

Wujian Miao, PhD

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(i) Professional Preparation

1982	Undergraduate Diploma, Chemistry	Nantong University, China
1986	M. Sc. Courses Diploma, Phys. Chem.	Jinan University, China
1991	M. Sc., Electrochemistry	Sun Yat-sen (Zhongshan) Uni., China
2000	Ph.D., Electrochemistry	Monash University, Australia
2/2001-7/2004	Postdoctoral Fellow, Electrochemistry	University of Texas at Austin

(ii) Appointments

8/2019-present	Faculty Lead of Chemistry	University of Southern Mississippi
8/2018-present	Full Prof. of Chemistry	University of Southern Mississippi
8/2010-7/2018	Assoc. Prof. of Chemistry	University of Southern Mississippi
8/2004-7/2010	Assist. Prof. of Chemistry	University of Southern Mississippi
1/2000-12/2000	Research Scientist	CSIRO, Australia
8/1991-2/1996	Lecturer of Chemistry	Nantong University, China
8/1994-2/1996	Chair of Chem & Biochem.	Nantong University, China
8/1992-7/1994	Assistant Chair of Chem. & Biochem.	Nantong University, China
8/1986-8/1988	Director of Chemistry Labs	Nantong University, China
8/1982-8/1985	Chemistry Lab Technician	Nantong University, China

(iii) Selected Professional Activities

1. Membership:

- **Member** of (a) the American Chemical Society (ACS), (b) the Electrochemical Society (ECS), (c) the Society for Electroanalytical Chemistry (SEAC), (d) the International Society of Electrochemistry (ISE), (e) the Mississippi Academy of Sciences, and (f) Sigma Xi, The Scientific Research Honor Society.
- **Council member** of the China's Teachers College Association of Analytical Chemistry (1994-1998).
- **Fellow** of the Universities & Colleges Laboratorial Management Society of Jiangsu Province (China, 1986-1996).

2. External peer review services:

- **Reviewer of 30+ scientific journals** including: (a) *J. Amer. Chem. Soc.*, (b) *Anal. Chem.*, (c) *Chem. Rev.*, (d) *J. Phys. Chem.*, (e) *Langmuir*, (f) *Proc. Nati. Acad. Sci.*, (g) *Electrochem. Comm.*, (h) *J. Electroanal. Chem.*, (i) *Anal. Chim. Acta*, (j) *Electrochim. Acta*, (k) *Electrophoresis*, (l) *J. Chromatogr.*, (m) *Inorg. Chem.*, (n) *Chem. Euro. J.*, (o) *Angew. Chem. Int. Ed.*, (p) *J. Solid-state Electrochem.*, (q) *Electroanalysis*, (r) *Biomacromolecules*, (s) *Chem. Mater.*, (t) *Colloids Surf.*, (u) *J. Nat. Prod.*, (v) *Bioanalysis*, (w) *Talanta*, (x) *Sensors*, (y) *ACS Omega*, and (z) *Analyst*.
- **Proposal reviewer of funding agencies:** (a) ACS PRF Proposals, (b) NSF Proposals, (c) NIH proposals, (d) The Netherlands Organization for Scientific Research (NOW, Vidi Domain Science) (2017), (e) DOE (TCF, 2018 and NE-INBRE DRPP, 2019) proposals.
- **Proposal review panel:** (a) NIH NIAID Special Emphasis Panel (SEP) (ZIKV, R21, 2016, 2017), (b) NSF CHE Panel (2017).

- **External examiner of PhD dissertation and defense:** (a) University of Western Ontario (Canada, 2013), (b) McGill University (Canada, 2019).
- **External T&P evaluator:** (a) The International Center for Chemical and Biological Sciences, University of Karachi (Pakistan, 2012), (b) University of Massachusetts Lowell (2019).
- **Scientific committee member** of the first international workshop on electrogenerated chemiluminescence (ECL) (September 2014, Italy).
- **External examination committee chair** of the 2017 Mid-term Examinations of Graduate Students (16 in total) in the Key Laboratories of Bioelectrochemical and Environmental Analysis as well as Electrochemical Techniques and Nanodevice Engineering of Gangsu Province (Northwest Normal University, Lanzhou, China, 2017).
- **Task group member** of an IUPAC project titled “Critical Evaluation and Vocabulary of Chemosensing and Determination Methods for Explosive Residues on-site and in the Field” (IUPAC Project No.; 2015-008-2-500).

3. Mentorship:

- **Graduate students (12):**

Graduated with PhD degree (6): (a) Shijun Wang, May 2010; (b) Suman Parajuli, May 2011; (c) Yiliyasi Wusimanjiang, December 2016; (d) Pradip Bastola, August 2017; (e) Tamanna Shanta, August 2017; (f) Arun Siddarth Sridhar, May 2018.

Graduated with MSc degree (2): Tommie Pittman, August 2008; (b) Abdul Rashid Issifu, May 2023.

Doctoral students (4): (a) Arati Biswakarma, (b) Jesy Alka Motcha Alangaram, (c) Piyush Kumar, (d) Nazmul Hosen (shared with Dr. Karl J Wallace).

- **Rotation graduate students (19):** (a) Xiaolan Li, (b) Amit Kumar, (c) Enrendra Manandhar, (d) Narriser Lewis, (e) LaCrissia Bridges, (f) Emily Vogel, (g) Joshua Phillips, (h) Johnathan Hugh Broome, (i) Arron Davis, (j) Frederick McFarland, (k) Xinyi Zhao, (l) Rashid Mia, (m) Kan Tang, (n) Nicholas Kreis, (o) Naveen Edirisinghe, (p) Taylor Hood, (q) Kushal Biswas, (r) Leah Case, (s) Jack Eaton.
- **Visiting professors (7):** (a) Dr. Milka Neshkova from Bulgarian Academy of Sciences (2 weeks, 2006 on an NSF collaborative project); (b) Dr. Jian Shi and (c) Dr. Xiaohui Jing from Nantong University (3 months, 2008-2009); (d) Dr. Cunwang Ge from Nantong University (12 months, 2010-2011); (e) Dr. Aixiang Wang and (f) Prof. Lin Li from Linyi University (6 months, 2011-2012); (g) Dr. Mahesha Herath, Visiting Assistant Prof. at USM, 2012.
- **Postdoctoral fellows (2):** (a) Dr. Guizheng Zou from Shandong University (2011-2012); (b) Dr. Rashid Mia from University of Southern Mississippi (2022, co-mentored with Dr. Karl J Wallace).
- **Undergraduate research students (~30 from USM and 10+ from outside):** For detailed list, visit <http://www.usm.edu/electrochem/Members.htm>. Among our accomplished researchers, Jacob Gersh and Nathaniel Kurtz were honored with the USM Eagle SPUR undergraduate research grant (\$1000 each). Additionally, Alexander Meyer earned recognition as the recipient of the Chair’s Award at the Spring 2015 Undergraduate Research Symposium. Further, Kathryn Aumick from Rochester Institute of Technology and Joseph Waite from Weber State University were participants of our NSF-sponsored REU program in summers 2022 and 2023, respectively. Both were distinguished as the top presenters among 10 REU researchers during their respective final symposiums, as acknowledged by our faculty. Their outstanding performance led to their selection to represent our REU program at the ACS Spring Meetings in 2023 and 2024, with all associated costs covered by the REU grant. Upon graduation, many of our undergraduate research students went to graduate schools, medical schools or other professional schools including pharmacy programs.
- **High school students via the ACS Project SEED Program (4):** one of them was a recipient of the 2014-2015 ACS Project SEED College Scholarship for his freshman year in college (\$5000).

4. Editorship:

- **Editorial Board** of *ISRN Analytical Chemistry* (2011-2014).
- **Editor** of *CLEAN-Soil, Air, Water* (Wiley, 2012-2016).
- **Editorial Board** of *Biosensor* (MDPI, 2022-)

5. Expert Consultant of Scitemex LLC (2015-).**(iv) Selected Social Activities**

- **Secretary-General** of the Chinese Student Club at Monash University (1996-1998).
- **Council Member** of the Overseas Exchange Association of Nantong City (China) (1998-2002).

(v) Selected Service at USM**1. Leadership:**

- Faculty Lead of Chemistry and Biochemistry, School of Mathematics and Natural Sciences (2019-).
- Previously, (a) Assistant Chair (1992-1994) and (b) Chair (1994-1996) of Chemistry and Biochemistry at Nantong University, and (c) Director of Chemistry Laboratories at Nantong University (1986-1988).

2. University level:

- USM Assessment Committee (2016).
- USM Academic Council (2016-2017).
- USM Data Management Plan Committee (2013).
- USM NSF CAREER Proposal Development Workshop Speaker (2012).
- USM Drapeau Center for Undergraduate Research Proposal Reviewer.

3. College level:

- CoST Scholarship Committee (2012-2014).
- CoST Research Committee (2013-2016).
- CAS Faculty Research Seed Grant Proposal Reviewer (2020, 2021).

4. Inter-department level:

- Forensic Science New Faculty Search Committee (School of Criminal Justice, 2016).

5. Department level:

- School of MANS Faculty Evaluation Committee (2021).
- Chemistry Faculty Evaluation Committee (Personnel Committee) (2013, 2015, 2018, 2020-Chair, and 2021-Chair).
- Chemistry New Faculty Search Committee (2006, 2010, 2011-Chair).
- Chemistry Instructor Search Committee (2014, 2015, 2019).
- Chemistry Senior Lab Manager and Instrumentation Coordinator Search Committee (2015-Chair, 2018).
- General Chemistry Lab Teaching Coordinator Search Committee (2019-Chair).
- Chemistry Tenure and Promotion Guidelines Committee (2009).
- Chemistry Non-tenure Track Teaching Faculty Promotion Criteria Draft Committee (2017).
- Chemistry and School of MANS Tenure and Promotion Committee (2011-, Members and Chairs).
- Chemistry Graduate Admission Committee (2004-2008).
- Chemistry Graduate Recruiting Committee (2006-2008).
- Chemistry Graduate Committee (2012-).
- Chemistry Undergraduate Committee (2008-present, Coordinator for 2010-2011 & 2015-2019).
- Chemistry Seminar Coordinator (2008-2010).
- Chemistry Library Liaison (2006-).

- Chemistry Upper-Level Laboratory Committee (2011-Chair).
- Chemistry Scholarship Committee (2019-, Chairs).
- Chemistry Graduate Advisory Committee
Chair (12) for Tommie Pittman, Shijun Wang, Suman Parajuli, Yiliyasi Wusimanjiang, Pradip Bastola, Tamanna Shanta, Arun Siddarth Sridhar, Arati Biswakarma, Jesy Alka Motchaalangaram, Piyush Kumar, Nazmul Hosen (Co-Chair Dr. Karl J Wallace), and Abdul Rashid Issifu
Member (30+) for Dale Rosado, Jacob Chris Strawbridge, Shawna L Baolf, Mary Mackey, Hanna Ahmed, Enrendra Manandhar, Narriser Lewis, Nicole Mackey, Souvik Baberjee, David Heaps, Vernonika Dubniakova, Scott Jones, LaCrissia Bridges, Johnathan “Hugh” Broome, Joshua Phillips, Maureen Smith, Emily Vogel, Aaron Davis, Amber Windham, Harikiran Kotapati, Frederick McFarland, Asylla Griffin, Emily Matthews, Xinyi Zhao, Rashid Mia, Ashley Johnson, Kan Tang, Amin Mehrehjedy, Nick Kreis, Taylor Hood, Meagan Stanley, Leach Case, Sixing Mo.

(vi) Invited Seminars/Talks Outside of USM

1. Department of Chemistry, Jackson State University, (Jackson, MS, USA, November 2004).
2. Institute of General Inorganic Chemistry, the Bulgarian Academy of Sciences (Sofia, Bulgaria, October 2006).
3. School of Chemistry and Chemical Engineering, Nanjing University (Nanjing, China, May 2007).
4. School of Chemistry and Chemical Engineering, Nantong University (Nantong, China, May 2007).
5. Department of Chemistry, Jackson State University (Jackson, MS, USA, October 2007).
6. “Electrochemistry at the Nanoscale” Symposium at the 60th Southeastern Regional Meeting of the American Chemical Society (SERMACS) (Nashville, TN, USA, November 2008).
7. “The 9th Southern School on Material Science and Computational Chemistry” (Jackson, MS, USA, July 2009).
8. “The International Symposium on Frontiers of Electrochemical Science and Technology”—a Satellite Meeting of 60th Annual Meeting of International Society of Electrochemistry (Xi’an, China, August 2009).
9. School of Chemistry and Chemical Engineering, Nantong University (Nantong, China, August 2009).
10. Department of Chemistry, Mississippi State University (Starkville, MS, USA, October 2009).
11. Department of Chemistry, Tulane University (New Orleans, LA, USA, October 2010).
12. Department of Chemistry, University of Central Florida (Orlando, FL, USA, December 2010).
13. School of Chemistry & Resources Environment, Linyi University (Linyi, China, May 2011).
14. The 13th International Symposium on Electroanalytical Chemistry (Changchun, China, August 2011).
15. Department of Chemistry, University of Western Ontario (Ontario, Canada, August 2013).
16. “NanoElectrochemistry in Biomedical Research and Energy Technology” Symposium at the 65th Southeastern Regional Meeting of the American Chemical Society (SERMACS) (Atlanta, GA, USA, November 2013).
17. Department of Chemistry, University of Georgia (Athens, GA, USA, January 2014).
18. The First International Workshop on Electrogenerated Chemiluminescence (ECL) (Bertinoro, Italy, September 2014).
19. College of Environmental and Energy Engineering, Beijing University of Technology (Beijing, China, May 18-19, 2015).
20. The 1st Northwestern International Electrochemistry Symposium (Lanzhou, China, June 16-19, 2016).

21. 2017 Symposium on Bioelectrochemical and Environmental Analysis/Electrochemical Techniques and Nanodevice Engineering (Lanzhou, China, July 18-19, 2017).
22. Keynote Speaker of “International Workshop on Energetic Materials” (Organized by University of Istanbul and IUPAC, Istanbul, Turkey, Oct. 18-19, 2018).
23. Department of Chemistry, Jackson State University-Research Initiative for Scientific Enhancement (RISE) Program (Dr. Glake Hill, June 24 and July 1, 2020).
24. Department of Chemistry and Biochemistry, Florida State University (Tallahassee, FL, October 2023)

(vii) Courses Taught at USM

- CHE 311–Analytical Chemistry (Summers 2006, 2008-2013, 2015; Falls 2011-2023; Springs 2017-2023).
- CHE 311L–Analytical Chemistry Laboratory (Summers 2006, 2008-2010).
- CHE 411/511–Instrumental Analysis (Springs 2005-2023).
- CHE 411L–Instrumental Analysis Laboratory (Springs 2005-2012).
- CHE 400/500–Chemical Literature (Falls 2005-2010, 2014).
- CHE 811–Analytical Electrochemistry (Summer 2007, Spring 2015, Fall 2020).
- CHE 689/789–Chemistry Seminars (Fall 2008-Spring 2010).
- CHE 719–Current Topics of Analytical Chemistry: Electrochemistry (mini-session, Spring 2012).
- CHE 392–Introduction to Research (2004-).
- CHE 496(H)–Undergraduate Research (Honors) (Capstone Course) (2004-).
- CHE 729–Current Topics in Biochemistry-Methods and Techniques in Chemistry and Biochemistry (Team Taught on “EPR” and “Electrochemistry”, Springs 2019-2022).
- CHE 308–Chemistry Junior Seminar (Guest lecture on “Applications of Excel in Analytical Chemistry”, Falls 2019-2022).

(viii) Funding Obtained at USM

1. NSF-MRSEC via USM (NSF-DMR 0213883, ~\$80,000, PI, 01/01/2006-12/31/2008).
2. “Dean’s Research Initiative Program” (College of Science and Technology at USM, \$4000, PI, 2004).
3. “New Chemical Sensors Development Using Electrochemically Prepared Active Membranes” (NSF-OISE-0535467, The National Science Foundation, \$20,000, PI, 2006).
4. “Aubrey Keith Lucas & Ella Ginn Lucas Endowment for Faculty Excellence Award” (University of Southern Mississippi, \$4244, PI, 2008).
5. “Biosensors based on Electrogenenerated Chemiluminescence” NSF CAREER Award (The National Science Foundation, CHE 0955878, \$660,000, PI, 2010-2016).
6. “Consultation Agreement between USM and Hitachi High-Technologies Corporation (Japan)” (\$15,000, PI, 2017-2018).
7. “Remote Chemical Detection for CWAs and Explosives” (US DoD ERDC, BAA #18-0105, Total \$1,071,986.00, my share ~\$420,000, Co-PI, 2019-2023).
8. “College of Arts and Sciences Research Seed Award” (USM, \$5000, PI, 2019).
9. “Mississippi Energy Program for Innovation Clusters (EPIC)-Virtual-QUAD” Proposal: Ramie (\$5000, my share ~4000, Co-PI, 2021).
10. “Interdisciplinary Investigation, School of Interdisciplinary Studies and Professional Development 2021-2022: Ramie” (USM, \$3000, Co-PI, 2021).

(ix) Research Collaborations Established After Joining USM**1. International:**

- Dr. Milka Neshkova, Institute of Inorganic Chemistry, The Bulgarian Academy of Sciences, Sofia, Bulgaria.
- Professor Erkang Wang, The State Key Electrochemistry Lab, Changchun Institute of Applied Chemistry, The Chinese Academy of Sciences, Changchun, China.
- Prof. Cunwang Ge, School of Chemistry and Chemical Engineering, Nantong University, China.
- Prof. Nick Rozhitskii, Biomedical Electronics Department, Kharkiv National University of Radio Electronics, Ukraine.
- Prof. Chengxiao Zhang, Key Laboratory of Applied Surface and Colloid Chemistry, Ministry of Education, Key Laboratory of Analytical Chemistry for Life Science of Shaanxi Province, School of Chemistry and Materials Science, Shaanxi Normal University, Xi'an, China.
- Prof. Liping Lu, College of Environmental and Energy Engineering, Beijing University of Technology, China
- Prof. Guizheng Zou, School of Chemistry and Chemical Engineering, Shandong University, China.
- Prof. Xiaohui Jing, School of Chemistry and Chemical Engineering, Nantong University, China.

2. Domestic:

- Prof. Mario A. Alpuche-Avile, Department of Chemistry, University of Nevada, Reno, NV.
- Prof. Yulin Deng, School of Chemical & Biomolecular Engineering at Georgia Tech, GA.
- Prof. Charles Hoyle, School of Polymer Science and Engineering, USM.
- Prof. Fengwei Bai, School of Biological, Environmental, and Earth Sciences, USM.
- Prof. Song Guo, School of MANS, USM.
- Prof. Karl J Wallace, School of MANS, USM.
- Prof. Alvin Holder, (now) Old Dominion University, VA.

(x) Selected Honors and Awards

1. "Yao Wannian Scholarship" (Zhongshan University, 1990).
2. "Guanghua Education Scholarship" (Zhongshan University, 1990).
3. "Zhongshan University Top Postgraduate" (Zhongshan University, 1991).
4. "Young Faculty Teaching Contest Award" (2nd Place, Nantong University, 1992).
5. "Top Young Faculty in General Universities & Colleges of Jiangsu Province" (The Education Commission of Jiangsu Province, 1994).
6. "Excellent Paper Award in Science & Technology" (3rd Place, The Science & Technology Commission of Nantong City, 1989, 1993, 1995).
7. "Study Abroad Scholarship" (The State Education Commission of China, 1995).
8. "Chunhui Plan Conference Grant-in-Aid" for Excellent Chinese Scholars Abroad (The State Education Commission of China, 1997).
9. "Guangdong Provincial Natural Science Award" (3rd Place) and "Guangdong Institutions of Higher Learning Award for Science and Technology Progress" (2nd Place) for "Investigation of a New Type of Pulse Voltammetry" (Co-awardee, Guangdong Province, 1998).
10. "Monash Graduate Scholarship" (Monash University, 1996-1999).
11. Selected for inclusion in the 2007-2021 editions of Who's Who in America[®] and the 2008 edition of Who's Who in the World[®], and for selection for the Albert Nelson Marquis Lifetime Achievement Award (2021) (Marquis Who's Who[®] Publication).

12. "Aubrey Keith Lucas & Ella Ginn Lucas Endowment for Faculty Excellence Award" (University of Southern Mississippi, 2008).
13. "NSF CAREER Award" (The National Science Foundation, 2010).
14. "Innovation Award for Applied Research" (University of Southern Mississippi, 2011).
15. "Distinguished Visiting Professor of Beijing University of Technology (China)" (2016-2018).
16. "World's Top 2% Most Cited Scientists" in various disciplines (DOI: 10.17632/btchxktzyw.6, 2019, 2020, 2021, 2022).

(xi) References

1. **Dr. David O. Wipf**, Henry Family Dean's Distinguished Professor of Chemistry, Department of Chemistry, Mississippi State University, Box 9573, MS 39762.
Email: dwipf@chemistry.msstate.edu; wipf@ra.msstate.edu; *Tel:* 662-325-7608.
2. **Dr. Mark M. Richter**, Professor of Chemistry, Henry Dreyfus Teacher-Scholar, Department of Chemistry, Missouri State University, Springfield, MO 65897.
Email: MarkRichter@missouristate.edu; *Tel:* 417-836-5507.
3. **Dr. Bernd Schroeder**, Professor of Mathematics, School of Mathematics and Natural Sciences, University of Southern Mississippi, 118 College Drive, Box 5043, Hattiesburg, MS 39406.
Email: bernd.schroeder@usm.edu; *Tel:* 601-266-4301.

PATENTS & PUBLICATIONS:**A. PATENTS:**

4. Sengupta, P. P., Alford, M. H., Sherif, A. B., Miao, W. *An Enhanced Ramie Crop and Methods of Processing and Using Thereof*. (U.S. Provisional Application Serial No. 63/167,396, filed March 29, 2021).
3. Miao, W. et al. *HMTD Detection Method* (U.S. Provisional Application Serial No. 61/263,111, filed November 20, 2009).
2. Miao, W. et al. *TNT Detection in Soil* (U.S. Provisional Application Serial No. 61/262,970, filed November 20, 2009).
1. Bard, A. J. & Miao, W. *Methods and Compositions for the Detection of Biological Molecules Using a Two Particle Complex*, U.S. Pat. US 8188243 (May 29, 2012); World Intellectual Property Organization, WO/2006083305 (April 22, 2010); European Patent Office, EP 1787124 (May 23, 2007).

B. PUBLICATIONS:**I. Book Chapters:**

8. Miao, W. & Lu, L. Efficient ECL Luminophores, in *Analytical Electrogenerated Chemiluminescence: From Fundamentals to Bioassays* (ed. Sojic, N.), 59-91, Chapter 3 (Royal Society of Chemistry, 2019).
7. Miao, W. & Ge, C. Electrogenerated Chemiluminescence (ECL), in *Encyclopedia of Supramolecular Chemistry* (eds. Atwood, J. L., Steed, J. W. & Wallace, K.), 1-12 (Taylor & Francis LLC., New York, 2010).
6. Miao, W., Ge, C., Parajuli, S., Shi, J. & Jing, X. Trace Detection of High Explosives with Nanomaterials, in *Trace Analysis with Nanomaterials* (eds. Pierce, D. & Zhao, J.), 161-189, Chapter 7 (Wiley-VCH Verlag, Weinheim, 2010).
5. Miao, W. & Wang, S. Electrogenerated Chemiluminescence: Principle, Instrumentation and Its Bio-related Applications, in *Handbook of Chemiluminescent Methods in Oxidative Stress Assessment* (eds. Popov, I. & Lewin, G.), 41-83, Chapter 4 (Transworld Research Network, Kerala, 2008).
4. Miao, W. Electrogenerated Chemiluminescence, in *Handbook of Electrochemistry* (ed. Zoski, C. G.), 541-590, Chapter 13 (Elsevier, HR Amsterdam, 2007).
3. Miao, W. & Choi, J.-P. Coreactants, in *Electrogenerated Chemiluminescence* (ed. Bard, A. J.), 213-272, Chapter 5 (Marcel Dekker, Inc., New York, 2004).
2. Miao, W. Analytical Processes in Sampling and Sample Preparation, in *Solutions and Skills in Analytical Chemistry Exercises* (ed. Guo, Y.), 330-338, Chapter 12 (Publishing House of Peking Normal University, Beijing, 1993).
1. Miao, W. Spectrophotometry, in *Solutions and Skills in Analytical Chemistry Exercises* (ed. Guo, Y.), 296-329, Chapter 11 (Publishing House of Peking Normal University, Beijing, 1993).

II. Papers in Peer-Reviewed Scientific Journals (#-undergraduate student):

56. Dawoud, A., Mia, R., Motchaalangaram, J. A., Miao, W. & Wallace, K. J. Toward Remote Detection of Chemical Warfare Simulants Using a Miniature Potentiostat. *Micro* **4**, 49-60 (2024).
55. Kumar, P., Dinsmore, F. #, Miao, W. Hydrogen Bubble-Assisted One-Step Electrodeposition of Cu, Ni, and P toward Electrocatalytic Water Oxidation. *ACS Appl. Energy Mater.* **5**, 12602-12613 (2022).
54. Dawoud, A., Mia, R., Biswakarma, A., Motchaalangaram, J. A., Miao, W. & Wallace, K. Embedded Electrochemistry with a Miniaturized, Drone-Based, Potentiostat System for Remote Detection Chemical Warfare Agents. *Int. J. Aerosp. Mech. Eng.* **16**, 112-115 (2022).

53. Tang, K., Turner, C.[#], Case, L., Mehrehjedy, A.[#], He, X., Miao, W. & Guo, S. Organic Electrochemical Transistor with Molecularly Imprinted Polymer-Modified Gate for the Real-Time Selective Detection of Dopamine. *ACS Appl. Polym. Mater.* **4**, 2337-2345 (2022).
52. Tang, K., Miao, W. & Guo, S. Crosslinked Pedot:Pss Organic Electrochemical Transistors on Interdigitated Electrodes with Improved Stability. *ACS Appl. Polym. Mater.* **3**, 1436-1444 (2021).
51. Zou, F., Hu, J., Miao, W., Shen, Y., Ding, J. & Jing, X. Synthesis and Characterization of Enhanced Photocatalytic Activity with Li⁺-Doping Nanosized TiO₂ Catalyst. *ACS Omega* **5**, 28510-28516 (2020).
50. Lu, L., Zhang, L., Miao, W., Wang, X. & Guo, G. Aggregation-Induced Electrochemiluminescence of the Dichlorobis(1,10-Phenanthroline)Ruthenium(II) (Ru(Phen)₂Cl₂)/Tri-*n*-Propylamine (TPrA) System in H₂O–MeCN Mixtures for Identification of Nucleic Acids. *Anal. Chem.* **92**, 9613-9619 (2020).
49. Lu, L.; Liu, C.; Miao, W.; Wang, X.; Guo, G., Ultrasensitive Detection of miRNA Based on Efficient Immobilization of Probe and Electrochemiluminescent Quenching of Ru(bpy)₃²⁺ by Methylene Blue. *Anal. Chim. Acta* **1093**, 52-60 (2020).
48. Fernando, A.; Parajuli, S.; Barakoti, K. K.; Miao, W.; Alpuche-Aviles, M. A., Evidence of Radical Intermediate Generated in the Electrochemical Oxidation of Iodide. *J. Mex. Chem. Soc. Special Issue dedicated to "Mexican Chemist Overseas"* **63 (3)**, 70-83 (2019).
47. Pan, G., Jing, X., Ding, X., Shen, Y., Xu, S. & Miao, W. Synergistic Effects of Photocatalytic and Electrocatalytic Oxidation Based on a Three-Dimensional Electrode Reactor toward Degradation of Dyes in Wastewater. *J. Alloys Compd.* **809**, 151749 (2019)
46. Lu, L., Wang, J., Miao, W., Wang, X. & Guo, G. Electrogenated Chemiluminescence Biosensor with a Tripod Probe for the Highly Sensitive Detection of MicroRNA. *Anal. Chem.* **91**, 1452-1459 (2019).
45. Siddarth, A. S. & Miao, W. Photoelectrochemical Studies on Earth Abundant Pentanickel Polyoxometalates as Co-Catalysts for Solar Water Oxidation. *Sustainable Energy & Fuels* **2**, 827-835 (2018).
44. Lu, L., Liu, C., Kang, T., Wang, X., Guo, G. & Miao, W. In Situ Enhanced Electrochemiluminescence Based on Co-Reactant Self-Generated for Sensitive Detection of microRNA. *Sensors & Actuators: B. Chem.* **255**, 35-41 (2018).
43. Zou, G., Tan, X., Long, X., He, Y. & Miao, W. Spectrum-Resolved Dual-Color Electrochemiluminescence Immunoassay for Simultaneous Detection of Two Targets with Nanocrystals as Tags. *Anal. Chem.* **89**, 13024-13029 (2017).
42. Acharya, D., Bastola, P., Le, L., Paul, A. M., Fernandez, E., Diamond, M. S., Miao, W. & Bai, F. An Ultrasensitive Electrogenated Chemiluminescence-Based Immunoassay for Specific Detection of Zika Virus. *Sci. Rep.* **6**, 32227 (2016).
41. Zhang, X., Tan, X., Zhang, B., Miao, W. & Zou, G. Spectrum-Based Electrochemiluminescent Immunoassay with Ternary CdZnSe Nanocrystals as Labels. *Anal. Chem.* **88**, 6947-6953 (2016).
40. Zhang, X., Zhang, B., Miao, W. & Zou, G. Molecular-Counting-free and Electrochemiluminescent Single Molecular Immunoassay with Dual-stabilizers-capped CdSe Nanocrystals as Labels, *Anal. Chem.* **88**, 5482-5488 (2016).
39. Wusimanjiang, Y., Meyer, A.[#], Lu, L. & Miao, W. Effects of Multi-walled Carbon Nanotubes on the Electrogenated Chemiluminescence and Fluorescence of CdTe Quantum Dots. *Anal. Bioanal. Chem.* **408**, 7049-7057 (2016) ([Invited contribution for the topical issue of *Analytical Electrochemiluminescence: State of the Art and Perspectives* and selected by the editor as a forefront paper](#)).

38. Lu, L., Guo, L., Li, M., Kang, T., Cheng, S. & Miao, W. Investigation of Perfluorooctanoic Acid Induced DNA Damage Using Electrogenerated Chemiluminescence Associated with Charge Transfer in DNA. *Anal. Bioanal. Chem.* **408**, 7137-7145 (2016) ([Invited contribution for the topical issue of Analytical Electrochemiluminescence: State of the Art and Perspectives](#)).
37. Parajuli, S., Jing, X., & Miao, W. Electrogenerated Chemiluminescence (ECL) Quenching of the Ru(bpy)₃²⁺/TPPrA System by the Explosive TNT. *Electrochim. Acta* **180**, 196-201 (2015).
36. Parajuli, S. & Miao, W. Sensitive Determination of Triacetone Triperoxide Explosives Using Electrogenerated Chemiluminescence. *Anal. Chem.* **85**, 8008-8015 (2013).
35. Ma, F., Zhang, Y., Qi, H., Gao, Q., Zhang, C. & Miao, W. Ultrasensitive Electrogenerated Chemiluminescence Biosensor for the Determination of Mercury Ion Incorporating G4 PAMAM Dendrimer and Hg(II)-specific Oligonucleotide. *Biosens. Bioelectron.* **32**, 37-42 (2012).
34. Ge, C., Zhao, Y., Hui J., Zhang, T., Miao, W. & Yu, W. Cathodic Stripping Synthesis, Characterization and Cyto-osmosis of Low Toxicity Glutathione-capped CdTe Quantum Dots, *J. Nanosci. Nanotechnol.* **11**, 6710-6717 (2011).
33. Wang, S., Harris, E. #, Shi, J., Chen, A., Parajuli, S., Jing, X. & Miao, W. Electrogenerated Chemiluminescence Determination of C-reactive Protein with Carboxyl CdSe/ZnS Core/Shell Quantum Dots. *Phys. Chem. Chem. Phys. (PCCP), Themed Issue: Bioelectrochemistry*, **12**, 10073-10080 (2010) ([Invited contribution](#)).
32. Sun, B., Qi, H., Ma, F., Gao, Q., Zhang, C. & Miao, W. Double Covalent Coupling Method for the Fabrication of Highly Sensitive and Reusable Electrogenerated Chemiluminescence Sensors. *Anal. Chem.* **82**, 5046-5052 (2010).
31. Parajuli, S. & Miao, W. Sensitive Determination of Hexamethylene Triperoxide Diamine Explosives, Using Electrogenerated Chemiluminescence Enhanced by Silver Nitrate. *Anal. Chem.* **81**, 5267-5272 (2009).
30. Wang, S., Milam, J. #, Ohlin, A. C., Rambaran, V. H., Clark, E., Ward, W., Seymour, L. #, Casey, W. H., Holder, A. A. & Miao, W. Electrochemical and Electrogenerated Chemiluminescent Studies of a Trinuclear Complex, [((phen)₂Ru(dpp))₂RhCl₂]⁵⁺, and Its Interactions with Calf Thymus DNA. *Anal. Chem.* **81**, 4068-4075 (2009).
29. Pittman, T. L., Thomson, B. # & Miao, W. Ultrasensitive Detection of TNT in Soil, Water, Using Enhanced Electrogenerated Chemiluminescence. *Anal. Chim. Acta* **632**, 197-202 (2009).
28. Pittman, T. L. & Miao, W. Examination of Electron Transfer Through DNA Using Electrogenerated Chemiluminescence. *J. Phys. Chem. C* **112**, 16999-17004 (2008).
27. Wang, S., Neshkova, M. T. & Miao, W. EQCM Study of the ECL Quenching of the Tris(2,2'-bipyridyl)ruthenium(II)/Tris-*n*-propylamine System at a Au Electrode in the Presence of Chloride Ions. *Electrochim. Acta* **53**, 7661-7667 (2008).
26. Miao, W. Electrogenerated Chemiluminescence and Its Biorelated Applications. *Chem. Rev.* **108**, 2506-2553 (2008) ([Invited contribution](#)).
25. Wei, H., Lee, T. Y., Miao, W., Fortenberry, R., Magers, D. H., Hait, S., Guymon, A. C., Jonsson, S. E. & Hoyle, C. E. Characterization and Photopolymerization of Divinyl Fumarate. *Macromolecules* **40**, 6172-6180 (2007).
24. Miao, W., Cole, I. S., Neufeld, A. K. & Furman, S. Pitting Corrosion of Zn and Zn-Al Coated Steels in pH 2 to 12 NaCl Solutions. *J. Electrochem. Soc.* **154**, C7-C15 (2007).

23. Rosado, D. J.[#], Jr., Miao, W., Sun, Q. & Deng, Y. Electrochemistry and Electrogenerated Chemiluminescence of All-trans Conjugated Polymer Poly[distyrylbenzene-b-(ethylene Oxide)]s. *J. Phys. Chem. B* **110**, 15719-15723 (2006).
22. Ge, C., Miao, W., Ji, M. & Gu, N. Glutaraldehyde-Modified Electrode for Nonlabeling Voltammetric Detection of p16^{INK4A} Gene. *Anal. Bioanal. Chem.* **383**, 651-659 (2005).
21. Miao, W. & Bard, A. J. Electrogenerated Chemiluminescence. 80. C-Reactive Protein Determination at High Amplification with [Ru(bpy)₃]²⁺-Containing Microspheres. *Anal. Chem.* **76**, 7109-7113 (2004).
20. Miao, W. & Bard, A. J. Electrogenerated Chemiluminescence. 77. DNA Hybridization Detection at High Amplification with [Ru(bpy)₃]²⁺-Containing Microspheres. *Anal. Chem.* **76**, 5379-5386 (2004).
19. Miao, W. & Bard, A. J. Electrogenerated Chemiluminescence. 72. Determination of Immobilized DNA and C-Reactive Protein on Au(111) Electrodes Using Tris(2,2'-bipyridyl)ruthenium(II) Labels. *Anal. Chem.* **75**, 5825-5834 (2003).
18. Miao, W., Choi, J.-P. & Bard, A. J. Electrogenerated Chemiluminescence 69: The Tris(2,2'-bipyridine)ruthenium(II), (Ru(bpy)₃²⁺)/Tri-*n*-propylamine (TPrA) System Revisited - A New Route Involving TPrA⁺ Cation Radicals. *J. Am. Chem. Soc.* **124**, 14478-14485 (2002).
17. Miao, W., Ding, Z. & Bard, A. J. Solution Viscosity Effects on the Heterogeneous Electron Transfer Kinetics of Ferrocenemethanol in Dimethyl Sulfoxide-Water Mixtures. *J. Phys. Chem. B* **106**, 1392-1398 (2002).
16. Keyes, T. E., Forster, R. J., Bond, A. M. & Miao, W. Electron Self-Exchange in the Solid-State: Cocrystals of Hydroquinone and Bipyridyl Triazole. *J. Am. Chem. Soc.* **123**, 2877-2884 (2001).
15. Bond, A. M., Miao, W. & Raston, C. L. Mercury(II) Immobilized on Carbon Nanotubes: Synthesis, Characterization, and Redox Properties. *Langmuir* **16**, 6004-6012 (2000).
14. Bond, A. M., Feldberg, S. W., Miao, W., Oldham, K. B. & Raston, C. L. Modeling of Solid-state, Dissolution and Solution-phase Reactions at Adhered Solid-electrode-Solvent (Electrolyte) Interfaces: Electrochemistry of Microcrystals of C₆₀ Adhered to an Electrode in Contact with Dichloromethane (Bu₄NClO₄). *J. Electroanal. Chem.* **501**, 22-32 (2001).
13. Bond, A. M., Miao, W. & Raston, C. L. Identification of Processes that Occur after Reduction and Dissolution of C₆₀ Adhered to Gold, Glassy Carbon, and Platinum Electrodes Placed in Acetonitrile (Electrolyte) Solution. *J. Phys. Chem. B* **104**, 2320-2329 (2000).
12. Bond, A. M., Miao, W., Raston, C. L. & Sandoval, C. A. Electrochemical, EPR, and Magnetic Studies on Microcrystals of the [C₆₀-(*p*-Benzyl-calix[5]arene)₂]^{•8}Toluene and Its One-Electron-Reduced Encapsulation Complex. *J. Phys. Chem. B* **104**, 8129-8137 (2000).
11. Bond, A. M., Miao, W., Raston, C. L., Ness, T. J., Barnes, M. J. & Atwood, J. L. Electrochemical and Structural Studies on Microcrystals of the (C₆₀)_x(CTV) Inclusion Complexes (x = 1, 1.5; CTV = cyclotrimeratrylene). *J. Phys. Chem. B* **105**, 1687-1695 (2001).
10. Bond, A. M., Miao, W., Smith, T. D. & Jamis, J. Voltammetric Reduction of Mercury(II), Silver(I), Lead(II) and Copper(II) Ions Adsorbed onto a New Form of Mesoporous Silica. *Anal. Chim. Acta* **396**, 203-213 (1999).
9. Suarez, M. F., Marken, F., Compton, R. G., Bond, A. M., Miao, W. & Raston, C. L. Evidence for Nucleation-Growth, Redistribution, and Dissolution Mechanisms during the Course of Redox Cycling Experiments on the C₆₀/NBu₄C₆₀ Solid-State Redox System: Voltammetric, SEM, and in Situ AFM Studies. *J. Phys. Chem. B* **103**, 5637-5644 (1999).
8. Cai, P., Miao, W., Mo, J. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Coordination-Adsorptive Catalytic Irreversible Systems. *J. Instrum. Anal.* **14**, 33-38 (1995).

7. Mo, J., Miao, W., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Coordination-Adsorption Catalytic Systems. *J. Instrum. Anal.* **14**, 1-6 (1995).
6. Miao, W., Mo, J., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Complex Adsorptive Irreversible Systems. II. Systems Uncontrolled by the Complexation Rate. *J. Instrum. Anal.* **14**, 1-5 (1995).
5. Mo, J., Miao, W., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Adsorptive-Complex Irreversible System. I. Control by the Rate of Complexing Reaction. *J. Instrum. Anal.* **12**, 16-20 (1993).
4. Mo, J., Miao, W., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Coordination-Adsorptive Irreversible Systems. *Rock Mineral Anal.* **10**, 74-75 (1991).
3. Miao, W. & Hong, L. Determination of Miller Indexes of X-ray Diffraction Patterns with Computer. *Compt. Appl. Chem.* **7**, 44-48 (1990).
2. Miao, W. & Hu, X. Study and Application of Nonionic Surfactant-OP in Some Coordination Systems. *J. Nantong Teachers College (Nat. Sci. Sec.)* **5**, 30-38 (1989).
1. Miao, W. Is the Electronegativity of Group 0 Elements equal to 0? *Chem. Teach.* **4**, 42 (1980).

III. Proceedings/Abstracts of Conferences

107. Waite, Kumar P. & Miao, W. [Poster Board #900] Electrodeposition of Ni, Co, Fe, and Se over Carbon Cloth towards Electrocatalytic Hydrogen Evolution Reaction. *ACS Spring 2024 Meeting* (March 17-21, 2024, New Orleans, LA, USA).
106. Hosen, N. Mia, R. Miao, W. & Wallace, K. [Poster Board #1606] Design and Synthesis of Low Molecular Weight Electrogenerated Chemiluminescence Probes (LMEPs) for the Detection of Organophosphates. *ACS Spring 2024 Meeting* (March 17-21, 2024, New Orleans, LA, USA).
105. Guo, S. Mehrehjedy, A. Eaton, J. Tang, K. Turner, C. Sanders, A. He, X. & Miao, W. Real-time selective detection of neurotransmitter molecules by OECT with imprinted polymer modified gate. *ACS Spring 2024 Meeting* (March 17-21, 2024, New Orleans, LA, USA).
104. Kumar, P. & Miao, W. Surface Sulfurization of One-step Electrodeposition of Transition Metals (Ni, Co, and Fe) for Electrocatalytic Water Splitting. *ACS Spring 2024 Meeting* (March 17-21, 2024, New Orleans, LA, USA).
103. Waite, J., Kumar, P. & Miao, W. Electrodeposition of Ni, Co, Fe, and Se over Carbon Cloth towards Electrocatalytic Hydrogen Evolution Reaction. *Mississippi IDeA/EPSCoR Conference 2023*, 44 (July 27, 2023, Hattiesburg, MS, USA).
102. Northington, K., Motchaalangaram, J. & Miao, W. Aggregation Induced Electrogenerated Chemiluminescence Studies of 9,10-Diarylanthracene Derivatives. *Mississippi IDeA/EPSCoR Conference 2023*, 52 (July 27, 2023, Hattiesburg, MS, USA).
101. Kumar, P. & Miao, W. Surface Sulfurization of Electrodeposited Transition Metal toward Electrocatalytic Water Splitting Applications. *Mississippi IDeA/EPSCoR Conference 2023*, Oral Session 4-6, Chemistry (July 27, 2023, Hattiesburg, MS, USA).
100. Kumar, P. & Miao, W. One-Step Electrodeposition of Transition Metals (Ni, Co, and Fe) for Electrocatalytic Oxygen Evolution Reaction, *ACS Spring 2023 Meeting*, (March 26-30, 2023, Indianapolis, IN, USA), p 3825427-ENFL.
99. Hosen, N., Miao, W. & Wallace, K. J. The Synthesis of a Coumarin-Enamine Chemodosimeter for the Detection of Diisopropylfluorophosphate, a Nerve Agent Mimic. *Mississippi IDeA/EPSCoR Conference 2023*, Oral Session 4-6, Chemistry (July 27, 2023, Hattiesburg, MS, USA).

-
98. Aumick, K. Motchaalangaram, J. & Miao, W. Donor Driven Aggregation Induced Electrogenerated Chemiluminescence Mechanism of 9,10-Diphenylanthracene Derivatives, *ACS Spring 2023 Meeting* (March 26-30, 2023, Indianapolis, IN, USA), p 3815007-ANYL.
 97. Hosen, N., Mia, R., Miao, W. & Wallace, K. J. An ECL Generated Coumarin-enamine Chemodosimeter for Diisopropylfluorophosphate, a Nerve Agent Mimic. *2022 North American Supramolecular Chemistry Meeting (NASC 2022)* (December 18-20, 2022, New Orleans, LA, USA), NASC 2022 Book of abstracts, poster Abstracts P12.
 96. Issifu, A. & Miao, W. Analysis of Proteins in Ramie Leaf Using Matrix-assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-MS). (a) *2022 Susan A. Siltance Graduate Student Research Symposium* (April 14, 2022, Hattiesburg, MS, USA). (b) *2022 Lester Andrew Graduate Research Symposium* (May 18-22, 2022, Mississippi State University, Starkville, MS, USA).
 95. Motchaalangaram, J. & Miao, W. Aggregation Induced Electrochemiluminescence from Donor-Acceptor based Coumarin-Benzimidazole Derivatives. *2022 Susan A. Siltance Graduate Student Research Symposium* (April 14, 2022, Hattiesburg, MS, USA).
 94. Motchaalangaram, J., Aumick, K., Miao, W. Deciphering Aggregation Induced Electrogenerated Chemiluminescence Mechanism of 9,10-Diphenylanthracene Derivatives, *SERMACS 2022* (Oct. 19-22, 2022, San Juan, Puerto Rico, USA), p #14, 3789132.
 93. Mia, R., Biswakarma, A., Forenczek, F. R., Miao, W. & Wallace, K. J. An ECL Chemodosimeter for the Detection of DFP – a Sarin Simulant. *The 16th International Symposium of Macrocyclic and Supramolecular Chemistry (ISMSC2022)* (June 19-24, 2022, Eugene, OR, USA).
 92. Kumar, P., Dinsmore, F., Miao, W. Hydrogen Bubble Assisted One-Step Electrodeposition of Cu, Ni and P Towards Electrocatalytic Water Oxidation. *2022 Susan A. Siltance Graduate Student Research Symposium* (April 14, 2022, Hattiesburg, MS, USA).
 91. Aumick, K., Motchaalangaram, J. & Miao, W. Deciphering Aggregation Induced Electrogenerated Chemiluminescence Mechanism of 9,10-Diphenylanthracene Derivatives. *Mississippi IDEa Conference & Mississippi EPSCoR 2022* (July 28, 2022, Hattiesburg, MS, USA).
 90. Miao, W., Motchaalangaram, J., Biswakarma, A. & Wallace, K. J. Sensitive and Selective Detection of N,N-Dimethyltryptamine with Molecularly Imprinted Polymer Coupled with Electrogenerated Chemiluminescence. *240th ECS Meeting* (October 10-14, 2021, Orlando, FL, USA), *ECS Meeting Abstracts* MA2021-02, 1600 (2021).
 89. Kumar, P. & Miao, W. Vanadium Copper Hydroxy Carbonate Hydrate Towards the Electrocatalytic Oxygen Evolution Reaction. *240th ECS Meeting* (October 10-14, 2021, Orlando, FL, USA), *ECS Meeting Abstracts* MA2021-02, 1423 (2021).
 88. Miao, W. ([Keynote Lecturer](#)) Trace Detection of Explosives Based on Electrochemical, Chemiluminescent, and Electrogenerated Chemiluminescent Technique. *International Workshop on Energy Materials (IWEM 2018)*, (Oct. 18-19, Istanbul, Turkey).
 87. Sridhar, A. S. & Miao, W. Photoelectrochemical Studies on Electrodeposited Cu₂O/WSe_x Photocathodes for Solar Water Splitting. *PITTCO'2018*, 1340-16 (Feb 26-March 1, 2018, Orlando, FL, USA).
 86. Shanta, T. & Miao, W. Anodic Nanocatalysts for Formic Acid Fuel Cells: An Electrochemical Study. *The 13th SINO-US Chemistry Professors Conference*, (June 18-19, 2017, Nantong, Jiangsu, China).
 85. Miao, W. Direct EPR Evidence of Coreactant Intermediates of Electrogenerated Chemiluminescence. *2017 Symposium on Bioelectrochemical and Environmental Analysis/Electrochemical Techniques and Nanodevice Engineering* (July 18-19, 2017, Lanzhou, China).

-
84. Bastola, P. & Miao, W. Direct EPR Evidence of Cathodic ECL Coreactant Intermediates of Benzoyl Peroxide and Ammonium Persulfate. *231st ECS Meeting* (May 29-June 1, 2017, New Orleans, LA, USA).
 83. Miao, W. A Highly Sensitive Electrogenerated Chemiluminescence-Based Immunoassay for Specific Detection of Zika Virus, *The 1st Northwestern International Electrochemistry Symposium* (June 16-19, 2016, Lanzhou, China).
 82. Shanta, T. & Miao, W. Influence of Nanostructured Carbon Supports on Nanocatalysts Towards Electrooxidation of Formic Acid for Direct Formic Acid Fuel Cells. *229th ECS Meeting* (May 29-June 2, 2016, San Diego, CA, USA).
 81. Wusimanjiang, Y. & Miao, W. Effect of Multi-walled Carbon Nanotubes on the Electrogenerated Chemiluminescence of Quantum Dots. *Journal of the Mississippi Academy of Sciences, Vol. 61 (1): The 80th Annual Meeting of Mississippi Academy of Sciences*, O3.31, 86 (February 18-19, 2016, Hattiesburg, MS, USA).
 80. Shanta, T. & Miao, W. Study of Ternary Nanocatalysts for Direct Formic Acid Fuel Cells. *Journal of the Mississippi Academy of Sciences, Vol. 61 (1): The 80th Annual Meeting of Mississippi Academy of Sciences*, O3.27, 85 (February 18-19, 2016, Hattiesburg, MS, USA).
 79. Siddarth, S. A. & Miao, W. Cobalt Polyoxometalates as co-catalysis for Solar Hydrogen Evolution with Copper Selenide Photocathods. *Journal of the Mississippi Academy of Sciences, Vol. 61 (1): The 80th Annual Meeting of Mississippi Academy of Sciences*, O3.28, 85 (February 18-19, 2016, Hattiesburg, MS, USA).
 78. Bastola, P. & Miao, W. Electrogenerated Chemiluminescence (ECL) of Sulfonated 9,10-Diphenylanthracene and Rubrene in Aqueous with Nitrate Enhancing Agent. *Journal of the Mississippi Academy of Sciences, Vol. 61 (1): The 80th Annual Meeting of Mississippi Academy of Sciences*, O3.29, 85 (February 18-19, 2016, Hattiesburg, MS, USA).
 77. Wusimanjiang, Y., Zou, G. & Miao, W. Fluorescent and ECL Studies of Energy and Electron Transfer between CdSe and CdTe Quantum Dots. *15th Southern School on Computational and Materials Science Conference (SSCC&MS)*, (July 23-24, 2015, Jackson, MS, USA, [Invited Talk](#)).
 76. Shanta, T. & Miao, W. Investigation of Palladium Based Nanocatalysts for Direct Formic Acid Fuel Cells. *PITTCO'2015*, 1200-11P (March 8-12, 2015, New Orleans, LA, USA).
 75. Siddarth, A. S. & Miao, W. Photoelectrochemical Studies on Earth Abundant Pentanickel Polyoxometalates as Co-Catalysts for Water Oxidation. *PITTCO'2015*, 1370-4 (March 8-12, 2015, New Orleans, LA, USA).
 74. Wusimanjiang, Y. & Miao, W. Electrochemical Investigation of Peptide Bond Formation on Electrode Surface. *PITTCO'2015*, 2430-8 (March 8-12, 2015, New Orleans, LA, USA).
 73. Bastola, P. & Miao, W. Electrochemistry and Electrogenerated Chemiluminescence of Sulfonated 9,10-Diphenylanthracene and Rubrene in Aqueous Media. *PITTCO'2015*, 1570-12P (March 8-12, 2015, New Orleans, LA, USA).
 72. Wusimanjiang, Y. & Miao, W. Fluorescence and ECL Studies of Energy and Electron Transfer Between CdSe and CdTe Quantum Dots. *ECL 2014: International Meeting on Electrogenerated Chemiluminescence*, SU O2 (September 7-10, 2014, 2014, Bertinoro, Italy).
 71. Wusimanjiang, Y. & Miao, W. Electrogenerated Chemiluminescent Studies of Charge Transfer Between CdSe/ZnS and CdTe/CdS Quantum Dots and Their Applications Towards the Development of highly Sensitive ECL Immunosensors. *Journal of the Mississippi Academy of Sciences, Vol. 59 (1): The 78th Annual Meeting of Mississippi Academy of Sciences*, 72 (March 6-7, 2014, Hattiesburg, MS, USA).

70. Shanta, T. & Miao, W. Electrochemical Study of Palladium Based Nanocatalysts for Direct Formic Acid Fuel Cells. *Journal of the Mississippi Academy of Sciences, Vol. 59 (1): The 78th Annual Meeting of Mississippi Academy of Sciences*, 72 (March 6-7, 2014, Hattiesburg, MS, USA).
69. Siddarth, S. A. & Miao, W. Photoelectrochemical Studies on Layered Organic-Inorganic Hybrid Perovskite Photoelectrodes for Water Splitting. *Journal of the Mississippi Academy of Sciences, Vol. 59 (1): The 78th Annual Meeting of Mississippi Academy of Sciences*, 70 (March 6-7, 2014, Hattiesburg, MS, USA).
68. Bastola, P. & Miao, W. Electrogenerated Chemiluminescence (ECL) of Unmixed and Mixed Systems of 9,10-Diphenylanthracene, Rubrene, and Tris (2,2-bipyridine) Ruthenium(II) dichloride Using Benzoyl Peroxide as the ECL Coreactant. *Journal of the Mississippi Academy of Sciences, Vol. 59 (1): The 78th Annual Meeting of Mississippi Academy of Sciences*, 7x (March 6-7, 2014, Hattiesburg, MS, USA).
67. Wusimanjiang, Y. & Miao, W. Quenching and Enhancement of Fluorescence and Electrogenerated Chemiluminescence When CdSe/ZnS Mixed With CdTe/CdS Quantum Dots. *Abstracts, 65th Southeast Regional Meeting of the American Chemical Society, SERM-678* (November 13-16, 2013, Atlanta, GA, USA).
66. Wusimanjiang, Y. & Miao, W. Fluorescent and Electrogenerated Chemiluminescent Studies of Energy Transfer Between CdSe/ZnS and CdTe/Cds Quantum Dots in Aqueous Media. *Abstracts of Papers, 245th ACS National Meeting & Exposition, ANYL-203* (April 7-11, 2013, New Orleans, LA, USA).
65. Reed, A. D. & Miao, W. Synthesis and Electrogenerated Chemiluminescence of Water Soluble Silicon Quantum Dots. *PITTCO'2013, 2740-8P* (March 17-21, 2013, Philadelphia, PA, USA).
64. Wusimanjiang, Y., Manandhar, E., Wallace, K. & Miao, W. Meta-Bisclick: Electrochemistry, Electrogenerated Chemiluminescence, and Its Interactions with Zn²⁺ Ions. *Journal of the Mississippi Academy of Sciences, Vol. 58 (1): The 77th Annual Meeting of Mississippi Academy of Sciences*, 73 (Feb. 21-22, 2013, Hattiesburg, MS, USA).
63. Johnson, K., Mahesha, H., Wusimanjiang, Y., Stoulig III, P. & Miao, W. Electrogenerated Chemiluminescence of Water Soluble Silicon Quantum Dots. *Journal of the Mississippi Academy of Sciences, Vol. 58 (1): The 77th Annual Meeting of Mississippi Academy of Sciences*, 74 (Feb. 21-22, 2013, Hattiesburg, MS, USA).
62. Bastola, P., Manandhar, E., Cragg, P., Wallace, K. & Miao, W. A Self-Assembly Based Fluorescent Rationmetric Sensors for Fe³⁺ Ion. *Journal of the Mississippi Academy of Sciences, Vol. 58 (1): The 77th Annual Meeting of Mississippi Academy of Sciences*, 74 (Feb. 21-22, 2013, Hattiesburg, MS, USA).
61. Zou, G. & Miao, W. Electrode Surface Charge Effect on the Electron-Transfer Behavior of Redox Species. *Journal of the Mississippi Academy of Sciences, Vol. 57 (1): The 76th Annual Meeting of Mississippi Academy of Sciences*, 81 (Feb. 23-24, 2012, Hattiesburg, MS, USA).
60. Wang, A., Li, L., Chu, A. J. & Miao, W. An Investigation Into the Interactions Between Polycations and Factor VII and Factor VIIA Using a Quartz Crystal Microbalance. *Journal of the Mississippi Academy of Sciences, Vol. 57 (1): The 76th Annual Meeting of Mississippi Academy of Sciences*, 80 (Feb. 23-24, 2012, Hattiesburg, MS, USA).
59. Miao, W. & Zou, G. Size Dependent Electrogenerated Chemiluminescence from Dual-Stabilizer-Capped CdTe Nanocrystals. *PITTCO'2012, 2020-4* (March 11-15, 2012, Orlando, FL, USA).
58. Miao, W., Hanna, R., Shows, R. & Chu, A. An Investigation into the Interactions Between Polycations and Tissue Factor Using a Quartz Crystal Microbalance. *PITTCO'2012, 2400-5P* (March 11-15, 2012, Orlando, FL, USA).

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57. Miao, W. Biosensors based on Electrogenerated Chemoluminescence. *Journal of the Mississippi Academy of Sciences, Vol. 57 (1): The 76th Annual Meeting of Mississippi Academy of Sciences*, 64 (Feb. 23-24, 2012, Hattiesburg, MS, USA).
 56. Chu, A. & Miao, W. Polycations as Novel Anticoagulants Block Tissue Factor-Dependent FVII Activation: A Possible Mechanism. *Journal of the Mississippi Academy of Sciences, Vol. 57 (1): The 76th Annual Meeting of Mississippi Academy of Sciences*, 60 (Feb. 23-24, 2012, Hattiesburg, MS, USA).
 55. Ge, C., McCurry, D., Parajuli, S. & Miao, W. Electrochemical, ECL, EPR, and SECM-ECL Studies of the 2-(Dibutylamino)ethanol (DBAE) Free and Cation Radicals. *The 13th International Symposium on Electroanalytical Chemistry* (August 19-22, 2011, Changchun, China. [Invited Keynote Lecture](#)).
 54. Lewis, N. A., Liu, F., Magnusen, T., Erves, T., Arca, J. F., Beckford, F. A., Venkatraman, R., Gonzalez, S. A., Li, L., Parajuli, S., Seeram, N., Liu, A., Jarrett, W., Miao, W. & Holder, A. A. Novel chemotherapeutic agents of vanadium(IV) with thiosemithiocarbazones and Schiff bases as ligands: Structural and in vitro studies. INOR-207 (American Chemical Society, 2011).
 53. Bridges, L., Parajuli, S., Lewis, N., Holder, A. & Miao, W. Electrochemical and Spectroscopic Studies of Bi- and Tetra-nuclear Ruthenium (II) Containing Complexes *Journal of the Mississippi Academy of Sciences, Vol. 56 (1): The 75th Annual Meeting of Mississippi Academy of Sciences*, 55 (Feb. 17-18, 2011, Hattiesburg, MS, USA).
 52. Lewis, N., Liu, F., Magnusen, T., Erves, T., Arcs, F., Beckford, F., Venkatraman, R., Sarrias, A., Li, L., Parajuli, S., Seeram, N., Liu, A., Jarret, W., Miao, W. & Holder, A. Novel Chemotherapeutic Agents of Vanadium (IV) with Thiosemithiocarbazones and Schiff Bases as Ligands: Structural Aspects and *In Vitro* Studies *Journal of the Mississippi Academy of Sciences, Vol. 56 (1): The 75th Annual Meeting of Mississippi Academy of Sciences*, 46 (Feb. 17-18, 2011, Hattiesburg, MS, USA).
 51. Manandhar, E., Seawell, W., Moffett, E., Parajuli, S., Holder, A. & Miao, W. Electrochemical and Electrogenerated Chemiluminescent Studies of Ruthenium (II) Complex $[\text{Ru}(\text{pbt})_2(\text{dpp})](\text{PF}_6)_2$, *PITTCON'2011*, (440-35P) (March 13-18, 2011, Atlanta, GA, USA).
 50. Parajuli, S. & Miao, W. Determination of Trinitrotoluene by Electrogenerated Chemiluminescence Quenching Method. *PITTCON'2011*, (440-38P) (March 13-18, 2011, Atlanta, GA, USA).
 49. Miao, W., Ge, W., Chen, T., Zhao, Y. & Zhang, T. Electrochemical Synthesis, Characterization and Cell-imaging of Glutathione-capped CdTe/CdS Core/Shell Quantum Dots. *PITTCON'2011-ACS Anal. Chem.* (615-39P) (March 13-18, 2011, Atlanta, GA, USA).
 48. Wang, S., Maestri, T. & Miao, W. A Paper Strip Based Immunosensing System for the Determination of C-Reactive Protein Using Electrogenerated Chemiluminescence. *PITTCON'2011-ACS Anal. Chem.* (615-46P) (March 13-18, 2011, Atlanta, GA, USA).
 47. McCurry, D. & Miao, W. Determination of the 2-(Dibutylamino)ethanol Free Radical Potential in Acetonitrile/Benzene Solutions Using Electrogenerated Chemiluminescence. *PITTCON'2011*, (1170-15P) (March 13-18, 2011, Atlanta, GA, USA).
 46. Miao, W. & Parajuli, S. Selective Determination of Triacetone Triperoxide Explosive Using Electrogenerated Chemiluminescence. *PITTCON'2011*, (1670-2) (March 13-18, 2011, Atlanta, GA, USA).
 45. Manandhar, E., Seawell W., Moffett, E., Parajuli, S., Wang, S., Holder, A. A. & Miao, W. Electrochemical and Electrogenerated Chemiluminescent Studies of a Ruthenium (II) Complex $[\text{Ru}(\text{pbt})_2(\text{dpp})](\text{PF}_6)_2$ *Journal of the Mississippi Academy of Sciences, Vol. 55 (1): The 74th Annual Meeting of Mississippi Academy of Sciences*, 69 (Feb. 11-12, 2010, Hattiesburg, MS, USA).

44. Parajuli, S. & Miao, W. Selective Detection of Triacetone Triperoxide Using Electrogenerated Chemiluminescence *Journal of the Mississippi Academy of Sciences, Vol. 55 (1): The 74th Annual Meeting of Mississippi Academy of Sciences*, 55 (Feb. 11-12, 2010, Hattiesburg, MS, USA).
43. Maestri, T., Wang, S. & Miao, W. A New Electrogenerated Chemiluminescent Immunosensing System for Detection of C-Reactive Protein *Journal of the Mississippi Academy of Sciences, Vol. 55 (1): The 74th Annual Meeting of Mississippi Academy of Sciences*, 53 (Feb. 11-12, 2010, Hattiesburg, MS, USA).
42. Parajuli, S., Pittman, T. L., Thomson, B., Ge, C. & Miao, W. Sensitive Determination of Chemical Explosives Using Electrogenerated Chemiluminescence. *The International Symposium on Nanoelectrochemistry and Spectroelectrochemistry—a Satellite Meeting of 60th Annual Meeting of International Society of Electrochemistry*, I13, [Invited Talk](#) (August 12-15, 2009, Xi'an, China).
41. Miao, W. ECL Determination of C Reactive Protein with Carboxyl CdSe/ZnS Core/Shell Quantum Dot. *The 9th Southern School on Material Science and Computational Chemistry*, [Invited Talk](#) (July 27-29, 2009, Jackson, MS, USA).
40. Harris, E., Wang, S. & Miao, W. Electrogenerated Chemiluminescence of Semiconductor Nanoparticles. *Journal of the Mississippi Academy of Sciences, Vol. 54 (1): The 73rd Annual Meeting of Mississippi Academy of Sciences*, 56 (Feb. 25-27, 2009, Olive Branch, MS, USA).
39. Parajuli, S. & Miao, W. Detection of Peroxide-Based Explosive Triacetone triperoxide (TATP) Using Electrogenerated Chemiluminescence. *Journal of the Mississippi Academy of Sciences, Vol. 54 (1): The 73rd Annual Meeting of Mississippi Academy of Sciences*, 55 (Feb. 25-27, 2009, Olive Branch, MS, USA).
38. Wang, S., Wallace, K. & Miao, W. Electrochemical and Electrogenerated Chemiluminescent Studies of Squaraines and Their Applications in Metal Ion Sensing. *Journal of the Mississippi Academy of Sciences, Vol. 54 (1): The 73rd Annual Meeting of Mississippi Academy of Sciences*, 50 (Feb. 25-27, 2009, Olive Branch, MS, USA).
37. Wang, S., Harris, E. & Miao, W. Electrogenerated Chemiluminescent (ECL) Studies of Carboxyl Core/Shell Quantum Dot CdSe/ZnS and Its Applications as ECL Labels in Immunoassays. *Abstracts, 60th Southeast Regional Meeting of the American Chemical Society*, SERM-559, [Invited Talk](#) (November 12-15, 2008, Nashville, TN, USA).
36. Wang, S., Harris, E. & Miao, W. Electrogenerated Chemiluminescent (ECL) Studies of Carboxyl Core/Shell Quantum Dot CdSe/ZnS and Its Applications as ECL Labels in Immunoassays. *International Symposium on Stimuli-Responsive Materials*, Poster-133 (October 28-29, 2008, Hattiesburg, MS, USA).
35. Davis, M., Seymour, L., Rambaran, V. H., Ward, W., Clark, E., Moody, L., Parajuli, S., VanDerveer, D. G., Jarrett, W. L., Miao, W. & Holder, A. A. Use of ^{19}F NMR in Studying DNA Interactions with Ruthenium(II) Complexes. *Abstracts of Papers, 235th ACS National Meeting*, INOR-615 (April 6-10, 2008, New Orleans, LA, USA).
34. Davis, M., Seymour, L., Rambaran, V. H., Ward, W., Clark, E., Moody, L., VanDerveer, D. G., Parajuli, S., Jarrett, W. L., Miao, W. & Holder, A. A. Synthesis and Characterization of Some Fluorine-containing Complexes of Ruthenium(II): Use of ^{19}F NMR in Studying DNA Interactions. *Abstracts of Papers, 235th ACS National Meeting*, FLUO-019 (April 6-10, 2008, New Orleans, LA, USA).
33. Miao, W., Milam, J., Wang, S., Rambaran, V. H., Clark, E., Ward, W., Seymour, L. & Holder, A. A. Electrochemical and Electrogenerated Chemiluminescent Studies of $[(\text{phen})_2\text{Ru}(\text{dpp})]_2\text{RhCl}_2^{5+}$ and Its Interactions with DNA. *PITTCO'08*, 1200-16P (March 2-7, 2008, New Orleans, LA, USA).

32. Miao, W. & Wang, S. Towards Multiplexed Electrogenerated Chemiluminescent (ECL) Detection. *PITTCON'08*, 130-3 (March 2-7, 2008, New Orleans, LA, USA).
31. Moody, L., Davis, M., Rambaran, V. H., Seymour, L., Ward, W., Clark, E., vanDerveer, E., Parajuli, S., Jarrett, W., Miao, W. & Holder, A. A. Synthesis and Characterization of Some Fluorine-Containing Complexes of Ruthenium(II): Use of ^{19}F NMR in Studying DNA Interactions. *Journal of the Mississippi Academy of Sciences*, Vol. 53 (1): *The 72nd Annual Meeting of Mississippi Academy of Sciences*, 51 (Feb. 20-22, 2008, Olive Branch, MS, USA).
30. Pittman, T. L. & Miao, W. Preparation and Characterization of Tris(2,2'-bipyridyl)ruthenium (II)-Loaded Microcapsules as Electrogenerated Chemiluminescent Labels for Biomolecules Detection. *Journal of the Mississippi Academy of Sciences*, Vol. 53 (1): *The 72nd Annual Meeting of Mississippi Academy of Sciences*, 49 (Feb. 20-22, 2008, Olive Branch, MS, USA).
29. Parajuli, S. & Miao, W. Detection of Peroxide-Based Explosives Using Electrogenerated Chemiluminescence. *Journal of the Mississippi Academy of Sciences*, Vol. 53 (1): *The 72nd Annual Meeting of Mississippi Academy of Sciences*, 48 (Feb. 20-22, 2008, Olive Branch, MS, USA).
28. Wang, S. & Miao, W. ECL Quenching Behavior of $\text{Ru}(\text{bpy})_3^{2+}/\text{TPrA}$ System by Cl^- at Au Electrode: Direct Evidence Obtained from EQCM. *Journal of the Mississippi Academy of Sciences*, Vol. 53 (1): *The 72nd Annual Meeting of Mississippi Academy of Sciences*, 46 (Feb. 20-22, 2008, Olive Branch, MS, USA).
27. Wang, S., Neshkova, M. T. & Miao, W. Scanning Electrochemical Microscopic Studies of Cu(II)-Ion-Selective Membrane. International Symposium on Stimuli-Responsive Materials, 27-28 (October 31-31, 2007, Hattiesburg, MS, USA).
26. Miao, W., Pittman, T. L. & Thomson, B. Ultrasensitive Detection of 2,4,6-trinitrotoluene (TNT) Using Electrogenerated Chemiluminescence. *PITTCON'07*, 790-15P (Feb. 25-March 2, 2007, Chicago, IL, USA).
25. Pittman, T. L., Kolibal, L. G., Urban, M. W. & Miao, W. Synthesis, Characterization of Tris(2,2'-Bipyridyl)Ruthenium (II)-Loaded Microcapsules and Their Bio-Related Applications Based on Electrogenerated Chemiluminescent (ECL) Detection. *Journal of the Mississippi Academy of Sciences*, Vol. 52 (1): *The 71st Annual Meeting of Mississippi Academy of Sciences*, 81 (Feb. 21-23, 2007, Mississippi State, MS, USA).
24. Wang, S., Neshkova, M. T. & Miao, W. Studies of Electrochemically Prepared Ion-Selective Membranes With SECM. *Journal of the Mississippi Academy of Sciences*, Vol. 52 (1): *The 71st Annual Meeting of Mississippi Academy of Sciences*, 79 (Feb. 21-23, 2007, Mississippi State, MS, USA).
23. Parajuli, S., Harewood, G. R., Green, K.-A., Maragh, P. T., Dasgupta, T. P., Miao, W. & Holder, A. A. An Electrochemical Study of A Schiff Base Complex of Vanadium(V) and its Interactions With Calf Thymus DNA in DMSO--A Search For New Anti-Cancer Agent. *Journal of the Mississippi Academy of Sciences*, Vol. 52 (1): *The 71st Annual Meeting of Mississippi Academy of Sciences*, 78 (Feb. 21-23, 2007, Mississippi State, MS, USA).
22. Thomson, B. & Miao, W. Ultrasensitive Detection of 2,4,6-trinitrotoluene (TNT) Using Electrogenerated Chemiluminescence. The 2006 Annual Biomedical Research Conference for Minority Students (ABRCMS), 59, O-16 (November 8-11, 2006, Anaheim, CA, USA).
21. Pittman, T. L. & Miao, W. Detection of 2,4,6-trinitrotoluene (TNT) in Soil and Water Samples Using Electrogenerated Chemiluminescence (ECL). *First Annual International Symposium on Stimuli-Responsive Materials*, 24 (October 31, 2006, Hattiesburg, MS, USA).

20. Forster, R. J., Magers, D. H., Miao, W. & Hoyle, C. E. Relative Reactivity in a Series of Fumarates. *The 15th Conference on Current Trends in Computational Chemistry*, 54-55 (November 3-4, 2006, Jackson, MS, USA).
19. Miao, W. & Pittman, T. L. Examination of Electron Transfer Through DNA Using Electrogenerated Chemiluminescence. *PITTCO'06*, 430-31P (March 12-17, 2006, Orlando, FL, USA).
18. Miao, W., Rosado, D. J., Jr. & Sun, Q. Electrochemistry and Electrogenerated Chemiluminescence of All Trans Conjugated Polymer Poly[distyrylbenzene-b-(ethylene oxide)]_s. *PITTCO'06*, 330-8 (March 12-17, 2006, Orlando, FL, USA).
17. Wang, S. & Miao, W. Effect of Electrode Material and Electrolyte on the Electrogenerated Chemiluminescence Behavior of Ru(bpy)₃²⁺/TPrA System. *Journal of the Mississippi Academy of Sciences, Vol. 51 (2): The 70th Annual Meeting of Mississippi Academy of Sciences*, 167 (Feb. 23-24, 2006, Vicksburg, MS, USA).
16. Miao, W. Electrogenerated Chemiluminescence of Benzophenone Using Benzoperoxide as the Coreactant. *Journal of the Mississippi Academy of Sciences, Vol. 51 (1): The 70th Annual Meeting of Mississippi Academy of Sciences*, 46 (Feb. 23-24, 2006, Vicksburg, MS, USA).
15. Miao, W. Electrogenerated Chemiluminescence and Its Bio-related Applications. *Journal of the Mississippi Academy of Sciences, Vol. 50 (1): The 69th Annual Meeting of Mississippi Academy of Sciences*, 50 (Feb. 16-18, 2005, Oxford, MS, USA).
14. Choi, J.-P., Miao, W. & Bard, A. J. Electrogenerated Chemiluminescence (ECL) of Tris(2,2'-Bipyridine)Ruthenium(II) Complexes With Various Amine Coreactants. *The 58th Southwest Regional ACS Meeting*, P354 (November 3-6, 2002, Austin, TX, USA).
13. Miao, W. & Bard, A. J. ECL Determination of Immobilized DNA and CRP on Au (111) Electrodes Using Ru(bpy)₃²⁺ Labels. *The Electrochemical Biosensors Workshop, Invited Talk* (September 25-26, 2002, The U.S. Army Research Laboratory, Adelphi, Maryland, USA).
12. Cole, I. S., Neufeld, A. K., Furman, S. A., Miao, W. J. & Sherman, N. Response of 55% Aluminum-Zinc Coated Steel and Zinc to Well-defined Salt Doses Under Controlled Environments. *Proceedings-Electrochemical Society 2000-23* (Corrosion and Corrosion Prevention of Low-Density Metals and Alloys) 284-294 (2001).
11. Bond, A. M., Miao, W., Raston, C. L., Sandoval, C. A., Humphrey, D. G. & Eklund, J. C. Solid-State Electrochemistry of (*p*-Benzylcalix[5]Arene)₂-C₆₀-(C₆H₅Me)₈ Complex in Acetonitrile with Large and Small Cations. *Postgraduate Research Night, Book of Abstracts*, 11 (July 22, 1998, Melbourne, Australia).
10. Bond, A. M., Oldham, K. B., Miao, W., Feldberg, S. W. & Raston, C. L. Solid-state and Solution-phase Electrochemistry of the Fullerene C₆₀ in Dichloromethane. *Extended Abstracts, the 6th International Seminar on Electroanalytical Chemistry* (Oct. 10-12, 1997, Changchun, China).
9. Bond, A. M., Miao, W. & Smith, T. D. Cyclic Voltammetry of Cu(NH₃)₂²⁺, Pb²⁺, Ag(NH₃)₂⁺ and Hg²⁺ - Porous Silica Complexes. *Proceedings of the 10th Australasian Electrochemistry Conference* (Feb. 4-7, 1997, Gold Coast, Australia).
8. Lu, X. & Miao, W. Dibromo-*p*-Nitrochlorophosphonnazo (DBNCPA) Spectrophotometric Determination of Cerium-group Rare Earth Elements in Soils Using H₃PO₄ as Media. *Proceedings of the 2nd International Overseas Chinese Analytical Chemistry Conference* (Jinan University Press (Guangzhou), Nov. 15-18, 1995, Shengzhen, Guangdong, China).
7. Mo, J., Miao, W., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Complexing Adsorptive Catalytical Systems at Irreversible Electrode. *Proceedings of International 5th Beijing*

Conference and Exhibition on Instrumental Analysis (BCEIA) F71-F72 (Peking University Press, October 9-12, 1993, Beijing, China).

6. Mo, J., Miao, W., Cai, P. & Zhang, R. Study on Additive Cyclic Square Wave Voltammetry for Complexing Adsorptive Catalytical Systems. *Proceedings of International 5th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA)*, F69-F70 (Peking University Press, October 9-12, 1993, Beijing, China).
5. Mo, J., Miao, W. & Mo, S. Theory of Additive Square Wave Voltammetry for Adsorptive-complex Catalytic Irreversible Electrode Systems. *PITTCON'93*, 274P (March 8-11, 1993, Atlanta, Georgia, USA).
4. Mo, J., Miao, W., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Adsorptive-complex Catalytical Irreversible Systems. *Proceedings of the 34th IUPAC Congress* P245, No. D-2403 (August 15-20, 1993, Beijing, China).
3. Mo, J., Miao, W., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Adsorptive-complexing Irreversible Systems, II. Non-controlled by the rate of complexing reactions. *Proceedings of International 4th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA)*, F51-F52 (Science Press (Beijing-New York), October 18-24, 1991, Beijing, China).
2. Mo, J., Miao, W., Cai, P. & Zhang, R. Additive Cyclic Square Wave Voltammetry for Adsorptive-complexing Irreversible Systems, I. Controlled by the Rate of Complexing Reactions. *Proceedings of International 4th Beijing Conference and Exhibition on Instrumental Analysis (BCEIA)*, F49-F50 (Science Press (Beijing-New York), October 18-24, 1991, Beijing, China).
1. Mo, J., Miao, W. & Zheng, J. Study on Staircase Voltammetry Theoretical Current Curves for Catalytic System. *Proceedings of the 4th National Conference of China on Electroanalytical Chemistry*, P218, C41 (Publishing House of Shanghai Communications University, May 31-June 4, 1990, Shanghai, China).

IV. CSIRO Divisional Publications:

4. Miao, W., Cole, I. S., Neufeld, A. K., Furman, S. A., Fullston, D., Ganther, W. & Martin, A. FTIR and EIS Studies on the Corrosion Products Formed on Zinc Plates Exposed to Three Accelerated Zinc Corrosion Electrolytes. *CSIRO-DBCE Doc. 00/445* (2000).
3. Miao, W., Cole, I. S., Neufeld, A. K. & Furman, S. A. Identification of Passive Films and Corrosion Products Generated on Zinc Surfaces by an Electrochemical Technique in NaCl Solutions: SEM and FTIR Studies. *CSIRO-DBCE Doc. 00/444* (2000).
2. Miao, W., Cole, I. S., Neufeld, A. K. & Furman, S. A. Corrosion Behavior of Zinalume in pH 2 to 10 NaCl Solutions: Polarization Resistance and EIS Studies. *CSIRO-DBCE Doc. 00/187* (2000).
1. Miao, W., Cole, I. S., Neufeld, A. K. & Furman, S. A. Pitting Corrosion of Zn and Zn-Al Coated Steels in pH 2 to 12 NaCl Solutions. *CSIRO-DBCE Doc. 00/164* (2000).