

Curriculum Vitae – Stephen M. Kuebler, D.Phil.

as of 11 Sept. 2025

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EMPLOYMENT and APPOINTMENTS

Professor of Chemistry and Optics University of Central Florida (UCF) Joint appointment in Chemistry and CREOL, The College of Optics & Photonics Secondary Joint appointment in Material Science and Engineering Tenure in Chemistry Department, College of Science (awarded 8 Aug 2009)	8 Aug 2019 - present
Founding Associate Director, UCF Center for Ethics	Aug 2019 - present
Faculty Fellow for Student Success in Chemistry College of Science, University of Central Florida	Jan 2023 – Dec 2024
Associate Professor of Chemistry and Optics University of Central Florida	8 Aug 2009 - 7 Aug 2019
Interim Assistant Vice President of Research & Commercialization Office of Research & Commercialization, UCF	9 Aug 2012 - 31 Aug 2013
Assistant Professor of Chemistry and Optics University of Central Florida	8 Aug 2003 - 7 Aug 2009
Assistant Staff Scientist University of Arizona Department of Chemistry	1 Jul 2001 - 31 Jul 2003
Research Associate University of Arizona Department of Chemistry	26 Jan 1999 - 30 Jun 2001
Postdoctoral Research Scholar California Institute of Technology Department of Chemistry	1 Feb 1998 - 25 Jan 1999
"Kids-in-the-News" TV Reporter WBKO-TV, Bowling Green, Kentucky	Summer 1983 - Summer 1987
"Kids-in-the-News" TV Reporter KLFY-TV, Lafayette, Louisiana	Summer 1982 - Summer 1983

EDUCATION

University of Oxford – Oxford, UK D.Phil. in Chemistry conferred Mar 1998	Aug 1991 - Jan 1998
Tulane University – New Orleans, LA B.S., summa cum laude, major in Chemistry, minor in Physics B.A., cum laude, major in German	Aug 1987 - May 1991
University of Hamburg – Hamburg, Germany Junior-year-abroad study while enrolled at Tulane University	Sept 1989 - July 1990

AWARDS and RECOGNITION

- Champion of Undergraduate Research Spr 2025
“Recognizes UCF faculty who have made significant, lasting contributions to promote and facilitate undergraduate research at UCF.”
- Marshall Scholarship, Selection Committee Member, Atlanta Region 2009 - 2013 & 2019 - 2022
Association of Commonwealth Universities, UK
- Clifford G. Christians Ethics Research Award 26 Feb. 2022
"This is one of the highest awards presented by the Association and represents a significant milestone in academic achievement." Presented by the Association for Practical and Professional Ethics (APPE) for:

J. Beever and **S. M. Kuebler**, "Mapping the institutional epidemiology of ethics."
31st Annual International Conference of the Association for Practical and Professional Ethics (24-27 Feb. 2022, Cincinnati, OH), Association for Practical and Professional Ethics (APPE).
- Scroll and Quill Society (UCF recognition of significant scholarship in the discipline) 2020
- Outstanding Volunteer, awarded by Orlando Section – ACS 2018
- Research featured on Fox 35 News:
https://www.youtube.com/watch?time_continue=4&v=B3UsIPvrkcc
- Senior Member, OSA – Optical Society of America 2018
- Senior Member, SPIE – Soc. of Photo-Optical Instrumentation Engineers 2015
Top 13% in the leading international professional organization for optical engineers.
- Research Incentive Award ("RIA", UCF College of Science, UCF) 2018
- Four (4) Teaching Incentive Program Awards ("TIP", COS, UCF) 2009, 2014, 2019, 2025
- Excellence in Undergraduate Teaching Awards (College of Sciences, UCF) 2008 and 2015
- NSF CAREER Award Jan 2008
- Outstanding Four Year College Teacher (Orlando Section – ACS) 2005
- Invited Participant in the NSF Germany-USA Workshop on Nanomaterials 2005
Research exchange program sponsored jointly by NSF and the German Research Ministry (BMBF) involving 12 selected US scientists and engineers.
- Dean's Advisory Council, Barrett Honors College, Arizona State University 2000 - 2002
- NSF Graduate Research Fellowship 1993
- Marshall Scholar – Association of Commonwealth Universities, UK 1991
- Perry Medal – Tulane Univ. award to most outstanding Arts & Sciences graduate 1991
- Phi Beta Kappa 1991
- Excellence in research prize – Louisiana Chapter, ACS 1991

- Sigma Xi award for excellence in research 1991
- Goldwater Scholar 1989
- Truman Scholarship Finalist 1989
- Eagle Scout, Boy Scouts of America 1987

TEACHING

LECTURE COURSES TAUGHT

Created two new courses.

Taught eight different courses, for Chemistry and Optics, at graduate and undergraduate levels.

- | | | |
|---|-----------|---------------------|
| 1. Frontiers in Optics | OSE 4930 | Undergraduate level |
| Created by Kuebler in 2014 for the B.S. in Photonics Science and Engineering, UCF | | |
| 2. Solid-State Inorganic Chemistry | CHM 6620 | Graduate level |
| Created by Kuebler in 2004 for the PhD in Chemistry, Materials Track, UCF | | |
| 3. Fundamentals of Chemistry II | CHM 2046 | Undergraduate level |
| 4. Honors Fundamentals of Chemistry II | CHM 2046H | Undergraduate level |
| 5. Honors Fundamentals of Chemistry Lab | CHM 2046L | Undergraduate level |
| 6. Physical Chemistry Lab | CHM 3411L | Undergraduate level |
| 7. Inorganic Chemistry Lab | CHM 4610L | Undergraduate level |
| 8. Chemistry of Materials | CHM 6711 | Graduate level |

DISSERTATION and SENIOR-PROJECT COMMITTEE SERVICE

128 students in total.

- | | | |
|--------------------------|------------------------|------------------------------------|
| 1. Kristen Ling | PhD in Elec. Eng. | Advisor: Dr. Xun Gong |
| 2. Minh Tran | PhD in Chemistry | Advisor: Dr. Denisia Popolan-Vaida |
| 3. Carlos Granja Angulo | BS Optics | Sr. Design Project Team, spr 2025 |
| 4. Matthew Berasa | BS Comp. Eng. | Sr. Design Project Team, spr 2025 |
| 5. Andrew Forde | BS Elec. Eng. | Sr. Design Project Team, spr 2025 |
| 6. Andrew Topliffe | BS Elec. Eng. | Sr. Design Project Team, spr 2025 |
| 7. Alexander Alonzo | BS Optics | Sr. Design Project Team, spr 2025 |
| 8. Cater Clavell – EE | BS Elec. Eng. | Sr. Design Project Team, spr 2025 |
| 9. Xavier Colon | BS Optics | Sr. Design Project Team, spr 2025 |
| 10. Nathanael Olson – EE | BS Elec. Eng. | Sr. Design Project Team, spr 2025 |
| 11. Braeden Larson | BS Optics | Sr. Design Project Team, spr 2025 |
| 12. Griffith Zakow | BS Comp. Eng. | Sr. Design Project Team, spr 2025 |
| 13. Kobe Conomon | BS Elec. Eng. | Sr. Design Project Team, spr 2025 |
| 14. Adam Scheuring | BS Comp. Eng. | Sr. Design Project Team, spr 2025 |
| 15. Farris Thrower | BS Optics | Sr. Design Project Team, spr 2025 |
| 16. Rhami Thrower | BS in Comp. Eng. | Sr. Design Project Team, spr 2025 |
| 17. Dominic Falvo | BS Elec. Eng. | Sr. Design Project Team, spr 2025 |
| 18. Gonzalo Gomez-Silva | BS Elec. Eng. | Sr. Design Project Team, spr 2025 |
| 19. Matilynn Lam | PhD in Chemistry | Advisor: Christopher Randles |
| 20. Nicholas S. Lewis | PhD in Physics | Advisor: Luca Argenti |
| 21. Christopher Vanle | BS Optics, spring 2024 | Sr. Design Project Team, spr 2024 |
| 22. Daniel Hemmerde | BS Elec. Eng. | Sr. Design Project Team, spr 2024 |
| 23. Davis Rozel | BS Elec. Eng. | Sr. Design Project Team, spr 2024 |
| 24. Dylan Brancato | BS Optics, spring 2024 | Sr. Design Project Team, spr 2024 |
| 25. Ethan Shepherd | BS Optics, spring 2024 | Sr. Design Project Team, spr 2024 |
| 26. Pascual Siracusa | BS Elec. Eng. | Sr. Design Project Team, spr 2024 |

27.	Jean Georges	BS Comp. Eng.	Sr. Design Project Team, spr 2024
28.	Tamara Nelson	BS Optics, fall 2023	Sr. Design Project Team, fall 2023
29.	Misael Salazar	BS Optics, fall 2023	Sr. Design Project Team, fall 2023
30.	Miguel Daboin	BS Elec. Eng., fall 2023	Sr. Design Project Team, fall 2023
31.	Jarolin Jimenez Vasquez	BS Elec. Eng., fall 2023	Sr. Design Project Team, fall 2023
32.	Rashandel Marjan	PhD in Chemistry	Advisor: Chris Randles
33.	Kara Strickland	PhD in Chemistry	Advisor: Jonathan Caranto
34.	Gabriel Padilla	PhD in Chemistry	Advisor: Jonathan Caranto
35.	Kaitlin Turner	BS in Chemistry	Advisor: Dr. Geng Yang
36.	Yuchen Cao	PhD in Elec. Eng.	Advisor: Kenle Chen
37.	Zahid Hasan	PhD in Elec. Eng.	Advisor: Xun Gong
38.	Ectis Velazquez	PhD in Elec. Eng.	Advisor: Xun Gong
39.	Aaron Holloway	BS Elec. Eng., spring 2023	Sr. Design Project Team, spr 2023
40.	Ajay Nattanmai	BS Elec. Eng., spring 2023	Sr. Design Project Team, spr 2023
41.	Elijah Peterman	BS Elec. Eng., spring 2023	Sr. Design Project Team, spr 2023
42.	Malcolm Donaldson	BS Optics, spring 2023	Sr. Design Project Team, spr 2023
43.	Ryan Goff	BS Comp. Eng., spring 2023	Sr. Design Project Team, fall 2022
44.	Carlos Irizarry	BS Optics, spring 2023	Sr. Design Project Team, fall 2022
45.	Christopher Robertson	BS Comp. Eng., spring 2023	Sr. Design Project Team, fall 2022
46.	Eccleziias Senat	BS Elec. Eng., spring 2023	Sr. Design Project Team, fall 2022
47.	Michael McMahon	BS Optics, spring 2022	Sr. Design Project Team, spring 2022
48.	Daniel Valledor	BS Elec. Eng., spring 2022	Sr. Design Project Team, spring 2022
49.	Luis Carrillo	BS Elec. Eng., spring 2022	Sr. Design Project Team, spring 2022
50.	Michael Rogatisnky	BS Comp. Eng., spring 2022	Sr. Design Project Team, spring 2022
51.	Joshua Walton	BS Optics, spring 2022	Sr. Design Project Team, spring 2022
52.	Dylan Perkowski	BS Optics, spring 2022	Sr. Design Project Team, spring 2022
53.	Skyler Burns	BS Elec. Eng., spring 2022	Sr. Design Project Team, spring 2022
54.	Joshua Frazer	BS Comp. Eng., spring 2022	Sr. Design Project Team, spring 2022
55.	Remelisa Esteves	PhD, Aerospace Eng., spr 2023	Advisor: Seetha Raghavan
56.	Saad Mehmood	PhD in Physics, summer 2022	Advisor: Luca Argenti
57.	Mengdi Sun	PhD in Optics, spring 2022	Advisor: Dr. Pieter Kik
58.	He Cheng	PhD in Optics, spring 2022	Advisor: Dr. Xioaming Xu
59.	Junyi Huang	PhD in EE, summer 2021	Advisor: Dr. Xun Gong
60.	Chenyi Zhang	PhD in Optics, spring 2021	Advisor: Dr. Ryan Gelfand
61.	Arifur Rahaman	PhD in Optics, fall 2020	Advisor: Dr. Xiaoming Yu
62.	Ricardo Lovato	PhD in EE, spring 2021	Advisor: Dr. Xun Gong
63.	Erin Crites	BS in Physics, spring 2020	Advisor: Dr. Michael Chini
	Honors in the Major		
64.	Dr. Shima Gholam Mirzaei	PhD in Physics, spring 2020	Advisor: Dr. Michael Chini
65.	Dr. Haiheng Ye	PhD in Chemistry, spring 2019	Advisor: Dr. Xiaohu Xia
66.	Dr. Xuan Chen	PhD in Mater. Sci. Eng.	Advisor: Dr. Romaine Gaume
67.	Dr. Michael Trampler	PhD in EE, summer 2019	Advisor: Dr. Xun Gong
68.	Dr. Wei Ouyang	PhD in EE, summer 2019	Advisor: Dr. Xun Gong
69.	Ryan Heitz	BS Comp. Eng.	Sr. Design Project Team, spring 2019
70.	Sandy Cline	BS in Optics	Sr. Design Project Team, spring 2019
71.	Brian Ascencio`	BS Elec. and Comp. Eng.	Sr. Design Project Team, spring 2019
72.	Shane Zweibach	BS Comp. Eng.	Sr. Design Project Team, spring 2019
73.	Zarina Marie Balde	BS in Biomolec. Sci., fall 2018	Advisor: Dr. Debopam Chakrabarti
	Honors in the Major		
74.	Dr. Mahmoud Shirazi	PhD in EE, summer 2018	Advisor: Dr. Xun Gong

75.	Dr. Mathew Logan	PhD in Chem., summer 2018	Advisor: Dr. Fernando Uribe-Romo
76.	Dr. Alexander York	PhD in Math, summer 2018	Advisor: Dr. Joseph Brennan
77.	Sam Benjamin	B.S. Optics	Sr. Design Project Team, fall 2017
78.	Isaias Velez	B.S. Elec. Eng.	Sr. Design Project Team, fall 2017
79.	Sommer Hilliard	B.S. Elec. Eng.	Sr. Design Project Team, fall 2017
80.	Cary McEwan	B.S. Comp. Sci.	Sr. Design Project Team, fall 2017
81.	Benjamin Stuart	B.S. Optics	Sr. Design Project Team, fall 2017
82.	Garrett Bennett	B.S. Optics	Sr. Design Project Team, fall 2017
83.	George Salinas	B.S. Comp. Sci.	Sr. Design Project Team, fall 2017
84.	Zhitao Chen	B.S. Elec. Eng.	Sr. Design Project Team, fall 2017
85.	Anthony J. Riggins	BS in Optics	Sr. Design Project Team, summer 2017
86.	Jesus M. Marcano	BS in Elec. Eng.	Sr. Design Project Team, summer 2017
87.	Jack A. Fenton	BS in Elec. Eng.	Sr. Design Project Team, summer 2017
88.	Melissa J. Wetzel	BS in Comp. Eng.	Sr. Design Project Team, summer 2017
89.	Marielena Burdge	BS in Optics	Sr. Design Project Team, summer 2017
90.	Mahmoud Elhady	BS in Elec. Eng.	Sr. Design Project Team, summer 2017
91.	James Tavit	BS in Civil Eng.	Sr. Design Project Team, summer 2017
92.	Juan Palomino	BS in Civil Eng.	Sr. Design Project Team, summer 2017
93.	Ms. Tianjiao Li	PhD in EE, spring 2017	Advisor: Dr. Xun Gong
94.	Mr. Amjad Aman	PhD in MAE, fall 2016	Advisor: Dr. Nina Orlovskaya
95.	Mr. Anthony Terracciano	PhD in MAE, fall 2016	Advisor: Dr. Nina Orlovskaya
96.	Mr. Antoine Lepicard	PhD in Optics, fall 2016	Advisor: Dr. Kathleen Richardson
97.	Sean Crystal	BS in Optics	Sr. Design Project Team, summer 2016
98.	Jason Owens	BS in Optics	Sr. Design Project Team, summer 2016
99.	Mr. Richard Stadelmann	PhD in MAE, fall 2015	Advisor: Dr. Nina Orlovskaya
100.	Miss Warinya Chemnasiri	PhD in Chemistry, fall 2015	Advisor: Dr. Florencio Hernandez
101.	Mr. Chatdanai Lumdee	PhD in Optics, fall 2015	Advisor: Dr. Pieter Kik
102.	Mr. Carlos Diaz	PhD in Chem., summer 2015	Advisor: Dr. Florencio Hernandez
103.	Miss Sihui He	PhD in Optics, summer 2015	Advisor: Dr. Shin-Tson Wu
104.	Mr. Coleman Caricker	BS in Physics, spring 2015	Advisor: Dr. Alfons Schulte
105.	Mr. Kyle Thurmond	BS in Eng, fall 2014	Advisor: Dr. Subith S. Vasu
106.	Mr. Owen M. Pryor	BS in Eng, fall 2014	Advisor: Dr. Subith S. Vasu
107.	Dr. Seyfollah Toroghi	PhD in Optics, summer 2014	Advisor: Dr. Pieter Kik
108.	Dr. Aniruddha Dutta	PhD, Physics, spring 2014	Advisor: Dr. Helge Heinrich
109.	Dr. Jirair Gevorgyan	PhD in Chem., spring 2013	Advisor: Dr. Robert Igarashi
110.	Dr. David Restrepo	PhD in Chem., spring 2013	Advisor: Dr. Richard Blair
111.	Dr. Binh Tran	PhD in Chem., spring 2013	Advisor: Dr. Lei Zhai
112.	Dr. David Reid	PhD in Eng., fall 2012	Advisor: Dr. Sudipta Seal
113.	Dr. Caitlin Rinke	PhD in Chem., fall 2012	Advisor: Dr. Michael Sigman
114.	Dr. Deborah Maxwell	PhD in Chem., summer 2012	Advisor: Dr. Robert Igarashi
115.	Dr. Sihui He	PhD in Optics, spring 2012	Advisor: Dr. Shin-Tson Wu
116.	Dr. Christina Oropeza	PhD in Chem.	Advisor: Dr. Christopher Clausen
117.	Dr. Shruba Gangopadhyay	PhD in Chem., fall 2010	Advisor: Dr. Artem Masunov
118.	Dr. Hubert Seigneur	PhD in Optics, fall 2010	Advisor: Dr. Winston Schoenfeld
119.	Dr. Sanchita Biswas	PhD in Chem., spring 2010	Advisor: Dr. Kevin Belfield
120.	Dr. Luis Ono	PhD in Phys., fall 2009	Advisor: Dr. Beatriz Roldán-Cuenya
121.	Dr. Xiong Liu	PhD in Chem., summer 2009	Advisor: Dr. Qun Huo
122.	Dr. Qui Dai	PhD in Chem., spring 2008	Advisor: Dr. Qun Huo
123.	Ms. Amanda Parish	MS in Optics, 2007	Advisor: Dr. Shin-Tson Wu
124.	Ms. Kathleen Brooks	PhD candidate in Chem.	Advisor: Dr. Cherie Geiger
125.	Dr. Raymond C. Rumpf	PhD in Optics, spring 2006	Advisor: Dr. Eric Johnson

126. Dr. Marisol Garcia	PhD in Chem., spring 2006	Advisor: Dr. Florencio Hernandez
127. Dr. Chien-Hui Wen	PhD in Optics, spring 2006	Advisor: Dr. S.-T. Wu
128. Dr. Kristen Milum	MS in Chem., fall 2005	Advisor: Dr. Cherie Geiger

MENTEE TRAINING

FACULTY MENTORED (**indicates a member of an underrepresented group*)

- | | | |
|-------------------------------|--|----------------|
| 1. Dr. Tom Hopper | Asst. Prof. Chem, UCF | 2025 - present |
| 2. Dr. Chris Randles | Asst. Prof. Chem, UCF | 2022 - present |
| 3. Dr. Denisia Popolan-Vaida* | Asst. Prof. Chem., UCF | 2018 - 2025 |
| | Promoted to Assoc. Prof. in 2025 | |
| 4. Dr. Matthieu Baudelet | Asst. Prof. Chem. & Forensic Sci., UCF | 2018 - 2021 |
| | Promoted to Assoc. Prof. in 2021 | |
| 5. Dr. Jonathan Beever | Asst. Prof. Philosophy | 2017 - 2021 |
| | Promoted to Assoc. Prof. in 2021 | |
| | Promoted to full Professor in 2025 | |

VISITING SCHOLARS MENTORED (**indicates a member of an underrepresented group*)

- | | | |
|---------------------------|--------------------------------|-----------------------|
| 1. Tatiana Rios-Carvajal* | Univ. of Columbia, MS in Chem. | 2012/2013 |
| 2. Dr. Ahmed Shebl | Ain Shams University, Egypt | July 2014 - Oct. 2014 |
| 3. Marc Gauci | University of Nantes, France | Summer 2019 |

POST-DOCTORAL RESEARCHERS TRAINED (**member of an underrepresented group*)

8 post-doctoral scholars trained in total.

- | | | |
|----------------------------------|---|----------------|
| 1. Dr. Tyrone Thames | PhD, Physics, UCF | 2025 - present |
| 2. Dr. Alexandros Nikolaidis | PhD., The Ohio State University | 2023 - present |
| | Ethics scholar supported by NSF-ER2 project #2024296. | |
| 3. Dr. Joshua Kissel | Ph.D., Northwestern University | 2023 - present |
| | Ethics scholar supported by NSF-ER2 project #2024296. | |
| 4. Dr. Hajer Albalawi* | PhD, Texts and Technology, UCF | 2023 - 2024 |
| | Ethics scholar supported by NSF-ER2 project #2024296. | |
| 5. Dr. Shaimum Shahriar | PhD., Univ. Texas El Paso | 2021 - 2023 |
| | Tenure-earning Asst. Prof. of Electronics Eng. Technology, Troy University | |
| 6. Dr. Casey Schwarz* | PhD., UCF | 2013 - 2016 |
| | Tenured associate professor of Physics, Ursinus Coll. (Collegeville, PA) | |
| | Chair of Physical Sciences, Ursinus Coll. (Collegeville, PA) | |
| 7. Dr. Ananthakrishnan Narayanan | PhD., Auburn | 2010 - 2011 |
| | Cree, Inc., Durham, NC (2011 - 2015) | |
| | Reliability eng. manager, Phononic, Inc., Raleigh-Durham, NC (2015 - present) | |
| 8. Dr. Ivan Divliansky | PhD, Penn. State | 2004 - 2005 |
| | Research Scientist, CREOL, UCF | |

GRADUATE RESEARCHERS TRAINED (**member of an underrepresented group*)

Graduated 7 PhDs and 14 MS students in Chemistry or Optics.

27 graduate students trained in total, across multiple disciplines.

- | | | |
|-------------------|----------------------------|----------------|
| 1. Rafat Raftani* | PhD in chemistry | 2023 - present |
| 2. Tyrone Morales | MS in Optics and Photonics | 2022 - present |

3. Alexander Cockerham PhD in optics 2021 - present
 MS in Optics Fall 2023 - present
 - ORC Graduate Fellow
4. Chad Horton PhD in chemistry 2021 - present
5. Luke Craig MS in chemistry 2025
6. Pooria Golvari PhD in chemistry Grad. fall 2023
 MS in chemistry, spr. 2022
 - ORC Graduate Fellow
 - Senior Material Scientist at Sionic Energy, Rochester, NY
7. Lakelyn Taylor* PhD in commun., spr. 2023 Grad. fall 2023 Univ. Vermont
 - GRA on NSF-funded project #2024296.
8. Allison Banzon* PhD in Education Spr 2022 - Sum 2022
 - GRA on NSF-funded project #2024296.
9. Jen Crowell* PhD in Texts & Technol. Summer 2021
 - GRA on NSF-funded project #2024296.
10. Emily LaPadura* PhD in Texts & Technol. Summer 2021
 - GRA on NSF-funded project #2024296.
11. Chun Xia PhD in Optics Grad summer 2022 Intel
 MS in Optics Spring 2021
 - Doctoral Research Support Award Fall 2018
 (Coll. Graduate Studies, UCF; \$1,250 for travel).
 - ORC Graduate Fellow
 - Engineer at Intel Corporation (2022)
12. Geng Yang MS in Optics & Photonics 2020
13. Rashi Sharma* PhD in Chem. Grad. fall 2018
 MS in Chemistry Grad. spr. 2016
 - Outstanding Graduate Teaching Assistant (UCF Chem., May 2017)
 - Green Chemistry NSF travel Fellowship (Apr. 2013)
 - Postdoctoral scholar, UCF (CREOL, Richardson Group, 2019)
 - Adjunct instructor, UCF (fall 2022)
14. Chris Grabill PhD in Chem. Grad. spr. 2018 Lockheed-Martin
 MS in Chemistry Grad. spr. 2012
 - Research Excellence Fellowship (UCF, Aug. 2013)
 - Outstanding Graduate Teaching Assistant (UCF Chem., May 2012)
 - Outstanding Graduate Seminar (UCF Chem., May 2011)
 - Senior Chemist/Chemical Sampling & Analysis Supervisor
 (working on site at KSC/NASA, 2018)
15. Ali Mesbahi PhD candidate in Chem. 2016 - 2017
 - Continuing toward PhD. in Chemistry at UCF
16. Greg Miller PhD candidate in Chem. 2016 - 2017
 - Moved to group of Dr. Andres Gesquiere before leaving UCF program.
 - Unknighted Chemistry Grad. Student Assoc.
 Member of the Year (UCF, spring 2017)

17. Dr. Jennefir Digaum	PhD in Optics	Grad. spr. 2016	Micron, Inc.
- 2nd Place, Best Poster (20 Mar. 2015, OIDA Workshop on Integrated Photonics for High Volume Packaging)			
- 2nd Place, Best Paper, Federation of Optics College and University Students (FOCUS) Latin America Conference, OSA and SPIE (11-13 Nov. 2014, Medellin, Colombia)			
- 2nd Place for Best Poster (5 Apr. 2015, UCF Grad Res. Forum)			
18. Dr. Henry Williams*	PhD in Chemistry	Grad. fall 2013	
- Now Sr. scientist at NanoSpective, Orlando, FL			
19. Ali Ozcan	MS in Chemistry	Grad. spr. 2013	
- PhD. cand. at UCF			
20. Dr. Zhenyue Luo	PhD candidate in Optics	2010 - 2012	Apple
21. Kristen Lynch*	MS in Chemistry	Grad. fall 2011	Lockheed-Martin
	MS Mater. Sci. Eng.	Grad. fall 2012	
22. Rahul Hegishte	MS in Industrial Chemistry	Grad. spr. 2011	Univ. Pune
23. Marco A. Melino	MS in Optics	Grad. spr. 2010	DomesticTree.com
24. Dr. Toufic G. Jabbour	PhD in Optics	Grad. fall 2009	Zeiss
25. Amir Tal	MS in Optics	Grad. sum. 2007	Jenoptik
- Promoted to Manufacturing Engineering Manager (Jenoptik, 2022).			
26. Dr. Yun-Sheng Chen	MS in Optics	Grad. spr. 2008	Stanford
27. Dr. Yigit Ozan Yilmaz	MS in Optics	Grad. fall 2006	Intel

UNDERGRADUATES RESEARCHERS TRAINED (*member of an underrepresented group)

84 undergraduate researchers trained in total.

1. Gabriel B. Tiqui*	BS in Physics	Fall 2025
2. Jillian Fortin*	BS Biomedical Sci	Fall 2025
3. Elizabeth Rosario	BS in Molecular Eng	Sum 2025
- Univ. of Chicago, summer student at UCF		
4. Trenton "TJ" Fosberg	BS Forensic Science	2025 - present
5. Milani Herrington*	BS in Chemistry	2025 - present
6. Keaton Hernandez	BS in Optics	2025 - present
7. Austin Naugle	BS in Optics	2024 - present
- UCF-ORC Undergraduate Research Fellowship (spring '25)		
8. Neha Jaisankar*	BS in Health Sciences	2022 - present
- UCF-ORC Undergraduate Research Fellowship (fall '23)		
9. Azeem Hakim	BS in Health Sciences	2022 - present
- Summer Undergraduate Research Fellowship (2023)		
10. Manasi Prakash*	BS in Psychology	2022 - 2025
11. Jacob Boice	BS Mater Sci Eng	2025
	Minor, chem.	
12. Laurel Johnston*	BS in Chemistry	2023 - 2025
	BS in Material Science and Eng.	
- UCF-ORC Undergraduate Research Fellowship (fall 2024)		

13. Travis “TJ” Carroll*	BS in Chemistry	2024 - 2025
14. Paul Copeland	BS in Philosophy (spr 2024)	2023 - 2025
- Undergraduate intern with Center for Ethics		
15. Valentina Fonseca*	BS in Biomedical Sci	2023 - 2025
- Admitted to UCF Chemistry PhD program		
16. John Harrison	BS Business, Chem minor	2022 - 2024
- Pursuing DDS at Univ. of Maryland.		
17. Grace Guerdouar*	BS in philosophy	2022 - 2024
- Undergraduate intern with Center for Ethics		
18. Victor Milanes*	BS Philosophy	2022 - 2025
- Undergrad researcher on NSF-funded ethics project #2024296.		
19. Daniela Martinez*	BS in Psychology	2023 - 2024
20. Lana Melmed*	BS in Biotechnology	2023 - 2024
21. Harun Al-Ansari*	BS in Chemistry	2023 - 2024
22. Khaled Alkameh*	BS in Health Sciences (spr 2023)	2021 - 2023
- Summer Undergraduate Research Fellowship (2022)		
23. Madigan Roozen*	BS in Optics	2022 - 2023
- EXCEL fellow (Spr & sum '22)		
24. Eva Vazquez*	BS Psychology	2021 - 2023
- Undergrad researcher on NSF-funded ethics project #2024296.		
25. Desiree Aguilar*	BS in Chemistry	2021 - 2024
- Summer Undergraduate Research Fellowship (2022)		
26. Matthew Carlton	BS in Chemistry, spr 2023	2022 - 2023
27. Michael McMahon	BS in Optics, spr 2022	2021 - 2022
- Research Fellow, X-Force, National Security Innovation Network ('22)		
28. Westley Hunter	BS Criminal Justice	2021 - 2022
- Undergrad researcher on NSF-funded ethics project #2024296.		
29. Fatima Hussain*	BS Psychology, clinical track	2021 - 2022
- Undergrad researcher on NSF-funded ethics project #2024296.		
30. Andrew Dremann	BS in Health Sciences	2021 - 2022
- Summer Undergraduate Research Fellowship (2022)		
31. Tyrone Morales*	BS in Optics	2022
32. Alex Cockerham	BS in Chem. and Biomolec. Sci. '21	Fall 2017 - present
- Burnett Research Scholar award, UCF (fall 2017)		
33. Robin Howell*	BS in Optics '21	Spring 2022
- Optics Engineer at Optics1 (New Hampshire, (Sum 23 - present)		
- Optics Engineer 1 with JenaOptik (Sum 22 – Sum 23)		
34. Jordan Collins*	BS, Comp. Sci.	2018 - 2020
35. Grant Biehler	BS in Chem.	Sum 2018 - 2019
36. Hannah West (Sinigaglio)*	BS in Optics, UCF	Fall 2017 - 2019
- Internship at Harris Corp. (summer 2018)		

- PhD in optics, Univ. Delaware (summer 2025)
- 37. Mark Gaspich BS in Chemistry, UCF Fall 2017 - 2019
- 38. Rohit Karnati BS in Chemistry, UCF Fall 2017 - Fall 2018
- 39. Christopher Kosan BS in Mech. Eng., UCF Fall 2016 - Spring 2018
- 40. Nicholas Kosan BS in Optics, UCF Fall 2015 - Spring 2018
 - NSF-REU at Univ. of Arizona (summer 2018)
 - Astronaut Scholarship, UCF (2017)
 - Distinguished Undergraduate Research Award, UCF (Feb. 2017)
 - RAMP fellowship, UCF (fall 2016)
 - Princeton PhD in Biomed. Eng. (fall 2019)
 - Awarded NASA-NSTGRO (spring 2021)
- 41. Jordyn White* BS in Chemistry, UCF Fall 2017 - Spring 2018
- 42. Robert Katims BS in Chemistry, UCF Spr 2015 - Spr 2017
- 43. Jayk Barker* BS in Mech. Eng. Sum 2015 - Sum 2016
- 44. Janzen Fallgren BS in Chemistry, UCF Sum 2016 - Fall 2016
- 45. Ryan Sapia BS in Chemistry, UCF Sum 2015 - Sum 2016
 - RAMP fellowship, UCF (fall 2015)
 - PhD candidate, UCF Chemistry (fall 2016)
- 46. Evan Duga BS in Chem., UCF Spring 2017
- 47. Daniel Batista* BS in Optics, UCF Fall 2014 - fall 2015
 - Burnett Research Scholars Fellowship, UCF (summer 2015)
- 48. Lauren Gandy* BS in Forensic Science 2013 - 2016
 - BA in French
 - PhD in Chemistry, RPI 2023
 - Order of Pegasus (UCF's highest award to students, 2017)
 - President's Advisory Council, UCF (2016)
 - Most Outstanding Service Award, UCF Chemistry (2016)
 - Outstanding Four-Year College Student, Orlando Chapter-ACS (Dec. 2015)
 - ACS@UCF president (2015/2016) and vice-president (2014/2015)
- 49. Michelle Hettinger* BS in Chemistry, UCF Spring 2015
 - System Chemist, Hayden Station, Xcel Energy, Hayden, CO
- 50. Alec Brown BS in Physics, UCF Summer 2015
- 51. Christa Deeks* BS in Chemistry, UCF Summer 2015
- 52. Elizabeth Isaac* BS in Chemistry, Otterbein College Summer 2015
- 53. Shreya Labh* BS in Chemistry, UCF 2014 - 2015
 - SURF, Summer Undergraduate Research Fellowship, UCF (2014)
- 54. Jeremy Thomas BS in Physics, Andrews Univ. Summer 2014
- 55. Anna Lewis* BS in Chemistry, UCF 2013 - 2014
 - RISE Summer Research Fellowship, German Academic Exchange Service (2014)
 - Nuclear and Radiochemistry Summer School Fellowship, ACS & Dept. of Energy (2014)
 - Employed after graduation by UCF start-up Flex Optronix.
- 56. Gerald Richardson BS in Molec/Micro Biology, UCF 2013 - 2015
 - Order of Pegasus (UCF's highest award to students, 2015)
 - Admitted to Univ. of Florida Medical School (2015)

	- Harvard Graduate School of Education (2017)	
57. Gabriel Padilla*	BS in Chemistry, UCF	2012 - 2014
	- McNair Scholar, UCF (2013)	
58. Daniel Freppon	BS in Chemistry, UCF	2008 - 2013
	- MS in Chemistry, Iowa State Univ.	
	- R&D Physicist, UbiQD, Los Alamos	
59. Drew Hanson	BS in Chemistry, UCF	2012 - 2013
60. Jose Jerez*	BS Engineering, UCF	2013
	(Mentee, UCF LEARN program)	
61. Dalibor Todorovski	BS Engineering, UCF	2013
	(Mentee, UCF LEARN program)	
62. Adrian Tatulian	BS in Physics, UCF	2013
63. Landon Meahl	BS in Physics	2012
64. Kaley Wilburn*	BS in Microbiol/Molec. Biol.	2012
65. Chris Clukay	BS in Chemistry, UCF	2010 - 2012
	- NSF Graduate Research Fellowship (2015)	
	- Best Student award, American Institute of Chemistry (2014)	
	- 3rd Place for Best Poster, Florida Inorganic and Materials Symposium (2010)	
66. Suliman Ayad	BS in Chemistry, UCF	2011
67. Dale Karas	REU in Optics	Summer 2011
68. Chris Grabill	BS in Chemistry, UCF	2008 - 2009
	- Outstanding Undergraduate Seminar (UCF Chem., May 2009)	
	- Second place, Showcase of Undergraduate Research Excellence (UCF, April 2009)	
	- Best Undergraduate Poster Presentation, Annual Meeting of the Florida Chapter of the American Vacuum Society (FLAVS, Mar. 2009)	
	- Physical Chemistry Award (UCF Chem., May 2008)	
69. Amanda Dupuy*	BS in Forensic Science, UCF	2008 - 2009
	- RAMP fellowship, UCF (2008)	
70. Craig Ament	BS in Physics, UCF	2008 - 2010
	- UCF SMART Fellowship (2008)	
71. Michael Petrovich	BS in Computer Science, UCF	2006 - 2007
72. Gregory Weaver	BS in Computer Science, UCF	2005 - 2006
73. David "Britt" Torrance	BS in Physics, UCF	2004 - 2006
	- RAMP fellowship, UCF (2005)	
74. Julien Fourez	CREOL-Intl. REU	Summer 2005
75. Meagan Giesler*	CREOL-REU	Summer 2005
76. Hiram Gonzales*	Nano/Engineering-REU	Summer 2005
77. Luciana Xavier*	BS in Physics, UCF	Summer 2005
78. Janneth Oleas*	NIH-Bridge Program	Summer 2005
79. Caleb Parnell-Lampen	NSF-REU at CREOL	Summer 2004
80. Forrest Ruhge	BS in Physics, UCF	Spring 2004
81. Amy Thompson*	NSF-REU at CREOL	Summer 2004
82. Daniel L. Huffman	BS in Chemistry	Summer 2004
83. Hubert P. Seigneur	BSE Comp. Eng., UCF	Summer 2004
84. Elbony Jones*	BS chem., UCF, 2004	Spring 2004

HIGH SCHOOL STUDENTS TRAINED (**member of an underrepresented group*)

- | | | |
|--|--|-------------|
| 1. Velan Nambi | Hagerty High School, Oviedo, FL | Summer 2025 |
| 2. Lilly Nguyen* | Trinity Preparatory School | Fall 2021 |
| - Second place, Ying Science Expo, Sr. Div., Biomed. & Health Sci. | | |
| - Admitted to Brown Univ. Class of 2026 | | |
| 3. Casey Sun* | Hagerty High School, Oviedo, FL | Summer 2019 |
| 4. Trinity Johnson* | Circle Christian School, Winter Pk, FL | Summer 2018 |
| 5. Joel Perez* | Hagerty High School, Oviedo, FL | Summer 2017 |
| 6. Jonathan Sepulveda* | Hagerty High School, Oviedo, FL | 2016 - 2017 |
| 7. Aadit Vyas* | Hagerty High School, Oviedo, FL | 2014 - 2016 |
| - Outstanding High School Chemistry Student, Orlando ACS (2014) | | |
| - Went to <u>Yale</u> for undergraduate study (2016) | | |
| - Science consultant at Oliver Wyman (2020) | | |
| 8. Jayk Barker* | Hagerty High School, Oviedo, FL | Summer 2015 |
| 9. Johl Kapil | Seminole High School, Sanford, FL | Summer 2015 |
| 10. Amy-Grace Pothen* | Hagerty High School, Oviedo, FL | Summer 2013 |
| 11. Samantha Collins* | Hagerty High School, Oviedo, FL | Summer 2012 |
| 12. Vivek Kumar | Hagerty High School, Oviedo, FL | Summer 2011 |
| - Went to <u>Univ. Florida</u> for MBA | | |
| 13. Steven Wang | Seminole High School, Orlando, FL | Summer 2010 |
| - Went to <u>Vanderbilt</u> for undergraduate study (2011) | | |

RESEARCH EXPERIENCES

University of Central Florida

- Development of new material systems and processes for a laser-based nano-scale 3D printing technique called "multi-photon lithography" (MPL).
- Preparation and characterization of 3D metallo-dielectric micro-/nano-scale structures and devices.
- Development of new methods for 3D optical beam-shaping.
- Fabrication and characterization of functional micro-photonic devices.
- Ethics and Responsible Conduct (ERC) in STEM: Development and assessment of workshops, courses, and other vehicles for cultivating a university-wide culture ERC in STEM.

Caltech/JPL & Univ. of Arizona (Supervisors: Prof. Joseph W. Perry and Prof. Seth R. Marder)

- Development of materials for high-sensitivity two-photon-activated chemistry & microfabrication.
- Application of two-photon-induced polymerization to ultra-high-density information storage.
- Microfabrication of switchable diffractive micro-optical devices.
- Use of two-photon absorbers for optical limiting in liquid crystal charge-transport media.

Oxford (Supervisors: Prof. Robert G. Denning and Prof. Malcolm L. H. Green)

- Characterization of third-order nonlinear optical materials by degenerate four-wave mixing.

Tulane (Supervisor: Prof. Mark J. Fink)

- Preparation of a stable silanone, the silicon analog of a ketone.
- Isolation of *per-tert*-butyl-bis(cyclopropenyl), a valence isomer of *per-tert*-butyl-benzene.

Tulane (Supervisor: Prof. David M. Roundhill)

- Synthesis of a bidentate dithiolate for chelating biotoxic metals.

GRANTS and CONTRACTS

57 contracts/grants awarded at UCF.

Total involvement: \$ 7,137,233.79 (external = \$ 6,040,090.00)

Kuebler credit-share: \$ 4,015,006.00 (external = \$ 3,742,746.45)

Listing of contracts and grants

1. "Sub-Contract with FTL for MetaWrap SBIR Phase 2"

PI: Stephen M. Kuebler (60%)

Co-PI: Xun Gong (CECS, UCF)

Agency: FTL Labs, sub-contract via primary award from US Air Force Research Laboratory via SBIR Phase-2 contract #FA865125CB040, funded for a proposal submitted by FTL with UCF under topic F24A-T001.

Grant #: FA865125CB040

UCF ID#: AWD00007043

Start date: 08/08/2025

End date: 08/07/2027

Amount: \$549,994.00 (Kuebler share = \$329,996.40)

Type: External

Purpose: This award supports phase-2 of a project to develop a tool for designing meta-surfaces.

2. "Sub-contract with Heroica for Wide-Field-of-View Lens-Embedded Photonic Crystals"

PI: Stephen M. Kuebler

Agency: Heroica Technologies, sub-contract via primary award from US Air Force Research Laboratory via SBIR Phase-2 contract #FA865125CB011, funded for proposal F2D-13988 submitted by Heroica with UCF.

Grant #: FA865124PB020

UCF ID#: AWD00006534

Start date: 10/31/2024

End date: 10/30/2026

Amount: \$418,218.00 (Kuebler share = \$418,218)

Type: External

Purpose: This award supports development of lens-embedded photonic crystals for imaging.

3. "UCF Sub-Contract for FTL Labs Phase 1"

PI: Stephen M. Kuebler

Agency: FTL Labs, sub-contract via primary award from US Air Force Research Laboratory via SBIR Phase-1 contract # FA865124PB020, funded for proposal F24A-T001-0018 submitted by FTL with UCF.

Grant #: FA865124PB020

UCF ID#: AWD00006406

Start date: 8/28/2024

End date: 1/31/2025

Amount: \$55,747.00 (Kuebler share = \$55,747.00)

Type: External

Purpose: This award supports development of a tool for designing meta-surfaces.

4. REU Site: "Unleashing the Light: Building the Future of Laser Technologies"

PI: Miguel A. Bandres

Co-PI: Rodrigo Amezcua-Correa
Support: Stephen M. Kuebler (\$1500 total to Center for Ethics, 0 credit share)
Agency: NSF
Grant #: 2349439
UCF ID#: Temporal ID Number 141302
Start date: 06/01/2024
End date: 08/15/2026
Amount: \$460,466 (Kuebler share = \$0, no credit awarded)
Type: External
Status: Under Consideration for Funding by ENG/EEC
Purpose: This award supports REU training in lasers, optics, and photonics. Kuebler provides ethics training for REU participants in each summer through the UCF Center for Ethics.
https://www.nsf.gov/awardsearch/showAward?AWD_ID=2349439&HistoricalAwards=false

5. "REU Site: Research in Materials for Energy Applications"

PI: Talat Rahman
Co-PI: Mihai Vaida
Support: Stephen M. Kuebler (\$1,500 total to Center for Ethics, 0 credit share)
Agency: NSF
Grant #: 2348914
UCF ID#: FP00009349
Start date: 04/15/2024
End date: 03/31/2027
Amount: \$427,964 (Kuebler share = \$0, no credit awarded)
Type: External
Status: Funded
Purpose: This award supports REU training in chemistry and physics. Kuebler provides ethics training in summer for all REU participants, through the UCF Center for Ethics.
https://www.nsf.gov/awardsearch/showAward?AWD_ID=2348914&HistoricalAwards=false

6. "Broadband Multifocal IR Metalenses"

PI: Stephen M. Kuebler
Agency: Air Force Research Laboratory
Grant #: FA8651-23-1-0005
UCF ID#: AWD00005480
Start date: 08/01/2023
End date: 07/31/2026
Amount: \$125,000.00 (Kuebler share = \$125,000)
Type: External
Purpose: This award supports fundamental research for the development of high-performance meta-lenses comprised of 3D volumetric scatters.

7. "FHTCC: Volumetric fabrication of micro-needles for nerve repair"

PI: Xiaoming Yu (50%)
Co-PIs: Stephen M. Kuebler (50%)
Agency: UCF/Office of Research & Commercialization/Florida High Tech Corridor Council

- (FHTCC)
- Grant #: NA
 UCF ID#: AWD00005488
 Start date: 02/29/2023
 End date: 08/29/2024
 Amount: \$30,000 (Kuebler share = \$15,000)
 Type: Internal
 Purpose: This award supports a public-private partnership with Axogen, Inc. to develop a new type of nerve-repair device fabricated by multiphoton lithography using three-dimensionally shaped laser beams.
8. "Axogen-UCF Phase 1"
- PI: Stephen M. Kuebler (50%)
 Co-PIs: Xiaoming Yu (50%)
 Agency: Axogen, Inc.
 Grant #: NA
 UCF ID#: AWD00005340
 Start date: 12/01/2022
 End date: 02/29/2024
 Amount: \$60,000 (Kuebler share = \$30,000)
 Type: External
 Purpose: This award launched a public-private partnership with Axogen, Inc. to develop a new type of nerve-repair device fabricated by multiphoton lithography using three-dimensionally shaped laser beams.
9. "MRI: Acquisition of a Scanning Near-Field Optical Microscope (neaSNOM) with Combined Nano-Infrared/Tip-Enhanced Raman Spectroscopy for Research & Education"
- PI: Chris Bennett (20%)
 Co-PIs: Stephen M. Kuebler (20%), Kathleen Richardson (20%), Alfons Schulte (20%), Lorraine Leon (20%)
 Agency: National Science Foundation
 Grant #: NSF 2216239
 UCF ID#: AWD00005150
 Start date: 09/01/2022
 End date: 08/31/2024
 Amount: \$468,564 (Kuebler share = \$93,712.80)
 Type: External
 Purpose: This award funds acquisition of a novel instrument that enables student training and research involving nano-scale infrared and Raman spectroscopy across a wide range of materials.
10. "Volumetric Metalenses"
- PI: Stephen M. Kuebler
 Agency: Air Force Research Laboratory
 Grant #: FA8651-22-1-0002
 UCF ID#: AWD00005116
 Start date: 08/09/2022
 End date: 12/31/2025
 Amount: \$299,993.00 (Kuebler share = \$299,993)

- Type: External
Purpose: This award supports fundamental research for the development of high-performance meta-lenses comprised of 3D volumetric scatters.
11. "Spatially varied plasmonic-photonic sensor for detection and identification of airborne agents"
PI: Stephen M. Kuebler
Agency: Air Force Research Laboratory
Grant #: FA8651-19-1-0003 P00004
UCF ID#: FP00000346
Start date: 01/01/2022
End date: 12/31/2023
Amount: \$99,999.00 (Kuebler share = \$99,999)
Type: External
Purpose: This award provided seed-funds for a new project exploring a method for detecting chemical analytes using sub-micron wells filled with metal-nanoparticles.
12. "SIP: Ultra-High-Speed Flow Facility for Hypersonics and Space Propulsion"
PI: Kareem Ahmed (10%)
co-PIs: Stephen M. Kuebler, Richard Blair, Xun Gong, Jayanta Kapat, Robert Peale, Seetha Raghavan, Martin Richardson, Laurene Tetard, Mengyu Xu (each at 10% credit-share).
Agency: UCF/Office of Provost
UCF ID#: AWD00001554 / FP00004522
Start date: 09/02/2021
End date: 09/01/2022
Amount: \$500,000 (Kuebler-share = \$50,000)
Type: Internal
Status: Funded
Purpose: This award provides seed funding to develop advanced instrumentation for characterizing hypersonic materials.
13. "Capturing multi-scale materials degradation under thermal, mechanical and chemical attack"
PI: Seetha Raghavan
Co-PI: Stephen M. Kuebler, Ranajay Ghosh, Laurene Tetard
Agency: UCF Seed Funding Program
UCF ID#: FP00002799
Start date: 01/01/2021
End date: 12/31/2022
Amount: \$70,152.80 (Kuebler share = \$14,030)
Type: Internal
Purpose: This award provided seed-funds for a new project exploring methods to prevent corrosion in near-earth orbit.
14. "Sub-Contract to UCF for AFOSR-STTR Phase 2 Proposal with EMA"
PI: Stephen M. Kuebler (100%)
Agency: Electro Magnetic Applications, Inc., sub-contract via primary award from US Air Force Research Laboratory via STTR Phase-2 contract #FA864920C0316, funded for proposal #F2-12937 submitted by EMA with UCF in response to DOD BAA AF19A-T017, "Tunable bioinspired spatially-varying random photonic crystals."

Grant #: FA8651-19-P-0110
UCF ID#: AWD00000744
Start date: 9/9/2020
End date: 06/30/2023
Amount: \$225,003
Type: External
Purpose: The objective is to develop fundamental understanding of the structure-property relationships of bio-inspired 3D integrated photonic devices.

15. "Development and Validation of Design-Tools for Meta-Optics"

PI: Stephen M. Kuebler (100%)
Agency: US Air Force Research Laboratory (AFRL)
Grant #: FA8651-19-1-0003 P00003
UCF ID#: FP00002055 / 24066106
Start date: 09/28/2020
End date: 12/31/2023
Amount: \$300,000
Type: External
Purpose: This project funds the development and experimental validation of a first-generation tool for designing and simulation performance of planar and volumetric meta-optics.

16. "Institutional Transformation: Intersections of Moral Foundations and Ethics Frameworks in STEM Enculturation"

PI: Jonathan Beever (40%)
Co-PI: Stephen Kuebler (25%), Laurie Pinkert (30%), Elizabeth Klonoff (5%)
Agency: NSF
Start date: 09/1/2020
End date: 08/31/2026
Amount: \$599,301 (Kuebler share = \$149,825)
Grant#: 2024296
UCF ID#: AWD00000528
Type: External
Purpose: This institutional, limited-submission project will establish a campus wide research program to study how individuals' moral compass affects their recruitment to and enculturation into STEM professions.

17. "CHIPS: Controlled Heterogeneity in Photonic Systems"

PI: Stephen M. Kuebler (100%)
Agency: US Air Force Research Laboratory (AFRL)
Grant #: FA8651-19-1-0003 P00002
UCF ID#: 0000007574
Start date: 11/30/2020
End date: 12/31/2023
Amount: \$39,999
Type: External
Purpose: This project funds an exploration of how controlled random defects introduced into photonic crystals affect the property of self-collimation, sensitivity to angle of input, and bandwidth response.

18. "Fundamental Study of Lens-Embedded Spatially-Variant Photonic Crystals"
PI: Stephen M. Kuebler (100%)
Agency: US Air Force Research Laboratory (AFRL)
Grant #: FA8651-19-1-0003
UCF ID#: 1067797
Start date: 05/13/2019
End date: 12/31/2023
Amount: \$60,192
Type: External
Purpose: This project funds the development of fundamental understanding of a new class of integrated photonic micro-optic that can both control the flow of optical power and focus it using one device.
19. "Sub-Contract to UCF for AFOSR-STTR Proposal with EMA"
PI: Stephen M. Kuebler (100%)
Agency: Electro Magnetic Applications, Inc., sub-contract via primary award from US Air Force Research Laboratory via STTR contract #FA8651-19-P-0110, funded for proposal #F19A-017-0040 submitted by EMA with UCF in response to DOD BAA AF19A-T017, "Tunable bioinspired spatially-varying random photonic crystals."
Grant #: N/A, STTR Primary Contract #FA8651-19-P-0110
UCF ID#: 1067357 / 0000007888
Start date: 03/06/2019
End date: 12/16/2019
Amount: \$44,996
Type: External
Purpose: The objective is to develop fundamental understanding of the structure-property relationships of bio-inspired 3D integrated photonic devices.
20. "COACHE Innovation Award Year-Three: "Sustaining Growth of the Culture of Ethics Across UCF"
PI: Jonathan Beever (50%)
Co-PI: Stephen M. Kuebler (50%)
Agency: UCF Faculty Excellence
Grant #: N/A
Start date: 07/1/2019
End date: 06/30/2020
Amount: \$15,000 (Kuebler share = \$7,500)
Type: Internal
Purpose: This award provided funds for a project to cultivate a culture of ethics in research at UCF.
21. "REU Supplement to NSF Award #1711356"
PI: Stephen M. Kuebler (82%)
Co-PI: Sasan Fathpour (18%, UCF)
Agency: NSF
Start date: 05/15/2018
End date: 07/14/2022
Amount: \$16,000 (Kuebler share = \$13,120)
Grant#: 1834350
UCF ID#: 1065540

- Type: External
Purpose: This award provided funds for two undergraduate researchers.
22. "COACHE Innovation Award Year-Two: Cultivating a Culture of Ethics in Research across UCF"
PI: Jonathan Beever (50%)
Co-PI: Stephen M. Kuebler (50%)
Agency: UCF Faculty Excellence
Grant #: N/A
Start date: 07/1/2018
End date: 06/30/2019
Amount: \$10,000 (Kuebler share = \$5,000)
Type: Internal
Purpose: This award provided funds for a project to cultivate a culture of ethics in research at UCF.
23. Burnett Research Scholars Grant to Kuebler-Group undergraduate Alex Cockerham: "Low-Shrinkage Materials for Nano-Scale 3D Printing"
Student: Alexander R. Cockerham (66.6%)
Mentor: Stephen M. Kuebler (33.3%)
Agency: Burnett Research Scholars Program, UCF
Start date: 12/21/2017
End date: 12/20/2018
Amount: \$3,000 (Kuebler share = \$1,000 for research consumables)
Type: Internal
Purpose: This award funded undergraduate Alex Cockerham to investigate new low-shrinkage material systems that could be used for nano-scale 3D fabrication.
24. "2018 High School Summer Research Experience in the Kuebler-Group at UCF with the REAP/AEOP Program"
PI: Stephen M. Kuebler
Agency: Academy of Applied Science
Grant #: 2018 - Univ of CFL-1
Start date: 10/01/2017
End date: 09/30/2019
Amount: \$5,000 (Kuebler share = \$2,000; \$1,500 provided to one student mentee each year)
UCF ID#: 1063246
Type: External
Purpose: This award provided a stipend for a high school summer researcher.
25. "Collaborative Research: Photon Funnels – A Fundamentally New Concept for Concentrating Light"
PI: Stephen M. Kuebler (81%)
Co-PI: Sasan Fathpour (19%, UCF)
Agency: NSF
Start date: 07/15/2017
End date: 07/14/2022
Amount: \$225,814 (Kuebler share = \$182,458)
Grant#: 1711356 (https://nsf.gov/awardsearch/showAward?AWD_ID=1711356)
UCF ID#: 1061581
Type: External

Purpose: This award provides support for 3 grad-student years, supplies, and small equipment to investigate new nanophotonic devices called "photon funnels."

This award is a collaborative grant with Raymond C. Rumpf at the University of Texas at El Paso (UTEP). The award to UTEP is NSF project no. 1711529, valued at \$174,235 (https://nsf.gov/awardsearch/showAward?AWD_ID=1711529).

Kuebler serves as PI for the overall collaborative project, valued in total at \$400,049.

26. "Light Concentrators for Next-Generation Imaging, Energy Harvesting, and Optical Computing"

PI: Stephen M. Kuebler

Agency: Florida Space Grant Consortium

Start date: 09/01/2016

End date: 08/31/2017

Amount: \$26,250

Grant#: 66016040-Y2

UCF ID#: 1060831

Type: Internal

Purpose: This seed grant funded a graduate student to obtain preliminary results on a new class of nano-photon devices called "photon funnels." These results enabled the team to obtain the NSF grant no. 1711356.

27. "COACHE Innovation Award Year-One: Cultivating an Institutional Culture of Ethics and Responsible Conduct"

PI: Jonathan Beever (50%)

Co-PI: Stephen M. Kuebler (50%)

Agency: UCF Faculty Excellence

Grant #: N/A

Start date: 07/01/2017

End date: 06/30/2018

Amount: \$5,000 (Kuebler share = \$2,500)

Type: Internal

Purpose: This award provided funds for a project to cultivate a culture of ethics in research at UCF.

28. "High School Summer Research Experience in the Kuebler-Group at UCF with the REAP/AEOP Program"

PI: Stephen M. Kuebler

Agency: Academy of Applied Science

Grant #: "SG-16-074" and "2017-Univ of CFL-1"

Start date: 05/01/2016

End date: 09/30/2017

Amount: \$5,000

UCF ID#: 1060250

Type: External

Purpose: This award provided a stipend for a high school summer researcher.

29. "FHTCC: Broadband Gradient Index (GRIN) Optics Phase 3"

PI: Kathleen Richardson (61%)

Co-PI: Stephen M. Kuebler (39%)
Agency: Florida High-Tech Corridor Council (FHTCC, UCF/I-4)
Start date: 07/11/2016
End date: 12/31/2016
Amount: \$56,666 (Kuebler share = \$22,100)
UCF ID#: 1060458
Type: Internal
Purpose: The award provided matching funds to a contract with Lockheed to develop a new method for manufacturing infrared optics and supported a graduate student.

30. "Broadband Gradient Index (GRIN) Optics Phase 3"

PI: Kathleen C. Richardson (61%)
Co-PI: Stephen M. Kuebler (39%)
Agency: Lockheed-Martin
Start date: 12/14/2015
End date: 11/27/2016
Amount: \$190,000 (Kuebler share = \$74,100)
UCF ID#: 1060239
Type: External
Purpose: This award funded an investigation of a new method for manufacturing infrared optics and supported a post-doctoral researcher.

31. "High School Traineeship via AEOP/REAP 2015"

PI: Stephen M. Kuebler
Agency: Academy of Applied Science
Grant #: 15-50 and 15-51
Start date: 04/15/2015
End date: 09/30/2015
Amount: \$4,000
UCF ID#: 1058317
Type: External
Purpose: This award provided a stipend for a high school summer researcher.

32. "RF: Preparation of a Reflective Surface Using a Microporous Substrate"

PI: Stephen M. Kuebler
Agency: SemPlastics
Grant #: NA
Start date: 07/21/2014
End date: 12/20/2014
Amount: \$1,497
UCF ID#: 1057607
Type: External
Purpose: This contract with a company based in Oviedo provided partial support for a graduate student to explore new approaches for fabricating infrared optics.

33. "High School Traineeship via AEOP/REAP"

PI: Stephen M. Kuebler
Agency: Academy of Applied Science
Grant #: 14-33 and 14-33A

Start date: 04/15/2014
End date: 09/30/2014
Amount: \$4,000
UCF ID#: 1057133
Type: External
Purpose: This award provided a stipend for a high school summer researcher.

34. "MRI: Development of a Multi-Scale Thermal-Mechanical-Spectroscopic System for in-Situ Materials Characterization, Research, and Training"

PI: Nina Orlovskaya (10%)
Co-PI: Stephen M. Kuebler (10%, UCF), Seetha Raghavan (50%, UCF), Ali Gordon (10%, UCF), Masahiro Ishigami (20%, UCF)
Agency: National Science Foundation
Grant #: DMR-1337758
Start date: 9/1/2013
End date: 08/31/2019
Amount: \$500,000 (Kuebler share = \$50,000)
UCF ID#: 1055384
Type: External
Purpose: The grant provided funds to development a one-of-a-kind materials-characterization instrument for shared use by UCF faculty and collaborators nationwide.

35. "SRI: Novel Chalcogenide Materials for Space-Based Infrared Optics"

PI: Stephen M. Kuebler (58%)
Co-PI: Kathleen Richardson (UCF, 42%), Rafael Guzman (UF, 0%)
Agency: Florida Space Research Institute
Grant #: SRI 2013-A
Start date: 7/15/2013
End date: 02/28/2015
Amount: \$64,999 (Kuebler share = \$37,499)
UCF ID#: 1055794
Type: Internal
Purpose: The award provided support for a graduate student to develop new methods for manufacturing infrared optics.

36. "Enhanced Chalcogenide Materials for Space-Based Infrared Optics"

PI: Stephen M. Kuebler (50%)
Co-PI: Kathleen Richardson (UCF, 50%)
Agency: Florida Space Grant Consortium
Start date: 8/15/2013
End date: 7/31/2014
Amount: \$25,028.58 (Kuebler share = \$12,528.58)
UCF ID#: 1055741
Type: Internal
Purpose: The award provided support for a graduate student to develop new methods for manufacturing infrared optics.

37. "AAS-REAP Program 2013"

PI: Stephen M. Kuebler

Agency: Academy of Applied Science
Grant #: 13-03
Start date: 01/22/2013
End date: 09/30/2013
Amount: \$2,600
UCF ID#: 1055269
Type: External
Purpose: This award provided a stipend for a high school summer researcher.

38. "FHTCC: Chalcogenide Materials for Functional Optics"

PI: Stephen M. Kuebler (50%)
Co-PI: Kathleen Richardson (50%)
Agency: Florida High-Tech Corridor Council (FHTCC)
Start date: 02/28/2013
End date: 11/27/2013
Amount: \$50,000 (Kuebler share = \$25,000)
UCF ID#: 1055388
Type: Internal
Purpose: The award provided matching funds to a Lockheed contract and supported a graduate student developing a new method for manufacturing infrared optics.

39. "Chalcogenide Materials and Functional Optics"

PI: Stephen M. Kuebler (50%)
Co-PI: Kathleen Richardson (50%)
Agency: Lockheed Martin - Missile & Fire Control
Start date: 01/02/2013
End date: 11/27/2013
Amount: \$50,000 (Kuebler share = \$25,000)
UCF ID#: 1055237
Type: External
Purpose: The award provided matching funds to a contract with Lockheed and supported a graduate student to develop a new method for manufacturing infrared optics.

40. "Direct Laser Writing of Micro-IR Components"

PI: Stephen M. Kuebler
Agency: Lockheed Martin - Missile & Fire Control
Start date: 06/07/2012
End date: 11/30/2012
Amount: \$20,000
UCF ID#: 1053795
Type: External
Purpose: This award funded an preliminary investigation of a new method for manufacturing infrared optics and provided partial support for a graduate students.

41. "Kuebler Group AAS-REAP Program 2012"

PI: Stephen M. Kuebler
Agency: Academy of Applied Science
Grant #: 12-09
Start date: 02/08/2012

End date: 09/30/2012
Amount: \$2,600
UCF ID#: 1053734
Type: External
Purpose: This award provided a stipend for a high school summer researcher.

42. "AAS-REAP Program 2011"

PI: Stephen M. Kuebler (100%)
Agency: Academy of Applied Science
Start date: 02/10/2011
End date: 05/31/2012
Amount: \$2,600
Grant #: 11-44
UCF ID#: 1052195
Type: External
Purpose: This award provided a stipend for a high school summer researcher.

43. "ARRA: Purchase and Development of a Cyber-Enabled Broadly Tunable kHz Femtosecond Laser System"

PI: Kevin D. Belfield (30%)
Co-PIs: Stephen M. Kuebler (UCF, 30%), Florencio E. Hernandez (UCF, 30%),
Andre Gesquiere (10%)
Agency: National Science Foundation
Amount: \$500,000 (Kuebler share = \$150,000)
Grant #: 0840431
Start date: 08/01/2009
End date: 02/31/2015
UCF ID#: 1047906
Type: External
Purpose: This award funded the acquisition of a state-of-the-art amplified femtosecond laser facility for Chemistry department and UCF faculty. This grant was awarded on 08/01/09, 7 days before the date of last promotion, but long after the promotion review, so its totals are included among awards after promotion.

44. "UCF Component of Phase I with Prime Research LC for DARPA SBIR Awarded under Proposal D082-007-0736"

PI: Stephen M. Kuebler (100%)
Agency: DARPA via sub-contract through Prime Research
Amount: \$31,952
Grant #: #D082-007-0736
Start date: 03/16/09
End date: 08/31/09
UCF ID#: 1049125
Type: External
Purpose: The award was a sub-contract from a DARPA grant co-written with high-tech company Prime Research to develop new types of fiber-optic sensors. The award provided partial support for a graduate student.

45. "Electroless Metallization onto Polymeric Surfaces: Synthesis, Analysis, and Modeling for Achieving Controlled Nanoscale Morphologies"

PI: Stephen M. Kuebler (50%)
Co-PIs: Helge Heinrich (UCF, 25%), Aniket Bhattacharya (UCF, 25%)
Agency: National Science Foundation
Amount: \$469,999 (Kuebler share = \$213,429)
Grant #: 0809821
Start date: 7/1/08
End date: 6/30/12
UCF ID#: 1047001
Type: External
Purpose: This grant funded supported a fundamental investigation to improve the chemistry of an industrially applied process for metallizing surfaces, like reflective car parts. The grant provided support for 6 years of graduate student support and consumables. The split of funds for this award differs from the credit split.

46. "REU: Three-Dimensional Multi-Scale Metallodielectric Materials"

PI: Stephen M. Kuebler (100%, no co-PIs)
Agency: National Science Foundation
Amount: \$4,997
Grant #: 0939903 (Supplement to 0748712)
Start date: 2/15/08
End date: 1/31/2015
UCF ID#: 1049485
Type: External
Purpose: This award provided funds for an undergraduate researcher.

47. "CAREER: Three-Dimensional Multi-Scale Metallodielectric Materials"

PI: Stephen M. Kuebler (100%, no co-PIs)
Agency: National Science Foundation
Amount: \$574,840
Grant #: 0748712
Start date: 2/1/08
End date: 1/31/15
UCF ID#: 1046316
Type: External
Purpose: This award funded 2 grad students and 2 undergrads for 5 years to develop new types of nano-scale optical devices.

48. "Polypeptide nano-templating: A new method for creating metal and semiconductor nanoscale structures with 3D shape control"

PI: Stephen M. Kuebler (100%, no co-PIs)
Agency: American Chemical Society via. Petroleum Research Fund
Amount: \$35,000
Grant #: PRF# 42322-G5
Start date: 9/1/05
End date: 8/31/07
UCF ID#: 1040910
Type: External

- Purpose: This award provided funding for a graduate student and supplies to develop a new approach for nano-scale 3D fabrication based on folded proteins.
49. "Fabrication of photonic crystal on an optical fiber end-face for Prime Research LC"
- PI: Stephen M. Kuebler (100%, no co-PIs)
 - Agency: Prime Research, LC
 - Amount: \$2,000
 - Grant #: Not applicable
 - Start date: 8/15/07
 - End date: 8/14/08
 - UCF ID#: 1046390
 - Type: External
 - Purpose: The award provided seed-funding to develop a new type of fiber-optic based sensors.
50. "Millimeter-wave component and system characterization for interdisciplinary research"
- PI: Nader Behdad (Comp. Eng. & Comp. Sci., 38%)
 - Co-PI: Stephen M. Kuebler (20% credit), Lei Wei (Comp. Eng. & Comp. Sci., 10%), Xun Gong (Comp. Eng. & Comp. Sci., 32%)
 - Agency: Pres. Initiative to Fund Major Research Eqpt. 2006-2007 (UCF internal)
 - Amount: \$200,000 (Kuebler share = \$40,000)
 - Start date: 2/1/07
 - End date: 6/30/07
 - UCF ID#: 1044989
 - Type: Internal, not tracked by UCF office of sponsored research.
 - Purpose: This award provided funds for the acquisition of a state-of-the-art "vector analyzer," which is used to characterize high-frequency electronic circuits.
51. "Low-cost multi-function spectrometry system for undergraduate laboratory instruction"
- PI: Stephen M. Kuebler (25%)
 - Co-PIs: Andres D. Campiglia (25%), Florencio E. Hernandez (25%), Kevin D. Belfield (25%)
 - Agency: Office of Research and Commercialization, UCF
 - Amount: \$19,999.00
 - UCF ID#: Internal, not assigned UCF ID#
 - Type: Internal, not tracked by UCF office of sponsored research.
 - Purpose: This award provided funds for the acquisition of low-cost instruments for optical and infrared spectroscopy for use in undergraduate teaching labs.
52. "2009 MRS Symposium BB, 'Material Systems and Processes for 3D Micro- and Nanoscale Fabrication & Lithography,' San Francisco, CA; April 14 - 16, 2009"
- PI: Paula Mammarella (Materials Research Soc.)
 - Co-PIs: Stephen M. Kuebler (50%), Valeria T. Milam (GaTech, 50%)
 - Agency: NSF – DMR, Biomaterials
 - Amount: \$4,000 (Kuebler share = \$2,000)
 - Grant #: 0917832
 - Start date: 04/01/2009
 - End date: 03/31/2010
 - Type: External, not tracked by UCF office of sponsored research.
 - Purpose: This grant provided funding for international speakers, young faculty, and students

presenting at a symposium organized and chaired by Kuebler for the spring 2009 Intl. Meeting of the Materials Research Society (San Francisco, 14-16 April 2009).

53. "Symposium BB: Material Systems and Processes for 3D Micro- and Nanoscale Fabrication and Lithography"

PI: Paula Mammarella (Materials Research Society)
Co-PIs: Stephen M. Kuebler (50%), Valeria T. Milam (GaTech, 50%)
Agency: Air Force Office of Scientific Research
Amount: \$5,000 (Kuebler share = \$2,500)
Grant #: NA
Start date: 04/01/2009
End date: 03/31/2010
Type: External, not tracked by UCF office of sponsored research.
Purpose: This grant provided funding for international speakers, young faculty, and students presenting at a symposium organized and chaired by Kuebler for the spring 2009 Intl. Meeting of the Materials Research Society (San Francisco, 14-16 April 2009).

54. "Symposium BB: Material Systems and Processes for 3D Micro- and Nanoscale Fabrication and Lithography"

PI: Paula Mammarella (Materials Research Society)
Co-PIs: Stephen M. Kuebler (50%), Valeria T. Milam (GaTech, 50%)
Agency: Air Force Research Laboratory
Amount: \$5,000 (Kuebler share = \$2,500)
Grant #: N/A
Start date: 04/01/2009
End date: 03/31/2010
Type: External, not tracked by UCF office of sponsored research.
Purpose: This grant provided funding for international speakers, young faculty, and students presenting at a symposium organized and chaired by Kuebler for the spring 2009 International Meeting of the Materials Research Society (San Francisco, 14-16 April 2009).

55. "Travel support for distinguished international speakers presenting at a PMSE session of the ACS Atlanta"

PI: Stephen M. Kuebler (100%)
Agency: ACS-Petroleum Research Fund
Amount: \$3,600
Grant #: PRF# 44579-SE
Start date: 3/1/06
End date: 3/31/06
UCF ID#: Not applicable
Type: External, not tracked by UCF office of sponsored research.
Purpose: This grant provided funding for international speakers, young faculty, and students presenting at a symposium organized and chaired by Kuebler for the spring 2009 International Meeting of the Materials Research Society (San Francisco, 14-16 April 2009).

56. "Proposed use of the Photon Design electromagnetic simulation software OmniSim for modeling photonic structures created by multi-photon three-dimensional microfabrication"

PI: Stephen M. Kuebler (100%, no co-PIs)
Agency: Photon Design (United Kingdom)
Amount: Product value equivalent to \$10,300 USD (Not included in totals above)
Grant #: Not applicable
Start date: 3/25/05
End date: Perpetual license
UCF ID#: Not applicable
Type: External, in-kind award, not tracked by UCF office of sponsored research.
Purpose: This award-in-kind from Photon Design, UK provided an open-ended license to use their software for electromagnetic simulation that supports research by graduate and undergraduate students. The award was obtained through a public competition in which competitors proposed novel uses for OmniSim in their own photonics research.

57. "Material systems and processes for polypeptide nano-templating"

PI: Stephen M. Kuebler (no co-PIs)
Agency: UCF Office of Research
Amount: \$7,500
Start date: 4/15/04
End date: 6/30/05
UCF ID#: 1040158
Type: Internal
Purpose: This award provided seed-funding to develop a new approach for nano-scale 3D fabrication based on folded proteins.

SCHOLARSHIP

PEER-REVIEWED PUBLICATIONS[†] (as of 9 Sept. 2025)

60 peer-reviewed publications in total.

Per Google Scholar: Total citations = 6683 citations; *h*-index = 28;
i10-index = 54 (# of publications with 10 or more citations).

Per ISI Web-of-Science: Total citations = 4473; *h*-index = 22.[‡]
[‡]With paper under "Klueber" (40 citations)

[†]In Kuebler's field, peer-refereed scholarship is single-blind reviewed. Editors secure two or more external referees who are international experts in the discipline to assess the suitability of work for publication.

*Indicates corresponding author and primary investigator (PI).

Solid underline indicates graduate co-author.

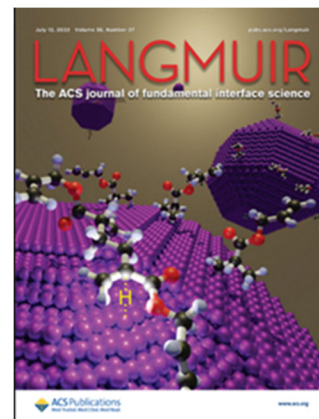
Dashed underline indicates undergraduate co-author.

Double underline indicates high-school co-author.

60. P. Golvari, T. Morales, A. Rahmani, **S. M. Kuebler**^{*}, and J. Touma. "Rapid deposition and controlled clustering of gold nanoparticles on surfaces and micro-patterned substrates." *ACS Omega* **2025**, 10(17) 17783-17793; <https://doi.org/10.1021/acsomega.5c00293>.
59. A. C. Nikolaidis^{*}, J. Beever, J. Kissel, **S. M. Kuebler**, and L. A. Pinkert. "The moral limits of professional ethics enculturation." *Intl. J. Ethics Educ.* **2025**, 10, 133-154; <https://doi.org/10.1007/s40889-025-00210-x>.
58. A. C. Nikolaidis^{*}, L. A. Pinkert, **S. M. Kuebler**, and J. Beever. "From education to enculturation: rethinking the development of ethical professionals in higher education." *Intl J. Ethics Educ.* **2024**, 9, 307-327, <https://doi.org/10.1007/s40889-024-00194-0>.
57. A. L. Musgrove^{*}, A. Cockerham, J. J. Pazos, S. Shahriar, M. McMahon, J. E. Touma, and **S. M. Kuebler**. "Bio-inspired photonic and plasmonic systems for gas sensing: Applications, fabrication, and analytical methods." *J. Opt. Microsys.* **2024**, 4(2), 020902-1 - 020902-40; [JOM-23029V 1..40 \(luminad.com\)](https://doi.org/10.1007/s40889-024-00194-0).
56. M. Sun, D. Huang, P. Golvari, **S. M. Kuebler**, P. J. Delfyett and P. G. Kik^{*}. "Diffractive light-trapping transparent electrodes using zero-order suppression." *Nanophotonics* **2023**, 12(18), 3545-3552, <https://www.degruyter.com/document/doi/10.1515/nanoph-2023-0205/html>, (3 Aug 2023).
55. P. Golvari, K. Alkameh, A. Rahmani, T. Jurca, and **S. M. Kuebler**^{*}. "Pt-coated silicon nanoparticles: An investigation into the hydrosilylation on hydrogen-terminated silicon surfaces using Pt(dvs)." *Langmuir* **2023**, 39(26) 9154-9161, <https://doi.org/10.1021/acs.langmuir.3c00896> (16 Jun. 2023).
54. M. Sun, P. Golvari, **S. M. Kuebler**, and P. G. Kik^{*}. "Experimental demonstration of light-trapping transparent electrode geometries." *ACS Photonics* **2023**, 10, 595-600, <https://doi.org/10.1021/acsphotonics.2c01468> (9 Feb 2023).
53. M. Sun, H. Cheng, P. Golvari, **S. M. Kuebler**, X. Yu^{*}, and M. Zhang. "Modeling of two-photon polymerization in the strong-pulse regime." *Additive Manuf.* **2022**, 60A, 103241-1 - 103241-12,

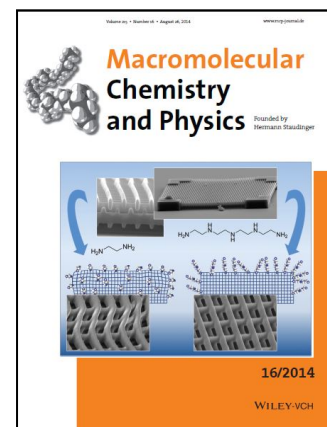
<https://doi.org/10.1016/j.addma.2022.103241>.

52. P. Golvari, K. Alkameh, **S. M. Kuebler***. "Si-H surface groups inhibit methacrylic polymerization: Thermal hydrosilylation of allyl methacrylate with silicon nanoparticles." *Langmuir* **2022**, 38(27), 8366-8373, <https://doi.org/10.1021/acs.langmuir.2c00891>. **This work was featured on the Journal's cover.**
51. C. Xia, E. Bustamante, **S. M. Kuebler***, R. C. Rumpf and J. Touma. "Binary-lens-embedded photonic crystal." *Opt. Lett.* **2022**, 47(12), 2943-2946; <https://doi.org/10.1364/OL.458854>.
50. C. Xia, J. J. Gutierrez, **S. M. Kuebler***, R. C. Rumpf, J. Touma. "Cylindrical-lens-embedded photonic crystal based on self-collimation." *Opt. Express* **2022**, 30, 9165-9180, <https://doi.org/10.1364/OE.452467>.
49. H. Cheng, P. Golvari, C. Xia, M. Sun, M. Zhang, **S. M. Kuebler**, X. Yu*. "High-throughput microfabrication of axially tunable helices." *Photonics Res.* **2022**, 10, 303-315; <https://doi.org/10.1364/PRJ.439592>. **This paper was selected as an Editor's Pick.**
48. R. Sharma, J. L. Digaum, H. West, C. M. Schwarz, and **S. M. Kuebler***, "Gentle method for removing metal and restoring function after scanning electron microscopy," *J. Micro/Nanopattern., Mater. Metrol.* **2021**, 20(2), 023601-1 - 023601-11; <https://doi.org/10.1117/1.JMM.20.2.023601>.
47. P. Golvari and **S. M. Kuebler***, "Fabrication of functional microdevices in SU-8 by multi-photon lithography." *Micromachines* **2021**, 12(5), 472-1 - 472-24; <https://doi.org/10.3390/mi12050472>.
46. C. Xia, **S. M. Kuebler***, N. P. Martinez, M. Martinez, R. C. Rumpf, and J. Touma, "Wide-band self-collimation in low refractive index hexagonal lattice." *Opt. Lett.* **2021**, 46(9), 2228-2231, <https://doi.org/10.1364/OL.421860>.
45. J. Beever*, **S. M. Kuebler**, and J. Collins, "Where ethics is taught: An institutional epidemiology." *Intl. J. Ethics Educ.*, **2021**, 121, 1-24; <https://doi.org/10.1007/s40889-021-00121-7>.
44. H. Cheng, C. Xia, **S. M. Kuebler**, P. Golvari, M. Sun, M. Zhang, X. Yu*. "Generation of Bessel-beam arrays for parallel fabrication in two-photon polymerization." *J. Laser Appl.* **2021**, 33, 012040-1 - 012040-6; <https://doi.org/10.2351/7.0000313>.
43. C. M. Schwarz,* **S. M. Kuebler**, C. Rivero-Baleine, B. Triplett, M. Kang, Q. Altemose, C. Blanco, K. A. Richardson, Q. Du, S. Deckoff-Jones, J. Hu, Y. Zhang, Y. Pan, C. Ríos. "Structurally and morphologically engineered chalcogenide materials for optical and photonic devices." *J. Opt. Microsys.* **2021**, 1(1), 013502-1 - 013502-13; <http://dx.doi.org/10.1117/1.JOM.1.1.013502>. **This paper was profiled in an SPIE Highlight dated 13 July 2021, <https://spie.org/news/seeing-glass-in-a-new-light?SSO=1>.**
42. H. Cheng, C. Xia, **S. M. Kuebler** and X. Yu.* "Aberration correction for SLM-generated Bessel beams propagating through tilted interfaces." *Opt. Commun.* **2020**, 475, 126213-1 - 126213-6, <https://doi.org/10.1016/j.optcom.2020.126213>.
41. H. Cheng, C. Xia, M. Sun, M. Zhang, **S. M. Kuebler** and X. Yu*. "Micro- and nano-fabrication using Bessel-beam activated photopolymerization." *J. Laser Appl.* **2020**, 32, 022067-1 - 022067-7, (<https://doi.org/10.2351/7.0000079>).



40. C. M. Schwarz*, M. Kang, Q. Altemose, K. Raichle, B. Schnable, C. Grabill, J. Rice, M. Truman, C. Pantano, I. Mingareev, C. Rivero-Baleine, K. A. Richardson, **S. M. Kuebler**. "Processing and properties of novel ZnO-Bi₂O₃-B₂O₃ glass-ceramic nanocomposites." *J. Alloys Compounds* **2020**, 820, 153173-1 - 153173-9.
(<https://doi.org/10.1016/j.jallcom.2019.153173>).
39. H. Cheng, C. Xia, M. Zhang, **S. M. Kuebler** and X. Yu.* "Fabrication of high-aspect-ratio structures using Bessel-beam-activated photopolymerization." *Appl. Opt.* **2019**, 58(13), D91-D97.
(<https://doi.org/10.1364/AO.58.000D91>).
38. C. N. Grabill, D. Freppon, M. Hettinger, **S. M. Kuebler***, Nanoscale morphology of electrolessly deposited silver metal, *Appl. Surf. Sci.* **2019**, 466, 230-243.
(<https://doi.org/10.1016/j.apsusc.2018.10.006>).
37. C. M. Schwarz, C. Grabill, G. D. Richardson, S. Labh, B. Gleason, C. Rivero-Baleine, K. A. Richardson, A. Pogrebnyakov, T. S. Mayer and **S. M. Kuebler***. "Processing and fabrication of micro-structures by multiphoton lithography in germanium-doped arsenic selenide." *Opt. Mater. Express* **2018**, 8(7), 1902-1915.
(<https://www.osapublishing.org/ome/fulltext.cfm?uri=ome-8-7-1902&id=390585>).
36. C. M. Schwarz, C. N. Grabill, G. D. Richardson, S. Labh, A. M. Lewis, A. Vyas, B. Gleason, C. Rivero-Baleine, K. A. Richardson, A. Pogrebnyakov, T. S. Mayer and **S. M. Kuebler***. "Fabrication and characterization of micro-structures created in thermally deposited arsenic trisulfide by multiphoton lithography." *J. Micro/Nanolithog., MEMS, MOEMS* **2017**, 16(2), 023508-1 - 023508-11.
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35. H. E. Williams, C. Diaz, G. Padilla, F. E. Hernandez, **S. M. Kuebler***. "Order of multiphoton excitation of sulfonium photo-acid generators used in photoresists based on SU-8." *J. Appl. Phys.* **2017**, 121, 223104-1 - 223104-12.
(<http://dx.doi.org/10.1063/1.4984828>).
34. T. Rios-Carvajal, C. A. Sierra*, and **S. M. Kuebler**. "Synthesis of novel phenylenevinylene linkers with electron-donating substituents by the Heck reaction," *Synth. Metals*, **2015**, 183-187
(<http://www.sciencedirect.com/science/article/pii/S0379677915300321>).
33. R. C. Rumpf*, J. J. Pazos, J. L. Digaum, **S. M. Kuebler**. "Spatially-variant periodic structures in electromagnetics." *Phil. Trans. Royal Soc. A.* **2015**, 373, 20140359-1 - 20140359-22
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32. J. L. Digaum, J. J. Pazos, J. Chiles, J. D' Archangel, G. Padilla, A. Tatulian, R. C. Rumpf, S. Fathpour, G. D. Boreman and **S. M. Kuebler***. "Tight control of light beams in photonic crystals with spatially-variant lattice orientation." *Opt. Express*, **2014**, 22(21), 25788 - 25804
(<http://dx.doi.org/10.1364/OE.22.025788>).

31. **S. M. Kuebler***, D. A. Narayanan, D. E. Karas and K. M. Wilburn. "Low-distortion surface functionalization of polymeric microstructures." *Macromolec. Chem. Phys.* **2014**, 215(16), 1533-1542. **This work was featured on the journal's cover.**
30. C. J. Clukay, C. N. Grabill, M. A. Hettinger, A. Dutta, D. J. Freppon, A. Robledo, H. Heinrich, A. Bhattacharya, **S. M. Kuebler***. "Controlling formation of gold nanoparticles generated *in situ* at a polymeric surface." *Appl. Surf. Sci.*, **2014**, 292, 128-136.
29. Z. Luo and **S. M. Kuebler***. "Axial superresolution of focused radially polarized light using diffractive optical elements." *Opt. Commun.*, **2014**, 315, 176-182.
28. A. Dutta, C. J. Clukay, C. N. Grabill, B. Yuan, D. J. Freppon, A. Bhattacharya, **S. M. Kuebler**, H. Heinrich*. "Nanoscale characterization of gold nanoparticles for electroless deposition on polymeric surfaces." *J. Microscopy*, **2013**, 251, 27-34.
27. H. E. Williams, Z. Luo, **S. M. Kuebler***. "Effect of refractive index mismatch on multi-photon direct laser writing." *Opt. Express*, **2012**, 20, 25030-25040.
26. **S. M. Kuebler***, H. E. Williams, D. J. Freppon, R. C. Rumpf, M. A. Melino. "Creation of three-dimensional micro-photonic structures on the end-face of optical fibers." *J. Laser Micro Nanoeng.* **2012**, 7, 293 – 298.
25. D. Restrepo, K. E. Lynch, K. Giesler, **S. M. Kuebler**, and R. Blair*. "Low-temperature (210 °C) deposition of crystalline germanium via in situ disproportionation of GeI₂." *Mater. Res. Bull.*, **2012**, 47, 3484-3488.
24. H. E. Williams, D. J. Freppon, **S. M. Kuebler***, R. C. Rumpf, M. A. Melino. "Fabrication of three-dimensional micro-photonic structures on the tip of optical fibers using SU-8." *Opt. Express*, **2011**, 19, 22910-22922.
23. A. Robledo, C. N. Grabill, **S. M. Kuebler**, A. Dutta, H. Heinrich, and A. Bhattacharya*. "Morphologies from slippery ballistic deposition model: A bottom-up approach for nanofabrication." *Phys. Rev. E*, **2011**, 83, 051604-1 - 051604-9.
22. T. G. Jabbour and **S. M. Kuebler***. "Particle swarm optimization of axially super-resolving binary phase diffractive optical elements." *Opt. Lett.*, **2008**, 33(13), 1533-1535.
21. T. G. Jabbour and **S. M. Kuebler***. "Vectorial beam shaping." *Opt. Express*, **2008**, 16(10), 7203-7213.
20. T. G. Jabbour, M. Petrovich, and **S. M. Kuebler***. "Design of axially super-resolving phase filters using the method of generalized projections." *Opt. Commun.*, **2008**, 281, 2002-2011.
19. A. Tal, Y.-S. Chen, H. E. Williams, R. C. Rumpf, and **S. M. Kuebler***, "Fabrication and characterization of three-dimensional copper metallodielectric photonic crystals," *Opt. Express* **2007**, 15, 18283-18293.
18. R. C. Rumpf*, A. Tal, and **S. M. Kuebler**. "Rigorous electromagnetic analysis of volumetrically complex media using the slice absorption method." *J. Opt. Soc. Am. A* **2007**, 24(10), 3123-3134.
17. Y.-S. Chen, A. Tal, and **S. M. Kuebler***. "Route to three-dimensional metallized micro-structures

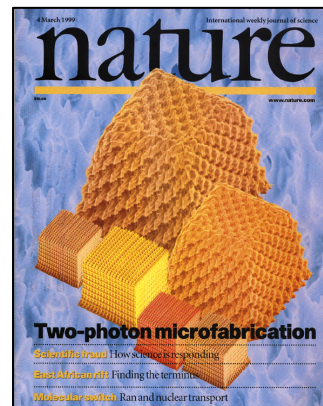


- using cross-linkable epoxide SU-8." *Chem. Mater.* **2007**, 19(16), 3858-3860.
16. T. G. Jabbour and **S. M. Kuebler***. "Axial field shaping under high numerical aperture focusing." *Opt. Lett.* **2007**, 32, 527-529.
 15. Y.-S. Chen, A. Tal, D. B. Torrance, and **S. M. Kuebler***. "Fabrication and characterization of three-dimensional silver-coated polymeric microstructures." *Adv. Funct. Mater.* **2006**, 16(13), 1739-1744. **This work was featured on the journal's cover.**
 14. T. G. Jabbour and **S. M. Kuebler***. "Vector diffraction analysis of high numerical aperture focused beams modified by two- and three-zone annular multi-phase plates." *Optics Express*, **2006**, 14, 1033-1043.
 13. T. Yu, C. K. Ober*, **S. M. Kuebler**, W. Zhou, S. R. Marder, and J. W. Perry. "Chemically amplified positive resists for two-photon three-dimensional microfabrication." *Adv. Mater.* **2003**, 15(6), 517-521.
 12. **S. M. Kuebler**, K. L. Braun, W. Zhou, J. K. Cammack, T. Yu, C. K. Ober, S. R. Marder, and J. W. Perry*. "Design and application of high-sensitivity two-photon initiators for three-dimensional microfabrication." *J. Photochem. Photobiol. A: Chem.* **2003**, 158(2-3), 163-170.
 11. W. Zhou, **S. M. Kuebler**, K. L. Braun, T. Yu, J. K. Cammack, C. K. Ober, J. W. Perry, and S. R. Marder*. "An efficient two-photon-generated photoacid applied to positive-tone 3D microfabrication." *Science* **2002**, 296, 1106-1109.
 10. T. Watanabe*, M. Akiyama, K. Totani, **S. M. Kuebler**, F. Stellacci, W. Wenseleers, K. Braun, S. R. Marder, and J. W. Perry. "Photoresponsive hydrogel microstructure fabricated by two-photon initiated polymerization." *Adv. Funct. Mater.* **2002**, 12(9), 611-614.
 9. W. Zhou, **S. M. Kuebler**, D. Carrig, J. W. Perry, and S. R. Marder*. "Efficient photoacids based upon triarylamine dialkylsulfonium salts." *J. Am. Chem. Soc.* **2002**, 124(9), 1897-1901.
 8. F. Stellacci, C. A. Bauer, T. Meyer-Friedrichsen, W. Wenseleers, V. Alain, **S. M. Kuebler**, S. J. K. Pond, Y. Zhang, S. R. Marder, and J. W. Perry*. "Laser and electron-beam induced growth of nanoparticles for 2D and 3D metal patterning." *Adv. Mater.* **2002**, 14, 194-198.
 7. **S. M. Kuebler**, M. Rumi, T. Watanabe, K. Braun, B. H. Cumpston, A. A. Heikal, L. L. Erskine, S. Thayumanavan, S. Barlow, S. R. Marder, and J. W. Perry*. "Optimizing two-photon initiators and exposure conditions for three-dimensional lithographic microfabrication." *J. Photopolym. Sci. Technol.* **2001**, 14(4), 657-668.
 6. **S. M. Kuebler**, R. G. Denning*, and H. L. Anderson. "Large third-order electronic polarizability of a conjugated porphyrin polymer." *J. Am. Chem. Soc.* **2000**, 122, 339-347.
 5. B. H. Cumpston, S. P. Ananthavel, S. Barlow, D. L. Dyer, J. E. Ehrlich, L. L. Erskine, A. A. Heikal, **S. M. Kuebler**, I.-Y. S. Lee, D. McCord-Maughon, J. Qin, H. R. Röckel, M. Rumi, X.-L. Wu, S. R. Marder, and J. W. Perry*. "Two-photon polymerization initiators for three-dimensional optical data storage and microfabrication." *Nature* **1999**, 398, 51-54. **This work was featured on the**



Journal's cover.

4. J. R. G. Thorne, **S. M. Kuebler**, R. G. Denning*, I. M. Blake, P. N. Taylor, and H. L. Anderson. "Degenerate four-wave mixing studies of acetylene-linked conjugated porphyrin oligomers." *Chem. Phys.* **1999**, 248(2-3), 181-193.
3. **S. M. Kuebler** and R. G. Denning*. "Population gratings in degenerate four-wave mixing studies of a nickel dithiolene at 1064 nm." *Chem. Phys. Lett.* **1996**, 250, 120-127.
2. R. Dias, M. H. Garcia*, J. C. Rodrigues, M. L. H. Green, and **S. M. Kuebler**. "Synthesis and characterisation of η^5 -monocyclopentadienyl(*p*-nitrobenzonitrile)ruthenium(II) salts: second harmonic generation powder efficiencies." *J. Organomet. Chem.* **1994**, 475, 241-245.
1. R. Dias, M. H. Garcia*, M. P. Robalo, M. L. H. Green, K. K. Lai, A. J. Pulham, **S. M. Kuebler** and G. Balavoine. "Organometallic compounds for non-linear optics: synthesis, reactivity and electrochemistry of chiral η^5 -monocyclopentadienyl(nitrile)iron complexes." *J. Organomet. Chem.* **1993**, 453, 241-247.



BOOK CHAPTERS (all peer reviewed)

1. R. Sharma, **S. M. Kuebler***, C. N. Grabill, J. L. Digaum, N. R. Kusan, A. R. Cockerham, N. Martinez and R. C. Rumpf. "Fabrication of functional nanophotonic devices via multi-photon polymerization," in *Additive Manufacturing of Structures and Functional Devices: Materials, Methods, Models, and Testing*, A. Kotula, J. Seppala and C. Snyder, Eds. American Chemical Society and Oxford University Press: Oxford, UK, **2018**, Vol. 1315, pp. 151-171; <https://pubs.acs.org/doi/10.1021/bk-2019-1315>.
2. C. M. Schwarz, C. N. Grabill, J. L. Digaum, H. E. Williams, and **S. M. Kuebler***. "Multi-photon processing of composite materials and functionalization of 3D structures", in *Multiphoton Lithography: Techniques, Materials and Applications*, R. Liska, J. Stampfl, and A. Ovsianikov, Eds. (Wiley-VCH, Weinheim, **2016**), pp. 221-264.
3. **S. M. Kuebler*** and M. Rumi. "Nonlinear optics -- applications: three-dimensional microfabrication", in *Encyclopedia of Modern Optics*, R. D. Guenther, D. G. Steel and L. Bayvel, Eds. Elsevier: Oxford, **2004**, pp. 189-206.

PATENT and PROVISIONAL PATENT APPLICATIONS

1. A. Cockerham, **S. M. Kuebler**, X. Yu, H. Cheng. "Volumetric fabrication of micro-needle arrays using three-dimensional light fields." UCF Reference #: 2025-003-01; Lord patent-attys, reference # 1513001.147US0.
2. R. Sharma and **S. M. Kuebler**. "Method for removing metal from microstructures." USA (Serial # 62/820,976), provisional patent application filed 20 Mar. 2019.
3. R. C. Rumpf, **S. M. Kuebler**, N. P. Martinez, and C. L. Valle. "Spatially variant photonic crystal apparatus, methods, and applications." US patent no. 10,824,045, assigned to Board of Regents, The University of Texas System and University of Central Florida Research Foundation, Inc. Filed on 17 Jun 2016 as provisional patent application no. 62/351565. Patent awarded on 3 Nov. 2020.

4. **S. M. Kuebler**, C. M. Schwarz, K. C. Richardson, H. E. Williams, T. S. Mayer and C. Rivero-Baleine. "Nanoparticles and methods for producing nanoparticles." Provisional application submitted in USA under Serial #61/975,148 for assignment to University of Central Florida, Lockheed-Martin, and Pennsylvania State University (4 Apr 2014).
5. S. Marder, J. W. Perry, W. Zhou, **S. M. Kuebler**, J. K. Cammack. "Materials, methods and uses for photochemical generation of acids and/or radical species." United States Patent #7,459,106, issued on 2 Dec. 2008 to The Arizona Board of Regents on Behalf of the University of Arizona, Tucson, AZ (US).
6. M. Mansuripur, P. Khulbe, G. Malahalali, J. Perry, **S. Kuebler**, and J. K. Erwin. "Information storage and retrieval using macro-molecules as storage media." Provisional US patent application (UA #02-023), filed 26 June 2002.

INVITED CONFERENCE PRESENTATIONS

1. **S. M. Kuebler** and J. Beever. "Using AI as a faculty member." Invited Plenary Presentation, 2024 UCF Summer Faculty Development Institute (UCF, 8 May 2024).

The received wisdom is that artificial intelligence is here to stay, offering great promise in streamlining tasks, making us possibly faster / more effective at our jobs, and potentially increasing our productivity in our faculty lives. On this view, both research and teaching stand to be revolutionized. But there are significant ethical risks that come along with these emerging technologies. What ethical guidelines in development, implementation, and use of the various forms of artificial intelligence should guide our actions and thinking as faculty researchers and teachers? Under which circumstances should we have second thoughts or even refrain? When do we need to disclose AI use, and how much is "too much" AI use? We'll explore these and related issues in a panel discussion, and also leave time for townhall-type questions from the audience.

2. **S. M. Kuebler** and J. Beever. "Using AI as a faculty member." Invited presentation and discussion presented at "Teaching and Learning Day," UCF Faculty Center for Teaching and Learning (*ca.* 50 participants, Orlando, FL, 6 Mar 2024).
3. H. Cheng, P. Golvari, C. Xia, M. Sun, M. Zhang, **S. M. Kuebler**, X. Yu*. "Volumetric microfabrication of helical structures for industrial applications (Invited Paper)." Novel Patterning Technologies 2022 (Conf. 12054), held as part of the 2022 SPIE Advanced Lithography and Patterning meeting (San Jose, CA, USA, 24 - 28 Apr. 2022); <https://doi.org/10.1117/12.2614703>.
4. H. Cheng, P. Golvari, C. Xia, M. Sun, M. Zhang, **S. M. Kuebler**, X. Yu*. "Rapid microfabrication of helical structures for industrial applications." Photonics West 2022: Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XV (San Francisco, CA, 22-27 Jan. 2022), SPIE, Vol. 12012, pp. 1201205-1 - 1201205-8; <https://doi.org/10.1117/12.2608940>.
This presentation by graduate student He Cheng was awarded Best Student-Paper.
5. **S. M. Kuebler***, A. Cockerham, S. Shariar, C. Xia, M. McMahon, R. C. Rumpf, J. J. Gutierrez, N. P. Martinez, E. Bustamente, J. Pazos and J. Touma. "Better optics through imperfection." Invited paper presented at 2021 IEEE Research and Applications of Photonics in Defense (RAPID) (2-4 Aug 2021, Virtual conference), IEEE, Bioinspired and Bioprincip Technologies, MD1.2; <https://ieee-rapid.org/wp-content/uploads/sites/5/2021/10/RAPID-2021-Full-Program-Danielle-Corrigan.pdf>.

6. **S. M. Kuebler**. "Advances in 3D printing functional nano-photonic devices by multi-photon lithography." Invited paper presented at "Cope Scholar Symposium in honor of Seth Marder: Development of Organic Semiconductor Materials," held as part of the 71st Southeastern Regional Meeting of the American Chemical Society (20-23 Oct. 2019, Savannah, GA).
7. **S. M. Kuebler***, C. Xia, P. Golvari, R. C. Rumpf, N. P. Martinez, M. Martinez, J. Gutierrez, J. Touma, H. Cheng, M. Sun, M. Zhang and X. Yu. "Routes to Nanophotonic Devices for Micron-Scale Beam Steering in 3D." Invited paper presented at 2019 Research and Applications of Photonics in Defense (RAPID, 19 – 21 August 2019, Hilton Sandestin Beach Golf Resort, Miramar Beach, FL, USA), IEEE.
8. **S. M. Kuebler*** and J. Beever. "Leveraging philosophy to cultivate a culture of ethical and responsible conduct in chemistry and beyond." Invited poster presented at SciMix poster symposium, American Chemical Society National Meeting and Exposition (31 Mar. - 4 Apr. 2019, Orlando, FL, USA), American Chemical Society, [international presentation](#).
9. **S. M. Kuebler***, C. Xia, G. Yang, R. Sharma, N. P. Martinez, R. C. Rumpf and J. Touma. "3D printing functional nano-photonic devices by multi-photon lithography." Invited talk presented at SPIE Advanced Lithography: Novel Patterning Technologies for Semiconductors, MEMS/NEMS and MOEMS (24-28 Feb. 2019, San Jose, CA), M. I. Sanchez and E. M. Panning, Eds., SPIE, Vol. 10958, pp. 1095806-1 - 1095806-8, <https://doi.org/10.1117/12.2518030>, [international presentation](#).
10. **S. M. Kuebler***, C. Xia, R. Sharma, J. L. Digaum, N. P. Martinez, C. L. Valle and R. C. Rumpf. "Fabrication of functional nanophotonic devices by multi-photon lithography." Invited paper presented at Photonics West 2019: Organic Photonic Materials and Devices XXI (2-7 Feb. 2019, San Francisco, CA), C. Tabor, F. Kajzar and T. Kaino, Eds., SPIE, Vol. 10915, pp. 1091502-1 - 1091502-10, <https://doi.org/10.1117/12.2508675>, [international presentation](#).
11. **S. M. Kuebler***. "Advances in nano-scale 3D printing by multi-photon lithography." Invited talk presented at 94th Florida Annual Meeting and Exposition (FAME 2018, 3-5 May 2018, Innsbruck Resort, Palm Harbor, FL), American Chemical Society.
12. **S. M. Kuebler***. "Material systems for nano-scale 3D printing by multi-photon lithography." Invited talk presented at 94th Florida Annual Meeting and Exposition (FAME 2018, 3-5 May 2018, Innsbruck Resort, Palm Harbor, FL), American Chemical Society.
13. K. Richardson*, M. Kang, L. Siskin, A. Yadav, C. Blanco, M. Antia, S. Novak, B. Gleason, C. Smith, A. Buff, A. Lepicard, M. Dussauze, C. Schwarz, **S. Kuebler**, C. Grabill, C. Pantano, T. Mayer, A. Pogrebnyakov, A. Swisher, C. Rivero-Baleinee, A. Kirk, S. Mensah, M. Driggers, J. Huf, P.-T. Lin, A. Agarwal, C. Lia and W. Deng. "Advances in infrared GRIN: A review of novel materials towards components and devices." Invited talk presented at SPIE Defense and Commercial Sensing (15 - 19 April 2018, Orlando, FL), SPIE, Vol. 10627, pp. 106270A-1 - 106270A-17, <https://doi.org/10.1117/12.2304608>, [international presentation](#).
14. J. Kreisel, K. Turner and **S. M. Kuebler***. "Florida ACS symposium for ethical chemistry." Invited talk presented at "Stories from Successful ACS Student Chapter Grants," a symposium held as part of the 255th National Meeting of the American Chemical Society (18 Mar. 2018, New Orleans, LA), American Chemical Society, [international presentation](#).
15. **S. M. Kuebler***. "Multiphoton lithography (MPL) for micro/nano-scale 3D manufacturing: capabilities and challenges." Invited lecture presented at The Technical Cooperation Program

- (TTCP) Functional Additive Workshop (13 Mar. 2018, Victoria, Canada), TTCP (<https://www.acq.osd.mil/ttcp/>), [international presentation](#).
16. N. Martinez, C. L. Valle, **S. M. Kuebler**, J. J. Pazos, C. R. Garcia, E. A. Berry, and R. C. Rumpf*. "Spatially-variant periodic structures in electromagnetics." Invited talk given by Rumpf at Forum for Electromagnetic Research Methods and Application Technologies (FERMAT) (8 Sept. 2016, University of Central Florida).
 17. C. Baleine*, K. Richardson, **S. Kuebler**, D. Christodoulides, T. Mayer, and D. Werner, "Nonlinear metamaterials based on infrared glass and glass ceramic solutions," in OSA Nonlinear Metamaterials Incubator, (OSA Headquarters, 2010 Massachusetts Ave. NW, Washington, DC, USA, 2015).
 18. **S. M. Kuebler***, J. L. Digaum, J. Pazos, J. Chiles, G. Padilla, A. Tatulian, R. C. Rumpf, and S. Fathpour. "Tight control of light beams in photonic crystals with spatially-variant lattice orientation." Invited paper presented by Kuebler at "Frontiers in Optics/Laser Science -- FiO 1.1: Three-Dimensional Optical Structure Design, Fabrication and Nanopatterning," Optical Society of America (Tucson, AZ, 19-23 Oct. 2014), [international presentation](#).
 19. **S. M. Kuebler***. "Development of materials and additive manufacturing processes for fabricating light-weight, low-cost, infrared meta-optics using photo-patternable chalcogenide glasses." Invited paper presented at the 2014 Lockheed-Martin Technical Fellows Meeting (10 Sept. 2014, Orlando, FL).
 20. **S. M. Kuebler***, H. E. Williams, D. J. Freppon, R. C. Rumpf, and M. A. Melino. "Creation of three-dimensional micro-photonic structures on the end-face of optical fibers." Invited paper presented by Kuebler at the 13th International Symposium on Laser Precision Microfabrication (Japan Laser Processing Society: Washington, D. C., 2012), [international presentation](#).
 21. **S. M. Kuebler** and Toufic G. Jabbour. "Transverse and axial beam shaping in the non-paraxial domain." Keynote Presentation given at Laser Beam Shaping X, Conf. #7430 of SPIE Optics and Photonics 2009; *Proc. SPIE*, vol. 7430, paper 7430-01 (2-6 Aug. 2009, San Diego, CA), [international presentation](#).
 22. **S. M. Kuebler**. "Hybrid top-down/bottom-up route to 3D metallo-dielectric metamaterials." Invited paper presented at the 2009 Workshop on Wave Function Engineering and Coherent Control in Nanostructured Materials, Los Alamos National Laboratory (25-27 Feb. 2009, Los Alamos, NM).
 23. **S. M. Kuebler**. "Fabrication of metallo-dielectric photonic crystals using multi-photon direct laser writing." Invited paper presented at the Southeast Ultrafast Conference, 15 Jan. 2009, Univ. of Central Florida, Orlando, FL).
 24. **S. M. Kuebler**, Y.-S. Chen, H. E. Williams, A. Tal. "Preparation and characterization of metallo-dielectric photonic crystals." Southeast Regional Meeting of the American Chemical Society (24-26 Oct. 2007, Greenville, SC).
 25. **S. M. Kuebler**, Y.-S. Chen, and A. Tal. "Fabrication of functional metal/polymer composite microstructures." Invited paper presented at Material Research Society Fall Meeting (San Francisco, 8-12 Apr. 2007), [international presentation](#).
 26. **S. M. Kuebler**, A. Tal, and Y.-S. Chen. "Fabrication and optical properties of metal-polymer composite photonic crystals." Invited paper presented at 10th Annual Southeast Ultrafast Conference (Vanderbilt Univ., Nashville, TN, 11-12 Jan. 2007).

27. **S. M. Kuebler.** "Advances in multi-photon three-dimensional microfabrication." Invited paper presented at Optics in the Southeast 2004, Optical Society of America (Charlotte, NC, 3-4 Nov. 2004).
28. **S. M. Kuebler.** "Nanophotonic structures and devices via two-photon three-dimensional microfabrication." Invited presenter on expert panel for the "DSRC Brainstorming Workshop on Prospects and Limits for Nanophotonics", David Miller, Chair, Defense Sciences Research Council (DSRC)/DARPA, Arlington VA, 10 May 2004, 2004.
29. **S. M. Kuebler**, J. W. Perry, S. R. Marder, C. K. Ober, K. L. Braun, T. Yu, and W. Zhou. "High-sensitivity material systems for two-photon three-dimensional microfabrication." Invited paper presented by Kuebler at Photonics West 2004, "Micromachining Technology for Micro-Optics and Nano-Optics II" (San Jose, CA, 24-29 Jan. 2004), *Proc. Soc. of Photo-Opt. Instr. Eng.*, Vol. 5347, pp. 111-117, international presentation.
30. **S. M. Kuebler**, M. Rumi, T. Watanabe, K. Braun, B. H. Cumpston, A. A. Heikal, L. L. Erskine, S. Thayumanavan, S. Barlow, S. R. Marder, and J. W. Perry. "Two-photon initiators for highly efficient three-dimensional lithographic microfabrication." Invited paper presented by Kuebler at 2nd International Conference on Photonics Science and Technology (Chitose, Japan, 6-8 Sept. 2001), *Nanotechnology: Toward the Organic Photonics*, H. Sasabe, Ed., GooTech, Ltd.: Chitose, Japan, pp. 77-94, international presentation.

INVITED PRESENTATIONS at OTHER INSTITUTIONS

1. **S. M. Kuebler**, Jake Linford, Benoit Glazer, and Terry M. Sanks. "Generative Artificial Intelligence." Presenter and panelist in a discussion of artificial intelligence (AI) and its impact on intellectual property, held as part of the 14th Annual Intellectual Property Symposium, Orlando, FL, sponsored by the Florida Bar Continuing Legal Education Committee and the Business Law Section (12 April 2024).

This meeting enabled legal professionals to earn continuing education credits through the CLER Program (max credit: 8.5 hours) and Certification Program (max credit: 8.5 hours);
<https://flabizlaw.org/calendar/#!event/2024/4/11/2024-ip-symposium>.
2. **S. M. Kuebler.** "Functional devices created by laser-based nanoscale 3D printing." Invited lecture presented at Axogen corporate and research headquarters (Tampa, FL, 14 Dec. 2021)
<https://www.axogeninc.com/>).
3. **S. M. Kuebler.** "Laser-based nanoscale 3D printing: Chemistries, materials, and functional optical devices." Invited departmental colloquium presented at Department of Chemistry, University of Georgia (3 Mar. 2020, Athens, GA).
4. **S. M. Kuebler.** "Functional optoelectronic devices created by laser-based nanoscale 3D printing." Invited lecture presented at Department of Electrical Engineering, University of South Alabama (21 Nov. 2019, Mobile, AL).
5. **S. M. Kuebler*.** "Functional optical devices created by laser-based nanoscale 3D printing." Invited lecture presented at University of South Alabama (2 Nov. 2018, Mobile, AL).
6. **S. M. Kuebler*.** "Functional optical devices created by laser-based nanoscale 3D printing." Invited lecture presented at University of Tennessee at Knoxville (11 Oct. 2018, Knoxville, TN).

7. **S. M. Kuebler***. "Creating new types of optical devices by laser-based nano-scale 3D printing." Invited talk presented at Munitions Directorate, Eglin Air Force Base (15 Mar. 2018, Valparaiso, FL).
8. **S. M. Kuebler***, R. Sharma, J. L. Digaum, N. Kosan, C. M. Schwarz, N. Martinez, C. L. Valle, R. C. Rumpf. "Nanophotonic Devices for Three-Dimensional Control of Optical Beams." Invited lecture presented at Drexel University (6 Oct. 2017, Philadelphia, PA).
9. **S. M. Kuebler***, R. Sharma, J. L. Digaum, N. Kosan, C. M. Schwarz, N. Martinez, C. L. Valle, R. C. Rumpf. "Nanophotonic Devices for Three-Dimensional Control of Optical Beams." Invited lecture presented at Ursinus College (5 Oct. 2017, Collegeville, PA).
10. **S. M. Kuebler***. "New approaches for controlling light in three dimensions using spatially-variant photonic crystals." Invited talk given by Kuebler at Air Force Research Laboratory, Wright-Patterson Air Force Base (9 Jun 2017, Dayton, OH).
11. J. L. Digaum, J. J. Pazos, R. C. Rumpf, **S. M. Kuebler***. "Controlling light using three-dimensional spatially-variant self-collimating photonic crystals." Invited lecture given by Digaum at Physics Department Seminar, La Sierra University (Riverside, CA, 1 May 2015).
12. **S. M. Kuebler***. "Nanophotonic Materials Created by Multi-Photon Direct Laser Writing." Invited lecture presented by Kuebler at University of North Carolina at Charlotte (Charlotte, NC, 21 Aug 2014).
13. **S. M. Kuebler***. "Nanophotonic Materials Created by Multi-Photon Direct Laser Writing." Invited lecture presented by Kuebler at the Photonics Center, Boston University (Boston, MA, 28 Aug 2014).
14. **S. M. Kuebler***. "Axial and transverse laser beam shaping using vector diffraction theory." Invited lecture presented at the Computational and Optical Sensing and Imaging (COSI) NSF-IGERT program (University of Colorado at Boulder, 27 Sept. 2010).
15. **S. M. Kuebler**. "Preparation of metallo-dielectric metamaterials by direct laser writing and new approaches for enhancing focal spot resolution." Invited paper presented at the Laser Center of Hannover (13 May 2008, Hannover, Germany), [international presentation](#).
16. **S. M. Kuebler**. "Development and applications of multi-photon direct laser writing." IBM Almaden Research Center (25 Jan. 2008, Almaden, CA).
17. **S. M. Kuebler**. "Development and applications of multi-photon direct laser writing -- a versatile approach for three-dimensional micron-scale fabrication." Invited paper presented at Tulane University (New Orleans, LA, 2 Apr. 2007).
18. **S. M. Kuebler**. "Three dimensional micro- and nano-scale fabrication via multi-photon activated chemistry." Invited paper presented at Workshop on Nanomaterials, Karlsruhe, Germany, jointly sponsored by NSF and the German Research Ministry (BMBF), in conjunction with a tour by young US scientists and engineers of Germany's Competence Centers in Nanotechnology (14 Mar. 2005, Forschungszentrum Karlsruhe, Karlsruhe, Germany), [international presentation](#).
19. M. Mansuripur, P. K. Khulbe, **S. M. Kuebler**, J. W. Perry, M. S. Giridhar and N. Peyghambarian. "Information storage and retrieval using macromolecules as storage media." Invited talk presented at Philips Research Laboratories (Sept. 2003, Eindhoven, Netherlands), [international presentation](#).

PUBLISHED CONFERENCE PAPERS and PROCEEDINGS

1. T. Morales, T. Thames, J. J. Pazos, **S. M. Kuebler***, J. Touma, "Photonic crystal lenses for compact imaging systems," 2025 IEEE Research and Applications of Photonics in Defense Conference (RAPID) (14 Aug 2025, Miramar Beach, FL), IEEE, pp. ThC4.4-1 - ThC4.4-2.
2. A. Cockerham, C. Horton, **S. M. Kuebler*** and J. Touma. "Using AI-assisted inverse design for metalens performance optimization." Contributed paper presented by Cockerham 2023 IEEE Research and Applications of Photonics in Defense Conference (RAPID) (11 - 13 Sept 2023, Miramar Beach, FL), IEEE, pp. TuB4.5-1 - TuB4.5-2, <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=10264756>.
3. T. Morales, S. Shahriar, J. J. Pazos, D. Aguilar, **S. M. Kuebler*** and J. Touma. "Using AI-assisted inverse design for metalens performance optimization." Contributed paper presented by Morales 2023 IEEE Research and Applications of Photonics in Defense Conference (RAPID) (11 - 13 Sept 2023, Miramar Beach, FL), IEEE, pp. WE4.2-1 - WE4.2-2, <https://doi.org/10.1109/RAPID54473.2023.10264744>.
4. L. Taylor*, L. A. Pinkert, J. Beever, **S. Kuebler**, E. Klonoff. "Disciplinary leaders' perceptions of ethics: An interview-based study of ethics frameworks." Contributed paper presented by Kuebler at the ASEE 2022 Annual Conference: Excellence through Diversity (Minneapolis, MN, 26-29 Jun. 2022), [international presentation](#).
5. C. Xia, J. J. Gutierrez, **S. M. Kuebler***, R. C. Rumpf and J. Touma. "Cylindrical-lens-embedded photonic crystal based on self-collimation." Contributed paper presented by Kuebler 2022 IEEE Research and Applications of Photonics in Defense Conference (RAPID) (12 - 14 Sept 2022, Miramar Beach, FL), IEEE, pp. WD1.4-1 - WD1.4-2, <https://ieeexplore.ieee.org/document/9911541>.
6. S. Shahriar, J. J. Pazos, R. Howell, D. Aguilar, **S. M. Kuebler***, T. Morales and J. Touma. "Morpho butterfly-inspired sensors created by multi-photon polymerization." Contributed paper presented by Shahriar 2022 IEEE Research and Applications of Photonics in Defense Conference (RAPID) (12 - 14 Sept 2022, Miramar Beach, FL), IEEE, pp. TuF3.3-1 - TuF3.3-2, <https://ieeexplore.ieee.org/document/9911536>.
7. C. L. Horton, **S. M. Kuebler***, M. Martinez, E. Bustamante, R. C. Rumpf and J. Touma. "Design and fabrication of a metalens with a hexagonal array of intersecting-wall meta-atoms for operation in the near-infrared." Contributed paper presented by Horton 2022 IEEE Research and Applications of Photonics in Defense Conference (RAPID) (12 - 14 Sept 2022, Miramar Beach, FL), IEEE, pp. TuF2.4-1 - TuF2.4-2, <https://ieeexplore.ieee.org/document/9911569>.
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the 31st Annual International Conference of the Association for Practical and Professional Ethics (24-27 Feb. 2022, Cincinnati, OH), Association for Practical and Professional Ethics;
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CONTRIBUTED CONFERENCE PRESENTATIONS

1. J. Kissel*, A. Nikolaidis, J. Beever, **S. M. Kuebler**, and L. A. Pinkert. "Value diversity, enculturation, and the common good: Students as both subject and object of ethics education and enculturation." 2025 Annual Conference, Association for Practical and Professional Ethics (APPE) (20-23 Feb 2025, Norfolk, VA), [international presentation](#).
2. A. Nikolaidis*, L. A. Pinkert, J. Kissel, J. Beever, and **S. M. Kuebler**. "Opening the black box of ethics enculturation: What faculty and student perspectives reveal about the way in which professional values emerge." 2025 Annual Conference, Association for Practical and Professional Ethics (APPE) (20-23 Feb 2025, Norfolk, VA), [international presentation](#).
3. A. C. Nikolaidis*, J. Beever, J. Kissel, **S. M. Kuebler** and L. A. Pinkert. "The moral limits of professional ethics enculturation." Contributed paper presented by Nikolaidis and Kissel, 50th Annual Association for Moral Education (AME) Conference (24 Oct. 2024, New York, NY), [international presentation](#).
4. J. Kissel*, J. Beever, **S. M. Kuebler**, A. C. Nikolaidis and L. A. Pinkert. "Ethics education, enculturation, and diverse recruitment — The importance of input and output." Contributed paper presented by Kissel and Nikolaidis 50th Annual Association for Moral Education (AME) Conference (24-26 Oct 2024, New York, NY), [international presentation](#).
5. **S. Kuebler***, L. A. Pinkert, and J. Beever. "AI-literacy requires AI-ethics: A panel discussion of ethical approaches to AI-engagement." Contributed paper and panel discussion, 33rd Annual APPE International Conference, remote sessions (29 Mar 2024, Cincinnati, OH), Association for Practical and Professional Ethics (APPE), [international presentation](#).
6. H. Albalawi*, J. Beever and **S. Kuebler**. "Evaluating the public health of ethics education: A comparative analysis of where ethics is taught at Florida peer universities over a decade." Contributed paper presented at the 33rd Annual APPE International Conference (22 - 25 Feb 2024, Cincinnati, OH), Association for Practical and Professional Ethics (APPE), [international presentation](#).
7. J. Beever*, **S. Kuebler**, L. Pinkert and A. Nikolaidis. "To what extent is ethics enculturation ethical?" Contributed paper presented at the 33rd Annual APPE International Conference (22 - 25 Feb 2024, Cincinnati, OH), Association for Practical and Professional Ethics (APPE), [international presentation](#).
8. P. Golvari, K. Alkameh, A. Rahmani, T. Jurca and **S. M. Kuebler***. "Hydrosilylation on hydrogen-terminated silicon surfaces using Pt(dvs): From efficient grafting of olefins to platinum-coated silicon nanoparticles for catalysis." Paper presented by P. Golvari at 2023 MRS Fall Meeting (26 Nov - 1 Dec 2023, Boston, MA), https://www.mrs.org/meetings-events/presentation/2023_mrs_fall_meeting/2023_mrs_fall_meeting-3956374.
9. P. Golvari, T. Morales, **S. M. Kuebler*** and J. Touma. "Flexible route to AuNP-cluster arrays for plasmonic sensing." Poster presented by P. Golvari at 2023 MRS Fall Meeting (26 Nov - 1 Dec 2023, Boston, MA), https://www.mrs.org/meetings-events/presentation/2023_mrs_fall_meeting/2023_mrs_fall_meeting-3954424.
10. **S. M. Kuebler** and J. Beever. "The right response to AI is teaching responsibility." Contributed presentation and guided discussion, presented at "Teaching with AI," Teaching and Learning with AI Conference (23-24 Sept 2023, UCF, Orlando, FL).

11. H. Cheng, P. Golvari, C. Xia, M. Sun, M. Zhang, **S. M. Kuebler**, X. Yu*. "High-throughput volumetric microfabrication with structured light." Contributed paper presented at the 12th International Conference on Photoexcited Processes and Applications (ICPEPA-12) (Suzhou, China, 18-22 Sept 2023), <https://www.researching.cn/conference/ICPEPA-12>, [international presentation](#).
12. L. A. Pinkert*, J. Beever, **S. Kuebler**, L. E. Taylor, E. Vazquez and V. Milanes. "Responsibility and accountability: Faculty leaders, ethics frameworks, and disciplinary enculturation." Contributed paper presented at the 2023 ASEE Annual Conference & Exposition (25-28 Jun 2023, Baltimore, Maryland), [international presentation](#).
13. **S. M. Kuebler** and J. Beever, "Frameworks for ethical decision-making in your collaborative work." Contributed presentation and discussion, 2023 Summer Faculty Development Institute, UCF Faculty Center for Teaching and Learning (*ca.* 40 participants, Orlando, FL, 8-10 May 2023).

What personal and disciplinary values guide your work? How do these intersect with the values of your students and collaborators? What strategies can we use to foster ethical literacy and responsible decision-making among diverse participants? Through active discussion with colleagues and facilitators, participants evaluated models for ethical decision-making and assess their relevance in collaborative interdisciplinary teaching and learning. Participants took away teaching tools for applying one specific model, Reflexive Principlism, in learning settings.
14. **S. M. Kuebler** and J. Beever, "I'm afraid I CAN do that, Dave! Academic integrity and Chat-GPT-X." Contributed presentation and discussion, 2023 Summer Faculty Development Institute, UCF Faculty Center for Teaching and Learning (*ca.* 40 participants, Orlando, FL, 8-10 May 2023).

Participants examined the current and future potential impacts of large language models like ChatGPT-4 and its future iterations on academic integrity issues like plagiarism facing our students and colleagues. Panelists took away a refresher on current academic integrity standards and institutional concerns as well as tools for thinking about the impacts of and responses to emerging artificial intelligence technologies on ethical conduct and standards.
15. J. Beever*, L. A. Pinkert, **S. Kuebler**, E. Vazquez, V. Milanes, L. Taylor, and E. Klonoff. "Responsibility and accountability: Faculty leaders, ethics frameworks, and disciplinary enculturation." Contributed paper presented at the 32nd Annual APPE International Conference (2 - 5 Mar 2023, Portland, OR), Association for Practical and Professional Ethics (APPE), [international presentation](#).
16. D. Aguilar, S. Shahriar, T. Morales, R. Howell, **S. M. Kuebler*** and J. J. Pazos. "Bio-inspired gas sensors fabricated by multiphoton lithography." Poster presented by D. Aguilar at the UCF Summer Research Showcase (22 July 2022, Orlando, FL).
17. K. Alkameh, P. Golvari, and **S. M. Kuebler***. "Solution and solid-state hydrosilylation of functional alkenes using Pt(dvs)." Poster presented at the UCF Student Scholar Symposium (28 Mar 2023, Orlando, FL).
18. K. Alkameh, P. Golvari, and **S. M. Kuebler***. "Solution and solid-state hydrosilylation of functional alkenes using Pt(dvs)." Poster presented at NanoFlorida conference (5 Mar 2023, Orlando, FL).
19. K. Alkameh, P. Golvari, and **S. M. Kuebler***. "Hydrosilylation of allyl methacrylate with silicon nanoparticles using Karstedt's catalyst." Poster presented at the Florida Undergraduate Research Conference (18 Feb 2023, Miami, FL).
20. P. Golvari, **S. M. Kuebler*** and J. Touma. "A facile method for selective deposition of metal

- nanoparticles into nanohole arrays for recyclable plasmonic sensors." Contributed poster presented at Fall 2022 National Meeting of the Materials Research Society, Materials Research Society (25 Nov. - 2 Dec. 2022, Boston, MA, USA), Materials Research Society, [international presentation](#).
21. P. Golvari, K. Alkameh and **S. M. Kuebler***. "Silicon nanoparticles as solid-state inhibitors for methacrylic autopolymerization." Contributed paper presented at Fall 2022 National Meeting of the Materials Research Society, Materials Research Society (25 Nov. - 2 Dec. 2022, Boston, MA, USA), Materials Research Society, [international presentation](#).
 22. H. Cheng, P. Golvari, M. Sun, M. Zhang, **S. M. Kuebler** and X. Yu*. "Single-shot microfabrication of complex 3D structures by volumetric multiphoton lithography." Contributed paper presented at Fall 2022 National Meeting of the Materials Research Society, Materials Research Society (25 Nov. - 2 Dec. 2022, Boston, MA, USA), Materials Research Society, [international presentation](#).
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 25. J. J. Pazos*, S. Shahriar, **S. M. Kuebler** and J. E. Touma. "Bioinspired microstructures for optical detection of vapors." Paper presented at META2022: 12th International Conference on Metamaterials, Photonic Crystals and Plasmonics (19 - 22 Jul 2022, Torremolinos, Spain), [international presentation](#).
 26. N. P. Martinez, C. Xia, **S. M. Kuebler** and R. C. Rumpf*. "Photon funnel design based on spatially variant self-collimating photonic crystals." Poster presented at FiO 1: Fabrication, Design and Instrumentation, a conference held as part of presented at Frontiers in Optics + Laser Science (31 Oct. - 4 Nov. 2021, Rochester, NY), Optica, [international presentation](#).
 27. J. Beever*, **S. M. Kuebler**, L. Pinkert, L. Taylor. "Faculty perspectives on frameworks of responsibility in their disciplines." IEEE Society on Social Implications of Technology, Technological Stewardship & Responsible Innovation, University of Waterloo and University of Guelph. (29 Oct 2021, virtual conference), IEEE, [international presentation](#).
 28. A. Ferguson, M. Plocica, J. Jarvis, B. Naumann, J. Chang, **S. Kuebler** and N. Takenaka*. "Biannual Inter-chapter speaker series to foster professional development and inter-chapter relations." Contributed poster CHED# 3545622 presented at Spring 2021 National Meeting of the American Chemical Society, Division of Chemical Education (CHED) (5 Apr. - 30 Apr. 2021, Virtual meeting), American Chemical Society, [international presentation](#).
 29. J. Beever, **S. M. Kuebler**, J. Gonzalez. "A sense of ethics ownership: Graduate student perceptions of ethics at a research institution." Twenty-Ninth Annual Conference of the Association for Practical and Professional Ethics (Atlanta, GA, 20 - 23 February 2020), [international presentation](#).
 30. **S. M. Kuebler** and R. Sharma. "Gentle etching of metal from polymeric three-dimensional structures: Making scanning electron microscopy a non-destructive technique." Contributed poster COLL #324 presented at 257th National Meeting of the American Chemical Society, Division of Colloid and Surface Chemistry, Nanomaterials: Advanced Nanoscale Characterization: In Situ TEM

- & Beyond (31 Mar. - 4 Apr. 2019, Orlando, FL, USA), American Chemical Society, [international presentation](#).
31. **S. M. Kuebler** and C. N. Grabill. "Controlling the nanoscale morphology of silver deposited by electroless metallization." Contributed paper INOR #1052 presented at 257th National Meeting of the American Chemical Society, Division of Inorganic Chemistry: Chemistry of Materials - Nanomaterials (31 Mar. - 4 Apr. 2019, Orlando, FL, USA), American Chemical Society, [international presentation](#).
 32. **S. M. Kuebler** and J. Beever. "Leveraging philosophy to cultivate a culture of ethical and responsible conduct in chemistry and beyond." *Invited* SciMix poster for paper CHED #1860 presented at 257th National Meeting of the American Chemical Society, SciMix poster symposium (31 Mar. - 4 Apr. 2019, Orlando, FL, USA), American Chemical Society, [international presentation](#).
 33. **S. M. Kuebler** and J. Beever. "Leveraging philosophy to cultivate a culture of ethical and responsible conduct in chemistry and beyond." Contributed paper #CHED 1860 presented at American Chemical Society National Meeting and Exposition (31 Mar. - 4 Apr. 2019, Orlando, FL, USA), American Chemical Society, [international presentation](#).
 34. A. Preston, A. Ferguson, J. Kreisel, **S. M. Kuebler** and N. Takenaka. "Fostering professional development and inter-chapter relations through the annual Florida chemistry conclave." Contributed poster CHED #1613 presented at 257th National Meeting of the American Chemical Society, Division of Chemical Education: Successful Student Chapters (31 Mar. - 4 Apr. 2019, Orlando, FL, USA), American Chemical Society, [international presentation](#).
 35. J. Kreisel, **S. M. Kuebler**, A. Zuleta-Visser and J. Chang. "Bonding with Bithlo: Enhancing the quality of K-12 science education in an underprivileged community." Contributed poster CHED #1610 presented at 257th National Meeting of the American Chemical Society (31 Mar. - 4 Apr. 2019, Orlando, FL, USA), American Chemical Society, [international presentation](#).
 36. J. Beever* and **S. M. Kuebler**. "Understanding ethics culture: A ground-up assessment and development of the culture of ethics at a major metropolitan university." Contributed paper presented at Twenty-Eighth Annual Conference of the Association for Practical and Professional Ethics (28 Feb. - 3 Mar. 2019, Baltimore, Maryland).
 37. **S. M. Kuebler**, R. Sharma, J. L. Digaum, N. Kosan, N. Martinez, C. L. Valle and R. C. Rumpf. "Polymeric nanophotonic devices for abrupt control of optical beams in three dimensions." 255th National Meeting of the American Chemical Society (18 - 22 Mar. 2018, New Orleans, LA), American Chemical Society, [international presentation](#).
 38. J. Kreisel*, **S. M. Kuebler**, L. Gandy, R. Sapia and N. Takenaka. "Fostering professional development and inter-chapter relations through the Annual Florida Chemistry Conclave." Poster presented at 255th National Meeting of the American Chemical Society (18 - 22 Mar. 2018, New Orleans, LA), American Chemical Society, [international presentation](#).
 39. C. Schwarz, M. Kang, C. Pantano, K. Richardson, C. Rivero-Baleine, **S. Kuebler**, C. Grabill, J. Rice, Q. Altomose, K. Raichle, B. Schnable, I. Wietecha-Reiman, E. Haldeman. "Optical and crystal growth studies of ZnO-Bi₂O₃-B₂O₃ glass." Contributed paper presented at 2018 SPIE Defense and Commercial Sensing (15-19 April 2018, Orlando, FL), SPIE, Vol. 10627, pp. 106270O-1 - 106270O-8, <https://doi.org/10.1117/12.2304446>, [international presentation](#).
 40. Q. Altomose, K. Raichle, B. Schnable, C. M. Schwarz*, M. Kang, C. G. Pantano, K. Richardson, C.

- Rivero-Baleine and **S. Kuebler**. "In situ X-ray diffraction studies of crystallization growth behavior in ZnO-Bi₂O₃-B₂O₃ glass as a route to functional optical devices." Contributed paper presented at "In Situ Studies of Materials Transformations (TC02)", a symposium held as part of the 2017 Fall Meeting of the Materials Research Society (26 Nov - 1 Dec 2017, Boston, MA), Materials Research Society, [international presentation](#).
41. N. Kosan, R. Sharma, J. Digaum, and **S. M. Kuebler***. "Controlling light with spatially variant photonic crystals and waveguide structures," 2017 Florida Undergraduate Research Conference (Florida Atlantic University, Boca Raton, FL, 24-25 Feb. 2017, 2017).
 42. C. M. Schwarz, C. Grabill, B. Gleason, R. Sapia, J. Barker, C. Rivero-Baleine, K. Richardson, A. Pogrebnyakov, T. S. Mayer and **S. M. Kuebler***. "Multi-photon lithography of 3D micro-structures in Ge-doped AsSe chalcogenide glasses." 252nd Annual Meeting of the American Chemical Society (21 - 25 Aug. 2016, Philadelphia, PA), [international presentation](#).
 43. L. Gandy, B. Maurant, Y. Y. L. Sip and **S. M. Kuebler***. "Bonding with Bithlo: Enhancing the quality of K-12 science education in an underprivileged community." 252nd Annual Meeting of the American Chemical Society (21 - 25 Aug. 2016, Philadelphia, PA), [international presentation](#).
 44. N. P. Martinez, E. Bustamante, J. Pazos, J. Digaum, **S. M. Kuebler** and R. C. Rumpf*. "Spatially-variant photonic crystals." Poster presented at the Southwest Emerging Technology Symposium (SETS) 2016 (8-9 April 2016, Wyndham El Paso Airport, El Paso, Texas).
 45. J. L. Digaum, D. Batista, R. C. Rumpf and **S. M. Kuebler***. "Spatially-variant self-collimating photonic crystal for beam bending at telecommunications wavelengths." Poster presented and awarded 2nd prize for best student-poster at OIDA Workshop on Integrated Photonics for High Volume Packaging, Optical Society of America (20 Mar. 2016, Anaheim, CA.), [international presentation](#).
 46. R. Sharma, J. L. Digaum, R. C. Rumpf, S. Fathpour, J. D' Archangel, G. Boreman and **S. M. Kuebler***. "Beam bending in spatially variant photonic crystals (SVPCs) at telecommunication wavelengths." Contributed talk presented at Florida Inorganic and Materials Symposium (FIMS) (9-10 Oct. 2015, Univ. of Florida, Gainesville, FL).
 47. C. M. Schwarz, C. N. Grabill, B. Gleason, S. Novak, A. M. Lewis, G. D. Richardson, C. Rivero-Baleine, K. A. Richardson, A. Pogrebnyakov, T. S. Mayer and **S. M. Kuebler***. "Fabrication and characterization of direct laser written 3D micro-structures in arsenic trisulfide chalcogenide glasses." International Conference and Trade fair on Laser Technology (20-23 July 2015, Orlando, FL, USA), OMICS International, [international presentation](#).
 48. C. M. Schwarz, C. N. Grabill, B. Gleason, G. D. Richardson, A. M. Lewis, S. Labh, C. Rivero-Baleine, K. A. Richardson, A. Pogrebnyakov, T. S. Mayer, **S. M. Kuebler***. "Properties of direct laser written nanostructures in multi-layered chalcogenide glasses." Poster presented at the American Ceramics Society Glass & Optical Materials Division and Deutsche Glastechnische Gesellschaft Joint Annual Meeting (ACERS GOMD-DGG, Miami, FL, 17-21 May 2015), [international presentation](#).
 49. J. L. Digaum, J. J. Pazos, R. C. Rumpf, J. Chiles, S. Fathpour, **S. M. Kuebler***. "Three-dimensional polarization-sensitive spatially-variant self-collimating photonic crystal for beam bending." Poster presented at Joint Symposium of the Florida Vacuum Society and the Florida Society of Microscopy (FLAVS/FSM 2015, Orlando, FL, 9 Mar. 2015).

50. C. M. Schwarz, C. N. Grabill, B. Gleason, G. D. Richardson, A. M. Lewis, S. Labh, C. Rivero-Baleine, K. A. Richardson, A. Pogrebnnyakov, T. S. Mayer, **S. M. Kuebler***. "Properties of direct laser written nanostructures in multi-layered chalcogenide glasses." Poster presented at the 2015 Florida Chapter of the American Vacuum Society (FLAVS) and the Florida Society for Microscopy (FSM) joint Symposium (University of Central Florida, 9-10 Mar. 2015).
51. J. Digaum, **S. M. Kuebler***, J. Pazos, R. C. Rumpf, J. Chiles, and S. Fathpour. "Ninety-degree beam bending using a spatially variant self-collimating photonic crystal." Federation of Optics College and University Students (FOCUS) Latin America Conference, OSA and SPIE (Medellin, Colombia, 11-13 Nov. 2014). Student presenter Digaum was awarded 2nd place for Best Student Paper, **international presentation**.
52. **S. M. Kuebler***, H. E. Williams, D. J. Freppon, and R. C. Rumpf. "Fabrication of polymeric micro-photonic structures on the tip of optical fibers." Contributed paper presented by Kuebler at the Specialty Optical Fibers Symposium, OSA Advanced Photonics 2012 Congress (Optical Society of America: Colorado Springs, CO, 17-21 June 2012), **international presentation**.
53. C. J. Clukay, D. J. Freppon, C. N. Grabill, A. Dutta, H. Heinrich, A. Bhattacharya, and **S. M. Kuebler***. "Characterization of gold nanoparticles generated in situ on a negative-photoresist polymer substrate." Poster presented at the Beckman Scholars and Beckman Young Investigators Symposium (11-13 August 2011, Irvine, CA).
54. **S. Kuebler** and A. Bhattacharya*. "Simulation studies of diffusion limited ballistic growth of particles from a surface." Paper presented at the American Physical Society March Meeting (21-25 March 2011, Dallas, TX, 2011), **international presentation**.
55. A. Dutta, B. Yuan, H. Heinrich*, C. N. Grabill, **S. M. Kuebler**, and A. Bhattacharya. "Quantitative transmission electron microscopy of nanoparticles and thin film formation in electroless metallization of polymeric surfaces." Paper presented at the American Physical Society March Meeting (21-25 March 2011, Dallas, TX), **international presentation**.
56. A. Robledo, A. Bhattacharya, C. Grabill, **S. M. Kuebler**, A. Dutta, and H. Heinrich*. "Simulation studies of electroless metal deposition using gold nano-clusters on polymeric surface." Paper presented at the Meeting of the American Physical Society (18 Feb. 2010, Portland, OR), Amer. Phys. Soc., Vol. 55, p. K1.00152, **international presentation**.
57. C. N. Grabill, H. E. Williams, D. Freppon, C. Clukay, **S. M. Kuebler***, A. Bhattacharya, A. Dutta, and H. Heinrich. "Chemical and physical parameters for controlling the nanoscale morphology of electrolessly deposited metal." Contributed paper presented at Florida Inorganic and Materials Symposium (1-2 Oct. 2010, Univ. of Florida, Gainesville, FL).
58. D. Freppon, C. Clukay, C. N. Grabill, A. Dutta, H. Heinrich, A. Robledo, A. Bhattacharya, and **S. M. Kuebler**. "Analysis of chemical systems used in controlled electroless deposition." Poster presented at NanoFlorida 2010 (25 Sept. 2010, UCF, Orlando, FL).
59. C. J. Clukay, D. J. Freppon, C. N. Grabill, A. Dutta, H. Heinrich, A. Robledo, A. Bhattacharya, and **S. M. Kuebler**. "Studies toward the understanding and control of electroless deposition." Poster presented at the Florida Inorganic and Materials Symposium (1-2 Oct. 2010, Univ. of Florida, Gainesville, FL).
60. K. E. Lynch, M. Melino, R. C. Rumpf, **S. M. Kuebler**. "Chemical System for Meta-Optical Fluorescence Probes." Paper presented at the Florida Inorganic and Materials Symposium (2-3 Oct.

- 2009, Univ. of Florida, Gainesville, FL).
61. C. N. Grabill, H. E. Williams, **S. M. Kuebler**, A. Y. Quazzani, A. Bhattacharya, A. Dutta, H. Heinrich. "Chemical System for Fundamental Study of Electroless Metallization." Poster presented at the Florida Inorganic and Materials Symposium (2-3 Oct. 2009, Univ. of Florida, Gainesville, FL).
 62. **S. M. Kuebler**, C. J. Clukay, A. Dutta, C. N. Grabill, H. Heinrich and A. Bhattacharya. "Morphologies of an anisotropic diffusion limited growth model to study electroless deposition." Poster presented at the March 2009 meeting of the American Physical Society (13-17 April 2009, Boston, MA), [international presentation](#).
 63. C. N. Grabill, H. E. Williams, **S. M. Kuebler**, A. Y. Quazzani, A. Bhattacharya, A. Dutta, H. Heinrich. "Chemical System for Fundamental Study of Electroless Metallization." Poster presented at the annual meeting of the Florida Chapter of the American Vacuum Society (8-12 March 2009, Univ. of Central Florida, Orlando, FL).
 64. A. Y. Quazzani, A. Bhattacharya, H. Heinrich, A. Dutta, **S. M. Kuebler**, C. N. Grabill, H. E. Williams. "Simulation studies of electroless metal deposition on polymeric surfaces." Poster presented at the annual meeting of the Florida Chapter of the American Vacuum Society (8-12 March 2009, Univ. of Central Florida, Orlando, FL).
 65. A. Dutta, H. Heinrich, C. N. Grabill, H. E. Williams, **S. M. Kuebler**, A. Y. Quazzani, A. Bhattacharya. "Transmission electron microscopy study of silver and gold nanoparticles on polymeric surfaces." Poster presented at the annual meeting of the Florida Chapter of the American Vacuum Society (8-12 March 2009, Univ. of Central Florida, Orlando, FL).
 66. **S. M. Kuebler**, H. E. Williams, M. A. Melino, T. G. Jabbour. "Method for preparing truly three-dimensional metallo-dielectric photonic crystals and related metamaterials." Paper EE14.4 presented at the spring 2009 international meeting of the Materials Research Society (13-17 April 2009, San Francisco, CA), [international presentation](#).
 67. C. N. Grabill, **S. M. Kuebler**, H. E. Williams, A. I. Ouazzani, A. Bhattacharya, H. Heinrich, A. Dutta. "Chemical and physical parameters for controlling the nanoscale morphology of electrolessly deposited metal". Paper D6.5 presented at the spring 2009 international meeting of the Materials Research Society (13-17 April 2009, San Francisco, CA), [international presentation](#).
 68. A. Y. Ouazzani, A. Bhattacharya, H. Heinrich, A. Dutta, **S. M. Kuebler**, C. N. Grabill, H. E. Williams. "Simulation studies of electroless metal deposition on polymeric surfaces." Poster presented at the Annual Meeting of the Florida Chapter of the American Vacuum Society (Univ. of Central Florida, Orlando, FL, 8-12 March 2009).
 69. H. E. Williams, **S. M. Kuebler**, M. A. Melino, T. G. Jabbour. "Preparation of functional three-dimensional nanophotonic materials and devices by multi-photon direct-laser writing in SU-8 on silicon". Poster BB6.16 presented at the spring 2009 international meeting of the Materials Research Society (13-17 April 2009, San Francisco, CA), [international presentation](#).
 70. **S. M. Kuebler**, Y.-S. Chen, and A. Tal. "Preparation of metallo-dielectric metamaterials." Frontiers in Optics 08: Rochester, NY, 19-24 Oct. 2008, [international presentation](#).
 71. Y.-S. Chen, H. E. Williams, A. Tal, **S. M. Kuebler**. "Routes to micron-scale three-dimensional metallodielectric photonic metamaterials." Paper presented at the Florida Inorganic Mini-

- Symposium (22 Sept. 2007, Univ. of Florida, Gainesville, FL).
72. A. Dupuy, Y.-S. Chen, H. E. Williams, A. Tal, **S. M. Kuebler**. "Study of optical properties on silver coated SU-8 films pre and post Annealing." Poster presented at the Florida Inorganic Mini-Symposium (22 Sept. 2007, Univ. of Florida, Gainesville, FL).
 73. **S. M. Kuebler**, Y. S. Chen, and A. Tal. "Route to three-dimensional micron-scale meta-materials via multi-photon patterning." Paper presented at the Material Research Society Fall Meeting (26 Nov. - 1 Dec. 2006, Boston, MA), MRS, [international presentation](#).
 74. Y.-S. Chen, A. Tal, **S. M. Kuebler**. "Fabrication of three-dimensional micron-scale metallic-dielectric composites and functional devices." Paper presented at the Florida Inorganic Mini-Symposium (14 Oct. 2006, Univ. of Florida, Gainesville, FL).
 75. **S. M. Kuebler** and T. G. Jabbour. "Effect of radially symmetric phase masks on the focused point-spread-function under high numerical aperture." Lecture presented at the 231st National Meeting of the American Chemical Society (26-30 Mar. 2006, Atlanta, GA), [international presentation](#).
 76. **S. M. Kuebler** and T. G. Jabbour. "Approaches for improving the resolution of multi-photon three-dimensional microfabrication." Lecture presented at Photonics 2005: Nanophotonics, Biophotonics and Optoelectronic Polymer Systems (5-8 June 2005, Orlando, FL), [international presentation](#).
 77. **S. M. Kuebler**. "Recent advances and new direction in multi-photon three-dimensional microfabrication." Lecture presented at the 20th Annual Organic Faculty of Florida Conference (5 Mar 2005, Orlando, FL).
 78. T. G. Jabbour, F. Ruhge, and **S. M. Kuebler**. "Optical means for improving the resolution of multi-photon three-dimensional lithographic microfabrication." Poster presented at the Florida Academy of Science 68th Annual Meeting (12-13 March 2004, University of Central Florida, Orlando, FL).
 79. T. Watanabe, N. Kimura, Y. Kazama, Y. Lu, F. Hasegawa, K. Totani, **S. Kuebler**, S. R. Marder, and J. W. Perry. "Microfabrication of hydrogel and liquid crystalline polymers by two-photon initiated polymerization." Lecture presented at the 7th International Conference on Organic Nonlinear Optics (4-8 Nov. 2003, Sorak, South Korea), [international presentation](#).
 80. S. Barlow, K. Braun, C. Grasso, M. Halik, **S. M. Kuebler**, S. R. Marder, J. W. Perry, S. J. Pond, M. Rumi, W. Wenseleers, and W. Zhou. "Advances in structure-property relationships for multiphoton-absorbing materials." Lecture presented at the SPIE International Symposium on Optical Science and Technology (2002, Seattle, WA), [international presentation](#).
 81. W. Zhou, **S. M. Kuebler**, K. L. Braun, T. Yu, J. K. Cammack, J. Wang, N. Tucker, S. Barlow, C. K. Ober, J. W. Perry, and S. R. Marder. "Efficient two-photon photoacids and radical initiators and their application to 3D microfabrication." Lecture presented at the XIXth IUPAC Symposium on Photochemistry (17-19 July 2002, Budapest, Hungary), [international presentation](#).
 82. T. Yu, C. K. Ober, **S. M. Kuebler**, W. Zhou, S. R. Marder and J. W. Perry. "Two-photon lithography for three-dimensional microfabrication." Paper presented at the American Chemical Society Annual Meeting (Boston, MA, 2002), [international presentation](#).
 83. J. W. Perry, C. A. Bauer, K. Braun, **S. M. Kuebler**, S. R. Marder, C. K. Ober, F. Stellacci, T. Watanabe, T. Yu and W. Zhou. "Three-dimensional microfabrication using two-photon activated chemistry." Lecture presented at the 5th AIST International Symposium on Photoreaction Control and Photofunctional Materials (Tsukuba, Japan, 18-20 March 2002), [international presentation](#).

84. **S. M. Kuebler**, M. Rumi, K. L. Braun, S. R. Marder, J. W. Perry and T. Watanabe. "Controlling resolution in three-dimensional microfabrication by two-photon initiated polymerization." Poster presented at the 6th International Conference on Organic Nonlinear Optics (Tucson, AZ, 2001), [international presentation](#).
85. F. Stellacci, C. A. Bauer, T. Meyer-Friedrichsen, W. Wenseleers, V. Alain, **S. M. Kuebler**, S. J. K. Pond, Y. Zhang, S. R. Marder and J. W. Perry. "Laser and electron-beam induced growth of nanoparticles for 2 & 3D metal patterning." Lecture presented at the 6th International Conference on Organic Nonlinear Optics (Tucson, AZ, 2001), [international presentation](#).
86. F. Stellacci, C. A. Bauer, T. Meyer-Friedrichsen, W. Wenseleers, V. Alain, **S. M. Kuebler**, S. J. K. Pond, Y. Zhang, S. R. Marder and J. W. Perry. "Photochemically induced growth of nanoparticles for 2 & 3D metal patterning." Poster presented at the 6th International Conference on Organic Nonlinear Optics (Tucson, AZ, 2001), [international presentation](#).
87. W. Zhou, K. L. Braun, **S. M. Kuebler**, J. W. Perry, S. R. Marder, T. Yu and C. K. Ober. "Efficient two-photon photoacids." Poster presented at the 6th International Conference on Organic Nonlinear Optics (Tucson, AZ, 2001), [international presentation](#).
88. T. Watanabe, M. Akiyama, F. Hasegawa, K. Totani, **S. Kuebler**, F. Stellacci, W. Wenseleers, K. Braun, M. Rumi, S. R. Marder and J. W. Perry. "Three-dimensional microfabrication of soft materials by two-photon excitation." Poster presented at the 6th International Conference on Organic Nonlinear Optics (Tucson, AZ, 2001), [international presentation](#).
89. S. J. K. Pond, M. Rumi, T. C. Parker, **S. M. Kuebler**, J.-L. Brédas, S. R. Marder, J. W. Perry, M. D. Levin, M. W. Day and D. Beljonne. "Two-photon spectroscopy of cyano-substituted *bis*(styryl)benzene compounds." Poster presented at the 6th International Conference on Organic Nonlinear Optics (Tucson, AZ, 2001), [international presentation](#).
90. **S. M. Kuebler**, W. Zhou, D. Carrig, J. K. Cammack, S. R. Marder and J. W. Perry. "Efficient two-photon initiators for three-dimensional microfabrication." Lecture presented by Kuebler at 43rd Rocky Mountain Conference on Analytical Chemistry (Denver, CO, 2001).
91. C. Bauer, K. Braun, D. Carrig, **S. M. Kuebler**, S. R. Marder, T. Meyer-Friedrichsen, C. K. Ober, J. W. Perry, S. K. Pond, M. Rumi, F. Stellacci, W. Wenseleers, T. Yu, Y. Zhang and W. Zhou. "The chemistry of two-photon absorbing materials." Lecture presented at the fall meeting of the Material Research Society (Boston, MA, 2001), [international presentation](#).
92. T. Yu, C. K. Ober, **S. M. Kuebler**, W. Zhou, S. R. Marder and J. W. Perry. "3-D microfabrication in a chemically amplified positive resist." Poster presented at the fall meeting of the Material Research Society (Boston, MA, 2001), [international presentation](#).
93. J. W. Perry, C. Bauer, K. Braun, K. Cammack, **S. M. Kuebler**, S. R. Marder, T. Meyer-Friedrichsen, M. Rumi, F. Stellacci, T. Watanabe, W. Wenseleers and W. Zhou. "Two-photon 3D microfabrication of polymeric and metallic structures." Paper presented at the Optical Society of America Annual Meeting (Long Beach, CA, 2001), [international presentation](#).
94. J. W. Perry, S. R. Marder, S. Pond, C. Bauer, K. Braun, M. Rumi, **S. M. Kuebler**, W. Wenseleers, F. Stellacci, K. Mohanalingam, W. Zhou, T. Meyer-Friedrichsen, M. Halik, C. Grasso, V. Alain, T. Parker, L. Dollinger and Y.-D. Zhang. "Structure-property relationships for two-photon absorbing molecules." Poster presented at the 14th Biennial Carl S. Marvel Symposium "Supramolecular Materials" (Tucson, AZ, 11-13 Mar. 2001).

95. J. W. Perry, C. Bauer, K. Cammack, **S. M. Kuebler**, S. R. Marder, T. Meyer-Friedrichsen, M. Rumi, F. Stellacci, T. Watanabe, W. Wenseleers, W. Zhou, T. Yu and C. Ober. "Two-photon 3D microfabrication of polymers and metals." Lecture presented at the Conference on Novel Optical Materials and Applications (Cetraro, Italy, 2001), [international presentation](#).
96. W. Zhou, **S. M. Kuebler**, S. R. Marder and J. W. Perry. "Donor-acceptor linked photoacid generators for microfabrication applications." Lecture presented at the 221st ACS National Meeting (San Diego, CA, 1-5 April 2001), [international presentation](#).
97. S. R. Marder, V. Alain, J.-L. Bredas, K. Braun, J. K. Cammack, M. Halik, **S. Kuebler**, J. W. Perry, M. Rumi, W. Wenseleers, W. Zhou, B. Cumpston and M. Lipson. "Applications of molecules with large two-photon absorption cross sections to microfabrication." Lecture presented at the 221st ACS National Meeting (San Diego, CA, 1-5 April 2001), [international presentation](#).
98. J. W. Perry, A. P. Ananthavel, G. Duerksen, J. Ehrlich, A. A. Heikal, K. Mansour, K. Mohanalingam, **S. M. Kuebler**, H. Röckel, S. R. Marder, T. Kosa and P. Palffy-Muhoray. "Nonlinear absorption and two-photon charge carrier generation in liquid crystal guest-host systems." Lecture presented at the Second International Conference on Optical Power Limiting (Venice, Italy, 2-5 July 2000), [international presentation](#).
99. J. W. Perry, S. P. Ananthavel, **S. M. Kuebler**, S. R. Marder, M. Rumi, F. Stellacci, B. H. Cumpston, A. A. Heikal, J. E. Ehrlich, L. L. Erskine, M. Lipson, D. McCord-Maughon and H. Röckel. "Optimizing multiphoton chemistry for 3D optical processes and technology." Lecture presented at the Conference on Lasers and Electro-optics/Quantum Electronics and Laser Science Conference (San Francisco, CA, 2000), [international presentation](#).
100. J. W. Perry, S. P. Ananthavel, **S. M. Kuebler**, S. R. Marder, M. Rumi, D. L. Dyer, M. D. Levin, D. McCord-Maughon, H. Röckel, B. H. Cumpston, A. Heikal, J. E. Ehrlich, D. Beljonne, T. Kogej and J.-L. Bredas. "Conjugated molecules with large two-photon cross sections." Lecture presented at the 218th ACS National Meeting (New Orleans, LA, 22-26 Aug. 1999), [international presentation](#).
101. S. Ananthavel, M. Rumi, **S. Kuebler**, J. W. Perry, S. Thayumanavan, S. R. Marder, K. Mansour, J. E. Ehrlich, S. Barlow and H. Röckel. "Two-photon absorbing chromophores for broadband optical limiting." Poster presented at the Conference on Lasers and Electro-Optics (Baltimore, MD, 1999), [international presentation](#).
102. **S. M. Kuebler**, S. P. Ananthavel, M. Rumi, S. R. Marder, J. W. Perry, S. Barlow, B. H. Cumpston, D. L. Dyer, J. E. Ehrlich, L. L. Erskine, A. A. Heikal, I.-Y. S. Lee, D. McCord-Maughon, J. Qin, H. Röckel and W.-L. Wu. "Two-photon polymerization initiators for efficient three-dimensional optical data storage and microfabrication." Lecture presented by Kuebler at the Conference on Lasers and Electro-Optics (Baltimore, MD, 1999), [international presentation](#).
103. S. Ananthavel, M. Rumi, **S. Kuebler**, J. W. Perry, S. Thayumanavan, S. R. Marder, K. Mansour, J. E. Ehrlich, S. Barlow and H. Röckel. "Two-photon absorbing chromophores for broadband optical limiting." Poster presented at the Conference on Lasers and Electro-Optics (Baltimore, MD, 1999), [international presentation](#).
104. S. Barlow, B. H. Cumpston, G. Duerksen, J. Y. Fu, J. E. Ehrlich, A. A. Heikal, T. Kosa, **S. M. Kuebler**, I. Y. S. Lee, S. G. Lukishova, K. Mansour, S. R. Marder, D. McCord-Maughon, P. Palffy-Muhoray, J. W. Perry, H. Röckel, M. Rumi, G. Subramanian, B. Taheri, S. Thayumanavan and X. L. Wu. "Two-photon absorbing materials for optical power limiting and imaging." Lecture

presented at the SPIE International Symposium on Optical Science, Engineering, and Instrumentation: Nonlinear Optical Liquids for Power Limiting and Imaging (San Diego, CA, 1998), [international presentation](#).

105. M. Rumi, J. E. Ehrlich, B. H. Cumpston, **S. M. Kuebler**, A. A. Heikal, J. Y. Fu, S. Barlow, M. D. Levin, L. Erskine, D. McCord-Maughon, H. Röckel, S. Thayumanavan, S. R. Marder, J. W. Perry, T. Kogej, D. Beljonne, J. Brédas, M. Albota, S. Hess, C. Xu and W. W. Webb. "Structure/property relationships and applications of two-photon absorbing molecules." Lecture presented at the SPIE International Symposium on Optical Science, Engineering, and Instrumentation: Third-Order Nonlinear Optical Materials (San Diego, CA, 1998), [international presentation](#).
106. **S. M. Kuebler** and R. G. Denning. "Time-resolved degenerate four-wave mixing studies of a zinc porphyrin polymer at 1064 nm." Poster presented by Kuebler at the Dielectric Society Annual Conference (Canterbury, England, 1996), [international presentation](#).
107. **S. M. Kuebler** and R. G. Denning. "50 ps single-pulse degenerate four-wave mixing at $\lambda = 1064$ nm." Lecture presented at the European Commission: Human Capital Mobility Network for Nonlinear Optical Materials (Copenhagen, Denmark, 1995), [international presentation](#).
108. **S. M. Kuebler** and R. G. Denning. "Population grating effects in studies of $\text{NiS}_4\text{C}_4\text{Ph}_2\text{Bu}_2$ by degenerate four-wave mixing (DFWM)." Poster presented by Kuebler at the European Commission: Human Capital Mobility Network for Nonlinear Optical Materials (Copenhagen, Denmark, 1995), [international presentation](#).
109. **S. M. Kuebler** and R. G. Denning. "Measurement of the third-order nonlinear optical polarisability by degenerate four-wave mixing." Lecture presented by Kuebler at the Solid State Seminars Series, Inorganic Chemistry Laboratory, University of Oxford (Oxford, UK, 1993).
110. **S. M. Kuebler** and R. G. Denning. "Measurement of the third-order nonlinear optical polarisability by forward scatter degenerate four-wave mixing." Poster presented by Kuebler at the SERC 21st Century Materials Initiative Grant Holders Workshop (UK, 1992), [international presentation](#).

OTHER WORKS (*not peer-reviewed*)

1. "Seeing glass in a new light." In *SPIE News*, **2021** (<https://spie.org/news/seeing-glass-in-a-new-light>): SPIE Highlight of research reported in C. M. Schwarz, **S. M. Kuebler**, et al., "Structurally and morphologically engineered chalcogenide materials for optical and photonic devices." *J. Opt. Microsys.* **2021**, 1(1), 013502-1 - 013502-13.
2. **S. M. Kuebler** and J. Beever. "Robin Hood had it easy – The real world is not so straightforward." *UCF Forum* **2019**, 24 July 2019.

Article: <https://stars.library.ucf.edu/ucf-forum/365/>.

This article was also carried as:

- 1) S. M. Kuebler, J. Beever, "Robin Hood had it easy – The real world is not so straightforward." SeminoleBusiness.org, Seminole County Regional Chamber of Commerce (24 July 2019, <https://business.seminolebusiness.org/news/details/robin-hood-had-it-easy-the-real-world-is-not-so-straightforward>; and
- 2) S. M. Kuebler, J. Beever, "Robin Hood had it easy – The real world is not so straightforward." Brevard Business News Vol. 37 No. 32, p. 4 (12 Aug. 2019, BrevardBusinessNews.com).

3. **S. M. Kuebler** and J. Beever. "Well, it's not illegal!" *UCF Forum* **2019**, 22 May 2019.
Article: <https://www.ucf.edu/news/well-not-illegal/>.
Podcast: <https://soundcloud.com/user-939830138/ucf-forum-stephen-m-kuebler-and-jonathan-beever-52619>.
This article was also carried as:
 - 1) S. M. Kuebler, J. Beever, "Well, It's Not Illegal!" Brevard Business News, Vol. 37 No. 22, p. 4 (10 June 2019, BrevardBusinessNews.com); and
 - 2) S. M. Kuebler, J. Beever, "Well, It's Not Illegal!" The Apopka Voice, 30 May 2019 (<https://theapokkavoice.com/well-its-not-illegal/>).
4. **S. M. Kuebler** and J. Beever. "Internet has helped spread information, but not necessarily knowledge." *UCF Forum* **2019**, 20 Mar. 2019.
Article: <https://stars.library.ucf.edu/ucf-forum/347/>.
Podcast: <https://soundcloud.com/user-939830138/ucf-forum-stephen-m-kuebler-and-jonathan-beever-32419>.
This article was also carried as:
 - 1) S. M. Kuebler, J. Beever, "The internet has helped to spread information, but not necessarily knowledge," *The Apopka Voice* (21 Mar. 2019, TheApopkaVoice.com); and
 - 2) S. M. Kuebler, J. Beever, "The internet has helped spread information, but not necessarily knowledge?" Brevard Business News, Vol. 37 No. 14, p. 4 (8 April 2019, BrevardBusinessNews.com).
5. **S. M. Kuebler** and J. Beever, radio interview with Marcus Smith, host of "Constant Wonder," BYU Radio, episode "Digital Storytelling, Industrial Musicals, Robot Ethics, Black History," originally aired 20 Feb. 2019, beginning at time 49 min 03 sec (<https://www.byuradio.org/episode/c9515db2-96ba-4717-ae43-b037bcc69f47/constant-wonder-digital-storytelling-industrial-musicals-robot-ethics-black-history>).
6. **S. M. Kuebler** and J. Beever. "Whom should self-driving cars be programmed to protect?" *UCF Forum* **2019**, 16 Jan. 2019.
Article: <https://stars.library.ucf.edu/ucf-forum/339/>.
Pod-cast: <https://soundcloud.com/user-939830138/ucf-forum-stephen-m-kuebler-and-jonathan-beever-120>.
This article was also carried as:
 - 1) S. M. Kuebler and J. Beever, "Who in society should these new self-driving cars be programmed to protect?" Brevard Business News, 4 Feb. 2019, p. 4 (BrevardBusinessNews.com);
 - 2) S. M. Kuebler and J. Beever, "UCF Forum: Who should self-driving cars be programmed to protect?" Seminole County Regional Chamber of Commerce, January 16, 2019, <https://www.seminolebusiness.org/news/details/ucf-forum-who-should-self-driving-cars-be-programmed-to-protect>.
7. **S. M. Kuebler** and J. Beever. "Following rules and doing the right thing aren't necessarily the same." *UCF Forum* **2018**, 14 Nov. 2018.

Article: <https://stars.library.ucf.edu/ucf-forum/329/>.

Pod-cast: <https://soundcloud.com/user-939830138/ucf-forum-stephen-kuebler-and-jonathan-beever>.

This article was also carried as S. M. Kuebler, J. Beever, "Following all the rules and doing the right thing aren't necessarily the same." *Brevard Business News*, 3 Dec. 2018, p. 4 (BrevardBusinessNews.com).

8. **S. M. Kuebler** and J. Beever. "Can't we make better decisions to ensure ethical outcomes?" *UCF Forum* **2018**, 9. Sept. 2018.

Article: <https://stars.library.ucf.edu/ucf-forum/321/>.

Pod-cast: <https://soundcloud.com/user-939830138/stephen-kuebler-and-jonathan-beever>.

9. **S. M. Kuebler**. "Should faculty focus on being public intellectuals, or creating them?" Invited contribution published in *UCF Faculty Focus*, D. S. Murphree, Ed. Karen L. Smith Faculty Center for Teaching and Learning (Orlando, FL, 2015, Vol. 14, pp. 2-4).

LEADERSHIP

- Co-Founding Associate Director, UCF Center for Ethics Aug 2019 - present
- Faculty Fellow for Student Success in Chemistry, College of Science, UCF Jan 2023 – Dec 2024
 Leading Chemistry faculty in an effort to improve student-performance and course-completion rates in the sequence Intro-Chem → Chem-1 → Chem-2 → Organic-1 → Organic-2 → Biochemistry.
- Interim Assistant Vice President of Research & Commercialization 9 Aug 2012 - 31 Aug 2013
 Office of Research & Commercialization, UCF.
- COACHE Innovation Awardee in Years 1, 2, & 3 (Faculty Excellence, UCF) 2017 - 2020
 Awarded funding for project with Dr. Jonathan Beever (Philosophy, UCF) to explore the ethics landscape at UCF and develop workshops and other activities that cultivate the institution's culture of ethics in research.
<https://facultyexcellence.ucf.edu/coache-innovation-awards>.
- Editorial Board Member, *Journal of Experimental Nanoscience* (Taylor & Francis) 2008 - present
<http://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=tjen20>
- Associate Editor, *Journal of Optical Microsystems* (SPIE) 2020 - present
- Associate Editor, *Journal of Micro/Nanolithography, MEMS, and MOEMS* (SPIE) 2008 - 2020
<https://www.spiedigitallibrary.org/journals/journal-of-micro-nanolithography-mems-and-moems/editorial-board?SSO=1>
- Chaired/co-organized over 30 conferences and symposia (*see Conf. and Symp. Organized*)
- Co-organized/led over 50 workshops (*see Workshop Organization and Service*)
- Immediate Past-Chair, Orlando Sect. of American Chemical Society (ACS) Jan 2013 - Dec 2013
- Chair, Orlando Section of ACS Oct 2011 - Dec 2012
- Chair-Elect, Orlando Section of ACS Jan 2011 - Oct 2011
- Secretary, Orlando Section of ACS Jan 2010 - Dec 2010
- Outreach Coordinator, Orlando Section – ACS Jan 2009 - Oct 2010
- Chair, ChemEd-Research Search Committee, Chem. Dept., UCF 2018/2019
- Chair, Organic Chemistry Search Committee, Chem. Dept., UCF 2016 - 2017
- Chair, Biochemistry Search Committee, Chem. Dept., UCF 2015 - 2016
- Asst. Scout Master, Boy Scout Troop 58, Central Florida Council, Scouts BSA Aug 2022 - present
- Cub Master and multiple other leadership positions, Scout Pack 3058, 2017 - 2022
 Central Florida Council, Scouts BSA

ADMINISTRATIVE SERVICE

FACULTY FELLOW FOR STUDENT SUCCESS IN CHEMISTRY

College of Science, UCF

Jan 2023 - Dec 2024

- Led Chemistry faculty in effort to improve student-performance and course-completion rates in the sequence Intro-Chem → Chem-1 → Chem-2 → Organic-1 → Organic-2 → Biochemistry.
- Supervised graduate research assistant analyzing student outcomes and risk-factors that affect course-completion rates.
- Coordinated General-Chemistry Committee and gen-chem instructional faculty.
- Developed a *General Chemistry Instructors Guide* that collates all department, college, and university policies and best practices.
- Served as liaison for Chemistry to College of Undergraduate Studies and other units working to improve undergraduate course-completion rates.
- Reported biweekly to COS dean on project outcomes.
- Percentage of students earning passing grades (“A”, “B”, or “C”) in lower-level chemistry courses was improved (circa 5%) and to the satisfaction of the dean of College of Sciences.

CO-FOUNDER and ASSOCIATE DIRECTOR, UCF CENTER for ETHICS (C4E)

UCF Office of Research (Univ-level center)

Aug. 2019 - present

- <https://ethicscenter.research.ucf.edu/>
- Co-administration of C4E activities and supervision of interns, with Dr. Jonathan Beever.
- Director, *Ethically Speaking* seminar series.
- Co-leading ethics workshops for students, faculty, and administrators across campus.
- Developing C4E proposals and directing externally funded research.
- Drafting peer-reviewed publications, reports, and other C4E works.

INTERIM ASSISTANT VP for RESEARCH

UCF Office of Research (ORC)

Aug 2012 - Aug 2013

- Served as a liaison between Centers & Institutes (C&I) and Academic Affairs. Duties included reviewing content of C&I Annual Evaluation Standards and Procedures, making recommendations for changes, helping with C&I HR related issues, coordinating the submission of C&I Annual reports, etc.
- Coordinated sabbatical review process for faculty from C&I and Small Colleges.
- Served as the ORC representative on the university Program Review Committee for external review of academic programs.
- Served as the ORC representative in the university Policies and Procedures committee.
- Supported faculty in the proposal development process (e.g., NSF Materials Research Instrumentation Grants and NSF CAREER grants).
- Co-led internal review of proposals for limited-submission programs.
- Served as ORC representative to the UCF Emergency Operations Center.
- Coordinated UCF's submission for the inaugural Innovation and Economic Prosperity Award (IEPA) administered by the Association of Public and Land-Grant Universities (APLU).
- Organized ORC's "Select Focus Group on UCF Innovation and Economic Development" (28 June 2013). Stakeholders from academia, industry, government, and local economic development

councils were assembled to assess and discuss UCF strengths and weaknesses in economic development, and to propose means for improvement. This activity was organized as part of UCF participation in the 2013 APLU-IEPA competition.

- Responsible for assisting with the professional development of post-doctoral associates at UCF.
- Designated as UCF's Councilor (campus representative) for the Oak Ridge Association of Universities (ORAU) and supported all program submissions from UCF to ORAU.
- Assisted the VP of Research with data analysis, report preparation, and representation at meetings as needed (e.g., Provost's Direct-Report Meetings, University Research Council meetings).
- Notable accomplishments
 - UCF was selected as a finalist for the APLU-IEPA competition and awarded a nationally-recognized designation as an "APLU Innovation and Economic Prosperity University".
 - Developed a one-hour presentation on UCF/State-University-System policies and guidelines on Responsible Conduct, Compliance, and Professional Ethics that was presented by the VP for Research to faculty and staff across all units on campus.

PROFESSIONAL SERVICE and MEMBERSHIP

PROFESSIONAL MEMBERSHIPS

- Senior Member, SPIE – Soc. of Photo-Optical Instrumentation Engineers.
(Top 13% in the leading international professional organization for optical engineers)
- American Chemical Society
- Materials Research Society
- Senior Member, Optical Society of America
- Member, Association for Practical and Professional Ethics (APPE)

CONFERENCE and SYMPOSIA ORGANIZATION

1. Member of Organizing Committee for "Novel Patterning Technologies 2025," (PC13427) held as part of SPIE Advanced Lithography + Patterning 2025 (23 - 27 Feb 2025, San Jose, CA); <https://www.spiedigitallibrary.org/conference-proceedings-of-spie/PC13427>.
2. Member of Organizing Committee for "Novel Patterning Technologies 2024," (#AL104) held as part of SPIE Advanced Lithography + Patterning 2024 (25 - 29 Feb 2024, San Jose, CA); <https://spie.org/documents/CFP-Flyers/AL24/AL104call.pdf>.
3. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XVII", conference #12898 held as part of Photonics West 2024 - OPTO (27 Jan. – 1 Feb. 2024, San Francisco, CA); <https://spie.org/Publications/Proceedings/Volume/12898>.
4. Member of Organizing Committee for "Novel Patterning Technologies," conference #12497 held as part of SPIE Advanced Lithography + Patterning 2023 (26 Feb. – 2 Mar. 2023, San Jose, CA).
5. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XVI", conference #12433 held as part of Photonics West 2023 - OPTO (28 Jan. – 2 Feb. 2023, San Francisco, CA); <http://spie.org/PW23O/conferencedetails/advanced-fabrication-micro-nano>.
6. Member of Organizing Committee for "Novel Patterning Technologies," conference AL102 held as part of SPIE Advanced Lithography (24 - 28 Apr. 2022, San Jose, CA), <https://spie.org/conferences-and-exhibitions/advanced-lithography-and-patterning?SSO=1>.
7. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XV", a conference held as part of Photonics West 2022 - OPTO (22 - 27 Jan 2022, San Francisco, CA); <http://spie.org/PW22O/conferencedetails/advanced-fabrication-micro-nano>.
8. Member of Organizing Committee for "Novel Patterning Technologies," conference AL102 held as part of SPIE Advanced Lithography (22 - 26 Feb. 2021, held remotely).
9. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XIV", a conference held as part of Photonics West 2021 - OPTO (6 - 11 March 2021, San Francisco, CA); <http://spie.org/PW21O/conferencedetails/advanced-fabrication-micro-nano>.
10. Member of Organizing Committee for "FiO 1: Optical Design, Fabrication and Instrumentation," a conference held as part of Frontiers in Optics: the 104th OSA Annual Meeting and Exhibit/Laser Science Conference (Optical Society of America, 14 - 17 Sept. 2020, held remotely).

11. Member of Organizing Committee for "Novel Patterning Technologies for Semiconductors, MEMS/NEMS and MOEMS 2020," conference AL102 held as part of SPIE Advanced Lithography (23 - 27 Feb. 2020, San Jose, CA).
12. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XIII", a conference held as part of Photonics West 2020 - OPTO (1 - 6 Feb. 2020, San Francisco, CA), <http://spie.org/PW200/conferencedetails/advanced-fabrication-micro-nano>.
13. Member of Organizing Committee for "FiO 1: Optical Design, Fabrication and Instrumentation," a conference held as part of Frontiers in Optics: the 103rd OSA Annual Meeting and Exhibit/Laser Science Conference (Optical Society of America, 15 - 19 Sept. 2019, Washington, D. C.).
14. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XII", a conference held as part of Photonics West 2019 - OPTO (2 - 7 Feb. 2019, San Francisco, CA), <http://spie.org/PW190/conferencedetails/advanced-fabrication-micro-nano>.
15. S. M. Kuebler, Chair, Session 2: "OLEDs, Organic Photonic Materials and Devices XXI," held as part of SPIE's Photonics West 2019 (2 - 7 Feb. 2019, San Francisco, CA).
16. Member of Organizing Committee for "*Semiconductor Nanostructures towards Electronic and Optoelectronic Device Applications - VII*", a symposium proposed for the Materials Research Society 2019 E-MRS Spring Meeting (Nice, France, 27-31 May 2019).
17. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics XI", a conference held as part of Photonics West 2018 - OPTO (27 Jan. - 1 Feb. 2018, San Francisco, CA).
18. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics X", a conference held as part of Photonics West 2017 - OPTO (28 Jan. - 2 Feb. 2017, San Francisco, CA).
19. Co-organizer: "Third-Annual Florida Chemistry Conclave: Materials Chemistry Symposium" (Florida Institute of Technology, 27 Jan. 2018).

Kuebler co-founded The Florida Chemistry Conclave with advisee Lauren Gandy (BS, Forensic Sci, 2016; ACS@UCF president and vice-president) to be an annually-themed professional-development workshop that brings 50 - 100 chemistry undergraduates together from across Florida for a day filled with research, networking, volunteering, and fun. The first two Conclaves were hosted in 2016 and 2017 at UCF. The event is co-sponsored by the Orlando Section of ACS, Stetson University, and UCF's Department of Chemistry, College of Sciences, Graduate College, College of Engineering, and CREOL, The College of Optics and Photonics. The event changes theme annually and hosting rotates biannually between institutions across the state. The Conclave has been supported by "Inter-Chapter Relations Grants" awarded by the national ACS (2016 & 2017) and authored by Kuebler with students and faculty co-leads at partnering institutions.
20. Co-organizer: The "Second Annual Florida Chemistry Conclave: Ethics and Responsible Conduct in Chemistry" (UCF, 28 Feb. 2017).
21. Founder and co-organizer: The "First Annual Florida Chemistry Conclave" (UCF, 2 Apr. 2016).

22. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics IX", a conference held as part of Photonics West 2016 - OPTO (13 - 18 Feb. 2016, San Francisco, CA).
23. Member of Program Committee for "FiO 1: Optical Design, Fabrication and Instrumentation," Subcommittee of the Frontiers in Optics/Laser Science 2015 Conference (Optical Society of America), <https://www.frontiersinoptics.com/library/images/fio/Archives/FiOLS2015.pdf>.
24. Member of Organizing Committee for "*Semiconductor Nanostructures towards Electronic and Optoelectronic Device Applications - V*", Materials Research Society 2015 E-MRS Spring Meeting (Lille, France, 11-15 May 2015), <https://www.european-mrs.com/2015-spring-symposium-i-european-materials-research-society>.
25. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics VIII", a conference held as part of Photonics West 2015-OPTO.
26. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics III", conference #MF106 at Photonics West 2010, SPIE (23-28 Jan. 2010, San Jose, CA). W. V. Schoenfeld, J. J. Wang, M. Loncar, T. J. Suleski, Eds.
27. Chair of spring 2009 Materials Research Society Symposium BB: "Material Systems and Processes for Three-Dimensional Micro- and Nano-Scale Fabrication and Lithography".
28. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics II", conference #MF106 at Photonics West 2009, SPIE (24-29 Jan. 2009, San Jose, CA). T. J. Suleski, W. V. Schoenfeld, J. J. Wang., Eds.
29. Member of Organizing Committee for "Advanced Fabrication Technologies for Micro/Nano Optics and Photonics", conference #6883 at Photonics West 2008 (19-24 Jan. 2008, San Jose, CA). T. J. Suleski, W. V. Schoenfeld, J. J. Wang., Eds., SPIE, Vol. 6883.
30. Member of Organizing Committee for "Micromachining Technology for Micro-Optics and Nano-Optics V and Microfabrication Process Technology XII", conference #6462 at Photonics West 2007 (22 - 24 Jan. 2006, San Jose, CA). E. G. Johnson, G. P. Nordin, T. J. Suleski, Eds., SPIE, Vol. 6462.
31. Chair of "Micro- and Nano-Scale Patterning Via Multi-Photon Activated Processes", a special symposium organized for the 231st National Meeting of the American Chemical Society (26-30 Mar. 2006, Atlanta, GA). Presenters included internationally renowned scientists from Japan (S. Maruo, Yokohama Natl. Univ.; S. Kawata, Osaka Univ.), the US (C. Ober, Cornell; J. Fourkas, Univ. Maryland; J. Perry, Georgia Tech; P. Campignola, Univ. Conn.), Germany (M. Wegener, Univ. Karlsruhe), and the UK (R. G. Denning, Oxford). Travel support for distinguished international speakers was provided by competitive award of a Type-SE grant from the Petroleum Research Fund (SE-44579).
32. Member of Organizing Committee for "Micromachining Technology for Micro-Optics and Nano-Optics IV", conference #6110 at Photonics West 2006 (23-25 Jan. 2006, San Jose, CA). E. G. Johnson, G. P. Nordin, T. J. Suleski, Eds., SPIE, Vol. 6110.
33. Member of Organizing Committee for "Micromachining Technology for Micro-Optics and Nano-Optics III", conference #5720 at Photonics West 2005 (24-29 Jan. 2005, San Jose, CA). E. G. Johnson, G. P. Nordin, T. J. Suleski, Eds., SPIE, Vol. 5720.

WORKSHOP ORGANIZATION, PRESENTATIONS, and SERVICE

Several of the workshops listed below were co-organized and led by Kuebler and Dr. Jonathan Beever (Philosophy) as part of a campus-wide initiative they launched in 2017 to *cultivate a culture of ethical and responsible conduct in research at UCF*. Participants discussed their own experiences with ethics in research and explored ways they could enhance ethical cultures within their own research programs, formal teaching, departments, colleges, and programs. Each workshop was customized to match the roles and backgrounds of the attendees.

1. S. M. Kuebler. "Doing the Right Thing: What Every Graduate Student Should Know about Research Misconduct."

This is a core workshop in the UCF College of Graduate Studies "Pathways to Success" program (<https://graduate.ucf.edu/pathways-to-success/>). Students learn the 12 core areas of responsible conduct of research (RCR) through a combination of case studies and facilitated discussion. Emphasis is placed on recognizing the historical foundations of RCR within the broader landscape of ethics. Students learn how to leverage communication and disclosure for the ethical and responsible conduct of research. Since taking over this course in 2017, Kuebler re-designed and continually updates this core-workshop. *The workshop has been held over 70 times, reaching typically 40 students per sitting*, on 1) 29 Aug 2017, 2) 27 Sept 2017, 3) 19 Oct 2017, 4) 30 Jan 2018, 5) 7 Mar 2018, 6) 5 Apr 2018, 7) 15 May 2018, 8) 1 Jun 2018, 9) 28 Jun 2018, 10) 11 Sept 2018, 11) 14 Sept 2018, 12) 2 Oct 2018, 13) 8 Nov 2018, 14) 17 Jan 2019, 15) 10 Feb 2019, 16) 26 Mar 2019, 17) 29 Mar 2019, 18) 14 May 2019, 19) 6 Aug 2019, 20) 20 Sept 2019, 21) 13 Nov 2019, 22) 6 Dec 2019, 23) 24 Jan 2020, 24) 14 Feb 2020, 25) 20 Mar 2020, 26) 28 May 2020, 27) 25 Jun 2020, 28) 30 Jul 2020, 29) 10 Sept 2020, 30) 8 Oct 2020, 31) 12 Nov 2020, 32) 18 Jan 2021, 33) 15 Feb 2021, 34) 15 Mar 2021, 35) 19 May 2021, 36) 16 Jun 2021, 37) 14 Jul 2021, 38) 14 Sept 2021, 39) 14 Oct 2021, 40) 16 Nov 2021, 41) 19 Jan 2022, 42) 22 Feb 2022, 43) 29 Mar 2022, 44) 25 May 2022, 45) 22 Jun 2022, 46) 26 Jul 2022, 47) 23 Sept 2022, 48) 7 Oct 2022, 49) 4 Nov 2022, 50) 27 Jan 2023, 51) 10 Feb 2023, 52) 24 Mar 2023, 53) 23 May 2023, 54) 19 Jun 2023, 55) 18 Jul 2023, 56) 14 Aug 2023, 57) 10 Oct 2023, 58) 28 Nov 2023, 59) 15 Feb 2024, 60) 12 Mar 2024, 61) 28 Mar 2024, 62) 10 Apr 2024, 63) 20 Jun 2024, 64) 9 Jul 2024, 65) 25 Jul 2024, 66) 3 Oct 2024, 67) 23 Oct 2024, 68) 27 Feb 2025, 69) 14 Mar 2025, 70) 2 Apr 2025, 71) 15 Apr 2025; 72) 2 Jun 2025; 73) 31 Jul 2025; 74) 8 Sept 2025.

2. S. M. Kuebler, "Doing the Right Thing... Frameworks for Ethical and Responsible Conduct of Research."

This research-ethics workshop has been delivered many times, both with and without collaborator Dr. Jonathan Beever. Attendees include participants in *UCF Research Week* (ca. 30 students per offering); recipients of the *Summer Undergraduate Research Fellowship* (ca. 50 students per offering); participants in REU programs hosted at UCF; students enrolled in *Introduction to Research I* (IDS 3913), the *UCF Summer Research Academy* (ca. 120 participants), and students completing *Honors Undergraduate Thesis* ("HUT", ca. 100 students per year), with the last three led out of the Office of Undergraduate Research); and colleagues' undergraduate and graduate courses.

During 2022/2023 it was delivered to 100 participants in the Honors Undergraduate Thesis (HUT) and the LEAD Scholars program (29 and 30 Mar. 2023).

During 2023/2024 it was led on: Saturday 22 July 2023 for undergrads in *Summer Research Academy*; on 1 Nov 2023 (ca. 25 students), 2 Nov 2023 (ca. 25 students), and 6 Mar 2024 (ca. 25

students) for IDS 3913; and 19 Sept 2023 for graduate students in Dr. Laurence Vonkalm's graduate biology course *Professional Development I* (PCB 6095, 12 students).

In summer 2024, the workshop supported students in the following REU sites at UCF:

1. “NSF National Science Foundation REU Site: Conservation, Restoration and Communication;” NSF award no. 2149866; PI: Dr. Linda Walters, co-PI: Dr. Kate Mansfield, 10 attendees; https://www.nsf.gov/awardsearch/showAward?AWD_ID=2149866&HistoricalAwards=false (23 May 2024).
2. “REU Site: Research Experience for Undergraduates in Applied and Computational Mathematics;” NSF award no. 2243771; PI: Katuscia Teixeira; 9 attendees; https://www.nsf.gov/awardsearch/showAward?AWD_ID=2243772 (29 May 2024).
3. “REU Site: Engineering and Nanoscience of Materials and Device Applications in Biotechnology and Medicine;” NSF award no. 1560007; PIs: Sudipta Seal and Kausik Mukhopadhyay; 7 attendees; <https://nsfreunano.research.ucf.edu/> (29 May 2024).
4. “NSF Research Experiences for Undergraduates Site: Advanced Technologies for Hypersonic, Propulsive, Energetic, and Reusable Platforms;” NSF award no. 1852130; PI: Ali Gordon, Jeffrey Kauffman; 13 attendees; <https://cater.cecs.ucf.edu/hyper/> (29 May 2024).
5. “REU Site: Research in Materials for Energy Applications;” NSF award no. 2348914; PI: Talat Rahman; Co-PI: Mihai Vaida; 11 attendees; https://www.nsf.gov/awardsearch/showAward?AWD_ID=2348914&HistoricalAwards=false (29 May 2024).

During 2024/2025 it was led for students in: *Summer Research Academy* on 24 May 2024 (ca. 30 students) and *Saturday* 20 July 2024 (ca. 100 students); *Fulbright US-Orientation Program* on 29 Jul 2024 (ca. 20 scholars); *Honors Undergraduate Thesis* on 26 Aug. and 3 Sept. '24 (ca. 100 students); Dr. Laurence Vonkalm's graduate biology course *Professional Development I* on 24 Sept 2024 (PCB 6095, 12 students); *F-LEARN Program* on 1 Oct 2024 (ca. 15 students); *T-LEARN Program* on 8 Oct 2024 (ca. 15 students); *Introduction to Academic Research* on 23 Oct 2024 (SLS 3523, 15 students); *Honors Undergraduate Thesis* (“HUT”) on 27 Jan 2025, ca. 20 students); *EXCEL Program* on 18 Feb 2025 (ISC 2055, ca. 50 students); Dr. Laurence Vonkalm's graduate biology course *Professional Development I* (PCB 6095, 16 students); and *Introduction to Academic Research* on 9 Apr 2025 (SLS 3523, ca. 15 students).

In summer 2025, the workshop supported circa 100 students across REU sites at UCF:

1. “NSF REU Site: Research Experiences in Pediatric Prosthetics;” NSF award no. 2349222; PI: Dr. Albert Manero, co-PI: Dr. Damla Turgut; <https://limbitless-solutions.org/reu> (3 Jun 2025).
2. “NSF Research Experiences for Undergraduates Site: Advanced Technologies for Hypersonic, Propulsive, Energetic, and Reusable Platforms;” NSF award no. 1852130; PI: Ali Gordon, Jeffrey Kauffman; <https://cater.cecs.ucf.edu/hyper/> (3 Jun 2025).
3. “REU Site: Research in Materials for Energy Applications;” NSF award no. 2348914; PI: Talat Rahman; Co-PI: Mihai Vaida; 11 attendees; https://www.nsf.gov/awardsearch/showAward?AWD_ID=2348914&HistoricalAwards=false (3 Jun 2025).

4. "REU Site: Research Experience for Undergraduates in Applied and Computational Mathematics;" NSF award no. 2243771; PI: Katuscia Teixeira; 9 attendees; https://www.nsf.gov/awardsearch/showAward?AWD_ID=2243772 (3 Jun 2025).
5. "REU Site: "Unleashing the Light: Building the Future of Laser Technologies;" NSF award no. 2349439; PI: Miguel A. Bandres, Co-PI: Rodrigo Amezcua-Correa; https://www.nsf.gov/awardsearch/showAward?AWD_ID=2349439 (3 Jun 2025).
6. "REU Site: Engineering and Nanoscience of Materials and Device Applications in Biotechnology and Medicine"; NSF award no. 1560007; PIs: Sudipta Seal and Kausik Mukhopadhyay; 7 attendees; <https://nsfreunano.research.ucf.edu/> (3 Jun 2025).

During 2025/2026, the workshop was led for students in: *Summer Undergraduate Research Fellowship (SURF)* on 23 May 2024 (ca. 30 students); *Summer Research Academy* on Saturday 19 July 2025 (ca. 100 students); Honors Undergraduate Thesis ("HUT") on 8 Sept 2025, ca. 90 students); Honors Undergraduate Thesis ("HUT") on 9 Sept 2025, ca. 60).

7. "AI Transformations: Navigating the Future of Work and Career Pathways."

A UCF Public Policy Event organized by the Office of Civil Discourse and Engagement, featuring **Dr. Stephen M. Kuebler**, Louis A. Mitchell, III, Dr. Amanda Pacheco, Melissa Stires, and hosted by Steve Mort, Executive Producer of News Night, WUCF-TV (17 April 2024, UCF, Orlando, FL, https://www.youtube.com/watch?v=C_Nn5TFYQ5E).



8. **S. M. Kuebler**. "Writing in my profession." UCF Center for Writing Excellence (20 Oct. 2022).

Delivered an oral presentation on why writing is important across disciplines, delivered to students, staff, and faculty attending the NCTE National Day on Writing "pop-up" reception organized by Dr. Laurie Pinkert, UCF Center for Writing Excellence (20 Oct. 2022).

9. **S. M. Kuebler**. "Rebooting our Understanding in Chemistry of Falsification, Fabrication, and Plagiarism (FFP)." Chemistry Department, UCF (multiple dates).

This workshop teaches the principles of FFP, professional behavior, and their ethical underpinnings. The workshop reaches 50+ UCF Chemistry graduate students per run and has been conducted on the following dates: 19 Apr 2019, 7 Apr 2020, and 5 Mar 2021.

10. **S. M. Kuebler**. "How to Study Chemistry" workshop, UCF Chemistry (multiple dates).

This workshop teaches undergraduates tried-and-true active-study methods – like notetaking by hand and self-assessment – that push new knowledge into long-term memory, but which intriguingly are unknown to most students. The workshop was first offered three (3) times in spring 2023, from 5:00 pm – 6:00 pm on **1-3**) 17, 18, and 19 January 2023. The sessions were attended by approximately 100 students in Chemistry Fundamentals II (CHM 2046.0001). Also offered on: **4**) 22 May '23, **5**) 23 May '23, **6**) 24 May '23, **7**) ~300 students in *Introduction to Chemistry* (CHM 2025 on 22 Aug '24, instructed by Dr. Andres Campiglia); **8**) 20 students in the *Fall 24 Organic Chemistry*

Academic Recovery Program (5 Sept. 2024); **9)** ca.30 students in Chemistry Fundamentals II (CHM 2046, 14 Jan 2025); **10)** ca. 30 students in Chemistry Fundamentals II (CHM 2046, 15 Jan 2025).

11. ***The "Be Better Club": An informal ethics discussion group***

Students, faculty, and staff interested in talking with us about contemporary ethical issues are welcome to participate in the bi-weekly "Be Better Club," an informal but informed bi-weekly discussion group. Topics are chosen by community interest and driven by members' own thinking.

The **UCF Center for Ethics** hosts the ***Be Better Club***, a discussion group of students, faculty, and staff interested in contemporary ethical issues and their implications on our lives and communities.

Fall 2022 – Spring 2023 DISCUSSIONS
<https://ucf.zoom.us/j/94911033007>



1. J. Beever and S. M. Kuebler. "Be Better Club: The Ethics of College Admissions."

The UCF Center for Ethics hosted a discussion asking: Who should be admitted into universities? Should universities prioritize merit over need? Who should receive financial aid and what should this aid look like? This conversation addressed important ethical dilemmas that arise in the college admissions process. Online discussion, Center for Ethics, University of Central Florida, 10 Apr 2024.

2. J. Beever and S. M. Kuebler. "Be Better Club: Decolonizing Higher Ed."

What is the legacy of colonialism in higher education? Is colonialism still a part of the higher ed curriculum? What demands does decolonization make on universities and how are these related to questions of social justice? This conversation addressed whether universities have an ethical obligation to decolonize, who is responsible for taking action in that direction, and more. Online discussion, Center for Ethics, University of Central Florida, 27 Mar 2024.

3. J. Beever and S. M. Kuebler. "Be Better Club: Campus Speech."

Is college campus speech free? Are universities indoctrinating their students? Should university students be more tolerant of different perspectives and opinions? Is academic freedom under threat? This conversation addressed the state of free speech on college campuses and its relation to central democratic values like autonomy and liberty. Online discussion, Center for Ethics, University of Central Florida, 3 Mar 2024.

4. J. Beever and S. M. Kuebler. "Be Better Club: Teaching Divisive Concepts."

Why are certain concepts divisive? How should they be taught? Should we be teaching divisive concepts in higher education? This conversation addressed the above questions, the ethics of teaching in higher education, and more. Online discussion, Center for Ethics, University of Central Florida, 21 Feb 2024.

5. J. Beever and S. M. Kuebler. "Be Better Club: Ethics Education for Computer Scientists."

How should we teach ethics to computer science students to ensure a responsible design of AI? How do we instill a motivation in students to become responsible engineers? This conversation was

address these and other pedagogy-relevant questions about computer science education." The UCF Center for Ethics hosted a discussion about the boundaries of disability? How do they challenge questions of responsibility and justice? Online discussion, Center for Ethics, University of Central Florida, 7 Feb 2024.

6. J. Beever and S. M. Kuebler. "Be Better Club: Teaching in the Age of AI."

What are the aims of higher education in the age of AI? How does AI shift our understanding of academic integrity? This conversation addressed these and other questions about teaching in the age of AI. Online discussion, Center for Ethics, University of Central Florida, 24 Jan 2024.

7. J. Beever and S. M. Kuebler. "Be Better Club: AI & Moral Character."

Wealth tax, universal basic income, automation and technology. What makes wealth distribution a justice issue? Online discussion, Center for Ethics, University of Central Florida, 8 Nov 2024.

8. J. Beever and S. M. Kuebler. "Be Better Club: AI & Environments."

Are we trading natural environments for artificial ones? Carbon footprints, changing climates, and energy usage are each implicated in big data. And few are bigger than AI. Online discussion, Center for Ethics, University of Central Florida, 27 Oct 2024.

9. J. Beever and S. M. Kuebler. "Be Better Club: AI & Data Privacy."

We used to worry about privacy. Do we still? Should we? Thinking AI challenges to data privacy will drive this conversation. Online discussion, Center for Ethics, University of Central Florida, 11 Oct 2024; <https://www.youtube.com/watch?v=9EvyN62E2DU>.

10. J. Beever and S. M. Kuebler. "Be Better Club: AI & Collaboration."

How can AI support ethical collaboration? We talked co-authors, collaborators, resources, and ownership of datafied ideas. Online discussion, Center for Ethics, University of Central Florida, 29 Sept 2024.

11. J. Beever and S. M. Kuebler. "Be Better Club: AI & Research Participants."

When are research subjects actually research participants? Individual persons are of key ethical concern in research. AI increases the visibility of these concerns. How should we handle informing and consenting participants in big data ecosystems? Online discussion, Center for Ethics, University of Central Florida, 13 Sept 2023.

12. J. Beever and S. M. Kuebler. "Be Better Club: AI & Epistemic Justice."

How is the ethical coupled to the epistemic? Whose knowledge is included or excluded in conversations about AI? What knowledge is represented by AI? Online discussion, Center for Ethics, University of Central Florida, 1 Sept 2023.

13. J. Beever and S. M. Kuebler. "Be Better Club: Defining Disability."

The UCF Center for Ethics hosted a discussion about the boundaries of disability. How do they challenge questions of responsibility and justice? Online discussion, Center for Ethics, University of Central Florida, 25 Apr 2023.

14. J. Beever and S. M. Kuebler. "Be Better Club: Thought Experiments."

The UCF Center for Ethics hosts a discussion about thought experiments in ethics. Online discussion, Center for Ethics, University of Central Florida, 1 Apr 2023; <https://www.youtube.com/watch?v=p9BxhuKN2Mk>.

15. J. Beever and S. M. Kuebler. "Be Better Club: Wealth Inequality."

In this session of the Be Better Club, hosted by the UCF Center for Ethics, we discussed wealth tax, universal basic income, automation and technology. What makes wealth distribution a justice issue? Online discussion, Center for Ethics, University of Central Florida, 28 Feb 2023.

16. J. Beever and S. M. Kuebler. "Be Better Club: Water and Resource Equity."

In this session of the Be Better Club, hosted by the UCF Center for Ethics, we discussed water and resource equity and access, through a series of case studies and example. Online discussion, Center for Ethics, University of Central Florida, 31 Jan 2023; https://www.youtube.com/watch?v=wO6Z_ekff6k.

17. J. Beever and S. M. Kuebler. "Be Better Club: Florida HB 7."

In this session of the Be Better Club, we have a conversation about Florida HB 7 and Critical Race Theory, with staff, students, and faculty participating. Online discussion, Center for Ethics, University of Central Florida, 29 Nov 2022; https://www.youtube.com/watch?v=_ofn7J1mnXM.

18. J. Beever and S. M. Kuebler. "Be Better Club: Public-Private Partnerships."

In this session of the Be Better Club, we have a conversation about Florida HB 7 and Critical Race Theory, with staff, students, and faculty participating. Online discussion, Center for Ethics, University of Central Florida, 25 Oct 2022; <https://www.youtube.com/watch?v=XUym03B1PrQ>.

19. J. Beever and S. M. Kuebler. "Be Better Club: Extraterrestrial Environmentalism."

What do we do about space trash, off-planet pollutants, and interplanetary invasive species? What is an environmental ethics of space? Online discussion, Center for Ethics, University of Central Florida, 27 Sept 2022.

20. J. Beever and S. M. Kuebler. "Be Better Club: Personhood."

In this discussion, our community talks about rights and personhood: how does a shift toward pursuing legal personhood for nonhuman entities shift the moral terrain? Online discussion, Center for Ethics, University of Central Florida, 30 Aug 2022; https://www.youtube.com/watch?v=KsXS_95kmjY.

21. J. Beever and S. M. Kuebler. "Be Better Club:" Ethics of Chatbots.

UCF's Dr. Stevie Carnell discusses the ethical issues associated with building, implementing, and using chatbots. Online discussion, Center for Ethics, University of Central Florida, 27 Apr 2022; <https://www.youtube.com/watch?v=UfTeshLHfQ8>.

22. J. Beever and S. M. Kuebler. "Be Better Club: The Bystander Effect."

When someone is injured or there is an emergency, what are the ethics of doing something or doing nothing? Where do social responsibility, concern for self, and duty to others butt heads? Online discussion, Center for Ethics, University of Central Florida, 12 Apr 2022; <https://www.youtube.com/watch?v=KMyTQ00k5Mk>.

23. J. Beever and S. M. Kuebler. "Be Better Club:" Baby Xenobots and Other Potential Horrors."

So xenobots procreated... We'll talk implications, both positive and negative, of the rise of artificial life. Online discussion, Center for Ethics, University of Central Florida, 30 Mar 2022; <https://youtu.be/luoCdohmcnY>.

24. J. Beever and S. M. Kuebler. "Be Better Club: AI, and You."

Like the old western, there's good, bad, and ugly here. We'll talk them through and see where you stand. Online discussion, Center for Ethics, University of Central Florida, 16 Mar 2022; <https://www.youtube.com/watch?v=P5yIe2BDWak>.

25. J. Beever and S. M. Kuebler. "Be Better Club: Rise of the Robots."

As robotics becomes more advanced, robots play a bigger and bigger role in tasks that humans traditionally have done. What are the ethical limits, if any, to their rise? Online discussion, Center for Ethics, University of Central Florida, 28 Feb 2022; <https://youtu.be/joGIW5V4DBc>.

26. J. Beever and S. M. Kuebler. "Be Better Club: Morally Neutral or Morally Neutered?"

The volume is up in the critique against perceived political bias in higher education. What gives? What does the future look like? Online discussion, Center for Ethics, University of Central Florida, 14 Feb 2022; <https://youtu.be/g0qEUnOw634>.

27. J. Beever and S. M. Kuebler. "Be Better Club: Data Scraping and the IRB."

What are the ethically relevant differences between data scraped from online social media and other human subjects data? Online discussion, Center for Ethics, University of Central Florida, 9 Nov 2021; <https://youtu.be/joGIW5V4DBc>.

28. J. Beever and S. M. Kuebler. "Be Better Club: AI and Autonomous Vehicles."

Autonomous systems challenge views of responsibility, blame, and agency. What should a future of ethical AI look like? Online discussion, Center for Ethics, University of Central Florida, 26 Oct 2021; <https://youtu.be/KeeQTvwYh0>.

29. J. Beever and S. M. Kuebler. "Be Better Club: Online Learning, Choice, and Equity."

Cameras on or off? Attending live or listening later? How do we balance engagement, privacy, and choice for students learning online? Online discussion, Center for Ethics, University of Central Florida, 12 Oct 2021; https://youtu.be/_qTwoEaDnGo.

30. J. Beever and S. M. Kuebler. "Be Better Club: Intellectual Property, Ownership, and Theft."

What are the ethical concerns around intellectual property? What are their implications in new FL legislation like FL HB 7017 and 1523? Online discussion, Center for Ethics, University of Central Florida, 28 Sept. 2021; <https://youtu.be/rvLWgwOLSA0>.

31. J. Beever and S. M. Kuebler. "Be Better Club: Intellectual Diversity, Free Speech, and Florida HB 233."

What's the relationship between intellectual diversity and free speech in academic contexts? Online discussion, Center for Ethics, University of Central Florida, 14 Sept 2021; https://youtu.be/phmqcB_6wbM.

32. J. Beever and S. M. Kuebler. "Be Better Club: Vaccines, Variants, and Uncertainty."

As we negotiate viral variants, what's the right thing to do? How do we deal with ongoing uncertainty about a changing risk landscape? Online discussion, Center for Ethics, University of Central Florida, 31 Aug 2021; <https://youtu.be/ZYAloMFnlgl>.

33. J. Beever and S. M. Kuebler. "Be Better Club: Autonomous Vehicles."

Online discussion of ethical issues surrounding AI and self-driving vehicles. Center for Ethics, University of Central Florida, 13 Apr 2021; <https://www.youtube.com/watch?v=7rageWoZ0P8>.

34. J. Beever and S. M. Kuebler. "Be Better Club: Social Media Ethics."

Online discussion of ethical issues surrounding social media. Center for Ethics, University of Central Florida, 30 Mar 2021; <https://www.youtube.com/watch?v=75rqjTS9zfc>.

35. J. Beever and S. M. Kuebler. "Be Better Club: Dr. Mark Satta."

The UCF Center for Ethics' Be Better Club, along with the Department of Philosophy, hosts Dr. Mark Satta (Wayne State) to talk about his work on epistemic trespassing, in the context of ethics, science, and knowledge. Center for Ethics, University of Central Florida, 16 Mar 2021; https://www.youtube.com/watch?v=_RMu5YL8_bE.

36. J. Beever and S. M. Kuebler. "Be Better Club: Vaccine Ethics."

The group discusses ethical issues associated with COVID-19 vaccination, including exemptions and changes to policies and practices. Center for Ethics, University of Central Florida, 2 Mar 2021; <https://www.youtube.com/watch?v=OS1puRzxdSI>.

37. J. Beever and S. M. Kuebler. "Be Better Club: Ethics with Podcasts."

Dr. Alison Kerr leads a discussion on ethics, pod casts, and plagiarism. Center for Ethics, University of Central Florida, 16 Feb 2021; <https://www.youtube.com/watch?v=9XrfZ7Np-PM>.

38. J. Beever and S. M. Kuebler. "Be Better Club: Ethics and Meritocracy."

Jose Vazquez discusses ethical issues around meritocracy. Center for Ethics, University of Central Florida, 18 Dec 2020; <https://www.youtube.com/watch?v=zUWCFapbu-g>.

39. J. Beever and S. M. Kuebler. "Be Better Club: Ethics and Religion."

Former UCF student Sterling Courtney leads a discussion on the intersections between ethics and religion. Center for Ethics, University of Central Florida, 11 Nov 2020; <https://www.youtube.com/watch?v=mEbtG7VvlMQ>.

40. J. Beever and S. M. Kuebler. "Be Better Club: Covid-19 and Social Justice."

Dr. Beever leads a discussion on ethical issues associated with the pandemic. Center for Ethics, University of Central Florida, 27 Oct 2020; https://www.youtube.com/watch?v=ZUtCwOOvH_Q.

41. J. Beever and S. M. Kuebler. "Be Better Club: Tweets and Power."

UCF Texts and Technology PhD student Marissa Salas leads a conversation on how tweets affect the balance of power and public opinion. Center for Ethics, University of Central Florida, 29 Sept 2020; <https://www.youtube.com/watch?v=awNA3hKAYvg>.

42. J. Beever and S. M. Kuebler. "Activities in the UCF Center for Ethics." 'AH-HA!' Moment! discussion series, UCF College of Arts and Humanities (31 Jul 2020).

Discussion, hosted by Dr. Nancy Stanlick, of the objectives and activities of the UCF Center for Ethics, <https://www.youtube.com/watch?v=nqiiQL6B8V8>.

43. S. M. Kuebler and J. Beever. "Ethics in a Pandemic." UCF Center for Ethics (22 Apr 2020).

Online discussion of ethical issues arising as society and organizations deal with the Covid-19 pandemic. https://youtu.be/eNC_AOTDjKY.

44. S. M. Kuebler, Workshop Invited-Speaker: "What a Journal Editor Looks for in a Publishable Manuscript." UCF Faculty Center for Teaching and Learning (19 Feb 2020).

Presentation and discussion held as part of a UCF writing workshop for STEM faculty led by Dr. Julie Donnelly (Post-Doctoral Scholar, UCF Faculty Center for Teaching and Learning) based on Wendy Belcher's "Writing Your Journal Article in 12 Weeks" workbook. Kuebler explained and answered questions on how to translate research into the peer-reviewed literature, from his perspective as Associate Editor of *Journal of Micro/Nano-Lithography*, *MEMS*, and *MOEMS* (SPIE).

45. S. M. Kuebler and J. Beever. "A BET you didn't know how important ethics is! Your good work has value." UCF College of Engineering (26 Nov 2019).

This mini-workshop for new faculty in the College of Engineering and Computer Science, UCF focused on how incorporating ethics into undergraduate and graduate student training fosters both student and faculty development across all areas of work.

46. S. M. Kuebler and J. Beever. "COS New-Faculty Workshop on Ethics in STEM" (UCF College of Sciences).

Workshop with new faculty hired into the UCF College of Sciences discussing the position of ethics in teaching, research, and mentoring as a faculty member. This workshop has been conducted on the following dates: 12 Oct 2017, 29 Mar 2019, 14 Oct 2019 and 3 Feb 2023.

47. S. M. Kuebler, "Life-Long Learning Opens Many Doors." ACS@UCF (23 Jan 2019).

This presentation on professional development and undergraduate research was delivered to the Student Chapter of the American Chemical Society of UCF.

48. J. Beever and S. M. Kuebler. "Cultivating Student Leadership of a Culture of Ethical Literacy and Responsible Conduct." UCF Student Development and Enrollment Services (14 Nov 2018)

A workshop organized to provide Diversity Education Units (<https://www.sdes.ucf.edu/deu/>) for staff in the Student Development and Enrollment Services Division of UCF.

49. S. M. Kuebler, "Make Passion for Learning Your Route to Success." Burnett Honors College (29 Oct 2018)

A presentation on professional development and undergraduate research delivered to first-year students enrolled in the Honors Symposium course, Burnett Honors College.

50. Panelist: "Near-Miss Candidates." New Advisors Workshop, National Association of Fellowship Advisors (Orlando, FL, 26 Jun 2018).

A round-table discussion held as part of the New Advisors Workshop, organized by the National Association of Fellowship Advisors, <http://www.nafadvisors.org/regional-summer-workshops>). Kuebler represented the Marshall Scholarships, with Josh Stanton, Youth Outreach Coordinator for the UK Embassy, Washington, DC.

51. S. M. Kuebler and J. Beever. "Ethics in Research: How to Start on the Right Path." UCF-SURF (25 May 2018).

A discussion for students enrolled in the UCF Summer Undergraduate Research Fellowship (SURF) program.

52. S. M. Kuebler and J. Beever. "Ethical Literacy in Undergraduate Research." UCF Undergraduate Research Council (17 Apr 2018).
53. S. M. Kuebler and J. Beever. "Building a Culture of Ethical Literacy across the Disciplines." UCF-APEP (20 Feb 2018).

Presentation and discussion of how to build ethical literacy and ethical cultures, led for members of UCF Faculty Excellence's "Assistant Professor Excellence Program" (APEP, <https://facultyexcellence.ucf.edu/assistant-professor-excellence-program/>).

54. S. M. Kuebler and J. Beever. "CDEP: Cultivating a Culture of Ethical Leadership." UCF-CDEP (23 Jan 2018 and 23 Mar 2020).

Presentation and discussion led for members of UCF Faculty Excellence's "Chairs and Directors Excellence Program" (CDEP, <https://facultyexcellence.ucf.edu/chairs-and-directors-excellence-program/>).

55. S. M. Kuebler. "Preparing for Graduate Studies" (Physics Dept., Ursinus College, 5 Oct 2017).

Kuebler organized and led a workshop at Ursinus College in which undergraduates in physics explored a wide range of topics related to graduate studies including what graduate study is like, what opportunities it affords, how to prepare and apply for graduate school, and how to select a research mentor.

56. Panelist: "New Graduate Student Orientation and Welcome Workshop" UCF College of Graduate Studies (10 Aug 2022, 9 Aug 2017, 11 Aug 2016, 12 Aug 2015).

Kuebler served on a panel organized by the UCF College of Graduate Studies that discussed how to be a successful graduate student and answered questions from circa 250+ attendees.

57. S. M. Kuebler. "Career Planning for after Graduate School: Academia, Industry, and More" UCF Summer Research Academy (17 Jun 2017, 11 Jun 2016, 13 Jun 2015, 15 Jun 2013).

Kuebler organized a mini-workshop held as part of the UCF Summer Research Academy, organized by the Office of Undergraduate Research, in which students learned how skills gained through graduate education make new career opportunities possible.

58. Panelist: "It's Never Too Early to Think about Graduate School." UCF Summer Research Academy (17 Jun 2017, 11 Jun 2016, 13 Jun 2015, 14 Jun 2014, 15 Jun 2013).

Kuebler served on a panel held as part of the UCF Summer Research Academy, organized by the Office of Undergraduate Research. Students learned what graduate schools are looking for, how to prepare their applications, and how to develop themselves for graduate education and careers afterward through formal coursework and experiences outside the classroom.

59. S. M. Kuebler and C. M. Schwarz. "Preparing Students for STEM Careers." UCF College of Education (17 Jul 2015).

Kuebler and Schwarz co-organized and led a workshop for 28 teacher-candidates in the class of Dr. Gwynn Crittenden exploring how to best prepare students for further study and careers in STEM. The workshop included presentations on current frontiers in nanotechnology and work in the Kuebler Group on nano-scale 3D printing by multi-photon lithography. Teacher-candidates were also toured in two groups through the Kuebler-Group labs. This activity was structured as professional-training activity for Schwarz when she worked with Kuebler as a post-doctoral scholar.

60. Co-organizer: "Women in Research: Paths to Successful Careers." Summer Research Academy, UCF (13 Jun 2015, 14 Jun 2014), with Dr. Kim Schneider and Dr. Casey Schwarz.

Attendees reviewed important questions about careers for women in research including how to overcome barriers, how to balance family and having a life, and various career paths. This mini-workshop was created in 2014 by Kuebler as a post-doctoral mentoring activity for Kuebler-Group post-doc Dr. Casey Schwarz, who led the activity.

61. Panelist: "NSF CAREER Advising Workshop." UCF College of Engineering and College of Sciences (2011 - 2014).
62. Co-leader and Participant: "Issues in Academic Leadership." UCF-FCTL (22 Mar 2013).

Workshop on academic leadership organized for the UCF Faculty Center for Teaching and Learning.

63. Organizer and leader: "Organic and Polymeric Optical Materials" CREOL, UCF (6 Mar 2013).

This workshop was created and led by Kuebler for the CREOL Industrial Affiliates Day (6-8 Mar 2013) to introduce attendees to the growing field of organic and polymeric optical materials.

64. Invited Participant, "NSF Germany-USA Workshop on Nanomaterials Research." NSF and BMBF (summer 2005)

Invited participant in an exchange program sponsored jointly by NSF and the German Research Ministry (BMBF) involving 12 selected US scientists and engineers (2005).

EDITORIAL POSITIONS

- Associate Editor, *Journal of Optical Microsystems* (2020 - present, published by SPIE, <https://www.spiedigitallibrary.org/journals/journal-of-optical-microsystems/editorial-board#navBarAnchor>).
- Associate Editor, *Journal of Micro/Nanolithography, MEMS, and MOEMS* (2008 - 2020, published by SPIE, <https://www.spiedigitallibrary.org/journals/journal-of-micro-nanolithography-mems-and-moems/editorial-board?SSO=1>).
- Editorial Board Member, *Journal of Experimental Nanoscience*, published by Taylor and Francis, <http://www.tandfonline.com/action/journalInformation?show=editorialBoard&journalCode=tjen20>.
- Guest Associate Editor, *Journal of Micro/Nanolithography, MEMS, and MOEMS* (2008).

PROPOSAL PEER REVIEW

1. National Science Foundation – Chemistry, Materials Research, and SBIR divisions
2. National Science Centre Poland (2020/2021)
3. NanoSci-ERA, European Research Area Nanoscience Consortium

4. American Chemical Society Petroleum Research Fund
5. Austrian Science Fund (2014)
6. Maryland Industrial Partnerships Program

JOURNAL PEER REVIEW

1. *Advanced Functional Materials*
2. *Advanced Materials*
3. *Applied Optics*
4. *Applied Physics Letters*
5. *Applied Physics B*
6. *ASME Journal of Micro and Nano Manufacturing*
7. *Chemistry of Materials*
8. *Electrochemical and Solid State Letters*
9. *European Journal of Inorganic Chemistry*
10. *Journal of the American Chemical Society*
11. *Journal of Colloid and Interface Science*
12. *Journal of Materials Chemistry*
13. *Journal of Micro/Nanolithography, MEMS, & MOEMS*
14. *Journal of Nano Education*
15. *Journal of Nanophotonics*
16. *Journal of Optics and Laser Technology*
17. *Journal of the Optical Society of America B*
18. *Journal of Physical Chemistry*
19. *Journal of Vacuum Sci. Technology*
20. *Laser and Photonics Reviews*
21. *Langmuir*
22. *Macromolecules*
23. *Materials Today*
24. *Micromachines*
25. *New Journal of Chemistry*
26. *Optics Communications*
27. *Optics Express*
28. *Optical Materials Express*
29. *Optics Letters*
30. *Photonics Journal*
31. *Physical Chemistry Chemical Physics*
32. *Physica Status Solidi*
33. *Science Reports (Nature Group)*
34. ***Science***
35. *Thin Solid Films*

TEXTBOOK REVIEW

- Invited to review chapters in T. R. Gilbert, R. V. Kirss, N. Foster, G. Davies, *Chemistry: The Science in Context*, 3rd. edn. (W. W. Norton, New York, 2015, ISBN-13: 978-0393934311).

2012

- Invited by W. W. Norton publishers to participate in a focus group and review electronic materials for teaching chemistry, including in-class response and online homework systems. 2013

UNIVERSITY SERVICE

• University-Level Service

- Academic Integrity Council, UCF College of Graduate Studies 2021 - present
- Academic Integrity Working Group, College of Graduate Studies *Pathways to Success* program. 2022 – present
- Undergraduate Research Council (representing Optics and Center for Ethics) 2011 - present
 - + Judge, Showcase for Undergraduate Research 2011 - present
 - + Undergraduate Research Grant reviewer 2013 - present
- Laser Safety Committee, Environmental Health and Safety, UCF 2021 - present
- Faculty Mentor, Society of Optics Students, CREOL, UCF 2015 - present
- Faculty Mentor, ACS Student Chapter, UCF 2007 - present

ACS@UCF was designated "Outstanding Chapter" (top 10%) by national ACS multiple years in a row: 2013/14, 14/15, 15/16, 16/17, 17/18, 18/19, 21/22, 22/23, and 23/24 and won the Green Chemistry Award in 2014 and 2018. In 2020/21 and 2024/25, we were designated "Commendable." Credentialling shown below began first in 2021/2022.



- Faculty Senate (College of Sciences seat) 2022 - 2024
 - + Research Council 2023 - 2025
 - + Undergraduate Policy and Curriculum Committee 2022 - 2023
- Rhodes/Marshall Endorsement Committee, UCF Office of Prestigious Awards 2023 - 2024
- Provost's Task Force on AI Initiatives at UCF 2023 – 2024
- Faculty Senate (Chemistry seat) 2015 - 2017
 - + Budget and Administration Committee 2015 - 2017
 - + Undergraduate Policy and Curriculum Committee 2015 - 2018
- University COACHE Priority Setting Committee 2021 - 2022
- Conflict of Interest, Huron-Research-Suite Onboarding Team 2021 - 2022
- Coach, UCF Team competing in the 2021 Lockheed Martin Ethics in Engineering Competition 2020
- Faculty Excellence Advisory Committee, Mid-Career Subcommittee 2017 - 2020
 - Selected via application: <https://facultyexcellence.ucf.edu/faculty-advisory-committee>
- Advisory Board Member and Sr. Personnel, F-LEARN (FTICs) and T-LEARN (AA transfer students). These are NSF-funded programs administered by PI Dr. Kim Schneider and the Office of Undergraduate Research. 2016 - 2021

- Internal proposal review, UCF Office of Research
- "Wahoo" services re-organization advisory committee, Office of Research and Commercialization, UCF 2016 - 2018
- Goldwater Scholar University Selection Committee 2017/2018
- Accessibility and Technology Committee (Student Disability Services) 2013 - 2016
- UCF National Merit Scholar Faculty Mentor 2007 - 2012
- Dean of Optics Five-Year Review Committee 2014/2015
- Research Misconduct Review Committee 2012 - 2013
- Provost's Ad Hoc Post-Doctoral Associate Committee 2012 - 2013
- Member, Search Committee for Assoc. VP Finance / Chief Human Resources Officer 2013
- University Research Council 2012 - 2013
- University Academic Program Review Committee 2012 - 2013
- Astronaut Scholarship Selection Committee member 2010 - 2012
- Provost's Evaluation Advisory Committee for Dean of Honors College 2011
- Focus Group, Five-Year Review of Dean of College of Graduate Studies 2011
- College-Level Service
 - PSB ad hoc Space Committee Spring 2025 - present
 - Co-chair, Strategic Planning Committee, College of Sciences, UCF Oct. 2022 – 2024
 - COS Leadership Council Jan 2022 – Jan 2025
 - COS IT Advisory Committee May 2023 - present
 - NSF CAREER Aspirant Mentoring Committee in CREOL 2019 - 2024
 - Undergraduate Curriculum Committee, CREOL 2014 - present
 - COS Facilities Working Group 2021 - present
 - Marketing Committee for CREOL 2018 - 2020
 - Dean's Advisory Council, College of Sciences 2018 - 2019
 - Grade Appeal Committee, College of Sciences Fall 2018
 - Student of the Year Committee, CREOL 2017/2018
 - Research Incentive Award (RIA) Committee, College of Science 2018 - 2019
 - Recognition and Scholarships Committee, College of Science 2015 - 2017
 - Sabbatical Committee 2014 - 2015
 - Teaching Incentive Program (TIP) Award Committee, College of Science '09, '15 - '16
 - Promotion and Tenure Committee, Nanoscience and Technology Center 2012
 - COS Excellence Awards Committee, College of Science 2011
- Department-Level Service
 - Radiochemistry/Separations Chemistry Search Committee 2025/2026
 - Chair's Advisory Committee 2020 – 2021, 2024 - present
 - Chair, General-Chemistry Committee 2023 - present
 - Chair, Chemistry Graduate Affairs Committee 2018 - present
 - Graduate Committee, Chem. Dept. 2015 - 2016, 2021 - present
 - Electronic-materials faculty-search committee 2023/2024
 - Communications and Marketing Committee 2021 - present
 - Promotion and Tenure Committee, Chemistry Dept. 2008 - present
 - Safety Team, Physical Sciences Building, UCF 2015 - present
 - Amplified femtosecond laser, administration/maintenance (department facility) 2015 - present
 - Inorganic chemistry proficiency exam administration 2010 - present

- Annual Evaluation Standards and Procedures (AESP) Committee, Chem. Dept.	2022 - 2023
	2016 - 2017
- NSF CAREER Aspirant Mentoring Committee in Chemistry	2019 - 2023
- Chair, Instructor and Lecturer Promotion Committee	2021
- Diversity and Inclusion Committee	2020 - 2021
- Chair, Search Committee for Chemical Education Research	2018/2019
- Organizing Committee, UCF/ACS Chemistry Mixer (31 Mar. 2019)	2018/2019
- Facilities and Space Committee, Chemistry Dept.	2016 - 2018
- Steering Committee, Chemistry Dept.	2015 - 2018
- 2017 Open-Search Committee (4 positions searched in parallel)	2017 - 2018
- Chair, Organic Chemistry Faculty Search Committee, Chem. Dept.	2016 - 2017
- Chair, Biochemistry Search Committee, Chem. Dept.	2015 - 2016
- Search Committee in Nanophotonics, CREOL, UCF	2014 - 2015
- Search Committee in Atto-science, Physics, UCF	2014 - 2015
- Safety Committee, Chemistry Dept.	2008 - 2015
- Awards and Recognition Committee	2010 - 2015
- Outreach Committee	2008 - 2015
- Inorganic and Physical Chemistry Committee, Chemistry Dept.	2004 - 2011
- Graduate Recruiting Committee, CREOL	2004 - 2012
- Undergraduate Curriculum Committee, Chemistry Dept.	2009 - 2012
- Cobb Chair Search Committee, CREOL	2011
- Biophotonics Search Committee, CREOL	2008, 2004/2005
- Biochemistry Search Committee, Chemistry Dept.	2005
- Instrumentation Committee, Chemistry Dept.	2004 - 2005

OUTREACH and SYNERGISTIC ACTIVITIES

- Boy Scout Troop 58, Central Florida Council, Scouts BSA
 - Assistant Scout Master Aug 2022 - present
- Cub Scout Pack 3058, Central Florida Council, Scouts BSA
 - Assistant Cub Master Aug 2021 - Aug 2022
 - Cub Master May 2019 - Aug 2021
 - Webelos-Den Leader, Pack 3058, Scouts BSA 2019 - 2021
 - Fundraising Chair, Pack 3058, Scouts BSA (Raised over \$5,000) 2018 - 2022
 - Bear-Den Leader, Pack 3058, Scouts BSA 2018 - 2019
 - Assistant Cub Master, Pack 3058, Scouts BSA 2018 - 2019
 - Assistant Wolf-Den Leader, Pack 3058, Scouts BSA 2017 - 2018
- Judge, Seminole Co. Science Fair Annually, since 2006
- Judge, Orlando Science Challenge (Orlando Science Center) 2015 - present
- Judge, Nelson Ying Science Competition (Orlando Science Center) 2015 - present
- Guest lecturer, Science, Technology, Engineering, Art and Math (STEAM) project 2012 & 2013

Lectures entitled "The Art of Research in Nanophotonic Materials" and "The Fourier Transform" were presented in layman's terms to art students to inspire them to create works that reflected some aspect of the science. Kuebler met again with the groups to critique the art and attended a public showing of all pieces. STEAM was

supported through the NSF-funded I³ program led by UCF Provost Tony Waldrop and Dr. Michael Georgiopoulos (NSF-0963146).

- Immediate Past-Chair, Orlando Section, American Chemical Society (ACS) Jan 2013 - Dec 2013
- Chair, Orlando Section of the ACS Oct 2011 - Dec 2012
- Chair-Elect, Orlando Section of the ACS Jan 2011 - Oct 2011
- Secretary, Orlando Section of the ACS Jan 2010 - Dec 2010
- Outreach Coordinator, Orlando Section of the ACS Jan 2009 - Oct 2010
- Outreach presentations on undergraduate/grad research to Orange Co. Schools (Orlando, FL), Seminole State College, Orlando Science Center and Florida Solar Energy Center, Paul Hagerty High School. 2004 - 2011
- Instructor, OCTET Program: ACS-IPG-funded program for training high school chemistry student in the seven-county region of the Orlando-Section. 2011
- Orlando Science Center Laser Camp Instructor Summer 2011
- Committee Member, Marshall Scholarship, UK Consulate, Atlanta Region 2009 - 2013
2020 - 2023

CERTIFICATIONS and OTHER TRAINING

- Certified CPR and AED for Adults (American Safety & Health Institute) 1 Feb 2025
- Wilderness First Aid (American Safety & Health Institute) 5 Apr 2025
- Collaborative Institutional Training Initiative (CITI, <https://www.citiprogram.org>):
 - "Human Subjects Research - Group 1. Biomedical Research Investigators and Key Personnel." 2018, 2021
 - "Responsible Conduct of Research for Engineers." 2019, 2021
 - "Physical Science Responsible Conduct of Research" 2019, 2021
 - "Conflict of Interest Mini-Course." 2013, 2022
- UCF's "IRB 101 Workshop" 29 Nov 2019
- Ethical Leadership Workshop (UCF course LDR005) 21 Feb 2018
- Co-leader and Participant: "Issues in Academic Leadership" workshop UCF (Faculty Center for Teaching). 22 Mar 2013
- "Academic Budget Basics" workshop (Faculty Center for Teaching, UCF) 19 Apr 2013
- "Faculty Mentoring" workshop (Faculty Center for Teaching, UCF) 15 Apr 2011
- Leadership Workshop (American Chemical Society, Ft. Worth, TX) 21-23 Jan 2011