Robert M. Pankow

Assistant Professor
Department of Chemistry and Biochemistry
The University of Texas at El Paso
El Paso, TX 79968
email: rmpankow@utep.edu phone: (915)-747-7555

Research Interests: *Design and synthesis of functional organic materials, polymer synthesis and characterization, organic synthesis, organometallics, sustainable chemistry, organic electronics.*

Professional Experience:

Assistant Professor, The University of Texas at El Paso, August 2023- Present

Postdoctoral Fellow, Northwestern University, June 2020-July 2023
Advisors: Prof. Tobin J. Marks and Prof. Antonio Facchetti

Education:

Ph.D., Chemistry, University of Southern California, August 2020
Advisor: Prof. Barry C. Thompson
Dissertation: *Strategies to Improve the Sustainability of Conjugated Polymer Synthesis*

M.S., Chemistry, California State University, Northridge, May 2015
Advisor: Prof. Katsu Ogawa
Thesis: *Design and Synthesis of Phosphole Containing Oligomers and Polymers*

B.A., Chemistry, University of California, Santa Barbara, June 2012
Advisor: Prof. R. Dan Little

Awards and Honors:

Emerging Investigator: *Journal of Materials Chemistry C* (April 2024)
UT STARS Program Recipient (September 2023)
ORISE Success Story (May 2023)
KAUST Solar Center Young Scientist Award (May 2022)
NUPA Postdoc of the Month (February 2022)
IC Postdoctoral Fellowship (October 2021)
USC Department of Chemistry G.K. Surya Prakash Award (May 2020)
2019 MRS Spring Meeting Symposium Poster Award (April 2019)
2019 MRS Spring Meeting Symposium Assistant (April 2019)
USC Department Travel Award (April 2019)
USC Department of Chemistry Research Award in Chemistry (March 2018)
USC Dornsife.Graduate School Fellowship (2016-2018)
CSUN Graduate Equity Fellowship Program (2013-2014)

Peer-Reviewed Publications (Citations: 1388, h-index: 20):

(39) Raul S. Ramos, Fernando Munoz Alba, Kavish Saini, Karyme M. Castaneda, Vianey F. Juarez-Rangel, Sreeprasad T. Sreenivasan, M. Carmen Ruiz Delgado, Rocio Ponce Ortiz, Robert M. Pankow* "Harnessing the Reversible Isomerization of Spiropyran to Merocyanine in Conjugated Polymers for Broadband Ultra-Violet to Near-Infrared Electrochromic Switching" *J. Mater. Chem. C* **2025**, *accepted.* DOI: 10.1039/D5TC01125F.

(38) Somayeh Mohammadi, Christian Sandoval-Pauker, Zayra N. Dorado, Thomas P. Senftle, Robert M. Pankow, Hamidreza Sharifan* "Fluorescent Sodium Alginate Hydrogel–Carbon Dots Sensor for Detecting Perfluorooctanoic Acid in Potable Water" *Anal. Chem.* **2025**, *97*, 10075-10084. DOI: 10.1021/acs.analchem.5c01991.

(37) A. M. Mahmudul Hasan, Rupam Roy, Mohammad K Shehab, Ani N. Davis, Kaitlin Slicker, Kent O. Kirlikovali, Robert M. Pankow, Omar K. Farha, Austin M. Evans* "Rapid Cathodic Coloration in Solution-Processable Electrochromic Polymers of Intrinsic Microporosity" *J. Am. Chem. Soc.* **2025**, *147*, 16331-16339. DOI: 10.1021/jacs.5c02014.

(36) Tanzida Zubair, Raul S. Ramos, Ashley Morales, Robert M. Pankow* "Synthesis of Poly(3,4-propylenedioxythiophene) (PProDOT) Analogues via Mechanochemical Oxidative Polymerization" *Polym. Chem.* **2025**, *16*, 1188-1196. DOI: 10.1039/D4PY01253D. **Invited Article.**

(35) Yao Yao, Robert M. Pankow, Wei Huang*, Cui Wu, Lin Gao, Yongjoon Cho, Jianhua Chen, Dayong Zhang, Sakshi Sharma, Xiaoxue Liu, Yuyang Wang, Bo Peng, Sein Chung, Kilwon Cho, Simone Fabiano, Zunzhong Ye, Jianfeng Ping*, Tobin J. Marks*, Antonio Facchetti* "An organic electrochemical neuron for a neuromorphic perception system" *PNAS* **2025**, *122*, e2414879122. DOI: 10.1073/pnas.2414879122.

(34) Christina Convertino*, Isaac Frausto Hernandez, Robyn K. Pinilla, Camila Leite-Madeira, Lori M. Houghtalen, Robert M. Pankow, Lizette O. Villanueva, Jaeyoung Cho, Jeffrey T. Olimpo, and Elena C. Bitner "Faculty Reflections on Implementing Servingness into Research and Teaching: How Professional Development Around Servingness Fosters Latinx Student Success" *J. Lat. Educ.* **2024**, 1-11. DOI: 10.1080/15348431.2024.2431700.

(33) Yongjoon Cho, Lin Gao, Yao Yao, Jaehyun Kim, Dayong Zhang, Giacomo Forti, Isaiah Duplessis, Yuyang Wang, Robert M. Pankow, Xudong Ji, Jonathan Rivnay, Tobin J. Marks,* Antonio Facchetti* "Small-Molecule Mixed Ionic-Electronic Conductors for Efficient N-Type Electrochemical Transistors: Structure-Function Correlations" *Angew. Chem. Int. Ed.* **2024**, e202414180. DOI: 10.1002/anie.202414180.

(32) Tanzida Zubair, Md Mahmudul Hasan, Raul S. Ramos, Robert M. Pankow*, "Conjugated Polymers with Near-Infrared (NIR) Optical Absorption: Structural Design Considerations and Applications in Organic Electronics" *J. Mater. Chem. C* **2024**, *12*, 8188-8216. accepted. DOI: 10.1039/D4TC01391C. **From themed collection: Journal of Materials Chemistry C Emerging Investigators 2024.**

(31) Vinod K. Sangwan*, Zachary Martin, Guoping Li, Fei Qin, Shreyash Hadke, Robert M. Pankow, Woo Cheol Jeon, Ding Zheng, Yongjoon Cho, Ryan M. Young*, Kevin L. Kohlstedt*, Michael R. Wasielewski*, George C. Schatz*, Antonio Facchetti*, Mark C. Hersam*, Tobin J. Marks*, "Elucidating performance degradation mechanisms in non-fullerene acceptor solar cells" *J. Mater. Chem. A* **2024**, DOI: 10.1039/D4TA03501A.

(30) Jaehyun Kim, Robert M. Pankow, Yongjoon Cho, I. Daniel Duplessis, Fei Qin, Dilara Meli, Rachel Daso, Ding Zheng, Wei Huang, Jonathan Rivnay*, Tobin Marks*, Antonio Facchetti*, "Monolithically-integrated ultra-high-resolution vertical organic electrochemical transistor arrays and complementary circuits" *Nat. Electron.* **2024**, *7*, 234-243.

(29) Jianglin Wu, Caixia Fu, Robert M. Pankow, Yao Chen*, Ding Zheng, Zhiyun Lu, Yan Huang*, Tobin J. Marks*, Antonio Facchetti*, "Copolymers Based on π-Conjugated Asymmetric Naphthalene Diimide Building Blocks: Synthesis, Crystallography, and Structure–Property–Charge Transport/Photovoltaic Correlations" *Chem. Mater*. **2023**, *35*, 10106-10118.

(28) Fei Qin, Guoping Li, Yang Liu, Yongjoon Cho, Robert M. Pankow, Dayong Zhang, Liangwen Feng, Yuyang Wang, Seonghun Jeong, Giacomo Forti, Ding Zheng, Changduk Yang, Yinhua Zhou*, Tobin J. Marks*, Antonio Facchetti*, "Conjugated versus Nonconjugated Polymerized Small-Molecule Acceptors. Photovoltaic Response and Mechanical Properties" *ACS Energy Lett.* **2023**, *8*, 4733-4745.

(27) Robert M. Pankow, Brendan Kerwin, Yongjoon Cho, Seonghun Jeong, Gicaomo Forti, Bryan Musolino, Changduk Yang, Antonio Facchetti*, Tobin J. Marks*, "Enhanced Optical Contrast and Switching in Near-Infrared Electrochromic Devices by Optimizing Conjugated Polymer Oligo(Ethylene Glycol) Sidechain Content and Gel Electrolyte Composition" *Adv. Func. Mater*. **2023**, 2309428.

(26) Guoping Li, Fei Qin, Robert M. Jacobberger , Subhrangsu Mukherjee , Leighton O. Jones, Ryan M. Young, Robert M. Pankow, Brendan Kerwin , Lucas Q. Flagg , Ding Zheng , Kevin L. Kohlstedt*, Vinod K. Sangwan*, Mark C. Hersam*, George C. Schatz*, Dean M. DeLongchamp*, Michael R. Wasielewski*, Yinhua, Zhou*, Antonio Facchetti*, Tobin J. Marks*, "What is the Role of Non-Fullerene Acceptor Symmetry in Polymer Solar Cell Efficiency?" *Joule* **2023**, *7*, 2152-2173.

(25) Giacomo Forti, Robert M. Pankow, Fei Qin, Yongjoon Cho, Brendan Kerwin, Isaiah Duplessis, Andrea Nitti, Seonghun Jeong, Changduk Yang*, Antonio Facchetti*, Dario Pasini*, Tobin J. Marks* "Anthradithiophene (ADT)-Based Polymerized Non-Fullerene Acceptors for All-Polymer Solar Cells" *Chem. Eur. J.* **2023**, e202300653.

(24) Robert M. Pankow, Alexandra Harbuzaru, Ding Zheng, Brendan Kerwin, Giacomo Forti, Isaiah D. Duplessis, Bryan Musolino, Rocio Ponce Ortiz, Antonio Facchetti*, Tobin J. Marks*,

"Oxidative-Reductive Near-Infrared Electrochromic Switching Enabled by Porous Vertically Stacked Multilayer Devices" *J. Am. Chem. Soc.* **2023**, *145*, 13411-13419.

(23) Wei Huang*, Jianhua Chen, Yao Yao, Ding Zheng, Xudong Ji, Liang-Wen Feng, David Moore, Nicholas R. Glavin, Miao Xie, Yao Chen, Robert M. Pankow, Abhijith Surendran, Zhi Wang, Yu Xia, Libing Bai, Jonathan Rivnay, Jianfeng Ping, Xugang Guo, Yuhua Cheng*, Tobin J. Marks*, Antonio Facchetti*, "Vertical Organic Electrochemical Transistors for Complementary Logic Circuits" *Nature* **2023**, *613*, 496-502.

(22) Ning Su, Jianhua Chen*, Mengran Peng, Guoping Li, Robert M. Pankow, Ding Zheng, Junqiao Ding*, Antonio Facchetti*, Tobin J. Marks*, "π-Extension and chlorination of non-fullerene acceptors enable more readily processable and sustainable high-performance organic solar cells" *J. Energy Chem.* **2023**, *79*, 321-329.

(21) Gabriele Bianchi, Chiara Carbonera, Laura Ciammaruchi*, Nadia Camaioni, Nicola Negarville, Francesca Tinti*, Giacomo Forti, Andrea Nitti*, Dario Pasini, Antonio Facchetti, Robert M. Pankow, Tobin J. Marks, Riccardo Po, "An Anthradithiophene Donor Polymer for Organic Solar Cells with a Good Balance Between Efficiency and Synthetic Accessibility" *Solar RRL* **2022**, *6*, 2200643.

(20) Robert M. Pankow, Jianglin Wu, Alexandra Harbuzaru, Brendan Kerwin, Yao Chen, Rocio Ponce Ortiz, Antonio Facchetti*, Tobin J. Marks*, "All-Polymer Solar Cells Incorporating Readily Accessible Naphthalene Diimide and Isoindigo Acceptor Polymers for Improved Light Harvesting" *Chem. Mater.* **2022**, *34*, 3267-3279.

(19) Jianhua Chen, Wei Huang*, Ding Zheng *, Zhaoqian Xie*, Xinming Zhuang, Dan Zhao, Yao Chen, Ning Su, Hongming Chen, Robert M. Pankow, Zhan Gao, Junsheng Yu, Xugang Guo, Xinge Yu*, Tobin J. Marks*, Antonio Facchetti*, "Ultra-Stretchable Organic Electrochemical Transistors with Strain-Resistant Performance" *Nat. Mater.* **2022**, *21*, 564-571.

- **Highlighted by Nature Materials**: F. Cicoira *Nat. Mater.* **2022**, *21*, 495-497.
- **Highlighted by Sohu News** June 23rd, 2022.

(18) Guoping Li, Liang-Wen Feng, Subhrangsu Mukherjee, Leighton O. Jones, Robert . Jacobberger, Wei, Huang, Ryan M. Young, Robert M. Pankow, Weigang Zhu, Norman Lu, Kevin L. Kohlstedt*, Vinod K. Sangwan*, Michael R. Wasieleski*, Mark C. Hersam*, George C. Schatz*, Dean M. DeLongchamp*, Antonio Facchetti*, Tobin J. Marks*, "Non-Fullerene Acceptors with Direct and Indirect Hexa-Fluorination Afford >17% Efficiency in Polymer Solar Cells" *Energy Environ. Sci.* **2022**, *15*, 645-659.

(17) Wei Huang, Jianhua Chen, Gang Wang, Yao Yao, Xinming Zhuang, Robert M. Pankow, Yuhua Cheng, Tobin J. Marks*, Antonio Facchetti*, "Dielectric materials for electrolyte gated transistor applications" *J. Mat. Chem. C.*, **2021**, *9*, 9348-9376.

(16) Robert M. Pankow and Barry C. Thompson*, "The Development of Conjugated Polymers as the Cornerstone of Organic Electronics" *Polymer* **2020**, *207*, 122874. **Invited Perspective Article.**

(15) Liwei Ye, Alexander Schmitt, Robert M. Pankow, Barry C. Thompson*, "An Efficient Precatalyst Approach for the Synthesis of Thiazole-Containing Conjugated Polymers via Cu-Catalyzed Direct Arylation Polymerization (Cu-DArP)" *ACS. Macro Letters* **2020**, *9*, 1446-1451.

(14) Robert M. Pankow, Liwei Ye, Barry C. Thompson*, "Influence of the Ester Directing-Group on the Inhibition of Defect Formation in Polythiophenes with Direct Arylation Polymerization (DArP)," *Macromolecules* **2020**, *53*, 3315-3324.

(13) Robert M. Pankow and Barry C. Thompson*, "Approaches for Improving the Sustainability of Direct Arylation Polymerization (DArP)," *Polymer Chemistry* **2020**, *11*, 630-640. **Invited Review**.

(12) Liwei Ye, Robert M. Pankow, Alexander Scmitt, Barry C. Thompson*, "Synthesis of Conjugated Polymers using Aryl-Bromides via Cu-Catalyzed Direct Arylation Polymerization (Cu-DArP)," *Polymer Chemistry* **2019**, *10*, 6545-6550.

(11) Liwei Ye, Robert M. Pankow, Mami Horikawa, Elizabeth Melenbrink, Kangying Liu, Barry C. Thompson*, "Green Solvent Processed Amide-Functionalized Conjugated Polymers Prepared via Direct Arylation Polymerization (DArP)," *Macromolecules* **2019**, *52*, 9383-9388.

(10) Robert M. Pankow, Liwei Ye, Barry C. Thompson*, "Influence of an Ester Directing-Group on Defect Formation in the Synthesis of Conjugated Polymers via Direct Arylation Polymerization (DArP) using Sustainable Solvents," *Polymer Chemistry*, **2019**, *10*, 4561-4572.

(9) Dhritiman Bhattacharyya, Angelo Montenegro, Purnim Dhar, Muhammet Mammetkuliyev, Robert M. Pankow, Moon Chul Jung, Mark E. Thompson, Barry C. Thompson, Alexander V. Benderskii*, "Molecular orientation of poly-3-hexylthiophene at the buried interface with fullerene" *J. Phys. Chem. Lett.* **2019**, *10*, 1757-1762.

(8) Robert M. Pankow, Liwei Ye, Barry C. Thompson*, "Sustainable Synthesis of a Fluorinated Arylene Conjugated Polymer via Cu-Catalyzed Direct Arylation Polymerization (DArP)," *ACS Macro Lett.* **2018**, *10*, 1232-1236.

(7) Robert M. Pankow, Liwe Ye, and Barry C. Thompson*, "Copper Catalyzed Synthesis of Conjugated Polymers using Direct Arylation Polymerization," *Polymer Chemistry* **2018**, *9*, 4120-4124.

- **Highlighted as the best paper** in *Polymer Chemistry* in August 2018.
- **Highlighted by ChemSusChem** as research of *exceptional quality* and *importance for sustainability*: A. Facchetti *ChemSusChem* **2018**, *11*, 3829-3833.

(6) Robert M. Pankow, Liwe Ye, Nemal S. Gobalasingham, Neda Salami, and Barry C. Thompson*, "Investigation of Green Solvents for Direct Arylation Polymerization (DArP)," *Polymer Chemistry* **2018**, *9*, 3885-3992.

(5) Robert M. Pankow, John D. Munteanu, and Barry C. Thompson*, "Influence of the aryl spacer in 2,5-dialkoxyphenylene and diaryl substituted thieno[3,4-c]pyrrole-4,6-dione copolymers," *J. Mat. Chem. C.* **2018**, *6*, 5992-5998.

(4) Nemal S. Gobalasingham, Seyma Ekiz, Robert M. Pankow, Francesco Livi, Eva Bundegaard*, and Barry C. Thompson*, "Carbazole-Based Copolymers via Direct Arylation Polymerization (DArP) for Suzuki-Convergent Polymer Solar Cell Performance," *Polymer Chemistry* **2017**, *8*, 4393-4402.

(3) Robert M. Pankow, Nemal S. Gobalasingham, John Munteanu, and Barry C. Thompson*, "Preparation of Semi-Alternating Conjugated Polymers using Direct Arylation Polymerization (DArP) and Improvement of Photovoltaic Device Perfomance," *J. Polym. Sci. Part A: Polym. Chem.* **2017**, *55*, 3370-3380.

(2) Nemal S. Gobalasingham, Robert M. Pankow, Seyma Ekiz, and Barry C. Thompson*, "Evaluating Structure-Function Relationships Toward Three-Component Conjugated Polymers via Direct Arylation Polymerization (DArP) for Stille Convergent Solar Cell Performance," *J. Mat. Chem. A* **2017**, *5*, 14101-14113.

(1) Nemal S. Gobalasingham, Robert M. Pankow, and Barry C. Thompson*, "Synthesis of Random Poly(Hexyl Thiophene-3-Carboxylate) Copolymers via Oxidative Direct Arylation Polymerization (Oxi-DArP)," *Polymer Chemistry* **2017**, *8*, 1963-1971.

Book Chapters:

(1) Brian Schmatz, Robert M. Pankow, Barry C. Thompson, John Reynolds, "Perspective on the Advancements in Conjugated Polymer Synthesis, Design, and Functionality over the Past Ten Years." In *The Handbook of Conducting Polymers*, 4th ed; Barry C. Thompson, John R. Reynolds, and Terje Skotheim, Ed.; Taylor and Francis, Boca Raton, 2019.

Invited Seminars:

(1) "Molecular Engineering of Conjugated Polymers for Next-Generation Electrochromic Devices" New Mexico Tech; Socorro, NM; August 30, 2024.

Conference Presentations:

(19) "Morphological and Structural Engineering of Conjugated Polymers for Near-Infrared Electrochromic Devices" Robert M. Pankow. Talk (in-person) given at MRS Spring 2024 Meeting, Seattle, WA, April 25, 2024.

(18) “Morphological Engineering of Conjugated Polymers for Next-Generation Electrochromic Devices” Robert M. Pankow. Talk (in-person) given at ACS Spring 2024 Meeting, New Orleans, LA, March 18, 2024.

(17) “Morphological Engineering of Conjugated Polymers for Next-Generation Electrochromic Devices” Robert M. Pankow. Talk (in-person) given at ACS 2023 Southwest Regional Meeting, Oklahoma City, OK, November 15, 2023.

(16) “Evaluating the Influence of Polyethylene Glycol Side-Chain Content on the Electrochromic Properties of Diketopyrrolopyrrole-EDOT Copolymers” Robert M. Pankow, Bryan J. Musolino, Antonio Facchetti, and Tobin J. Marks. Talk (virtual) given at IC Tech Week 2023, McLean, VA, September 28, 2023.

(15) “Evaluating the Influence of Polyethylene Glycol Side-Chain Content on the Electrochromic Properties for Diketopyrrolopyrrole-EDOT Copolymers” Robert M. Pankow, Bryan J. Musolino, Antonio Facchetti, and Tobin J. Marks. Talk (in-person) given at Pittcon 2023, Philadelphia, PA, March 3, 2023.

(14) “Tailoring NIR Light-Absorbing Conjugated Polymers for Mechanically and Environmentally Robust Tunable Electrochromic Filters” Robert M. Pankow. Talk (virtual) given at the Intelligence Community Academic Research Symposium, September 21, 2022.

(13) “Probing the Effects of Film Nanostructure for Conjugated Polymers in Applications as Mixed-Ion Conductors” Robert M. Pankow, Bryan J. Musolino, Antonio Facchetti, and Tobin J. Marks. Talk (in-person) given at ACS Fall 2022 National Meeting & Exposition Chicago, IL August 25, 2022.

(12) “Structurally Simple Acceptor Polymers Synthesized via Direct Arylation Polymerization for All-Polymer Solar Cells” Robert M. Pankow, Antonio Facchetti, and Tobin J. Marks. **Invited talk** and poster presentation (in-person) given at KAUST Research Conference: Accelerating Solar Energy Research towards meeting Vision 2030 Goals, KAUST, Saudi Arabia, May 10, 2022. **Selected as Young Scientist Award Winner for best presentation.**

(11) “Enhancing the Sustainability of All-Polymer Solar Cells by Designing Structurally Simple Polymer Acceptors Synthesized via Direct Arylation Polymerization” Robert M. Pankow and Tobin J. Marks. **Invited talk** (virtual) given at CityU Croucher Advanced Study Institute, Kowloon, Hong Kong, December 9, 2021.

(10) “Sustainable methods for the preparation of conjugated polymers using direct arylation polymerization (DArP)**”** Robert M. Pankow and Barry C. Thompson. Talk given at the ACS National Meeting and Exposition, San Diego, CA, August 27, 2019.

(9) “Preparation of Conjugated Polymers via Direct Arylation Polymerization (DArP) for Solar Cell Applications” Robert M. Pankow and Barry C. Thompson. Poster presented at the 2019

MRS Spring Meeting, Phoenix, AZ, April 24, 2019. **Selected as a poster winner for the symposium**.

(8) "Influence of the aryl spacer in 2,5-dialkoxyphenylene and diaryl substituted thieno[3,4-c]pyrrole-4,6-dione copolymers" Robert M. Pankow, John D. Munteanu, Barry C. Thompson. Poster presented at Stauffer Graduate Student Research Poster Extravaganza, March 2018.

(7) "Expanding the Scope of Direct Arylation Polymerization (DArP) Towards the Preparation of Complimentary Absorbing Polymers for Organic Solar Cells". Robert M. Pankow, Nemal S. Gobalasingham, John D. Munteanu, Barry C. Thompson. Poster Presented at the 46th John Stauffer Distinguished Lecture Poster Session, March 30, 2017.

(6) "Effects of annulations and oxidation on photophysical properties of phosphole containing oligomers and their precursors". Kenneth F. Cooper, Robert M. Pankow, and Katsu Ogawa. Poster presented at 248th ACS National Meeting and Exposition, San Francisco, CA, August 12, 2014.

(5) **"**Microwave assisted synthesis and electrochemical characterization of phosphole containing conjugated oligomers**"** Robert M. Pankow, Kenneth F. Cooper, and Katsu Ogawa. Poster presented at 248th ACS National Meeting and Exposition, San Francisco, CA, August 12, 2014.

(4) "The Electrochemical Characterization of Phosphole Containing Platinum Complexes and π-Conjugated Polymers: Structure-Property Relationships Associated with P-Center Modification" Robert M. Pankow and Katsu Ogawa. Talk given at the CSUN Student Research & Creative Works Symposium, February 14, 2014.

(3) "Microwave Assisted Synthesis of Phosphole Containing Oligomers" Robert M. Pankow, Kenneth F. Cooper and Katsu Ogawa. Talk given at The 15th Annual Student Symposium Sigma Xi Scientific Research Society-CSUN Chapter, April 26, 2013. **Selected for First Place**.

(2) "Photophysical Properties of Phosphole Containing Oligomers" Kenneth F. Cooper, Robert M. Pankow, and Katsu Ogawa. Talk given at The 15th Annual Student Symposium Sigma Xi Scientific Research Society-CSUN Chapter, April 26, 2013. **Selected for Second Place**.

(1) "Microwave assisted Cycloaddition for Syntheses of Phosphole Containing Oligomers" Robert M. Pankow, Kenneth F. Cooper and Katsu Ogawa. Poster presented at CSUN Student Research & Creative Works Symposium, February 14, 2013. **Selected for Second Place**.

Student Presentations:

(7) "Mechanochemical Synthesis of Poly(3,4- Propylenedioxythiophene) (PPRODOT) Analogues at Room Temperature" Ashley Morales, Tanzida Zubair, Raul S. Ramos, Robert M. Pankow. Poster presentation at UTEP COURI Spring 2025 Symposium. May 3, 2025. **Selected for Honorable Mention.**

(6) “Synthesis and Electrochemical Characterization of PProDOT Copolymers Incorporating Urea Sidechains” Adrian B. Richarte, Md Mahmudul Hasan, Robert M. Pankow. Poster presentation at UTEP COURI Spring 2025 Symposium. May 3, 2025.

(5) “Incorporating Spiropyran into Conjugated Polymers with Broad Spectral Coverage” Raul S. Ramos and Robert M. Pankow. Poster presentation at ACS Spring Meeting 2025; San Diego, CA. March 25, 2025.

(4) “Mechanochemical Synthesis of Poly(3,4- Propylenedioxythiophene) (PPRODOT) Analogues at Room Temperature” Tanzida Zubair, Raul S. Ramos, Ashley Morales, Robert M. Pankow. Poster presentation at ACS Spring Meeting 2025; San Diego, CA. March 24, 2025. **Selected for POLY Sci-Mix**.

(3) “Synthesis and Characterization of a Urea-Functionalized Polythiophene for Electrochromic and Energy Storage Application” Md Mahmudul Hasan, Raul S. Ramos, Adrian B. Richarte, Robert M. Pankow. Poster presentation at UTEP Department of Chemistry and Biochemistry Annual Biochemistry and Chemistry Day. March 22, 2025.

(2) “Incorporating Spiropyran into Conjugated Polymers for Electrochromic Switching with Broad Spectral Coverage” Raul S. Ramos and Robert M. Pankow. Poster presentation UTEP Department of Chemistry and Biochemistry Annual Biochemistry and Chemistry Day. March 22, 2025. **Awarded Best Poster.**

(1) “Mechanochemical Synthesis of Poly(3,4- Propylenedioxythiophene) (PPRODOT) Analogues at Room Temperature” Tanzida Zubair, Raul S. Ramos, Ashley Morales, Robert M. Pankow. Poster presentation at UTEP Department of Chemistry and Biochemistry Annual Biochemistry and Chemistry Day. March 22, 2025.

Current & Prior Support at UTEP:

(3) UTEP Institute for Strategic and Sustainable Resources Grant “Separation of High-Value Elements for National Defense (SHIELD)” July 2025-June 2026: $59,908; Role: PI (Co-PIs: Chad Hoyer and Camila Madeira).

(2) UTEP University Research Institute Grant “Synthesis of Intrinsically Self-Healing Conjugated Polymers” January 2024-August 2024: $5,000; Role: sole PI.

(1) UT Science and Technology Acquisition and Retention (STARs) Program; August 2023-February 2026: $300,000.

Professional Societies:

American Chemical Society (Member since 2013), Materials Research Society (Member since 2019).

Professional Activities:

ACS Petroleum Research Fund Reviewer, 2025

European Research Council Reviewer, 2025
Invited Panelist, *Job Talk Success in Academia*, USC PhD Academy (October 8, 2024)
Attendee, NSF Chemistry Early Career Workshop (May 2024)
Guest Editor, *Energy Advances*, Royal Society of Chemistry
NSF Reviewer, 2023-Present
Reviewer: *Journal of Materials Chemistry C, Journal of Nanotechnology, Materials Horizons, ACS Applied Materials and Interfaces, ChemistrySelect, Nature Communications, RSC Advances, Chemical Engineering Journal, RSC Applied Polymers, Advanced Materials Technologies*
Community Board Member, *Materials Horizons*, Royal Society of Chemistry, April 2020-Present
Session Chair for New Synthesis and Characterization of Polymers at ACS National Meeting Spring 2019

Institutional Service:

UTEP Department of Chemistry and Biochemistry, Faculty Search Committee, Fall 2025
Invited Panelist, *Minds that Innovate: A Panel Discussion with UTEP NSF CAREER Faculty*, UTEP ORSP (September 20, 2024)
UTEP Department of Chemistry, Department Safety Committee, Fall 2024- Present
UTEP Department of Chemistry and Biochemistry, Faculty Search Committee, Fall 2024
UTEP Department of Mathematical Sciences, Faculty Search Committee, Fall 2024
UTEP Department of Chemistry and Biochemistry, Awards Committee, Fall 2023-Present
UTEP Department of Chemistry and Biochemistry, Faculty Search Committee, Fall 2023
UTEP College of Science Speed Mentoring, August 3rd, 2023

Courses Taught at UTEP:

Semester	Course	Instructor Rating
Spring 2025	CHEM 6196/6396 - Graduate Research in Chemistry	-
	CHEM 4376 - Introduction to Research	-
	CHEM 2322 - Organic Chemistry II	5/5
	RSRC 4033 (Undergraduate Research)	-
Fall 2024	CHEM 6396/6196: Graduate Research in Chemistry	-
	CHEM 4376: Introduction to Research	-
	CHEM 2321: Organic Chemistry I	4.83/5
	RSRC 4033: Undergraduate Research	-
Spring 2024	CHEM 6196/5396: Graduate Research in Chemistry	-
	CHEM 4376: Introduction to Research	-
	CHEM 2125: Lab for Organic Chemistry	-
	RSRC 4033 (Undergraduate Research)	-
Fall 2023	CHEM 6195/5195: Graduate Seminar	4.44/5
	CHEM 6396: Graduate Research in Chemistry	-
	CHEM 5196: Graduate Research in Chemistry	-
	RSRC 4033 (Undergraduate Research)	-

Graduate Students Mentored at UTEP:

Yeslie Carrillo, Ph.D. Materials Science, UACJ (Summer 2024-Fall 2024)
- Postdoctoral Fellow, UTEP

Tanzida Zubair, Ph.D. Chemistry, UTEP (Fall 2023-Present)
- Sloan Center for Systematic Change Fellow 2024

Md Mahmudul Hasan, Ph.D. Chemistry, UTEP (Fall 2023-Present)
- Sloan Center for Systematic Change Fellow 2024

Raul S. Ramos, M.S. Chemistry, UTEP (Fall 2023-Present)
- Sloan Center for Systematic Change Fellow 2024

Undergraduate Students Mentored at UTEP:

Valeria Marquez, B.S. Chemistry, UTEP (Summer 2025-Present)

Keolalani Gurule, B.S. Biochemistry, UTEP (Summer 2025-Present)
- UTEP COURI SURPASS Program, Summer 2025

Andrea Mena, B.S. Chemistry, UTEP (Spring 2025-Present)

Isabella Romero, B.S. Biochemistry, UTEP (Spring 2025-Present)
- UTEP COURI SURPASS Program, Summer 2025

Paulina Garay Luna, B.S. Biochemistry, UTEP (Spring 2025-Present)

Ashley Morales, UTEP (Summer 2024-Spring 2025)
- Department of Chemistry, Best Biochemistry Undergraduate Award 2025

Adrian Bocanegra Richarte, B.S. Chemistry, UTEP (Spring 2024-Present)
- NSF-REU, Summer 2024, University of Southern Mississippi
- Snyder Scholar, Summer 2025, UIUC

Vianey Juarez-Rangel, B.S. Chemistry, UTEP (Fall 2023-Fall 2024)
- UCSB-MRL FLAM Scholar Summer 2024
- Department of Chemistry, Best Chemistry Undergraduate Award 2024
- Georgia Tech Chemistry PhD Program 2025

Karyme Castaneda, B.S. Chemistry, UTEP (Fall 2023-Spring 2025)
- UCSB-MRL FLAM Scholar Summer 2024
- Department of Chemistry, Best Chemistry Undergraduate Award 2025

Paulina Trevino, B.S. Biology, UTEP (Fall 2023-Spring 2024)
- UT Dallas Bioengineering PhD Program 2024

High School Students Mentored at UTEP:

Catherine Cardenas, Young Women's STEAM Academy, Summer 2025

Destiny Licon, Young Women's STEAM Academy, Summer 2024