

Kimberley Rose Cousins
Professor Chemistry & Biochemistry
California State University San Bernardino
5500 University Parkway
San Bernardino CA 92407
(909) 537-5391
kcousins@csusb.edu

a. Professional Preparation

Duke University	Chemistry	B.S., 1984
University of Texas at Austin	Organic Chemistry	Ph.D., 1991

b. Appointments

Chair, Department of Chemistry and Biochemistry, CSU San Bernardino	2017 – present
Professor of Chemistry and Biochemistry, CSU, San Bernardino	2004 – present
Associate Professor of Chemistry, CSU, San Bernardino	1997 – 2004
Assistant Professor of Chemistry, CSU, San Bernardino	1991 – 1997
Instructor, Austin Community College (Austin TX)	1991
Instructor, Southwestern University (Georgetown TX)	1990
Camille and Henry Dreyfus Foundation Postdoctoral Fellow, Hendrix College (AR)	1989 – 1990
Graduate student: Teaching Assistant (1 year), NIH Research Assistant (2 years), Robert A. Welch Foundation Predoctoral Fellow (2 years); University of Texas at Austin.	1984 – 1989

c. Courses taught at CSUSB (did significant course development in every course taught)

1. Organic Chemistry I, II, III (lecture and lab, many times, lecture sizes up to 187): course series for Biology majors and pre-professional students
2. Principles of Organic Chemistry I, II, III (lecture and lab, many times, lecture sizes up to 78): course series for Chemistry and Biochemistry majors
3. Intermediate Organic Chemistry
4. Fundamentals of General Chemistry (GE, pre-allied health) lecture & lab
5. Fundamentals of Organic Chemistry (pre-allied health) lecture & lab
6. Chemistry for Educators (lecturer and lab): pre- K-8 teachers—part of course development team
7. Senior Seminar (many times)—led course redesign
8. Advanced topics course: Computational Chemistry (developed from scratch)
9. Advanced topics course: Chemistry Literature (developed from scratch)
10. Advanced topics course: Polymer Chemistry (developed from scratch)
11. Introduction to STEM and STEM Research (developed from scratch)
12. Supervision courses: Supervised projects, Advanced laboratory techniques, Independent study, Internship
13. Served on three MS thesis committees: two in Computer Science, and one in Masters of Science/Environmental Science

d. Grants Awarded (all since arriving at CSUSB)

1. National Science Foundation, CHE, "MRI: Acquisition of a Multi-nuclear 400 MHz NMR Spectrometer Equipped with an Autosampler to Support Undergraduate Research at a Hispanic Serving/Minority Serving Institution," NSF 2018196, **co-PI, \$351,157** 2020
2. National Science Foundation, OISE, "Undergraduate materials science New Zealand", NSF 1952599, **co-PI, \$299,991.00** 2020
3. National Science Foundation, HRD, "CREST Center for Advanced, Functional Materials: Phase II", NSF 1914777, **PI, \$4,997,433** 2019
4. National Science Foundation, DUE "Improving Student Success in STEM by Improving Faculty Teaching," NSF-1727086, **Senior Personnel, \$1,121,536.00** 2017
5. National Science Foundation, DUE "Promoting Pre- and Post-transfer Success in STEM at Hispanic Serving Institutions," NSF-1644261, **PI \$4,999,625** 2016
6. National Science Foundation, CREST "CSUSB Center for Materials Science," NSF-HRD 1345163, **co-PI \$4,999,321** 2014
7. National Science Foundation, DUE "Investigating Student Success Using Evidence-based Strategies (ISSUES)," NSF-DUE 1347671, **co-PI \$248,710** 2013
8. Department of Defense "Materials Research of Novel Organic- Piezoelectric/Ferroelectric Compounds at a H.S.I." ARO # W911NF1210080, **co-PI \$538,211** 2012
9. National Science foundation, "Maturation of an S-STEM Scholarship program at a Hispanic Serving/Minority Serving Institution," NSF-S-STEM 1060632, **PI \$598,000** 2011
10. National Science Foundation, "PRISM: CSUSB Strengthening the Scientific Workforce", NSF-1035120, **co-PI \$2,257,785** 2010
11. National Science Foundation, "Mathematics and Science Scholars at California State University, San Bernardino" NSF-DUE 0631182, **co-PI \$500,000** 2006
12. National Science Foundation-ILI, "A Unified Plan for Mathematical and Molecular Modeling Data Analysis and Chemical Communication in the Laboratory Curriculum", **PI \$41,440** 1998
13. Camille and Henry Dreyfus Foundation, "A Novel Program for the Development of Industrially Relevant GC/MS Experiments for the Undergraduate Curriculum using Student Liaisons", **PI \$20,000** 1995
14. National Science Foundation-ILI, "Incorporation of NMR Spectroscopy into the Undergraduate Curriculum, **co-PI \$89,000** 1994
15. Research Corporation, Cottrell Grants Program, "Polymer-Bound Organoaluminum Reagents." **PI \$32,200** 1993
16. Camille and Henry Dreyfus Foundation, "Development of Polymer-Bound Organoaluminum Reagents for Organic Synthesis." **PI \$10,000** 1992

17. Twelve awards for Research and Instructional Development through the California State University, San Bernardino Mini-Grant program, **\$ 35,500** 1993 – 2010

e. Publications (undergraduate coauthors indicated with *; graduate students **)
Since arriving at CSUSB

1. Talyn, Becky, Sara J. Callori, Karen Cerwin, Mike Chao, Kimberley R. Cousins, Carol Hood, Sally F. McGill, Anthony E. Metcalf, and Laura Woodney. "Faculty Learning Communities Facilitated the Rapid Pivot to Online Teaching and Learning." *Journal of College Science Teaching* 51, no. 1 (2021).
2. Dean Peterson*, Jiandang Liu*, Francisco Guzman*, Jonas Etzweiler*, Joseph Spong*, Sean Murphy*, Sara J. Callori, Kimberley Cousins, Timothy Usher, Renwu Zhang, "Studying the Interface Between Croconic Acid Thin Films and Substrates Using Slow Positron Beam American", *Institute of Physics (AIP) Proceedings*, 2182, 050022 (2019).
3. Kimberley Cousins, Renwu Zhang. Highly Porous Organic Polymers for Hydrogen Fuel Storage, *Polymers*. **2019**, 11(4), 690.
4. Timothy Usher, Kimberley Cousins, Douglas Smith, Renwu Zhang, Eva Zurek, Stephen Ducharme, Sara Callori, Daniel Miller**, Paulo Costa**. "Materials Genome Approach to Organic Ferroelectrics and Piezoelectrics." *Int. J. Nanotechnol.*, Vol. 15, Nos. 8/9/10, 2018.
5. Cousins, Kimberley; Usher, Timothy; Smith, Douglas C.; Zhang, John; Dixon, Paul K.; Callori, Sara. "Leveraging NSF-CREST center funding to support undergraduate research at multiple Hispanic Serving/Minority institutions.", Chapter 14 in *Best Practices for Supporting and Expanding Undergraduate Research in Chemistry*, ACS Symposium series, Bridget L. Gourley, Rebecca M. Jones, Eds. American Chemical Society: Washington, D.C. 2018.
6. Timothy D Usher, Kimberley R Cousins, Renwu Zhang, Stephen Ducharme, "The promise of piezoelectric polymers," *Polym Int*, **2018** 67, 790-798.
7. Paulo S. Costa**, Francisco Guzman*, Kimberley Cousins, Sara J. Callori, Erika Sanchez*, Paul K. Dixon, Douglas Smith, Timothy Usher, Renwu Zhang, "Fabricating high-quality ultra-thin croconic acid film using electric field guidance," *Applied Surface Science*, Volume 427, 2018, Pages 541-546.
8. Tenayuca J,* Cousins, K. Yang S, Zhang L. "Computational modeling approach in probing effects of cytosine methylation on the transcription factor binding to DNA." *Curr Top Med Chem* 2016 Nov 16. [Epub ahead of print.] Volume 17, Number 14, 2017
9. Francisco Guzman,* Judy Tran,* Kimberley Cousins, Paul K. Dixon, Douglas Smith, Timothy D. Usher, Renwu Zhang, "Study of Defects in Croconic Acid Single Crystals Using Positron Annihilation Lifetime Spectroscopy," *Defect and Diffusion Forum*, **2016**, 373, 179-182.
10. Robert N. Phalen, Kimberley Cousins, Timothy Usher, Michelle Young,* Renwu Zhang, "Revising the formulation of the Narayanaswamy equation using the Adam-Gibbs theory," *J. Non-Cryst. Sol.* **2016**, 453, 59-65.

11. “Opening Doors to a Bright Future: Fast tracking Careers in STEM,” International Innovation, **2014**(126), 53-55. (Editorial Feature).
12. Donna A. Kunkel**, James Hooper**, Scott Simpson**, Sumit Beniwal**, Katie L. Morrow*, Douglas C. Smith, Kimberley Cousins, Stephen Ducharme, Eva Zurek, Axel Enders, “Rhodizonic Acid on Noble Metals: Surface Reactivity and Coordination Chemistry” *J. Phys. Chem. Lett.*, **2013**, 4 (20), pp 3413–3419.
13. Cousins, K. R. "Computer Review of ChemDraw Ultra 12.0," *J. Am. Chem. Soc.*, (Computer Software Review) 2011, 133, 8388-8389.
14. Cousins, K. R. “ChemDraw Ultra 9.0”, *J. Am. Chem. Soc.* (Computer Software Review) 2005; 127(11); 4115-4116.
15. Cousins, K. R. “The Chemical Thesaurus V2.0” *J. Am. Chem. Soc.* (Computer Software Review); 2001; 123(35); 8645-8646.
16. Cousins, K. R., . “ChemDraw 6.0 Ultra”, *J. Am. Chem. Soc.* (Computer Software Review) 2000, 122(41), 10257-10258.
17. Cousins, K. R.; Pierson, K. M.* "A Microscale Procedure for TLC Analysis of the Pigments from Spinach Using a Commercial Vegetable Juicer," *J. Chem. Educ.*, 1998, 75, 1268-1269.
18. Cousins, K. R., "ChemOffice Plus: A Package of Programs for Chemists," *J. Comp. Chem. and Inform. Sci.* **1993**, 33, 788. (Computer software review).

Work initiated prior to CSUSB and completed here

19. Gilbert, J. C.; Cousins, K. R. "Theoretical and Experimental Studies of the 3-Aza-Claisen Rearrangement," *Tetrahedron*, **1994**, 50, 10671-10684.

Prior to CSUSB:

1. Thomas E. Goodwin; Kimberley R. Cousins; Heidi M. Crane;* Phyllis O. Eason;* Timothy E. Freyaldenhoven; * Charles C. Harmon;* Brock K. King;* Christine D. LaRocca;* Robert L. Lile;* Shari G. Orlicek; * Ronald W. Pelton; * Omer L. Shedd;* John S. Swanson;* Joseph W. Thompson*, “Synthesis of Two New Maytansinoid Model Compounds from Carbohydrate Precursors” *Journal of Carbohydrate Chemistry*, 1532-2327, Volume 17, Issue 3, **1998**, 323 – 339.
2. C. H. Lochmüller; K. R. Lung; K. R. Cousins “Applications of Optimization Strategies in the Design of Intelligent Laboratory Robotic Procedures” *Analytical Letters*, 1532-236X, Volume 18, Issue 4, **1985**, 439 – 448.

Patent:

March 22, 2022, as U.S. Patent No. 11,279,626 Robert E. Pellenbarg, Kimberley R. Cousins, “Octamethylcyclotetrasiloxane interacts with Lithium Ions”.

f. Presentations and Abstracts (all since arriving at CSUSB)

1. Kimberley Cousins, “External funding as a catalyst for change in chemistry and STEM at CSUSB,” Affecting Change in Academic Departments through Strategic Diversity Leadership in the Chemical Sciences Symposium—National ACS Meeting, San Diego CA, March 2022.
2. Kimberley Cousins, “Reducing equity gaps in organic chemistry: critical evaluation of nine years of data from POGIL vs. lecture classrooms,” (online), Spring 2021 National Meeting of the American Chemical Society, April 8, 2021.
3. Kimberley Cousins, “CREST Center for Advanced, Functional Materials: Phase II: response to Covid-19,” short video presentation, CREST PI Meeting, Feb 4-5 2021 (online).
4. Kimberley Cousins & Timothy Usher, “Center for Advanced Functional Materials at CSUSB,” CSU Webcast/STEM-NET, (online) March 11, 2020.
5. Kimberley R. Cousins, “Materials Genome Approach to Functional Materials Discovery using the Cambridge Data System”, CREST/HBCU-UP PI Meeting, Washington, D. C. February 6, 2020.
6. Kimberley Cousins & Jeremy Mallari, “P3-STEM: Promoting STEM transfer student success at multiple minority serving/Hispanic serving institutions”, at the CHED: Programs Designed to Promote Greater Retention in STEM & Chemistry Symposium (oral presentation), American Chemical Society Fall 2019 National Meeting, San Diego, CA, August 25, 2019; also presented at the SciMix poster session on August 25, at the same meeting; and at the S-STEM PI meeting, Washington, D.C. September 13, 2019.
7. Kimberley Cousins & Sarah Rodriguez* “Materials genome approach to functional materials discovery using the CSD” at the One Million Crystal Structures Symposium (oral presentation), American Chemical Society Fall 2019 National Meeting, San Diego, CA, August 26, 2019. Re-reported in a white paper by Wendy Warr, November, 2019.
8. Sara Callori & Kimberley Cousins, “Widening the STEM pipeline through CREST funded research and mentoring,” CREST PI meeting poster session, February 2019, Washington, D. C.
9. Kimberley Cousins & Timothy Usher, “Student Success through Quality Mentored Undergraduate Research,” CSUSB GI 2025 Conference (oral presentation), May 10, 2018.
10. Kimberly Costino, Kimberley Cousins, Davida Fischman, Kirsten Fleming, Carol Hood, Tony Metcalf, David Polcyn, Becky Talyn & Laura Woodney, “Investigating Student Success Using Evidenced-based Strategies-eXpanded,” CSUSB GI 2025 Conference (poster), May 10, 2018.
11. Kimberley Cousins & Renwu “John” Zhang, “Authentic Materials Research with Undergraduates”, CREST/HBCU-UP PI Meeting, February 21, 2018, Washington, D. C.
12. Cousins, K. R. T. Usher, D.C. Smith, R. Zhang, P.K. Dixon, “Leveraging CREST- center funding to advance under- graduate research at multiple Minority Serving Institutions,” 253rd

- American Chemical Society National Meeting, San Francisco, April 2017.
13. Cousins, K. R. Silvana Bialosiewicz, "Improving process skills in a medium-sized organic chemistry lecture section at a minority serving institution," 253rd American Chemical Society National Meeting, San Francisco, April 2017.
 14. K.R. Cousins, T. Usher, R. Zhang, D. Miller, D.C. Smith, "Theory linked with experiment in discovering new functional organic/organometallic materials," 253rd American Chemical Society National Meeting, San Francisco, April 2017.
 15. Kimberley R. Cousins, Timothy Usher, Paul K.Dixon, Sara Callori, Douglas C. Smith, Renwu Zhang, Stephen Descharme, Eva Zurek, "Greater than a Sum of Its Parts: Synergisms through CREST," CREST/HBCU/UP PI Meeting, Washington, D.C. March 1-2, 2017.
 16. Kimberley Cousins, "Organic Chemistry: Immersion in POGIL," 2016 Faculty Showcase, April 20, 2016, Ignite talk awarded "Outstanding Innovator: 3rd Place", California State University, San Bernardino.
 17. Cousins, Kimberley; Vinson, Luke; Quesada, Alejandra; Usher, Timothy; Smith, Douglas C. "Using CSD in the search for organoferroelectric crystalline compounds," CCDC 2016 West Coast User's Meeting, San Diego, February 9, 2016.
 18. Cousins, Kimberley. "Nine years and counting: S-STEM Scholarships as a tool for success at CSUSB," ACS Western Regional Meeting, San Marcos, CA, Nov 7, 2015.
 19. Cousins, Kimberley. "From Laboratory Robots to Functional Materials," Invited keynote speaker at WoPhyS 2015, University of Nebraska-Lincoln, Oct 15, 2015.
 20. Cousins, Kimberley, "Possible mechanisms for interconversion of polar forms for the ferroelectric diisopropylammonium halides," (COMP Poster Session and SciMix), 249th ACS National Meeting, Denver, Colorado, March 22-26, 2015.
 21. Cousins, Kimberley; Kim, Yu Jung. "PRISM: CSUSB strengthening the scientific workforce," 249th ACS National Meeting, Denver, Colorado, March 22-26, 2015.
 22. Cousins, Kimberley: "ISSUES: Investigating student success using evidence-based strategies," 249th ACS National Meeting, Denver, Colorado, March 22-26, 2015.
 23. Cousins, Kimberley, "Engaging everyone in a large lecture class: Lecture/POGIL hybrid, clickers, and classroom assessment," 2014 Biennial Conference on Chemical Education, Grand Valley State University, Allendale, MI, August 2014.
 24. Kimberley R. Cousins, Douglas C. Smith, Timothy Usher, "Investigating functional organic single crystals at the CSUSB Center for Advanced Functional Materials," invited speakers for May 2014 meeting of the San Geronimo Section of the American Chemical Society.
 25. Kimberley R Cousins. "Guided Inquiry Learning in a Large Lecture Organic Chemistry Sequence," 247th National Meeting of the American Chemical Society, Dallas TX Mar. 18,

- 2014.
26. Cousins, Kimberley; Kim, Yu Jung, "Using 'Poll Everywhere' for Chemistry Courses", TRC Opening Poster Session, CSUSB, September 20, 2011.
 27. Cousins, K. R. "Evolution of guided inquiry in organic chemistry courses at an Hispanic Serving Institution over five years", 239th National Meeting of the American Chemical Society, San Francisco, March 2010.
 28. Cousins, K. R. "S-STEM in collaboration with other federally funded programs at an Hispanic Serving Institution", 239th National Meeting of the American Chemical Society, San Francisco, March 2010.
 29. Cousins, K. R. "Student Engagement through Laboratory Projects" Invited speaker for Annual Phi Kappa Phi Brown Bag Lunch seminar, CSUSB March 4, 2008.
 30. Cousins, K.R. Noblet, J. "Chemistry and the Environment - Online!" Campus Teaching Symposium poster session, CSUSB, September 2008.
 31. Cousins, K. R., Rice, A., Chen C-W, Watrous, J. Baldrige, K.; "QSAR Studies of Cooling compounds", presented at the MMTSB Workshop, San Diego, August, 2006 IIA1.
 32. Cousins, Kimberley, Ulman, Jodie; Santiago, Rowena, "Transformational Agenda at a Comprehensive Institution," Fifth International Conference on the Scholarship of Teaching and Learning, May 12-13, 2005, London.
 33. Cousins, K. R. "Adventures in Media-Assisted Learning", Ninth CSU Regional Symposium, April 2, 2005.
 34. Cousins, K. R. "Teaching Computing in Existing Laboratory Courses at CSUSB" Teaching Computing in Chemistry Courses, Fall 2004 ConfChem (<http://www.ched-ccce.org/confchem/2004/b/index.html>, accessed 3/2005).
 35. Cousins, K. R. "The Scholarship of Teaching and Learning: POGIL Materials for Teaching Spectroscopy", CSUSB opening Symposium, Sept. 2004.
 36. Cousins, K. R. "Qualitative and Quantitative Analysis of Nicotinamide" at the Discovery-Based learning symposium, ACS National Meeting, Anaheim CA, April 2004.
 37. Cousins, K. R. "Using Surveys in Scholarly Teaching", Seventh CSU Regional Symposium, March 1 2003.
 38. Cousins, K.R. "Use of Blackboard in a Large Lecture Class in Organic Chemistry," Campus Teaching Symposium poster session, CSUSB, June 2001.
 39. Cousins, K.R. Maynard, D.F. Shamansky, L. S. "Revision of Chemistry 304: Chemistry in the Classroom" at the Campus Teaching Symposium, May 2000.

40. Cousins, K. R., "Reflections on Undergraduate Research" at the CSUSB Sigma Xi Chapter 661 Induction and Dinner, June 7, 1999.
41. Cousins, K.R; Smith, D.C. "From External Student Internships to Curriculum Development: the CSUSB Chemistry Department GC/MS Facility" at the CORE21 Symposium, February 1999.
42. Cousins, K. R. "An Undergraduate Computational Chemistry Course Enhanced by the Use of the Internet," ChemInternet'98, Sept 12-15, 1998, Irvine, CA.
43. Cousins, K. R. "Undergraduate Research and Class Projects in Computational Chemistry," 7th National Conference on Undergraduate Research, Occidental College, June 1998.
44. Cousins, K. Maynard, D., Smith, D. "Use of Dynamic Computer Animations in the Organic Chemistry Course," presented at the Spring Teaching Symposium, CSUSB, 1997.
45. Cousins, K. R. "The CSUSB GC/MS Project: Coupling Industrial Internships with Curriculum Development," poster presented at the 6th National Conference on Undergraduate Research, NCCU, Durham, NC, June 27-29, 1996.
46. Cousins, K. R., "Should Pregnant Students Enroll in Organic Chemistry Laboratory?" Western Biotech Conference, October 20, 1995, San Diego, CA.

f. Student Presentations & Abstracts (All since arriving at CSUSB)

1. Oscar Gonzalez Aviles (Kimberley Cousins) "Finding Ferroelectric Properties of Hydrogen-Bonded Co-crystals," Southern California Conference on Undergraduate Research, Pepperdine University, Nov. 19, 2022. Also presented at CAFM Poster Session, Sept 2022, CSUSB.
2. Crisol Aguirre Ortiz (Kimberley Cousins), "Computational Analysis of Polarity and Elasticity of Potential Piezoelectric Crystals," Southern California Conference on Undergraduate Research, Pepperdine University, Nov. 19, 2022. Also presented at CAFM Poster Session, Sept 2022, CSUSB.
3. Gonzalo Perez Maldonado (Kimberley Cousins) "D-4 and Its Application Toward a Selective Lithium-Ion Detector," Southern California Conference on Undergraduate Research, Pepperdine University, Nov. 19, 2022. Also presented at CAFM Poster Session, Sept 2022, CSUSB.
4. Karen Coronado* (Kimberley Cousins) "Seeking novel piezoelectric crystals", presented at the April 2022 CSUSB "Meeting of the Minds" symposium.
5. Chi Duong* (Kimberley Cousins) "Ferroelectric crystal growing." 2021 Southern California Conference on Undergraduate Research, Nov 20, 2021 (online).—Also presented at the April 2022 CSUSB "Meeting of the Minds" symposium.
6. Gonzalo Perez* & Dr. Kimberly Cousins, "D-4 and Its Application Toward a Selective Lithium-Ion Detector." 2021 Southern California Conference on Undergraduate Research,

- Nov 20, 2021 (online).).—Also presented at the April 2022 CSUSB “Meeting of the Minds” symposium.
7. Oscar Gonzalez* & Dr. Kimberley Cousins, “Running VASP Calculations to find ferroelectric properties of hydrogen bonded co-crystals.” 2021 Southern California Conference on Undergraduate Research, Nov 20, 2021 (online).).—Also presented at the April 2022 CSUSB “Meeting of the Minds” symposium.
 8. Gonzalo Perez-Maldonado, “D-4 and It’s Application Toward a Selective Lithium-Ion Detector”, Meeting of the Minds Student Research Symposium, CSUSB, April 2021.).— Also presented at the April 2022 CSUSB “Meeting of the Minds” symposium.
 9. Christopher Garcia, Kimberley Cousins, “Using CSD to search for the most common monomers for co-crystal formation”, Meeting of the Minds Student Research Symposium, CSUSB, May 2020.
 10. Carolina Escobar, Kimberley Cousins, “Screening for Multiferroics Using the CCDC,” Southern California Conference on Undergraduate Research, Nov 23, 2019, San Marcos, CA (poster); Also presented at the Meeting of the Minds Student Research Symposium, CSUSB, May 2020.
 11. Kristen White, Kimberley Cousins, “Using VASP Calculations to Determine Stability for Fluorinated Diisopropylammonium Bromide (DIPAB) Structures,” Southern California Conference on Undergraduate Research, Nov 23, 2019, San Marcos, CA (poster).
 12. Cindy Rosales, “Bis-guanidinium Croconate: Needles”, 8th Annual CSUSB “Meeting of the Minds”, May 16, 2019, CSUSB.
 13. Jaqueline Lamas, Kimberley Cousins, “Octamethyltetracyclosiloxane (D-4) can Chelate Lithium Ions from Aqueous Solution”, 8th Annual CSUSB “Meeting of the Minds”, May 16, 2019, CSUSB
 14. Sarah Rodriguez, Kimberley Cousins, “1,5-Diaminonaphthalene-*p*-Chloroanil: A Potential Ferroelectric,” Emerging Researchers National Conference, Washington, D.C. Feb 2019 (oral presentation).
 15. Viviana Dominguez, Kimberley Cousins, “Structure Analysis of Possibly Ferroelectric *bis*-Guanidinium Croconate,” Southern California Conference on Undergraduate Research, Nov 18, 2018, Pasadena, CA (poster).
 16. Joseph Barrera, Kimberley Cousins, “NICs Difference: Determination of Relative Aromaticity,” Southern California Conference on Undergraduate Research, Nov 18, 2018, Pasadena, CA (poster). Updated results presented at the 8th Annual CSUSB “Meeting of the Minds”, May 16, 2019, CSUSB (oral)
 17. Jose Uribe, Kimberley Cousins, Eva Zurek, Dan Miller, “Croconic Acid: Surface and Electric Field Influence on Deposition,” Southern California Conference on Undergraduate Research, Nov 18, 2019, Pasadena, CA.
 18. Sarah Rodriguez, Kimberley Cousins, “1,5-Diaminonaphthalene-*p*-Chloroanil: A Potential Ferroelectric,” Southern California Conference on Undergraduate Research, Nov 18, 2018, Pasadena, CA.
 19. Estefania Castro, Kimberley Cousins, Robert Pelleberg, “Octamethylcyclotetrasiloxane interaction with lithium ions,” Southern California Conference on Undergraduate Research,

- Nov 18, 2018, Pasadena, CA. Updated results presented at 8th Annual CSUSB “Meeting of the Minds”, May 16, 2019, CSUSB.
20. Diana Maytorena, Cesar Ramos, Kimberley Cousins, “Energy Calculations on Fluorinated DIPAB Derivatives, Southern California Conference on Undergraduate Research, Nov 18, 2018, Pasadena, CA.
 21. Viviana Dominguez, Kimberley Cousins, “Structure Analysis of Possibly Ferroelectric *bis*-Guanadinium Croconate,” Tenth Annual Women in Physical Sciences Conference, University of Nebraska, Lincoln, October 11-13, 2018.
 22. Jose Uribe, Kimberley Cousins, Eva Zurek, Dan Miller, “Croconic Acid: Surface and Electric Field Influence on Deposition,” 7th Annual CSUSB Meeting of the Minds Student Research Symposium, May 17, 2018.
 23. Joseph Barrera, Kimberley Cousins, “NICS Difference: Determination of Relative Aromaticity,” 7th Annual CSUSB Meeting of the Minds Student Research Symposium, May 17, 2018.
 24. Stephania Ortiz, Kimberley Cousins, “Predicting Potential Polarization for Novel Fluorinated Diisopropylammonium Bromide (DIPAB) Systems,” 7th Annual CSUSB Meeting of the Minds Student Research Symposium, May 17, 2018.
 25. Sarah Rodriguez, Kimberley Cousins, “Method for Screening New Charge Transfer Ferroelectric Systems,” Second place poster in Chemistry, Emerging Researchers National Conference, Feb 22-24, 2018, Washington, D. C.
 26. Jose Uribe, Daniel P. Miller, Eva Zurek, Kimberley Cousins “Croconic Acid Crystallization on Alpha Silica Surface,” Southern California Conferences for Undergraduate Research Cal Poly Pomona, Nov. 2017.
 27. Jacqueline Lamas, Kimberley Cousins, “Potential use of calculated energy differences for differentiating electronic ferroelectric dimers from non-polar compounds,” Southern California Conferences for Undergraduate Research Cal Poly Pomona, Nov. 2017.
 28. Sarah Rodriguez, Kimberley Cousins, “Screening for New Charge Transfer Organic Ferroelectric Systems, ,” Southern California Conferences for Undergraduate Research Cal Poly Pomona, Nov. 2017; also presented at 7th Annual CSUSB Meeting of the Minds Student Research Symposium, May 17, 2018.
 29. Maricarmen Martinez-Solano, Josephine Habib “Nitrobenzene Coupling” 6th Annual “Meeting of the Minds”, CSUSB, May 18 2017.
 30. Moises Romero, “Charge Analysis of Electronic Organoferroelectrics.” 6th Annual “Meeting of the Minds”, CSUSB, May 18 2017.
 31. (4 conferences) Moises Romero, Daniel Miller, Eva Zurek, Kimberley Cousins, “A Computational Outlook on Ferroelectricity: Transition State Optimizations and Charge Analysis,” Southern California Conference on Undergraduate Research, UC Riverside, November 12, 2016. Also as an oral presentation at the Emerging Researchers National Conference, Washington, D. C., March 2-4, 2017; also presented at the undergraduate roundtable and COMP poster session, 253rd American Chemical Society National Meeting, San Francisco, April 2017; UCI Undergraduate Poster Session, May 2017

32. (3 conferences) Maressah Ynfante-Corral, “Hydrogen Placement on Potential Organic Ferroelectric NUBHOH,” Southern California Conference on Undergraduate Research, UC Riverside, November 12, 2016; updated results presented at the COMP poster session, 253rd American Chemical Society National Meeting, San Francisco, April 2017, and at CSUSB Student Symposium, May 2017.
33. (4 conferences) Columba Sanchez, “Subset System Study of Diisopropylammonium Bromide: An Organic Ferroelectric,” Southern California Conference on Undergraduate Research, UC Riverside, November 12, 2016. Updated results with the same title presentation at the Emerging Researchers National Conference, Washington, D. C., March 2-4, 2017, and at the COMP poster session, 253rd American Chemical Society National Meeting, San Francisco, April 2017, and at CSUSB Student Symposium, May 2017.
34. (4 conferences) Sergio Jacinto, K. Cousins, T. Usher “Synthesis and Structure Prediction of a Novel, Potentially Electroactive, Organic Ferroelectric,” Southern California Conference on Undergraduate Research, UC Riverside, November 12, 2016. Updated results presented at the Emerging Researchers National Conference, Washington, D. C., March 2-4, 2017. *Poster won first place undergraduate in Chemistry and Chemical Sciences division*. Also presented at the COMP poster session, 253rd American Chemical Society National Meeting, San Francisco, April 2017, and at CSUSB Student Symposium, May 2017.
35. Sarah Rodriguez, “Methods for Studying Organoferroelectrics,” Southern California Conference on Undergraduate Research, UC Riverside, November 12, 2016.
36. Nkembuonwo Ndidi, “Interactions between electric, ferroelectric, and non-ferroelectric dimers,” Southern California Conference on Undergraduate Research, UC Riverside, November 12, 2016.
37. (2 conferences) Moises Romero, Nathan Tierce , “Computational Analysis of Hydrogen Bonding Organoferroelectric Dimers,” Southern California Conference on Undergraduate Research, Harvey Mudd College, November 21, 2015; also presented at the Emerging Researchers National Conference, Washington, D.C. February 24-27, 2016, and the CSUSB “Meeting of the Minds”, May 2016.
38. Quezada, Alejandra; Cousins, Kimberley. “Predicting Organic Amino-acid-like Potential Ferroelectric Compounds, Part 2.” Southern California Conference on Undergraduate Research, Harvey Mudd College, November 21, 2015.
39. Duran, Emely; Cousins, Kimberley. “Hydrogen Bonding Energies vs. OH Bond Length,” Southern California Conference on Undergraduate Research, Harvey Mudd College, November 21, 2015.
40. (2 conferences) Maressah Ynfante-Corral, Margarita Cuadras, “Comparing Methods for Calculating Aromaticity of Oxocarbons with Different Ring Sizes and Charges,” Southern California Conference on Undergraduate Research, Harvey Mudd College, November 21, 2015; also presented at the CSUSB Meeting of the Minds, May, 2016.
41. Sara Sandoval, “Hydrogen Bonding Varying as a Function of Distance and Angles ,” Southern California Conference on Undergraduate Research, Harvey Mudd College, November 21, 2015.

42. SeungHeon Lee, Kimberley Cousins. Docking Protein TRPM8 and Ligand 8 Menthol Isomers through AutoDock Vina and Visual Molecular Dynamics (VMD), 4th Annual Meeting of the Minds Student Research Conference, CSUSB, April 2015.
43. Quezada, Alejandra; Cousins, Kimberley. "Predicting Organic Amino-acid-like and Potentially Ferroelectric Compounds," Southern California Conference on Undergraduate Research, CSU Fullerton, November 22, 2014.
44. Osuna, Gisele; Cousins, Kimberley Farmer, Carl. "Investigative Analysis on the Aromaticity of Croconic Acid and its Anions," Southern California Conference on Undergraduate Research, CSU Fullerton, November 22, 2014.
45. Jeonghyo Lee, Kimberley Cousins, "Binding affinity of menthol ligand to the Transient Receptor Potential Melastatin 8 (TRPM8)," presented at the CSUSB Student Research Conference, May 27, 2014.
46. Joshua Cosgrove, Jeffrey Yang, Kimberley Cousins, "Progress toward a greener synthesis for Carpanone," 2014 Southern California Undergraduate Research Conference in Chemistry and Biochemistry Concordia University, Irvine, April 12th, 2014 .
47. (2 conferences) Margarita Cuadras, Kimberley Cousins, "Nucleus independent chemical shifts (NICS) scan method analysis for cyclic oxocarbons," Southern California Conference on Undergraduate Research, November 23, 2013, Whittier College; also at CSUSB Student Research Symposium, May 27, 2014.
48. Luke Vinson, Kimberley Cousins, "Identification of Possible Organoferroelectric Crystals", Southern California Conference on Undergraduate Research, November 23, 2013, Whittier College.
49. Cuadras, Margarita, Cousins, Kimberley, "Reevaluating the Aromaticity of Oxocarbon Molecules," Southern California Conference on Undergraduate Research, CSU Channel Islands, November 17, 2012.
50. Janhavi Dhargalkar, Steven Merrill; Kimberley R. Cousins, "Change In Ascorbic Acid Content With Temperature Titration Vs. HPLC Analysis", PRISM Scholars poster session, August 8, 2013.
51. Noah Ghossein, Carlos Navarro, Kimberley Cousins, "The Role of Dissolved Oxygen in Vitamin C Content of Citrus Fruits Over Time", PRISM Scholars poster session, August 8, 2013.
52. Moises Romero; Chelsea Egan; Kimberley Cousins, "Ascorbic Acid Concentration in Bell Peppers and Poblano Peppers", PRISM Scholars poster session, August 8, 2013.
53. Sandoval, Brittney, Cousins, Kimberley, "Green Conversion of Eugenol to Isoeugenol," Southern California Conference on Undergraduate Research, CSU Channel Islands, November 17, 2012.

54. Alan Santana, Niya Larios, Kimberley Cousins, "The role of dehydroascorbic acid in the apparent increase in ascorbic acid concentration," PRISM Scholars Poster Session, CSUSB, August 2012.
55. Kara Mendez, Jennie Pirolo, Kimberley Cousins, "Oranges and Grapefruits and Limes, Oh My!?", PRISM Scholars Poster Session, CSUSB, August 2012.
56. Felicia Onyeabar, Avneet Kaur, Kimberley Cousins, "The Effects of Temperature, time and pH on Standard Ascorbic Acid Solution Observing the Concentration of DPIP", PRISM Scholars Poster Session, CSUSB, August 2012.
57. Avneet Kaur, Emmett Campbell, Kimberley Cousins, Larry M Mink. "Synthesis of Pt(II)/(IV) and Pd(II) asymmetric tetraphenylporphyrins," 243rd ACS National Meeting, San Diego CA, March 25-29, 2012.
58. Vannary Sann, Kimberley Cousins, "Characteristics and Activity of Hydrotalcite," Emerging Researchers National Conference in STEM, February 23-25, Atlanta GA.
59. Sydney Rielle Malit, Jacqueline Olivas, Jeffery Yang, Kimberley Cousins, "Effects of Aging and Temperature on Apparent Ascorbic Acid Content", PRISM Scholars Poster Session, CSUSB, August 2011.
60. Robert Rigby, Kimberley Cousins, "Correlations between Citrus Fruit Properties and Ascorbic Acid Content", PRISM Scholars Poster Session, CSUSB, August 2011.
61. Ghossein, Adam; Torres, Carina, Kimberley Cousins, "Comparison of the Concentration of Ascorbic Acid in Homegrown and Industrial Oranges", PRISM Scholars Poster Session, CSUSB, August 2011.
62. Vannary Sann, Kimberley Cousins, "Characteristics and Activity of Hydrotalcite," Louis Stokes Alliance for Minority Participation, Student Research Conference, University of Texas at Arlington, Sept. 15-17, 2011.
63. Sann, Vannary, Cousins, Kimberley "Characteristics and Activity of Hydrotalcite," California State University, San Bernardino Undergraduate Research Competition, first place for College of Natural Sciences, June, 2011.
64. Luz A. Sandoval, Amber Mora, Kimberley Cousins, "Synthesizing amide derivatives of carboxylic acid using oxalyl chloride," 241st National Meeting of the American Chemical Society, CA, March 2011.
65. Raul Ocampo, Kimberley Cousins, "Modeling degradation of fuel cell polymers using GAMESS," American Chemical Society Southern California Undergraduate Research Conference In Chemistry and Biochemistry, Chapman University, April 17, 2010.
66. Amber Mora, Luz Sandoval, Sam Bonilla, "Synthesis of Amide Derivatives of Carboxylic Acids using Oxalyl Chloride," American Chemical Society Southern California Undergraduate Research Conference In Chemistry and Biochemistry, Chapman University, April 17, 2010.

67. Tenayuca, John, Cousins, K.R. "Homology Modeling to Predict the Structure of TRPM8", American Society for Cell Biology, Washington, D.C., December, 2007. Also presented at the National McNair Symposia, Chigaco, October, 2007, and campus McNair Symposium, August 2007.
68. John M. Tenayuca, Dario A. Gutierrez, Kimberley R. Cousins, Shumei Yang, "Nicotine's Affinity for the Tetrahydrobiopterin Binding Site in Endothelial Nitric Oxide Synthase: A Molecular Modeling Study,": Western Regional meeting of the American Chemical Society, San Diego, October 2007. Also presented at CSUSB and statewide CSU research competitions, 2008.
69. Griffith, M. Cousins, K.R. "Solvent-Free Williamson Ether Synthesis: Effect of the substituent on phenol," SCUR conference, University of California at Riverside, November, 2005.
70. McConnell, D. Cousins, K.R. "First Step in the Green Synthesis of Carpanone", McNair Symposium, CSUSB, August 2004.
71. Rice, A.* Cousins, K. R, "Preliminary QSAR Analysis of Novel Cooling Compounds," CSUSB Undergraduate Research Symposium winner, March 2003; also presented at CSU Research Competition, CSU Chico, May 2003. I.D 13.
72. Bell, J. M.* Cousins, K. R. "Semi-Empirical PM-3 Analysis of α and β D-Aldohexoses in Equilibrium" Biennial Meeting of the CCC of the CSU, San Bernarndino, July 9, 2001.
73. Reiter, O.* Cousins, K. R. "Using Phase Transfer Catalysis in the First Step of the Synthesis of Carpanone", National Meeting of the American Chemical Society, San Diego, CA, April 2, 2001; also presented at the CSUSB Research Competition, May 2001.
74. Bell, J.M.* Cousins, K.R. "Quantitative Analysis of Nicotinamide" at the SC-ACS Student Affiliates meeting poster session (Occidental College, April 2000); also presented at the CSUSB Undergraduate Research Competition, and CSU Competition, Spring 2000.
75. Gummo, T. L. Cousins, K. R., Concepcion, A. "An On-line Acid Base Titration Applet in the GTSS Project" Biennial Meeting of the CCC of the CSU, San Bernarndino, July 9, 2001.
76. Ramirez, J. Cousins,* K. R. Mowrey, B. "Using 2-D C-H NMR Spectroscopy to Completely Assign the Spectra of Intermediates in the Synthesis of Carpanone," CSUSB Research Competition, San Bernardino CA, April 1998, and California State University Undergraduate Research Competition, May, 1998, Chico CA.
77. Mowrey, B.*; Cousins, K. R. "Synthesis, NMR Analysis and Molecular Modeling of Carpanone," Undergraduate Research Conference, University of California at Santa Barbara, April 20, 1996.

78. Vaughn, J.,* Cousins, K. R. "Synthesis and FTIR Analysis of Polystyrene Derivatives" Sixth Annual UCR New Directions Undergraduate Research Conference, May 20th, 1995, University of California at Riverside, Riverside CA.
79. Sustarich, J. M.,* Cousins, K. R. "AM1 Study of a Proposed 3,3-Sigmatropic Rearrangement of Sulfenyl Ester Allene Compounds" Students' Affiliates Poster Session, 209th National Meeting of the ACS, April, 1995, Anaheim, CA.
80. Concepcion, N. S.,* Cousins, K. R. "A General Method of the Protection of Hindered Phenols using the Trimethylsilyl Group" Southern California Conference on Undergraduate Research, November 19, 1994, California Institute of Technology, Pasadena, CA.
81. Addington, D.,* Cousins, K. R. "Model Studies Toward the Preparation of *cis*-Poly(isoprenyl)- and Poly(butadienyl)-based Organoaluminum Reagents" National Conference on Undergraduate Research, Salt Lake City, Utah, March, 1993; 205th National Meeting of the ACS, Denver, Colorado, March, 1993.

g. Awards and Honors

1. *CSUSB Outstanding Professor and John M. Pfau Endowed Professor* 2019-2020
2. College of Natural Sciences, CSUSB 2018-19 *Outstanding Professional Activities Award*
3. *CSUSB Golden Apple Award*, 2008-09 (single highest teaching award on campus)
4. College of Natural Sciences, CSUSB 2006-07 *Outstanding Service Award*
5. School of Natural Sciences, CSUSB 1994-95 *Outstanding Instructionally Related Activities*
6. *Henze Award for Outstanding Teaching Assistant*, 1985, UT Austin

h. Leadership and Service

Selected Campus & Department Level Service

1. Workload Task Force, Quarter to Semester Executive Committee 2016
2. *ad hoc* Committee on Faculty Workload, CSUSB Faculty Senate appointee 2015-2016
3. CSUSB Strategic Planning Committee, faculty representative on the Student Success working group 2015
4. Office of Student Research Advisory Board, member 2011 – present
5. MASS (S-STEM) Scholars program, director 2010 – present
6. Teaching Academy, chair 2008 – 2009
7. Teaching Academy, chair elect 2007 – 2008
8. California Faculty Association, CSUSB Executive Board Member 2005-2016

- | | |
|--|----------------|
| 9. College Natural Sciences, faculty senator | 2004 – 2012 |
| 10. Faculty Senate Executive Committee, member | 2004 – 2007 |
| 11. Faculty Senate Executive Committee, Vice Chair | 2005 – 2007 |
| 12. Faculty Senate College Elections Officer | 2005 – 2010 |
| 13. Member or Chair for Departmental Retention, Promotion & Tenure Committees,
Department of Chemistry & Biochemistry (5 years), Nursing (1 year), Health Science and
Human Ecology (1 year), Geology (1 year) | 2002 - 2015 |
| 14. Campus Academic Technology Strategic Planning Committee | 2001 – 2002 |
| 15. Baseline Access Training and Support, chair | 2001 – 2002 |
| 16. Diversity in Graduate Education <i>ad hoc</i> committee | 2000 |
| 17. Baseline Access Training and Support (committee for distributing campus instructional
computing funds), member | 1999 – 2002 |
| 18. Co-Author, Department 5 Year Reports, and five-year review for ACS Accreditation of our
major | 1998 – 2008 |
| 19. Chemistry & Biochemistry Department computer committee, chair | 1997 – present |
| 20. Chemistry & Biochemistry Department curriculum committee, chair | 1996 – 2000 |

Professional Service:

- | | |
|---|--------------|
| 1. National Science Foundation Proposal Review Panelist HRD-CREST | 2016 |
| 2. Professional reviewer: total of about 40 manuscripts and scientific proposals (over thirty from
the <i>J. Chem. Educ.</i>) | 1999-2016 |
| 3. Campus Liaison for the Council on Undergraduate Research | 1995-present |
| 4. Secretary, Computational Chemists' Council of the CSU | 2001-2002 |
| 5. Organizer & Host, Computational Chemists' Committee Meeting and Symposium | 2001 |
| 6. Organizing committee, "Chemistry and the Internet International Conferences" 1999 – 2001 | |
| 7. Organizing committee, and poster chair for the Second and Third International "Chemistry
and the Internet" Conferences (September 1999 & 2000, Washington D.C.); Chair of the
Education session of the First International Chemistry and the Internet Conference,
September 1998, Irvine, CA. | 1998 – 2000 |
| 8. National Science Foundation Proposal Review Panelist: ILI | 1994 |

Memberships:

- American Chemical Society: San Geronio section; Division of Chemical Education; Division of Computers in Chemistry
- Council on Undergraduate Research
- AAUW
- Sigma Xi
- Phi Kappa Phi