

# COLLEGE OF SCIENCE AND TECHNOLOGY

# CHEMISTRY

## NEWSLETTER

Millersville University, Dept. of Chemistry ♦ <http://www.millersville.edu/chemistry/> ♦ Fall 2021

***Greetings from the Chemistry Department!*** We are very excited to be fully back on campus to teach and interact with all our students in person for the Fall 2021! We did have another successful year despite the challenges, and we would like to share our good news with you!

In 2021, five Millersville Chemistry students (shown in the picture below) carried out summer research on campus with Millersville Faculty. The Murley Summer Undergraduate Research Fellowship was awarded to three top chemistry applicants: **Elliott Newman**, **Joshua Rushlow**, and **Betel Erkalo**. Elliott and Joshua completed their research experience under the guidance of **Dr. Edward Rajaseelan**, and Betel completed her research project with **Dr. Melissa Mullen Davis**. In addition, **Landon Kurtz** and **Emma Witmer** worked on research with **Dr. Kathryn Allen** and **Dr. Melissa Mullen Davis**, respectively.

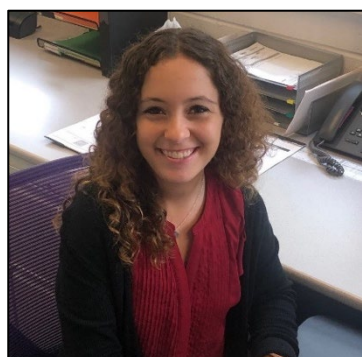


**2021 Millersville Chemistry summer research students (left to right): Landon Kurtz, Elliott Newman (Murley Fellow), Joshua Rushlow (Murley Fellow), Emma Witmer, and Betel Erkalo (Murley Fellow)**

The Department was honored for the 6<sup>th</sup> year in a row to have a chemistry alumnus receive the **Young Alumni Achievement Award!** The **2020** award recipient was **Dr. Jonathan Shue, DMD**, serving as a dentist in the Air Force. Dr. Shue graduated *summa cum laude* from Millersville University in 2013 with a B.S. chemistry degree along with departmental and university honors. Upon graduation, he was granted a four-year Health Professions Scholarship Program position with the United States Air Force and admission to the University of Pennsylvania School of Dental Medicine. He acquired his DMD along with departmental honors in dental radiology in May 2017. Dr. Shue matriculated into the Air Force Dental Corps and upon graduation he completed Commissioned Officer Training (COT) with the United States Air Force. He is currently working as a general dentist at the Vandenberg Air Force Base.



**Dr. Jonathan Shue, DMD**  
(MU-2013, U. Penn-2017)



**Ms. Madison (Maddie) Rebman**

This year, we have a new Department Secretary, **Ms. Madison (Maddie) Rebman**. Maddie is serving as secretary for the Physics and Geography departments as well. She graduated from Millersville University in 2020 with her bachelor's degree in Social Work, and she couldn't be happier to be back at the 'Ville! In her free time, she enjoys listening to music, attending concerts, going on Target runs, and spending time with her boyfriend and family at the bay or the beach. She looks forward to working with everyone in all three of her departments!

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### Important MU Faculty Milestones & Achievements:

Dr. Daniel Albert received his Tenure and Promotion to Associate Professor this year!



*Dr. Daniel Albert, Associate Professor in Chemistry (fourth from the left) with President Wubah (sixth from the left) and other Millersville faculty who were promoted in 2021.*

***Congratulations Dr. Albert!***

Congratulations to Dr. Edward Rajaseelan and Dr. Daniel Albert for their 2 joint publications with Mr. Elliott Newman and Mr. Joshua Rushlow (undergraduate students):

- Newman, E.B.; Astashkin, A.V.; Albert, D.R.; Rajaseelan, E. “(4-Benzyl-1-methyl-1,2,4-triazol-5-ylidene) [(1,2,5,6- $\eta$ )-cycloocta-1,5-diene] (triphenylphosphane- $\kappa P$ ) iridium (I) tetrafluoroborate.” *IUCrData*, 2021, 6, x210836. DOI: <https://doi.org/10.1107/S2414314621008361>. Chosen as Cover Illustration for August 2021 Issue: <https://iucrdata.iucr.org/x/issues/2021/08/00/>
- Rushlow, J.; Astashkin, A.V.; Albert, D.R.; Rajaseelan, E. “(Chlorido/bromido) [(1,2,5,6- $\eta$ )-cycloocta-1,5-diene] (4-isopropyl-1-methyl-1,2,4-triazol-5-ylidene) rhodium (I).” *IUCrData*, 2021, 6, x210811, DOI: <https://doi.org/10.1107/S2414314621008117>.

Congratulations to Dr. Edward Rajaseelan for his publication with two alumni, Dr. Jeffrey Rood and Mr. John Risell:

- Rood, J.A.; Subedi, C.B.; Risell, J.P.; Astashkin, A.V.; Rajaseelan, E. “[ (1,2,5,6- $\eta$ )-cycloocta-1,5-diene] (1-ethyl-3-isopropyl-1,3-imidazol-2-ylidene)(triphenylphosphane) rhodium(I) tetrafluoroborate.” *IUCrData* (2021). 6, x210597, DOI: <https://doi.org/10.1107/S2414314621005976>.

Congratulations to Dr. Daniel Albert for his 2 publications in collaboration with other OER faculty:

- Albert, D.R.; Redcay, A.; Pfannenstiel, A.N. “The Impact of Typical Textbook Behaviors on Satisfaction with Zero Textbook Cost Materials.” *International Journal of Open Educational Resources*, 2021, 4, 79-96, DOI: [10.18278/ijoer.4.1.7](https://doi.org/10.18278/ijoer.4.1.7)
- Pfannenstiel, A.N.; Redcay, A.; Albert, D.R. “Student Perceptions of Textbooks: Prior Behaviors and Beliefs Can Influence Zero Textbook Cost (ZTC) Adoption Impact.” *Open Praxis*. 2020, 12, DOI: <http://dx.doi.org/10.5944/openpraxis.12.4.1119>

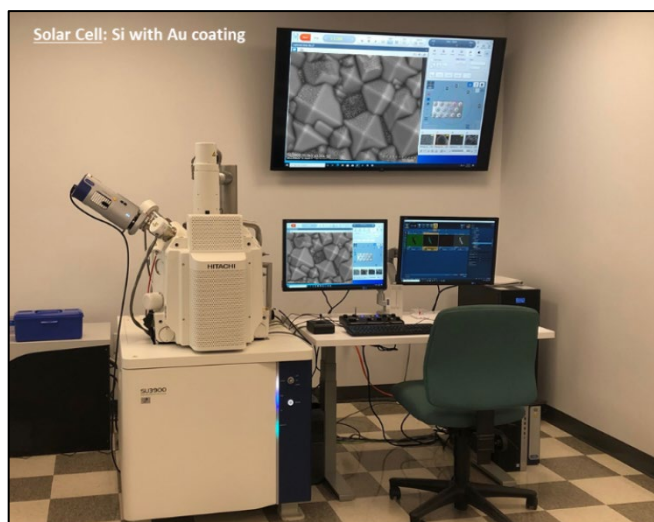
Congratulations to Dr. Melissa Mullen Davis for her 2 national meeting presentations:

- Mullen Davis, M.A., Sokoloski, Joshua E., Nallagatla, S.J., and Tanaglia, B.R. “Exploring Nucleic Acid structure-function relationships in remote Biochemistry instruction,” poster at American Society of Biochemistry and Molecular Biology (ASBMB) Meeting. Virtual. April 2021.
- Mullen Davis, M.A. “Writing children’s books as a tool for increasing student engagement in a non-major introductory chemistry course,” poster at National American Chemical Society (ACS) Meeting. Virtual. April 2021.

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In January of 2021, the MU College of Science and Technology acquired a new Hitachi SU3900 Scanning Electron Microscope (SEM). The funding for the microscope came from an NSF-MRI grant of \$287,000 and support from the MU Office of the Provost. **Dr. Maria Schiza** and **Dr. Jeremiah Mbindyo** were the two chemists involved in writing the NSF-MRI proposal and selecting the instrument. The extra support from the University allowed the purchase of a larger chamber as well as renovations of Roddy 154 to house the instrument. **Dr. Schiza** is serving as the PI for the grant, overseeing final renovations, microscope installation, initial training sessions for operation, and hiring of a technician. The microscope will be open for use to the MU faculty, MU students, and academic (high school & college) and industry users from the surrounding community.



*Hitachi SU3900 SEM – installed in Roddy 154*

### MU Students/Chemistry Majors News

The department continues to have healthy enrollments each year. For Fall 2021, we have 22 freshmen coming in as chemistry majors as well as two transfer students joining us from other institutions.

Chemistry faculty and students continue to be actively engaged in research, writing grants and presenting their work at conferences. Many students received Niemeyer-Hodgson and SGRCA research grants. Although students did not get to travel for the virtual 2021 National ACS Conference, they were able to participate by delivering their posters/presentation online. **Jessica Whittemore** presented the research she did in **Dr. Daniel Albert's** lab, **David Zimmerman** presented his research with **Dr. Kathryn Allen**, and **Autumn Peters**, **Nathaniel Maynard**, and **Yongyu Ou (Rose)** presented research projects they each completed with **Dr. Steven Kennedy**.

#### Eight students engaged in Internships during 2020-2021

Student	Internship Site
<b>Harrison Noel</b>	K&L Plating, Lancaster, PA
<b>Rebecca Goldinger</b>	McCreary Labs, Harrisburg, PA
<b>Jacinto Hyman</b>	Hershey, PA
<b>Luke Netherton</b>	Eurofins, Leola, PA
<b>Elizabeth L. Brittingham</b>	Eurofins, Leola, PA
<b>Betel Erkalo</b>	Cargill Cocoa, Mt. Joy, PA
<b>Wesley Strohecker,</b>	Lancaster, PA
<b>Madison V. Cherubin</b>	Neverwet, New Holland, PA

### Celebrating Chemistry Graduates: 2020 and 2021

Even though a graduation ceremony was not held in Spring 2020, an in-person event for those graduates was included as part of this spring's Millersville University commencement celebrations. Students who were able to return to campus joined faculty for a well-deserved recognition of their milestone achievement. In Spring 2021, 10 additional chemistry majors joined the ranks of our alumni.

The Chemistry Department is very proud of our 2020 and 2021 graduates! Their resilience in the face of unparalleled limitations deserves extra-special acknowledgment.



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**2020 Chemistry Graduates who attended the Spring 2021 Ceremony (shown above)**

**Left to right:** Erika Zurita-Torres, Chanveboll Yun, Jessica Sharrow, Rachel Laughlin, Austin Ackerman, Michael Seeger

**Not Shown:** Thomas Przywara, Peter Caceci, Cole Stempel, Troy Smith, Steven Knauss, Richard Carr, Girum Erkalo, Alexander Johnston, Jenna Davis, Kaylee Tada, Maryssa Brandt, Maitri Patel, Lindsay Balawejder, Natalie Barco, Kyra Brakefield, Madeline Stehly, Simona Gavrilovici, Courtney Kearns, Mingqi Lu.



**Spring 2021 Chemistry Graduates (shown above)**

**Left to right:** David Zimmerman, Autumn Peters, Yongyu Ou (Rose), Nathaniel Maynard, Jessica Whittemore

**Not Shown:** Mahmoud Bekhit, Melissa Cejudo Montes de Oca, Madelynn Guinane, Luke Netherton, Wesley Strohecker

Many of our graduates had jobs or job offers in a chemistry-related field before graduation, and the following are attending graduate school programs this Fall:

- **David Zimmerman** – Chemistry at **University of Colorado, Boulder**
- **Autumn Peters** – Chemistry at **Colorado State University**
- **Yongyu Ou (Rose)** – Chemistry at **University of California, Davis**
- **Nathaniel Maynard** – Oceanography at **Old Dominion University**
- **Jessica Whittemore** – Chemistry at **Cornell University**

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### 2021 Chemistry Department Awards

*This year's student recipients of Chemistry Department Awards were:*

- CRC Chemistry Achievement Award – **Joshua Rushlow**
- Gerald S. Weiss Chemistry Scholarship in Inorganic Chemistry – **Malcolm Jones**
- Cecil M. Upton Organic Chemistry Award – **Rebecca Drager**
- Polymer Education Undergraduate Award – **Landon Kurtz**
- Murley Summer Undergraduate Research Fellowship – **Betel Erkalo/Elliott Newman/Joshua Rushlow**
- MU ACS Student Chapter Award – **Yongyu Ou (Rose)**
- American Chemical Society Awards in:
  - Analytical Chemistry – **Kassandra Castaldi**
  - Inorganic Chemistry – **Nathaniel Maynard**
  - Organic Chemistry – **Autumn Peters**
  - Physical Chemistry – **Nathaniel Maynard**
- American Institute of Chemists Award – **Yongyu Ou (Rose)**
- ACS Southeastern PA Section Award – **Jessica Whittemore**

### 2021 Chemistry Department Scholarships

- Richard Sasin Endowed Scholarship in Chemistry - **Devon Erb/Elliott Newman**
- Yvonne and Sandra L Turchi Biochemistry Scholarship – **Lucia Martin**
- Sandra A Yeager, Ph.D. Chemistry Scholarship – **Amanda McKee**
- Dr. R. Edward Rajaseelan Excellence in Chemistry Scholarship – **Joshua Rushlow**

### Notable Alumni Achievements/Updates

- **Magenta Hensinger** (2015): Earned a Ph.D. from University of Vermont (2021) and is currently a Postdoctoral Fellow (Marie Skłodowska-Curie Actions Individual Fellowship) at Ludwig-Maximilians-Universität München. *See Magenta's exciting video explanation of research work in video at right.*

- **Lisa Nguyen** (2014): After earning a Ph.D. from The Ohio State University in 2019, Lisa is currently a chemistry lecturer at OSU.

- **Douglas Hildrew** (2004): Earned his M.D. from SUNY Upstate Medical University (2010), did his residency at Tulane (2015), and completed a fellowship at Pittsburgh Medical Center (2017). Since 2017, Doug practices Otology, Neurotology and Skull Base surgery at Yale University as an assistant professor in the medical school.



Video link: [Magenta Hensinger: Global Science Show on Twitter](#)

### Fall 2021 – Seminar Series

The Fall 2021 Seminar Series, hosted this year by **Dr. Melissa Mullen Davis**, includes a talk by alumna **Dr. Jillian Weissenrieder** (2015) on her post-doctoral work at UPenn. Seminars take place on Mondays from 4-5 pm, in Roddy 149. The complete list of seminars can be found here: [Fall 2021 Seminar Series](#)

We are very proud of the successes of all our graduates over the years. Our alumni reflect our efforts, dedication, and quality of teaching. ***You are Millersville, and we celebrate you this and every year. Thank you!*** We are always delighted to hear from you. Please stop by and visit us when you are in the area or send us an update.

#### **Alums! We LOVE to hear from you!**

Update your contact information online at: <http://www.millersville.edu/chemistry/alumni/index.php>

Click on “**Updates**” on the bottom of the page.

Then click on “**Update Now**” to update your information for us.