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EDUCATION

2005–2011	Ph.D. University of Georgia (Athens, GA, USA) *Dissertation title:* "Quantification of Virtual Chemical Properties: Strain, Hyperconjugation, Conjugation, and Aromaticity" *Advisor:* Professor Paul von Ragué Schleyer
2000–2004	B.S. Tung-Hai University (Taichung, Taiwan)

PROFESSIONAL EXPERIENCE

2021–present	Associate Professor	University of Houston (Houston, TX, USA)
2015–2021	Assistant Professor	University of Houston (Houston, TX, USA)
2013–2015	Research Scientist	University of Georgia (Athens, GA, USA)
2011–2013	Postdoctoral Associate	University of Georgia (Athens, GA, USA)

POSITIONS

2020–present	Advisory Board Member	*Organic & Biomolecular Chemistry*
2020–present	Editorial Board Member	*Chemical Communications*
2020–present	Associate Editor	*Journal of Physical Organic Chemistry*

HONORS AND AWARDS

2024	NIH-Maximizing Investigators' Research Award (MIRA) [Approved for funding]
2023	Tunghai University Distinguished Alumni Award
2021	Thieme Chemistry Journals Award 2021
2020	Alfred P. Sloan Research Fellowship
2019	NIH-Maximizing Investigators' Research Award (MIRA)
2018	NSF-CAREER Award
2012	IUPAC-Solvay Prize for Young Chemist

PUBLICATIONS *(produced from work performed at UH)*

107. Viesser, R. V.; Donald, C. P.; May, J. A.; Wu, J. I.* "Can Twisted Double Bonds Facilitate Stepwise [2+2] Cycloadditions?" *Org. Lett.* **2024** (accepted).

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104. Karas, L. J.; Jalife, S.; Viesser, R. V.; Soares, J. V.; Haley, M. M.*; Wu, J. I.* "Two Teams are Better Than One: Where Theory and Experiment Successfully Interact" *Angew. Chem. Int. Ed.* **2024**, *63*, e202317561. DOI: 10.1002/anie.202317561.

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70. Wen, Z.; Karas, L. J.; Wu, C. H.; Wu, J. I.* "How Does Excited-State Antiaromaticity Affect the Acidity Strengths of Photoacids?" *Chem. Commun. (Emerging Investigators Issue 2020)* **2020**, *56*, 8380–8383. DOI: 10.1039/D0CC02952A

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20. Wu, J. I.; Fernandez, I.; Mo, Y.; Schleyer, P. v. R.* "Why Cyclooctatetraene is Highly Stabilized: The Importance of "Two-Way" (Double) Hyperconjugation" *J. Chem. Theory Comput.* **2012**, *8*, 1280–1287. DOI: 10.1021/ct3000553

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7. Wu, J. I.; Wannere, C. S.; Mo, Y.; Schleyer, P. v. R.;* Bunz, U. H. F.* "4n π Electrons but Stable: N,N-Dihydrodiazapentacenes" *J. Org. Chem.* **2009***, 74,* 4343–4349. DOI: 10.1021/jo900684c

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INVITED CONFERENCE TALKS

1. Pacifichem 2025: Designed π-Systems–Syntheses, Properties, Theory, and Function, Honolulu, HI, USA; December 15–20, 2025
"*TBA*"
2. Pacifichem 2025: Chemical Concepts from Theory and Computation, Honolulu, HI, USA; December 15–20, 2025
"*TBA*"
3. 10th Heron Island Conference on Reactive Intermediates and Unusual Molecules, Heron Island, Queensland, Australia; July 6–12, 2025
"*TBA*"
4. Aromaticity–2025, Merida, Mexico; January 27–30, 2025
"TBA"
5. Workshop on Magnetically Induced Currents (MAGIC), Chiemsee, Germany; September 9–13, 2024
"*TBA*"
6. International Conference on Excited-State Aromaticity and Antiaromaticity (ICESAA3), Dubrovnik, Croatia; July 7–10, 2024
"*TBA*"
7. Chemical Concepts from Theory and Computations, Lyon, France; December 10–13, 2023
"*Antiaromaticity—The Fuzzier Brother? Historical Developments, Opportunities, and Challenges*"
8. The Beilstein Organic Chemistry Symposium: π-Conjugated Molecules and Materials, Limburg, Germany; November 7–9, 2023
"*Antiaromaticity—The Fuzzier Brother? Historical Developments, Opportunities, and Challenges*"
9. Fall ACS: Symposium for "Chemical Bonding–Perspectives from Valence Bond Theories, San Francisco; August 13–17, 2023
"*Antiaromaticity: The Fuzzier Brother? Historical Developments, Opportunities, and Challenges*"
10. 3rd From Carbon-Rich Molecules to Carbon-Based Materials, Riviera Maya, Mexico; May 7–10, 2023
"*A Carbon-Rich Buffet Talk*"
11. Macrocyclic and Supramolecular Chemistry Early Career Virtual Symposium; March 30, 2023
"*Molecules in a Hurry to Escape Antiaromaticity*"
12. ACS Southwest Regional Meeting, Baton Rouge, LA, USA; November 6–9, 2022
"*Molecules in a Hurry to Escape Antiaromaticity*"
13. International Symposium on Novel Aromatic Compounds (ISNA), Warsaw, Poland; July 3–8, 2022
"*Molecules in a Hurry to Escape Antiaromaticity*"
14. Canadian Chemistry Conference and Exhibition (CCCE), Calgary, Canada; July 3–8, 2022
"*Molecules in a Hurry to Escape Antiaromaticity*"
15. International Symposium of Macrocyclic and Supramolecular Chemistry (ISMSC), Eugene, OR, USA; June 19–24, 2022
"*Molecules in a Hurry to Escape Antiaromaticity*"
16. Reaction Mechanisms Conference (RMC), Denver, CO, USA; June 12–15, 2022
"*Molecules in a Hurry to Escape Antiaromaticity*"
17. Pacifichem 2020: New Horizon of Main Group and Transition Metal Aromatics, Honolulu, HI, USA; December 16–21, 2020
"*Molecules in a Hurry to Get Rid of Antiaromaticity*"

18. Pacifichem 2020: Designed π-Electron Systems: Synthesis, Properties, Theory and Function, Honolulu, HI, USA; December 16–21, 2020
"*Heteroatoms Here and There: Why it Matters for Designing π-Electronic Systems*"
19. Fall ACS: Symposium on Orbital Models in Electronic Structure Theory, Atlanta, GA, USA; August 22–26, 2021
"*Molecules in a Hurry to Get Rid of Antiaromaticity*"
20. RSC Desktop Seminar with ChemComm Emerging Investigators (online); November 17, 2020
"*Molecules in a Hurry to Get Rid of Antiaromaticity*"
21. International Conference on Horizons in Hydrogen Bond Research (HBOND19), Amsterdam, The Netherlands; September 24–27, 2019
"*Excited-State Proton Transfer: Molecules in a Hurry to Get Rid of Antiaromaticity*"
22. International Conference on Excited-State Aromaticity and Antiaromaticity, Sigtuna, Sweden; July 29–August 2, 2019
"*Excited-State Proton Transfer: Molecules in a Hurry to Get Rid of Antiaromaticity*"
23. GRC–Physical Organic Chemistry, Holderness, NH, USA; June 23–28, 2019
"*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
24. Aromaticity–2018, Riviera Maya, Mexico; November 28–December 1, 2018
"*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
25. European Symposium on Chemical Bonding, Oviedo, Spain; September 3–7, 2018
"*Aromaticity-Modulated Noncovalent Interactions*"
26. International Conference on Horizons in Hydrogen Bond Research (HBOND17), Jyväskylä, Finland; September 10–14, 2017
"*Aromaticity-Modulated Hydrogen Bonding*"
27. World Association of Theoretical and Computational Chemists (WATOC) Satellite Meeting: The Chemical Bonds in the 21st Century, Aachen, Germany; September 2–4, 2017
"*Aromaticity-Modulated Hydrogen Bonding*"
28. Female Excellence in Theoretical Chemistry, Putten, The Netherlands; June 22–25, 2017
"*Aromaticity-Modulated Hydrogen Bonding*"
29. International Symposium of Chemical Sciences Houston, TX, USA; January 19–21, 2017
"*Achieving Short, Strong Hydrogen Bonds Through π-Conjugation Gain*"
30. Congress of the International Society of Theoretical and Chemical Physics 2016 Conference, Grand Forks, ND, USA; July 17–22, 2016
"*How do Enzymes Turn "Weak Acids" into Strong Proton Donors?*"
31. Solvay Meeting: Conceptual Quantum Chemistry, Brussels, Belgium; April 4–8, 2016
"*How Can Weak Acids Be Strong Hydrogen Bond Donors?*"
32. Theory and Experiment: A Meeting at the Interface, Erlangen, Germany; March 30–April 1, 2016
"*Low-Barrier Hydrogen Bonding in Enzyme Catalysis*"
33. Accelerating Organic Reaction Discovery, Telluride, CO, USA; July 24–31, 2015
"*Tuning Hydrogen Bonds with Aromaticity*"
34. International Conference on Chemical Bonding, Kauai, HI, USA; July 2–6, 2015
"*Aromaticity Tomorrow: Concepts and Design in Silico*"
35. Southeastern Theoretical Chemistry Association Conference, Orlando, FL, USA; May 14–6, 2015
"*Reconsidering Textbook Concepts of Carbocation Chemistry*"

INVITED SEMINAR TALKS

1. Dartmouth College, Hanover, NH, USA; October 17, 2024
   "*TBA*"
2. University of New South Wales, Sydney, Australia; March 16, 2023
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
3. Hope College, Holland, MI, USA; November 4, 2022
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
4. Calvin University, Grand Rapids, MI, USA; November 3, 2022
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
5. The University of Akron, Akron, OH, USA; April 26, 2022
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
6. Universidade Federal de São Carlos, São Carlos, Brazil; March 17, 2022
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
7. University of New Mexico, Albuquerque, NM, USA; April 16, 2021
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
8. University of South Carolina, Columbia, SC, USA; March 19, 2021
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
9. University of Pittsburg, Pittsburg, PA, USA; February 25, 2021
   "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
10. Auburn University, Auburn, AL, USA; January 21, 2021
    "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
11. Ohio State University, Columbus, OH, USA; January 11, 2021
    "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
12. University of Campinas, Campinas, São Paulo, Brazil; August 20, 2020
    "*Molecules in a Hurry to Get Rid of Antiaromaticity*"
13. Iowa State University, Ames, IA, USA; March 6, 2020
    "*Excited-State Proton Transfer: Molecules in a Hurry to Get Rid of Antiaromaticity*"
14. Swarthmore College, Swarthmore, PA, USA; February 6, 2020
    "*Excited-State Proton Transfer: Molecules in a Hurry to Get Rid of Antiaromaticity*"
15. National Taiwan University, Center for Condensed Matter Sciences, Taipei, Taiwan; March 29, 2019
    "*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
16. National Chiao-Tung University, Hsinchu, Taiwan; March 27, 2019
    "*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
17. Emory University, Atlanta, GA, USA; March 6, 2019
    "*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
18. University of Georgia, Athens, GA, USA; March 5, 2019
    "*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
19. University of Memphis, Memphis, TN, USA; November 16, 2018
    "*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
20. University of California, Los Angeles, Los Angeles, CA, USA; November 2, 2018
    "*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"

21. University of Oregon, Eugene, OR, USA; October 31, 2018
"*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
22. University of California, Davis, Davis, CA, USA; October 30, 2018
"*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
23. University of North Texas, Denton, TX, USA; October 19, 2018
"*Aromaticity-Modulated Noncovalent Interactions: When Counting Electrons Matter*"
24. University of Houston, Houston, TX, USA; Jan. 31, 2018
"*Finding Magic Numbers in Chemistry—The Picasso Way*"
25. Leiden University, Leiden, The Netherlands; June 21, 2017
"*Aromaticity-Modulated Hydrogen Bonding*"

CONTRIBUTED TALKS

1. Pacifichem 2025: Programmed Self-Assembly of π-Conjugated Materials and Polymers, Honolulu, HI, USA; December 15–20, 2025
"*TBA*"
2. International Conference on Horizons in Hydrogen Bond Research (HBOND15), Wrocław, Poland; September 13–18, 2015
"*On the Nature of Low Barrier Hydrogen Bonds in Enzyme Catalysis*"

RESEARCH FUNDING

1. PI: Judy I. Wu
"*Unlocking Biologically-Relevant Opportunities Through Applications of Excited-State Aromaticity and Antiaromaticity*"
Sponsor: National Institutes of Health (MIRA, R35) Funding period: 08/01/2024–07/31/2029
Amount: $1,937,500 [Approved for funding]
2. PI: Judy I. Wu
"*Real-World Applications of the Antiaromaticity Concept: Assemblies, Synthetic Strategies, and Functional Properties*"
Sponsor: National Science Foundation Funding period: 08/01/2023–07/31/2026
Amount: $539,999
3. PI: Judy I. Wu
"*Computational Explorations of Unconventional Approaches to Control Noncovalent Interactions*"
Sponsor: National Institutes of Health (MIRA, R35) Funding period: 09/15/2019–07/31/2024
Amount: $1,868,641
4. PI: Judy I. Wu
"*CAREER: Computational Studies of Aromaticity-Modulated Interactions in Supramolecular Chemistry*"
Sponsor: National Science Foundation Funding period: 03/01/2018–02/28/2023
Amount: $585,012
5. PI: Judy I. Wu
Sponsor: Alfred P. Sloan Research Fellowship Funding period: 09/01/2020–08/31/2022
Amount: $75,000

RESEARCH MENTORING

Postdoctoral Researchers

1. Francisco A. Martins	Summer 2023–present
2. Croix J. Laconsay	Fall 2022–present
3. Renan V. Viesser	Summer 2021–present
4. Said Jalife	Summer 2021–present
5. Lucas J. Karas	Fall 2021–Fall 2022
6. Chia-Hua Wu	Fall 2015–Summer 2020
7. Ranjita Das	Spring 2017–Fall 2020

Graduate Students

1. Mahsa Boraghi	Spring 2017–Fall 2019 *M.S. thesis title:* "Computational Studies of Self-Assembling Squaramide and Urea Derivatives"
2. Yu Zhang	Fall 2016–Fall 2019 *M.S. thesis title:* "The Effects of Aromaticity Gain in Multipoint Hydrogen-Bonded Arrays"
3. Hari R. Paudel	Spring 2016–Summer 2020 *Ph.D. dissertation title:* "Aromaticity-Modulated Interactions in Small Organic Molecules"
4. Zhili Wen	Fall 2016–Summer 2021 *Ph.D. dissertation title:* A Renaissance of the (Anti)Aromaticity Concept in Modern Applications of Organic Chemistry
5. Lucas J. Karas	Fall 2017–Summer 2021 *Ph.D. dissertation title:* Molecules in a Hurry to Get Rid of Antiaromaticity
6. Siyeon Im	Fall 2018–Summer 2021 *M.S. thesis title:* Tuning Molecular Properties with External Stimuli: The Photochemistry of BODIPY and the Effect of Oriented-Electric Fields on Sigma Holes.
7. João V. Soares	Fall 2021–present
8. Muhammad U. Khan	Fall 2023–present

Undergraduate Students

1. Krista van Rickley	Fall 2015–Spring 2016
2. Cindy Vasquez	Fall 2015–Spring 2016
3. Khanh Nguyen	Fall 2016–Spring 2017

High School Students

1. Michelle Lee Summer 2019
2. Emily Gaw Summer 2017

MENTORED STUDENT AND POSTDOC ACCOMPLISHMENTS

- Francisco A. Martins
  Merck Award for Underrepresented Chemists of Color 2024
- João V. Soares
  Cullen Graduate Fellowship Travel Grant 2023
  College of NSM Conference Travel Award 2023
  Poster Award at 11th Young Researcher's Conference 2023
- Said Jalife
  Elected co-Chair for Gordon Research Seminar (GRS) –Physical Organic Chemistry 2025
  2024 RSCA Fellow 2024
  Poster Award at LatinXChem 2023
- Croix J. Laconsay
  ACS CAS Future Leaders 2023
- Lucas J. Karas
  Best Dissertation Award (UH, Department of Chemistry) 2021
  Jay K. Kochi Graduate Fellowship 2020
  NSM Graduate Student Profile 2020
  Graduate School Research Incentive Award 2018
- Chia-Hua Wu
  Eby Nell McElrath Postdoctoral Fellowship 2018

COURSES TAUGHT

- CHEM 4364: *Advanced Organic Chemistry*
  Fall 2023, Fall 2022, Fall 2021, Fall 2020, Fall 2019, Fall 2017, Fall 2016
- CHEM 6312: *Bonding*
  Fall 2023, Fall 2022, Fall 2021, Fall 2020, Spring 2020, Fall 2017, Fall 2016, Fall 2015

TEACHING EVALUATION SUMMARY

Scoring is out of 5, with a score of 5 being the highest.

Semester	Course	Students Enrolled	Students Responses	Mean Score for "Teaching Effectiveness"	Mean Overall Score
Fall 2023	CHEM 6312: *Bonding*	16	9	**4.89**	**4.86**
Fall 2023	CHEM 4364: *Advanced Organic Chemistry*	17	8	**4.88**	**4.84**
Fall 2022	CHEM 6312: *Bonding*	17	10	**4.80**	**4.85**
Fall 2022	CHEM 4364: *Advanced Organic Chemistry*	6	4	**4.75**	**4.75**

Fall 2021	CHEM 6312: *Bonding*	9	5	**5.00**	**4.95**
Fall 2021	CHEM 4364: *Advanced Organic Chemistry*	6	3	**5.00**	**4.92**
Fall 2020	CHEM 6312: *Bonding* (online)	9	5	**4.60**	**4.40**
Fall 2020	CHEM 4364: *Advanced Organic Chemistry* (online)	14	5	**3.80**	**3.90**
Spring 2020	CHEM 6312: *Bonding*	28	23	**4.48**	**4.57**
Fall 2019	CHEM 4364: *Advanced Organic Chemistry*	17	15	**4.53**	**4.62**
Fall 2017	CHEM 4364: *Advanced Organic Chemistry*	42	39	**4.36**	**4.38**
Fall 2017	CHEM 6312: *Bonding*	26	23	**4.39**	**4.40**
Fall 2016	CHEM 4364: *Advanced Organic Chemistry*	35	33	**4.60**	**4.60**
Fall 2016	CHEM 6312: *Bonding*	29	29	**4.80**	**4.60**
Fall 2015	CHEM 6312: *Bonding*	21	18	**4.72**	**4.75**

SERVICE ACTIVITIES

Departmental Service

- *Member*, Graduate Committee (Fall 2022–present).
- *Member*, Graduate Admissions Committee (Fall 2017–present).
- *Search Committee*, Theoretical/Computational Chemistry Faculty Search (2023).
- *Search Committee*, Inorganic Chemistry Faculty Search Committee (2021).
- *Search Committee*, Bio-organic Chemistry Faculty Search Committee (2016).
- *Organic Division Seminar Coordinator* (Fall 2016–Spring 2017).
- *Departmental Seminar Coordinator* (Fall 2017–Spring 2018).
- *Committee Member* for Oral Research Progress, M.S. Thesis, and Ph.D. Dissertation examinations, in the Department of Chemistry and Department of Chemical and Biomolecular Engineering

Broader Scientific Community

- *Reviewer of manuscripts* (for 20+ journals)
- *Reviewer for grant proposals*:
  a) American Chemical Society Petroleum Research Fund (ACS-PRF)
  b) National Science Foundation (NSF)

c) National Institute of Health (NIH)
d) European Research Council (ERC)
e) Research Foundation Flanders (Fonds Wetenschappelijk Onderzoek)

- *Governing Board Member* for the Reaction and Mechanisms Conferences (RMC) (2022–2028)
- *Elected Co-Chair*, Gordon Research Conference (GRC)–Physical Organic Chemistry (2027)
- *Elected Co-Vice Chair*, Gordon Research Conference (GRC)–Physical Organic Chemistry (2025)
- *Conference Chair* for the "International Conference of Excited-State (Anti)aromaticity (ICESAA)" (2022)
- *Discussion Leader* for the Gordon Research Conference (GRC)–Computational Chemistry (2024).
- *Discussion Leader* for the Gordon Research Conference (GRC)–Physical Organic Chemistry (2017).
- *Editorial Board Member* for *Chemical Communications* (2020–present)
- *Advisory Board Member* for *Organic and Biomolecular Chemistry* (2020–present)
- *Associate Editor* for *J. Phys. Org. Chem.* (2020–present)