctoral fellow (May 2006 March 2010)
- Dr. Bingguang Zhang, postdoctoral fellow (Sept. 2006 March 2009)
- Dr. Pin Shao, postdoctoral fellow (Nov. 2005 June 2008)
- Dr. Gang Wang, postdoctoral fellow (Oct. 2005 April 2006)
- Dr. Fengqi Guo, postdoctoral fellow (March 2002 June 2004)
- Dr. Hongjun Zhu, visiting scholar (August 2004 Nov. 2004)
- Taotao Lu, visiting graduate student from Hubei University, China (Nov. 2013 Dec. 2014)
- Lei Hu, visiting graduate student from Hubei University, China (Nov. 2011 Feb. 2013)
- Yuhao Li, visiting graduate student from Nanjing University of Technology, China (Jan. 2011 June 2011)
- Rui Liu, visiting graduate student from Nanjing University of Technology, China (Feb. 2010 August 2010)
- Hui Zhang, visiting graduate student from Nanjing University, China (Oct. 2007 Nov. 2008)
- Yasin Arslanoglu, visiting graduate student from Turkey (Sept. 2006 March 2007)
- Wenling Jia, visiting graduate student from University of Florida (July August 2003)
- Marcus Geffre, undergraduate research assistant (Sept. Dec. 2012)
- Chris Hanson, undergraduate research assistant (Sept. 2009 Dec. 2010)
- Indiwari Gopallawa, undergraduate research assistant (May July 2009)
- Andrew Sand, undergraduate research assistant (Sept. July 2008)
- Adam Wolfe, McNair Scholar (June August 2007)
- Scott Jungwirth, URM student (Feb. May 2006)
- Aaron Tank, high school teacher (June July 2006)
- Andrew Sand, Governor's School student and undergraduate research assistant (June July 2005, June August 2006 & June July 2007)
- Paul Barron, REU, AURA and undergraduate research assistant (May 2002 July 2005)
- Stacy Bjorgaard, Governor's School student (June July 2004)
- Gregory Rhode, undergraduate research assistant (August 2001 May 2003)
- Dana Powell, Governor's School student (June July 2003).
- Danielle Dyk, URM and undergraduate research assistant (Sept. 2001 May 2003)
- Kary Martin, URM student and undergraduate research assistant (Sept. 2001 Dec. 2002)
- Scott Jason Dee, REU student (May July 2002)
- Young An, REU student (May July 2002)
- Christa Berge, URM student (Sept. 2001 May 2002)
- Tron Ho, undergraduate research assistant, Department of Chemistry, University of Alabama at Birmingham (1998-1999)
- Dissertation Advisor for

- Ya-Peng Deng (B.S.), Beijing Normal University, 1997
- Xin-Chuan Yu (B.S.), Department of Chemistry, Beijing Light Industry College, 1996
- Hao-Yu Ji (B.S.), Chemical Engineering College, Beijing Union University, 1996

### SERVICE ACTIVITIES

#### University Committees

- 1. UA Faculty Senate Alternate for Jessica Goethals (Spring 2024)
- 2. UA Faculty Senate Research Committee Alternate for Jessica Goethals (Spring 2024)
- 3. UA Faculty Senate Alternate for Erin Stoneking (Fall 2023)
- 4. Faculty Senate Budget Committee (2020 2022)
- 5. Standing Committee on Faculty Rights (August 2015 May 2021)
- 6. Faculty Senator (August 2015 2018)
- 7. Faculty Senate Research and Consulting Committee (August 2014 2017)
- 8. Dunbar Hall Planning Committee (2015)
- 9. VPRCA Search Committee (Oct. 2012 April 2013)
- 10. Graduate School Dean Evaluation Committee (Sept. 2012 Jan. 2013)
- 11. Commission on Status of Female Faculty (2011-2014)
- 12. University Equal Opportunity Hearing Panel (2011-2013)
- 13. Graduate Council (May 2010 May 2013)
- 14. Faculty mentor for new faculty through campus-wide mentoring program (2010 2012)
- 15. Graduate School marshal for spring commencement ceremony (2011)
- 16. Listening Group (August October 2010)
- 17. Graduate Council representative on the Program Review Committee for Materials & Nanotechnology Program (Fall 2010)
- 18. University Senate Grade Appeal Board (August 2007 August 2010)
- 19. University Senate Faculty Development Committee (May 2004 May 2008)
- 20. University Senator, Sept. 2005 May 2006

#### College Committees

- 21. College Inclusion and Equity Task Force (2020)
- 22. College External Advisory Board Bylaw Committee (2020)
- 23. College Award Committee (2011 2021, Committee Chair in 2015-2016)
- 24. College Promotion and Tenure Evaluation Committee (Jan. 2008 May 2010. Committee Chair from August 2009 to May 2010)
- 25. College Equipment Committee (2010 2011)
- 26. Dean's Advisory Committee (2007–2009)

#### **Department Committees**

- 27. UA Department Graduate Recruiting and Admission Committee (member, Fall 2023 date)
- 28. UA Department Saxon Chair Search Committee (member, Fall 2023 date)
- 29. UA Department Strategic Committee (member, Spring 2023 date)
- 30. Department Undergraduate Recruiting and Retention Committee (2020 2022)
- 31. Department Undergraduate Advising Committee (2021 2023)
- 32. Department Safety Committee (2019 2020)
- 33. Dunbar Hall Planning Committee (2019)
- 34. Department Shared Instrument Committee (2018 2019)
- 35. Department Research Strategies Committee (Jan. 2016 2018)
- 36. Department Seminar Committee (2016 2018)
- 37. Department Award Nomination Committee (Committee Chair, July 2009 2013)

Nominating appropriate candidates for College and University awards. Three colleagues obtained College awards through our nomination.

- 38. Department Graduate Student Recruiting and Admission Committee (Fall 2001 Spring 2006, & Fall 2009 Fall 2015)
  - Evaluating graduate student applications and hosting visiting prospective students.
- 39. Department Seminar Committee (Fall 2001 Fall 2003, Fall 2009 2015, **Committee Chair**, Jan. 2016 Dec. 2016)
- 40. Department Promotion and Tenure Evaluation Committee (Jan. 2007 Dec. 2008. Committee Chair from Jan 2008 to Dec. 2008)
- 41. Department Safety Officer (July 2007 May 2009)
- 42. Departmental Graduate Student Progress Committee (Fall 2005 Fall 2007) Advising first-year students to select courses and evaluating second-year student seminars.
- 43. Departmental NMR staff search committee (Fall 2004 spring 2005)
- 44. Department faculty search committee (May 2005 Jan. 2006)
- 45. Department Material Characterization Lab Director search committee (Spring 2005 Fall 2005)
- 46. Department Public Relation Committee (April 2006 June 2009)
- 47. Department Library Liaison (2001 2003)
- 48. Department Facilities Committee (Fall 2001 Fall 2002)
- 49. Department Social Committee (Fall 2001 Fall 2002)

**Professional Services** 

- 1. *Session Chair*, International Association of Advanced Materials (IAAM) Fellow Summit, Nov. 12-14, Orlando, FL.
- 2. Session Chair, Materials 2023, April 24-26, Houston, TX, 2023
- 3. *Panelist* for NIH R15 Review Panel, March 2022
- 4. Panelist for NIH R15 Review Panel, March 2021
- 5. *Editorial Board Member*, Inorganics (2021 present)
- 6. *Editorial Board Member*, Journal of Materials Science Research (2016 2022)
- 7. Editorial Board Member, JSM Chemistry (2013 2018)
- 8. *Editorial Board Member*, Research and Reports in Chemistry (2011 present)
- 9. Editorial Board Member, Organic Chemistry: Current Research (2011 present)
- 10. Editorial Board Member, Mediterranean Journal of Chemistry (2011 2019)
- 11. *Co-Organizer* and *Session Chair*, 2021 Pacifichem Symposium #230, Dec. 16 21, Honolulu, Hawaii, 2021.
- 12. *Session Chair*, 2018 International Conference on Science and Technology of Synthetic Metals (ICSM2018), July 1 July 6, Busan, South Korea, 2018.
- 13. *Organizer* and *Program Chair* for the Sino-US Symposium on Frontier of Chemistry, June 17-19, Tianjin, China, 2018.
- 14. *Lead Organizer* and *Session Chair* for the 2018 MRS Spring Meeting Symposium EP03: Materials and Processes for Nonlinear Optics and Nonlinear Photonics, April 2–6, Phoenix, AZ, 2018.
- 15. *Lead Organizer* and *Session Chair* for the 2016 MRS Spring Meeting Symposium EP9: Materials and Processes for Nonlinear Optics, March 28 April 1, Phoenix, AZ, 2016.
- Session Chair, the 14<sup>th</sup> International Conference on Frontiers of Polymers and Advanced Materials (ICFPAM), Oct. 31 – Nov. 4, Daejeon, Korea (2016)
- 17. *Session Chair*, 2016 International Conference on Science and Technology of Synthetic Metals (ICSM2016), June 25 July 1, Guangzhou, China, 2016.

- 18. *Session Chair*, the 12<sup>th</sup> Sino-US Chemistry Professor Symposium, June 22-24, Guangzhou, China, 2016.
- 19. Session Chair, Pacifichem 2015 Symposium 269, Dec. 15-20, Honolulu, Hawaii, 2015.
- 20. Session Chair, the 11th Sino-US Chemistry Professor Symposium, July 21-23, Suzhou, China, 2015.
- 21. Session Chair and International Scientific Advisory Committee Member, International Symposium on Electrooptics and Nonlinear Optics (ISENO), Sept. 2-4, Harbin, China, 2014.
- 22. *Lead Organizer* and *Session Chair* for the 2014 MRS Spring Meeting Symposium JJ: Materials and Processes for Nonlinear Optics, April 22-24, San Francisco, CA, 2014.
- 23. *Co-organizer* and *Session Chair* for the 10<sup>th</sup> Sino-US Chemistry Professor Symposium, June 15-17, Jinan, China, 2014.
- 24. Session Chair, the 9th Sino-US Chemistry Professor Symposium, July 12-14, Chengdu, China, 2013.
- 25. Session Chair, the 244th ACS National Meeting, Philadelphia, PA, August 19, 2012.
- 26. *Site Visit Team Member* for NSF Partnership for Research and Education in Materials (PREM) Program in New Mexico Highlands University, Nov. 7-8, 2011.
- 27. *Session Chair*, the 18<sup>th</sup> International Conference on Photochemistry and Photophysics of Coordination Compounds, Sapporo, Japan, July 4-9, 2009.
- 28. *Member of the International Scientific Advisory Committee* for the International Symposium on Materials and Devices for Nonlinear Optics, France, June 26 July 1, 2009.
- 29. Session Chair, the OSA Topical Conference on Nanophotonics, Nanjing, China, May 26-29, 2008
- 30. Session Chair, the First Asian Conference on Coordination Chemistry, Okazaki, Japan, August 2007.
- 31. *Member of the International Scientific Advisory Committee* for the International Symposium on Materials and Devices for Nonlinear Optics, Ireland, June 2006.
- 32. One of the four organizers for the Workshop on Nanocomposite and Nanohybrid Materials organized by NDSU NSF NIRT team, Fargo, Oct. 6, 2006.
- 33. *Board Member*, Chinese-American Chemistry and Chemical Biology Professor Association (2008 present)
- 34. *Panelist* for NSF CAREER Proposal Writing Workshop, hosted by NDSU Office of VP for Research, 2016.
- 35. Panelist for NSF Day, hosted by NSF NDSU VPR Office, 2016.
- 36. Panelist on two NSF DMR Electronic and Photonic Materials Program panels in Feb. and Sept. 2015.
- 37. Proposal Reviewer for NSF, NIH, AFOSR, ACS-PRF, ND NASA EPSCoR, NDSU RDSP, the City College of the City University of New York Research Award Program, South Dakota State University Development Foundation
- 38. Manuscript reviewer for J. Am. Chem. Soc., Inorg. Chem., J. Phys. Chem. A & B, Organometallics, Appl. Phys. Lett., Opt. Mat., Opt. Lett., Eur. J. Inorg. Chem., Opt. Commun., J. Macromol. Sci., J. Opt. Soc. Am. B, Langmuir, Synthetic Metals, J. Macromolecular Science – Polymer Reviews, Journal of Colloid and Interface Science, Ultramicroscopy, Coordination Chemistry Review, IEEE Transactions on Nanotechnology

#### Public Services

- 1. Co-advised a Native American undergraduate student via the North Dakota NATURE Program (summer 2020)
- 2. Demonstrated my laser lab and synthetic labs to the "NATURE" group students (45 mins, 22 students) (June 2016 and 2017)
- 3. Facilitator for "ND Science Olympiad" (4/9/2016)
- 4. Guest speaker for NDSU WIR (Women in Research) group. (March 10, 2011)

- 5. *Panelist* for NSF CAREER Proposal Workshop, hosted by NDSU College of Science and Mathematics and College of Engineering and Architecture (2009)
- 6. *Panelist* for Geer-up for Grant: NSF CAREER Proposal Workshop, hosted by NDSU Office of VP for Research (2008)
- 7. Panelist for NDSU ADVANCE Forward program (2008)
- 8. *Panelist* for NSF CAREER Proposal Workshop, hosted by NDSU College of Engineering and Architecture (2007)
- 9. Judge for the State Science and Engineering Fair (April 2004)

#### Host for seminar speakers

- Prof. Svetlana Kilina, North Dakota State University (April 27, 2023)
- Prof. Dmitri Kilin, North Dakota State University (April 27, 2023)
- Prof. Kwang-Sup Lee, Hanan University, Korea (May 2019)
- Prof. Sherri A. McFarland, University of North Carolina Greensboro (May 2018)
- Prof. Jennifer Lu, University of California Merced (Sept. 2017)
- Dr. Jennifer Davoren, Pfizer (April 2016)
- Prof. Clemens Burda, Case Western Reserve University (Sept. 2013)
- Prof. Felix Castellano, Bowling Green State University (Sept. 2012)
- Prof. Russell Schmehl, Tulane University (March 2012)
- Prof. David McMillin, Purdue University (April 2011)
- Prof. Peter Ford, University of California Santa Barbara (April 2010)
- Prof. Wei Chen, University of Texas Arlington (August 2007)
- Prof. Luke Hanley, University of Illinois at Chicago (March 2007)
- Prof. Weihong Tan, University of Florida (April 2006)
- Prof. Ken Sakai, Kyushu University, Japan (Feb. 2006)
- Prof. Theodore Goodson, III, University of Michigan (Feb. 2005)
- Prof. Yunfeng Lu, Tulane University (Sept. 2004)
- Prof. Rigobet Advincula, University of Houston (Oct. 2002)
- Prof. Kanishka Marasinghe, University of North Dakota (Feb. 2002)

#### **RECRUITING SEMINARS**

- 1. Henan University, China, 2018
- 2. Shanghai Jiaotong University, China, 2015
- 3. Tianjin University of Science and Technology, China, 2015
- 4. Jilin University, China, 2014
- 5. Institute of Applied Chemistry, Chinese Academy of Sciences, China, 2014
- 6. Dalian University of Science and Technology, China, 2014
- 7. Fuzhou University, China, 2014
- 8. Sichuan University, China, 2013.
- 9. Fudan University, China, 2013.
- 10. Jiangnan University, China, 2013.
- 11. Hubei University, China, 2013.
- 12. Hunan University, China, 2012.
- 13. Hunan Normal University, China, 2012.
- 14. Central China University of Nationalities, China, 2012.
- 15. Southeast University of Science and Technology, China, 2011.
- 16. Jiangsu University, China, 2011.
- 17. Nanjing University of Technology, China, 2011.

- 18. Hubei University, China, 2011.
- 19. Zhengzhou University, China, 2011.
- 20. University of Wisconsin River Falls, Oct. 16, 2009.
- 21. Minnesota State University Mankato, Oct. 19, 2009.
- 22. Wuhan University, Wuhan, China, August 10, 2009.
- 23. Beijing University of Science and Technology, China, August 6, 2009.
- 24. Renmin University, Beijing, China, June 11, 2008.
- 25. Peking University, Beijing, China, June 10, 2008.
- 26. Shandong University, Jinan, China, June 4, 2008.
- 27. South Dakota State University, Sept. 19, 2007.
- 28. Tsinghua University, China, June 20, 2007.
- 29. Wuhan University, China, June 11, 2007.
- 30. Shandong University, China, June 3, 2007.
- 31. University of North Dakota, Grand Folks, ND, Sept. 15, 2006
- 32. Bemidji State University, Bemidji, MN, Nov. 18, 2005
- 33. Department of Chemistry, Nanjing University of Technology, China, May 16, 2005
- 34. Institute of Coordination Chemistry, Nanjing University, May 16, 2005
- 35. College of Chemistry and Molecular Science, Wuhan University, China, May 20, 2005
- 36. Department of Chemistry, Peking University, China, May 22, 2005
- 37. College of Chemistry, Fuzhou University, China, May 10, 2005
- 38. St. Cloud State University, St. Cloud, MN, Nov. 22, 2004
- 39. Augsburg College, Minneapolis, MN, Oct. 9, 2004
- 40. Minnesota State University Moorhead, Moorhead, MN. Nov. 17, 2003
- 41. University of Minnesota Morris, Morris, MN. Sept. 18, 2003
- 42. St. John University/St. Benedict College, MN. April 10, 2003
- 43. Concordia College, Moorhead, MN. Jan. 23, 2003
- 44. Bismarck State College, Oct. 4, 2002
- 45. University of Minnesota Duluth, Sept. 20, 2002
- 46. Chemistry Department, NDSU, June 14, 2002. (Seminar to REU students)