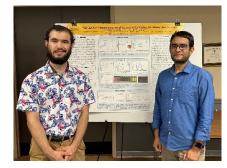
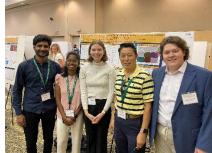
News & Events

• August 2024: Congratulations to Riley Patterson (Murray State University) and Nazmul Hosen (Graduate Student Mentor) for successfully completing the REU program this summer! Riley's outstanding performance (oral presentation and Abstract) led to his selection to represent our REU program at the upcoming 2025 Spring ACS Meeting, with up to \$1,600 in associated costs covered by the REU grant. Riley and Nazmul (photo, left) are the third pair from our group to be selected by the REU program to participate in the Spring ACS Meeting. Previously, Joseph Waite (Weber State University) and Piyush Kumar (Photo, middle), and Kathryn Aumick (Rochester Institute of Technology) and Jesy Alka M. (Photo, right) won the same award in 2023 and 2022, respectively.

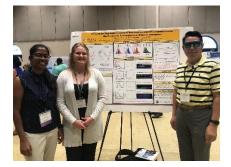


Riley Patterson (left) and Nazmul Hosen (graduate mentor, right).



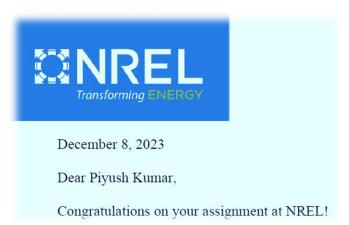


and Joey Waite (left to right).



Jesy Alka M. (graduate mentor), Kathryn Aumick, and Wujian Miao (left to right).

- Summer 2024: Congratulations to Jesy Alka M., who has been offered a half-year internship at Lam Research Corporation (https://www.lamresearch.com/) starting this summer, working on electrodeposition-related projects. This internship will provide Jesy with valuable real hands-on experience that integrates theoretical and experimental studies in a research lab setting at USM with manufacture-focused R&D applications. Jesy is expected to fulfill all the requirements of her doctoral degree at USM in Fall 2025.
- December 2023: Congratulations to Piyush Kuman, who has been offered a 12-month internship at the National Renewable Energy Laboratory (NREL) starting January 2024. Piyush's full-time internship at NREL, focusing on fuel cells and carbon-dioxide reduction, will provide valuable co-op experience which will benefit his program of study, current research, and future career. Considering his participation in the one-year



internship, Piyush is expected to complete all requirements for his doctoral degree at USM in Spring 2025.

 May 2023: Congratulations to Abdul Rashid Issifu on his graduation with a Master of Science degree in Analytical Chemistry! The title of Abdul's thesis is "RAMIE (BOEHMERIA NIVEA): A PERENNIAL PLANT WITH ITS PROTEIN IDENTIFICATION WITH MALDI-MS, A BIOSORBENT FOR Hg (II) REMOVAL FROM WATER AND AS A BAST FIBER PRODUCTION VIA ENZYMATIC DEGUMMING". Abdul is going to join South Dakoda State University for his doctoral studies.



- Congratulations to Nazmul Hosen and Piyush Kumar on receiving the USM College of Arts and Sciences Travel Grants in spring 2023 to attend national conferences and present their research work, separately!
- May 2022: Congratulations to Abdul Rashid Issifu on receiving a travel award from Mississippi State University (MSU) in support of his attending of the Lester Andrew Graduate Research Symposium (LARGS) 2022 hosted by MSU in Starkville, MS, May 18-22, 2022. Abdul presented his research work on "Analysis of Proteins in Ramie Leaf Using Matrix-assisted Laser Desorption/Ionization Mass Spectrometry (MALDI-MS)".



- May 2022: Dr. Wujian Miao was listed as the World's Top 2% Most-Cited Scientists by a Research Group at Stanford University since 2019. For detail information, please visit https://ecebm.com/2021/10/26/stanford-university-names-worlds-top-2-scientists-2021/ and https://elsevier.digitalcommonsdata.com/datasets/btchxktzyw/3.
- April 2022: Congratulations to Piyush Kuman, who recently won the 2nd place of the oral presentation within the Social and Educational Sciences and Business group during the 2022 Susan Siltanen Graduate Student Research Symposium at USM. The award included a certificate along with \$400 cash.
- September 2021: Congratulations to Jesy Alka M on receiving a USM Graduate Competitive Travel Awards to assist with her participation in the 240th ECS Meeting, October 10-14, 2021, Digital Meeting. Jesy's work titled "Sensitive Detection of N,N-Dimethyltryptamine with Molecularly Imprinted Polymer Coupled with Electrogegerated Chemiluminescence" will be presented in the meeting.



- August 2021: Congratulations to Piyush Kumar on receiving a travel grant from the Electrochemical Society (ECS) to assist with his participation in the 240th ECS Meeting, October 10-14, 2021, Digital Meeting. Piyush's presentation was titled "*Vanadium Copper Hydroxy Carbonate Hydrate Towards the Electrocatalytic Oxygen Evaluation Reaction*".
- May 2018: Congratulations to Arun Siddarth Sridhar on his graduation with a PhD degree in Analytical Chemistry! Congratulations to Cyntavia Newton, Murshiva Harris, Sarah Cook, and Nathaniel Kurtz on their graduation with a B. Sc. degree in Chemistry!



Dr. Arun Siddarth Sridhar (left) and Dr. Wujian Miao (right).

- Congratulations to Tamana Shanta, who graduated in August 2017, and was awarded with a PhD degree in December 2017! Her PhD dissertation titled "Anodic Nanocatalysyts for Formic Acid Fuel Cells--An Electrochemistry Study". After graduation, Tamanna took an Assistant Professor position at Winona State University, MN.
- Congratulations to Pradip Bastola, who graduated in August 2017, and was awarded with a PhD degree in December 2017! His PhD dissertation titled "*Electrogenerated Chemiluminescent Studies of 9,10-Diphenylanthracence, Rubrene, Tris (2,2'-Bipyridine) ruthenium (II) Species, and Their Derivatives for Sensentive Detection of Biomolecules*". After graduation, Pradip took a Research Scientist position at Abbott Laboratories, North Chicago.
- **December 2016:** Congratulations to Yiliyasi Wusimanjiang on his graduation with a PhD degree in Analytical Chemistry!



(L to R: Mather of YW, Dr. Wujian Miao, Dr. Yiliyasi Wusimanjiang, father of YW)

• April 2016: Congratulations to Yiliyasi Wusimanjiang, whose paper titled "*Effects of Multi-walled Carbon Nanotubes on the Electrogenerated Chemiluminescence and Fluorescence of CdTe Quantum Dots*", co-authored by Alex Meyer (a former undergraduate and the recipient of the Chair Award of the spring 2015 Undergraduate Research Symposium), Dr. Liping Lu (our research collaborator at Beijing University of Technology), and Dr. Wujian Miao, has been selected for publication by the Editor of *Analytical and Bioanalytical Chemistry* as a Paper in Forefront.

According to the Editorial Office, "The Editors select a number of exceptional papers for rapid publication as Papers in Forefront. These articles are given priority treatment, and they are printed prominently in a journal issue."



Y. Wusimanjiang



Alexander Meyer



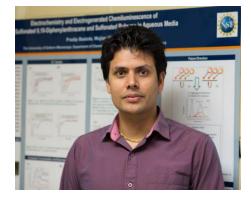
Dr. Liping Lu



Dr. Wujian Miao

- April 2016: Congratulations to Tamanna Shanta on receiving the 2016 University Graduate School Dean's Award for Outstanding Service as President of the Graduate Student Senate 2015-2016!
- April 2016: Congratulations to Tamanna Shanta on receiving a travel grant from the Electrochemical Society (ECS) for presenting the study on direct formic acid fuel cells to the 229th ECS Meeting, May 29-June 2, 2016, San Diego, CA.
- March 2016: Congratulations to Pradip Bastola on receiving a \$500 prize for travelling to a professional conference from the 2016 Dr. Susan A. Siltanen Graudate Student Research Symposium held

in USM Hattiesburg Campus in March 24, 2016. Pradip presented a poster on "ECL studies of sulfonated 9,10-diphenylanthrance and rubrene in aqueous media".





- March 2016: Congratulations to Tamanna Shanta on receiving the first place award (\$50) of the graduate student oral presentations in Chemistry Division at the 80th Annual Meeting of Mississippi Academy of Sciences held in February 2016 in Hattiesburg, MS.
- November 2015: Congratulations to Arun Siddarth Sridhar, who recently participated in the "3MT-three minutes thesis talk" organized by the Graduate School of the University of Southern Mississippi and won the Finalist Award (certificate & \$\$\$).



• October 2015: Dr. Liping Lu from Beijing University of Technology (BJUT) has recently visited our group. All four graduate students, Yiliyasi Wusimanjiang, Tamanna Shanta, Pradip Bastola, and Arun Siddarth, presented their work to Dr. Lu. Dr. Miao and Dr. Lu discussed potential scientific collaborations between the two research groups. Previously, Dr. Miao visited BJUT in May and September of 2015.

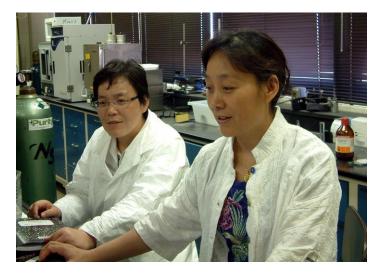


(L to R) Pradip Bastola, Arun Siddharth, Dr. Liping Lu, Yiliyasi Wusimanjiang, and Tamanna Shanta.



Dr. Liping Lu from BJUT.

- May 2015: Congratulations to Alex Meyer, who successfully presented his capstone research project titled "Effect of Carbon Nanotubes on the ECL of Quantum Dots" during the Spring 2015 Departmental Undergraduate Research Symposium, obtained the highest evaluation scores among 10+ his peers from our faculty, and received the Department Chair Award. Alex worked in our lab for a year and is now pursuing his MSc degree in Biomedical Sciences at the University of Mississippi Medical Center.
- November 2013: Jacob Gersh, a undergraduate research student in our lab, has recently received an Eagle SPUR award of \$1000 in support of his CHE 496 capstone course research project entitled "Electrochemical Investigation of Effect of Buffer on Peptide Bonding". According to the Steering Committee for the Center for Undergraduate Research at USM, over 50 impressive applications were received from both campuses representing a wide variety of high quality and innovative projects, only about half of the submitted proposals were funded. Congratulations to Jacob!
- July 2011: Prof. Aixiang Wang and Prof. Lin Li from the School of Chemistry and Resources Environment at Linyyi University (China) are currently visiting our research group. Linyi University and the International Exchange Foundation of Shandong Province for Overseas Studies have financially supported Profs. Wang and Li, respectively, for their 6-month visits.



Profs. Wang (left) and Li (right)

• Dr. Wujian Miao, along with several faculty from other colleges at USM, visited Linyi University (China) from May 15-22, 2011. Several lectures and research presentations were given to the School of Chemistry and Resources Environment at Linyi University.



USM delegation at Linyi University

(L to R) Drs. Zhaolin Jiang (Linyi), Fei Xue (Mass Comm and Journalism), David Davies (Honors), Robert Lyman (Provost), Tongsong Jiang (Linyi), Joseph Kolibal (Math), Chaoyang Zhang (Computer Sci), Wujian Miao (Chem), and Shuyan Wang (Tech Edu).



The Confucian Temple, Qufu, Shandong, China

• Congratulations to Suman Parajuli, who successfully defended his PhD dissertation entitled "Sensitive Detection of High Explosives Using Electrogenerated Chemiluminescence" in March

2011, and was awarded a PhD degree on May 13, 2011 during the university's commencement ceremony.



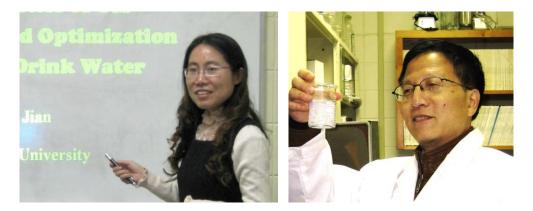
Drs. Wujian Miao (left) and Suman Parajuli (right)

- March 2011: Dr. Wujian Miao was selected by the University Research Council to be the recipient of the "2011 Innovation Award for Applied Research". The formal presentation of the award will be made during the 2011 University Research Council Awards Day event in the fall of 2011
- August 2010: Prof. Cunwang Ge from Nantong University has recently joined us as a Visiting Scholar. Dr. Ge received his BS in Physics from Yangzhou University, his MSc in Chemical Physics from University of Science and Technology of China, his PhD in Molecular and Biomolecular Electronics from Southeast University, and his post-doctoral training in Electrochemistry from Nanjing University. Dr. Ge's visit is jointly supported by the Jiangsu Government Scholarship for Overseas Studies and Dr. Miao's NSF CAREER grant.
- Congratulations to Shijun Wang, who successfully defended his PhD dissertation entitled "Toward Multiplexed Electrogenerated Chemiluminescent Detection" in March 2010, and was awarded a PhD degree on May 15, 2010 during the university's Centennial Celebration Commencement.



Drs. Wujian Miao (left) and Shijun Wang (right).

• November 2008: Dr. Jian Shi and Prof. Xiaohui Jing from Nantong University (China) are currently visiting our research group. They will be here for three months, working on various projects including possible applications of ECL in trace detection of water pollutants. Two research seminars have been scheduled: (1) "Study on the establishment water quality database, the characteristics of OM distribution and optimization removal of drink water" (by Dr. Jian Shi, 11/20/2008), and (2) "Treatment of dyeing wastewater with three-phase three-dimensional electrode reactor" (by Prof. Jinghui Jing, 11/26/2008). Welcome Dr. Jian Shi and Prof. Xiaohui Jing to join us!



Dr. Jian Shi & Prof. Xiaohui Jing

• September 2008: Our first graduate student, Tommie Pittman, received his MSc degree in August 2008, has been recently recruited by the world leading oilfield service provider--Schlumberger (www.slb.com) as a Field Engineer/R&D Scientist. Tommie's research in this

group focused on the utilization of $Ru(bpy)_3^{2+}$ as ECL labels for biomolecular detection. Congratulations to Tommie!



Dr. Wujian Miao's current graduate research team (Photo taken before Tommie Pittman's leaving for his new position, 9-29-2008). Front row (left to right): Dr. Wujian Miao, Tommie Pittman; back row (left to right): Amit Kumar, Suman Parajuli, Shijun Wang.

• **Dr. Wujian Miao To Be Profiled in a Marquis Who's Who Publication** Dr. Wujian Miao has been selected to be included in a biographical directory published by Marquis Who's Who (www.marquiswhoswho.com), the leading biographical reference publisher of the highest achievers and contributors from across the country and around the world.

Dr. Miao, along with other 25 people from Hattiesburg, MS which include the former city mayor Bobby Lee Chain and retired USM president Dr. Aubrey Keith Lucas, has been selected for inclusion in the 2007 (61st) edition of **Who's Who in America**, published in November 2006.

Beginning with the First Edition of **Who's Who in America** published in 1899, Marquis Who's Who has been chronicling the lives of the most accomplished individuals and innovators from every significant field of endeavor - including business, politics, medicine, science, law, education, art, religion and entertainment. Its directories provided essential biographical information for thousands of researchers, journalists, librarians and executive search firms around the world.

• August 23, 2006: Mr. Suman Parajuli from Nepal has recently joined our research group for his PhD study. Suman received his MSc in Chemistry from Tribhuvan University in 1993, and his Master of Philosophy (MPhil) in Chemistry from Kathmandu University in 1999. Suman has been teaching a number of chemistry courses in universities for the last 8 years, and he is now an Assistant Professor of Chemistry at Kathmandu University, Nepal. For more information, please visit our website at http://www.usm.edu/electrochem/Members.htm.

• Summer 2006 REU Program. Bethtrice Thompson from Jackson State University and Lamaryet Moody from Delta State University have joined us for ten-week undergraduate research programs. Bethtrice and Lamaryet are financially supported by NSF-MRSEC and NSF-AGEM REU programs, respectively. Visit our "Member" Section for more details.



International Research Collaboration Between USM and the Bulgarian Academy of Sciences. An international planning visit proposal entitled "New Chemical Sensors Development Using Electrochemically Prepared Active Membranes" was recently funded by the National Science Foundation. The primary objective of this proposal is to establish collaborations between the electrochemistry and bioanalytical chemistry research group of Dr. Wujian Miao at USM and the Laboratory of Electrochemical Sensors and Electroanalysis, Institute of General and Inorganic Chemistry at the Bulgarian Academy of Sciences (BAS), headed by Dr. Milka Toteva Neshkova. The proposed research project mainly deals with the chemical and electrochemical synthesis, characterization, and applications of a new generation of micro- to nano-scale semi-conductive ion-selective sensors (ISE) that could be readily adopted by a micro total analytical or a lab-on-chip system as micro-chemical sensors. The planed two weeks visit of Dr. Neshkova to USM from May 2 to May 16, 2006 will include intensive exchange of information concerning the state-of-the-art in both scientific groups, a peer evaluation of human resources and equipment, and consultation and examinations of the proposed research project progress. During her stay in USM, Dr. Neshkova will be also delivering two lectures; Lecture 1-"Recent Development of Flow-Injection Ion-Selective Detectors Using Thin Electroplated Chalcogenide Membranes" and Lecture 2-"New Analytical Applications of EQCM for Real-Time Stoichiometry and Phase Composition Monitoring During the Electrodeposition of Metal Chalcogenide Films". Dr. Neshkova is an internationally recognized electrochemist. She is the author or co-author of more than 40 refereed papers, and the investigator of 5 Bulgarian and 1 Hungarian Patents. The Cu-ISE on the basis of ternary CuAgSe was commercialized by Radelkiss Co. (Hungary) for the period of 1976-1990. Dr. Neshkova has been the principal advisor of 6 M.Sc and 4 PhD students.

- Dr. Richard Crooks from the Department of Chemistry and Biochemistry at The University of Texas at Austin presented his talk entitled "Dendrimer-Encapsulated Nanoparticels: Synthesis, Characterization, and Applications to Catalysis" in our department on March 24, 2006. Dick has recently moved from Texas A&M-College Station to UT-Austin.
- Dr. Russ Schmehl from the Department of Chemistry at Tulane University presented his talk entitled "Development of light Harvesting Ensembles From Transition Metal Complexes" in our department on September 30, 2005. Russ was our first department seminar speaker this semester after hurricane Katrina.
- August 12, 2005, our second PhD candidate, Mr. Shijun Wang, has recently joined our research group. Shijun originally from Anhui, China. He received his MS degree from Anhui University in July 2005, and his BS degree from Anhui University of Science and Technology in 1995. You may find his background from our website at http://www.usm.edu/electrochem/Members.htm.
- January 3, 2005, Mr. Tommie Pittman has recently joined our research group as a graduate student. Tommie first visited us in October 2004. His main research interests are Bioanalytical Chemistry, Surface Chemistry, and Electrochemistry. You may find his background from our website at http://www.usm.edu/electrochem/Members.htm.
- Dr. David Cliffel, the winner of the 2005 SEAC Young Investigator Award, from Vanderbilt University (http://www.vanderbilt.edu/AnS/Chemistry/groups/cliffel/), will be presenting a seminar on "Photoelectrochemistry of photosystem I protein complexes" on Feb. 11, 2005 in the Department of Chemistry and Biochemistry at USM.
- Dr. Mark Richter, from the Department of Chemistry at Southwest Missouri State University will be presenting a seminar on Electrogenerated Chemiluminescence on April 15, 2005 in the Department of Chemistry and Biochemistry at USM.
- Prof. Alan M Bond, the PhD supervisor of Dr. Wujian Miao, has been named the 2005 recipient of the Charles N. Reilley Award. The award symposium organized by Dr. Steve Feldberg will be held in Orlando, FL, February 27-March 4, 2005 during PITTCON 2005. Congratulations to Prof. Bond!
- Dr. Allen J Bard, the Postdoctoral supervisor of Dr. Wujian Miao, has been named the 2004 recipient of the international Welch Award in Chemistry. The award ceremony will be held in Houston, TX, October 25-26, 2004. Dr. Bard will receive \$300k for his lifetime contributions. Congratulations to Dr. Bard!

- A "Research Introduction at Dr. Wujian Miao Research Group" has now been added to the "Research" Section at http://www.usm.edu/electrochem/Research.htm. This presentation was given to the graduate students in the Department of Chemistry and Biochemistry at USM on September 9, 2004.
- On August 18, 2004, with the help of Dr. Robert Bateman, the chair of the department, "Dr. Wujian Miao Research Group" homepage now has its own web account on The University of Southern Mississippi Server. The new website address is http://www.usm.edu/electrochem. The "Ocean account" will be removed soon.
- On July 28, 2004, Dr. Wujian Miao left Allen J Bard's Research Group at UT-Austin for Hattiesburg, MS to resume his Assistant Professor position in the Department of Chemistry & Biochemistry at the University of Southern Mississippi (USM). Dr. Miao jointed Dr. Bard research group as a post-doctoral fellow on Feb. 15, 2001.
- On June 28, 2004, full-text copies of published papers are removed, and related abstracts are added. To request a copy of an interested paper, one can send a request to Dr. Wujian Miao.
- June 15-18, 2004, Dr. Wujian Miao re-visited Hattiesburg, and an apartment located in Twin Oaks Apartment Community, Oak Grove, was pre-rented.
- On May 3, 2004, all sections of the homepage have been "fed".
- Dr. Wujian Miao will attend the 205th Meeting of the Electrochemical Society held in San Antonio, TX, from May 9 to May 14. About 1000 people will attend the meeting.
- On April 29, 2004, full-texts and/or abstracts of the publications of Dr. Wujian Miao are added along with the publication list.
- On April 4, 2004, "Dr. Wujian Miao Research Group" homepage at USM was established. The website address is www.usm.edu/electrochem.
- On March 26, 2004, Dr. Wujian Miao accepted an Assistant Professor position from the University of Southern Mississippi. He will officially join the Department of Chemistry & Biochemistry at the university on August 19, 2004, and his teaching and research will be focused on the area of Analytical Chemistry. Before moving to Hattiesburg, MS, Dr. Miao will remain in Dr. Allen J Bard's Electrochemistry lab at the University of Texas at Austin, TX, as a postdoctoral fellow.