#### SUNY OSWEGO DEPARTMENT OF CHEMISTRY NEWSLETTER

**ACADEMIC YEAR** 

2019-2020

### Table of Contents:

Faculty/Staff Updates	2-7
Degree Candidates	8-9
Scholarships/Awards	10-11
News from Alums	11
Alumni Visits	12
Fred Scoles Retires	13
Sept. Symposium	14
Faculty Awards	15
Academic Clubs	16-17
Seminar Speakers	18



#### LETTER FROM THE CHAIR:

COVID19 has changed all of our lives since March. We became 100% online after spring break. We managed to finish the Spring semester without any complaints from students. Students were able to record and analyze data from video recorded labs. For the fall semester, we are planning to offer almost all labs either fully face-to-face or hybrid (some labs online and some labs face-to-face). Half of the lectures will be hybrid/face-to-face and other half will be fully online, mostly due to their sizes. Since classroom capacity is reduced to keep social distancing, the number of courses which can be taught in a classroom is limited so we are providing as many face-to-face lab opportunities as possible. We continued to have a summer research this summer, even though very limited compared to last year. Our summer research program has been supported by our alumni Peter and Andrea Bocko, who joined us this summer via zoom to talk with our students and faculty. We have an alumni speaker's program: We ask our alumni to speak to our majors talking about their experiences

as students and how their life has been shaped since they graduated from Oswego. Since outside speakers are not allowed this coming year because of COVID, we are open to having you via Zoom. Students always comment on these talks and visits in their exit surveys; therefore, we are always looking for our alumni to serve as guest speakers throughout the school year. If you are interested, please drop us an email to set up your Zoom meeting, which is easier and less time consuming compared to campus visits. We also welcome any company related talks for recruiting interns or new employees for your company. We can always arrange a talk with our juniors and seniors for you to connect with.

Here is a quote from one of our recent graduates regarding the importance of research in their education: "Research this past semester was phenomenal, I feel more confident in a laboratory, more independent, and was finally able see some of my experiences and lessons learned come to fruition". We believe that the best way of educating future chemists is providing more research opportunities both during the academic year and in the summer. Any support from our alumni in that regard is highly appreciated by our department. I will ask for you to utilize your company's matching donation policies to help these young minds. All your donations go directly to our undergraduate and graduate students for their summer stipends or research-related expenses. We had 34 undergraduate and 6 graduate students graduate from our programs this year. One of our students received SUNY Chancellor's Student Award, which is the highest student award within SUNY System. We had several faculty who received awards for research, mentoring and teaching, which makes our faculty and department highly regarded among its peers. There is so much exciting news related to our faculty and programs; such research funding, publications, sabbaticals, summer research, new collaborations, and international trips. Please enjoy reading our annual newsletter and continue to support SUNY Oswego Chemistry.

Dr. Fehmi Damkaci

Chair Department of Chemistry

#### **Faculty and Staff**

Matthew Baker, Assistant Professor, Organic Chemistry

matthew.baker@oswego.edu

PhD., The Pennsylvania State University, 2014

B.A., Alfred University, 2009



#### Research Interests:

Design and synthesis of stimuli-responsive polymers and materials. Specific applications include biodegradable and environmentally friendly plastics, as well as, polymers with sensing capabilities. Additional interests include the development of application-based organic and polymer chemistry teaching laboratory experiments.

#### **Updates:**

Dr. Baker enjoyed mentoring six students over the past year. During this time his students were busy working on environmentally friendly plastics with sensing capabilities. As a result of their productivity, one of his students presented their work at a local symposium and another had a poster accepted to the National American Chemical Society meeting in Philadelphia. Dr. Baker also had research accepted at the National ACS meeting, however, unfortunately this meeting was canceled due to the global pandemic. Dr. Baker has continued to develop and incorporate labs focused on plastics into the undergraduate curriculum, allowing students to create moldable plastics, hydrogels, and biodegradable plastics.

#### Kestutis Bendinskas, Professor, Biochemistry

kestutis.bendinskas@oswego.edu

Post-doctoral fellow, John Hopkins University, 1997

Ph.D., Bowling Green State University, 1996

B.S., Mendeleev University of Chemical Technology, 1991

#### **Research Interests:**

- -Exploring effects of toxic metals and semi-metals on human health, i.e. omics of lead (Pb), cadmium, mercury, arsenic in kids and steel mill workers in Oswego and Syracuse in the USA, Kolkata in India, and Tbilisi in the DR of Georgia;
- -Measuring cortisol and testosterone in saliva/urine/hair/nails to help psychologists and medical professionals in their research;
- -Studying metal-binding properties of proteins, e.g., the quenching of fluorescence of alpha-macroglobulin due to its binding to Pb;
- -Developing modern biochemistry and omics teaching laboratory experiments.

#### **Update:**

All three Capstone students Christopher Gayvert, Piper Goodleaf, Philip Mosher have successfully completed their research. Chris and Phil have joined graduate programs. Students measured hair and salivary cortisol, also hair, nail, salivary, and blood testosterone, and worked on statistical models using R to analyze our data. Our research group published three manuscripts: "Identification of Proteins Using Four Methods of Matrix-Assisted Laser Desorption Ionization Time-of-flight Mass Spectrometry" in *JChemEd*, "Do Vacations Alter the Connection Between Stress and Cardiovascular Activity? The Effects of a Planned Vacation on the Relationship Between Weekly Stress and Ambulatory Heart Rate" in *Psychology and Health*, and "Dietary contributions to increased background lead, mercury, and cadmium in 9–11 Year old children: Accounting for racial differences" in the *American Journal of Clinical Nutrition*. Kestas applied for three extramural grants this year, and was successful in receiving CUSE and NIH-HHEAR funding to analyze previously collected Syracuse Lead Study samples. Dr. Bendinskas co-Chaired the Scholarly and Creative Activities Committee, served as the Director of the Molecular Biology and Biochemistry Center, and was the President of the Milea Beach Road Association this year. Kestas continued serving as the Executive Editor of *American Journal of Undergraduate Research (AJUR)*, which publishes quarterly.

**Thomas Brown,** Assistant Professor, Inorganic Chemistry thomas.brown@oswego.edu
Ph.D., University of Nevada, Reno, 2016
B.S., University of California, Davis, 2011

#### Research Interests:

Photoemissive copper(I) coordination compounds for use in optoelectronics. Metallophilicity between closed-shell metal ions and the resulting photoluminescence.

#### Update:

Tom has completed his third year as tenure-track faculty with the Chemistry Department at SUNY Oswego. He had the joy of mentoring several research students which included six undergraduate students (Eva, Malik, Anthony, Michael, Matt, and Fiona) and five graduate students (Ryan, Darryl, Vaea, Emma, and Julian). Ryan and Darryl have completed their Master's degrees under Tom's supervision and will be starting a Ph.D. program and an industrial position, respectively. This past year, Tom has taught General Chemistry I & II with Lab, Inorganic Chemistry with Lab, and Inorganic Photochemistry. He is continuing to spread the joy of inorganic chemistry by developing new laboratory experiments for the senior-level Inorganic Chemistry Laboratory course. In order to continue his dedication to teaching, Tom completed a year-long, university supported Effective Teaching Course offered by the Association of College and University Educators (ACUE) here at SUNY Oswego. In addition to developing effective teaching strategies, Tom was also accepted to participate in the PKAL STEM Leadership Institute hosted by the Association of American Colleges & Universities. Hand in hand with developing STEM Leadership skills, Tom and a few of his colleagues (Julia, Fehmi, Sue, and Kristin) submitted an NSF proposal to strengthen retention rates within the Chemistry Department at SUNY Oswego. They are still waiting to hear back from the NSF but the fingers are definitely crossed for a positive response. Tom is looking forward to the next academic year and is excited to meet all the new students as well as welcome back the returning students.

Martha Bruch, Professor, Physical Chemistry martha.bruch@oswego.edu
Ph.D., University of Delaware, 1984
B.S., University of Delaware, 1978



#### **Research Interests:**

Nuclear magnetic resonance (NMR) spectroscopy, high performance liquid chromatography (HPLC) and polycyclic aromatic hydrocarbons (PAH).

#### **Update:**

She is continuing to teach general and physical chemistry and to create and analyze chemically modified silica surfaces by sold state C-13 and Si-29 NMR.

#### Fehmi Damkaci, Professor, Organic Chemistry

fehmi.demkaci@oswego.edu
Post-doctoral fellow, Boston College, 2004-2006
Ph.D., University of Maryland, College Park, 2004
M.S., University of Maryland, College Park, 2000



#### **Research Interests:**

Synthesis of designer polymeric nanoparticles to act as targeted drug delivery systems, total synthesis of heterocyclic natural products with medicinal and/or structural importance, and copper and iron catalyzed reactions, including heteroaryl couplings, heteroaryl ring formation, and C-H activation using N-pydrylurea derivatives as ligands.

#### **Update:**

Dr. Damkaci received the President's Award for Scholarly Activities. Dr. Damkaci worked with four undergraduate and graduate students on several research projects. His students presented their research in regional chemistry conferences throughout the year. He has been the president of a regional/national non-profit organization (terraed.org) located in Syracuse creating several STEM hands-on opportunities for students. The non-profit organizes regional STEM fairs in Rochester and Potsdam and supports STEM Fairs in Buffalo and Duchess County. His organization also provides capacity building grant for CNY public schools to develop hands-on STEM opportunities for its students. He also developed marina biology research experience in Bahamas for High School Science Teachers and their students. Even though it is canceled to due to Covid19, on its 10th year anniversary GENIUS Olympiad drew more than 1700 project application from 80 countries and 43 states. The non-profit also created a journal for high school research (ijhighschoolresearch.org) to publish high quality research accomplished by high school students and let them gain publishing skills.

#### Shokouh Haddadi, Assistant Professor, Forensics & Analytical Chemistry

shokouh.haddadi@oswego.edu
PhD in Analytical Chemistry University of Waterloo, 2008
MS Tabriz University, 1999
BS Azad University, 1995



#### **Research Interests:**

Chemical Analysis of Latent Fingerprints, Forensic Drug Analysis, Arson Analysis

#### **Update:**

During the academic year 2019-2020 Dr. Haddadi taught advanced forensic chemistry graduate course as well as criminalistic chemistry undergraduate course, during the Fall semester and analytical chemistry and forensic chemistry during the Spring semester. She also continued conducting research in the area of forensic analytical chemistry, working with capstone students. She presented the results of one of her research projects at the American Academy of Forensic Sciences 72nd Annual Scientific Meeting, in February, 2020. She received the Faculty Scholarly and Creative Activity Grant in Fall 2019 and worked with an undergraduate student who received the Faculty-Student Challenge Grant in Spring 2020. Besides teaching and research, Dr. Haddadi enjoyed serving as the capstone/assessment coordinator, being in touch with capstone research students and research advisors, and getting to know staff and faculty of other departments and discussing assessment approaches. Dr. Haddadi switched to online teaching during the Spring 2020 and this summer she has been working on making her classes online for the Fall 2020 semester. She is looking forward to another exciting and effective year and would like to thank all faculty, staff and students who she had the opportunity to work with during the last academic year and helped her with their kind advice, excellent support and their warm and effective presence.

Webe Kadima, Associate Professor, Analytical & Biochemistry webe.kadima@oswego.edu
Post-doctoral fellow, University of California, Riverside, 1987–1989
Ph.D., University of Alberta, 1986
M.Sc., University of Montreal, 1982
B.S., University of Montreal, 1980



#### **Research Interests:**

The investigation of plants used to treat diabetes in the Democratic Republic of Congo (DRC) involving clinical studies in the DRC and biochemical studies at SUNY Oswego.

**Julia Koeppe,** Assistant Professor, Biochemistry julia.koeppe@oswego.edu
Postdoctoral fellow, Oxford University, England, 2006-2010
Ph.D., University of California, San Diego, 2006
B.S., Hope College, Michigan, 2001

#### Research interests:

Protein interactions involved in activation and regulation of innate immunity. Protein interactions linking blood clotting and inflammation. Structure-function relationships in enzymes. Creating research-based curricula for biochemistry teaching labs

#### Update

It was another productive year in my research lab. I had 8 students working with me, and 2 of those were working on Capstone projects. I also had 2 MS students join the lab, and they will continue working with me in the coming year. Starting in summer 2019, we had several chances to travel to present our work. Ali Khan and Michael Kirsch both attended undergraduate research conferences to present their summer projects studying an enzyme of unknown function. I was invited to speak at Rowan University in New Jersey in October 2019, where I gave a talk on our project looking at interactions between thrombomodulin and the complement system. In February 2020, Ali Khan and I traveled to San Diego to the annual meeting of the Biophysical Society, and this may have been the last large meeting to take place in person before the pandemic hit and caused other societies to cancel meetings. We presented posters on our study of enzymes of unknown function and on our work with thrombomodulin. I was honored to receive the Provost's Award for Mentoring in Scholarly and Creative Activity based on my efforts in mentoring students both in and out of my lab. I continued to teach courses in biochemistry this year, and I taught a new graduate course on biophysical methods. In the methods course, I taught a unit on computer programming in Python, I first taught myself a bit of programming after attending a workshop hosted by Virginia Tech and the Molecular Sciences Software Institute (MoISSI) in August 2019. In the biochemistry labs, I continued to use the research-based curriculum in which students use computational and wet-lab methods to study enzymes of unknown function. I gave a talk on this curriculum in the Science Today lecture series on campus in September 2019. I am currently working with my collaborators to develop more online tools for this curriculum that can be used to teach labs fully online. This will be important as many universities are still teaching remotely due to the COVID-19 pandemic. My collaborators and I wrote about our own pivot to online learning in a paper that will be published in the Journal of Chemical Education. We received supplemental funding from NSF to support our efforts to develop these new materials. In a crossover between research and teaching, I attended a weeklong online boot camp to study the main protease of SARS-CoV-2 that was hosted by the Institute for Quantitative Biology and the Protein Data Bank (PDB) at Rutgers University in June 2020. Five students from Oswego, including Michael Kirsch and Charlotte Labrie-Cleary, also attended. We studied the structure of the protease and how its amino acid sequence has changed during the spread of the virus around the world. We then used a program called FoldIt to simulate 3D structural changes that could occur due to the amino acid changes. Understanding the structural changes will help with drug design for treatment of the virus. We wrote about the boot camp in a paper that will be published in Biochemistry and Molecular Biology Education. I am adapting resources used during the boot camp to create online lab experiments for biochemistry, and I will be teaching a unit on the SARS-CoV-2 protease in my graduate level enzymes course in the upcoming fall semester.

**Vadoud Niri,** Associate Professor, Analytical Chemistry vadoud.niri@oswego.edu

Post-doctoral fellow, University of North Dakota, 2009-2010 Post-doctoral fellow, University of Waterloo, 2004-2008

Ph.D. in Analytical Chemistry, University of Tabriz

#### Research Interests:

Dr. Niri's research group has been focusing on developing new sampling/sample preparation and analytical methods for monitoring chemical pollutants, which negatively affect public health and the environment (air, water, soil and sediment media) and investigating the efficiency of possible removal/remediation techniques for these compounds.



#### **Update:**

Dr. Niri has been active in research by supervising 2 graduate students and 7 undergraduate students in their research projects in the area of analytical chemistry during last fall and spring semesters. His research group worked on different projects such as analyzing drugs in biological samples, analysis of microbial volatile compounds from mold samples, and VOC removal by indoor plants. He has been also collaborating with Dr. Haddadi and Dr. Schneider from chemistry department and Dr. Poongodi from Biological Science department. In addition to presentations in on-campus conferences such as Summer Scholars Symposium, Dr. Niri has presented the results in a national meeting.

Presentations (presenters are underlined):

- M. Gysbers, T.M. Maslin, K. LaGatta, S. Haddadi, and V. Niri, Analysis of Drugs Used in Crimes using Solid Phase Extraction and Liquid Chromatography-Tandem Mass Spectrometry, Summer Scholars Symposium, SUNY-Oswego, September 13th, 2019.
- 2. <u>A. Makara, M. Miller</u>, and **V. Niri**, Investigation of Volatile Organic Compound Removal by Indoor Plants Using a Large Sampling Chamber, *Summer Scholars Symposium*, SUNY-Oswego, September 13<sup>th</sup>, 2019.
- 3. <u>B. Parody</u>, <u>P. Nformi</u>, and **V. Niri**, Analysis of Microbial Volatile Organic Compounds Release from Different Types of Mold Samples, *Summer Scholars Symposium*, SUNY-Oswego, September 13<sup>th</sup>, 2019.
- 4. M. Gysbers, T. Maslin, K. LaGatta, S. Haddadi, and <u>V. Niri</u>, Method Development for Analyzing 17 Benzodiazepines and Metabolites Used in Crimes Using Solid Phase Extraction Coupled to Liquid Chromatography-Tandem Mass Spectrometry, *The American Academy of Forensic Sciences 72<sup>nd</sup> Annual Scientific Meeting, Anaheim, CA*. February 17<sup>th</sup> 22<sup>nd</sup>, 2020.

Casey Raymond, Associate Professor, Inorganic Chemistry casey.raymond@oswego.edu
Post-doctoral fellow, Northwestern University, 1996–1998
Ph.D., Colorado State University, 1996
B.S., Michigan State University, 1991

#### **Research Interests:**

Solid-state inorganic chemistry, metal oxide, boron chemistry, crystallography, brewing science, fermentation science, and food science.

#### **Update:**

I am continuing to serve as the Acting Director of the Honors Program while Prof. Gwen Kay serves a second term as president of the SUNY Faculty Senate. It's been an enjoyable year working with these students. But, oh boy, was this past spring challenging—I suspect it was for everyone. We shifted our synthesis projects towards metal oxide so that the reagents were more stable to work with, as we were seeing extensive oxidation of the polychalcogenides in our equipment. And I didn't want to set up a glass blowing station for fused silica or have students sealing fused silica ampoules. We are starting to see some good progress this summer. Every conference I had planned to attend and present at for the year was cancelled. But this summer I am completing the revisions on a chapter in an ACS Symposium Series. So, that third cat we adopted to play with Ulysses din't work out quite as expected. Ulysses has slowed down due to hyperthyroidism, but the medications are working. We decided to try the oral meds based on cost and availability first and these are working so we're sticking with it. But Puma and Rosemary have become playmates much to our surprise. With the additional time availability we've gotten back on the tandem and are riding about every other day at this point. Typically 10–20 miles at a time and usually early in the morning to avoid the heat we've been having. Id' say this is one positive of COVID. We're doing as much as possible to minimize contact, including combining trips out into one and other than milk and a few things only grocery shopping once every three weeks.

#### Jeffery Schneider, Associate Professor, Analytical and Environmental Chemistry

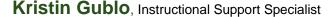
jeffery.schneider@oswego.edu

Ph.D., Dartmouth College, 1992

M.S., University of Wisconsin-Milwaukee, 1985

B.S., University of Wisconsin-Milwaukee, 1981

**Research Interests:** The determination of arsenic and lead in soils of Rice Creek Field Station, the study of carbohydrate composition of beer, and the investigation of the effect of boiling times on the isomerization of alpha acids in hops.



kristin.gublo@oswego.edu

M.S., SUNY Oswego, 1999

B.S., SUNY Oswego, 1996





**Update:** Kristin is responsible for providing all reagents and equipment for our laboratory courses. She provides lab safety training workshops each semester to the chemistry faculty, graduate students and undergraduate research students. Kristin serves as the department's Professional Advisor, Advisement Coordinator, Coordinator of the General Chemistry Peer Mentor Program, and Academic Probation Advisor. She taught two sections of our "Freshmen Chemistry Seminar" course in the fall semester for our incoming majors. This course provides incoming students a gateway to chemistry course to help smooth their transition and provide opportunities to build a strong cohort of support. She teaches a Chemical Safety course in the spring semester. Kristin works closely with our Career Services and Alumni office to provide our majors with alumni visits. This year she helped to plan visits from Peter Bocko, Larry Wilson, Seth Puterlo, Jesse Vanucchi and Todd Pagano. She serves as the club advisor for both the Chemistry Club and the Pre-optometry club. Kristin is active in various committees on campus including advisement practices, the chemical hygiene committee and new this year the student lab safety committee. She continues to supervise ~ 5 work study students per year. Her family is her "spare time". Ryan is going into 10th grade and Emily will be starting middle school this fall (and her dog Toby who is now 4). Her husband Ed (Oswego alumn ' 95/ '97) has been with Thermopatch Inc. in Syracuse for 16 years as their Operations Manager. This year they celebrated their 20<sup>th</sup> year wedding anniversary.

#### Chad Sigindere, Instrumentation Specialist

chad.sigindere@oswego.edu

M.S., University of Pittsburgh, 2017

M.S., SUNY Oswego, 2014



**Update:** Chad is excited to return to the Chemistry department. He oversees, maintains, and services a variety of analytical instruments and laboratory equipment. He will be teaching students how to properly operate and take care of these instruments. He will also support teaching and laboratory courses. After graduating from SUNY Oswego, Chad did bioorganic research, taught Chemistry and worked at the mass spectrometry facility at University of Pittsburgh. In the years to follow, he worked as a SUNY-ESF adjunct instructor and taught Chemistry in the Syracuse area. He recently joined the Chemistry department.

#### 2019- 2020 Chemistry Degree Candidates:

#### December 2019

Amarachukwu Ajoku Biochemistry **Brock Broniman** Chemistry BS Chynna Chou Biochemistry Veronika Malinowski Chemistry BA Doctor of Optometry Program at Massachusetts College of Pharm & Health Sci Michael Mongiovi Chemistry BA Christopher Murphy Chemistry BA Regeneron Pharmaceuticals, Rensselaer NY, Analytical Scientist Praise Nformi Chemistry BA Christopher Serrano Biochemistry Masters of Science in Chemistry at SUNY Oswego May 2020 Shelby Barnes Biochemistry BS Masters of Science in Chemistry at SUNY Oswego Research Associate for Car-Freshner Corporation (did co-op summer/fall 2019) \*Kaitlyn Barney Chemistry BA Masters of Science in Chemistry at SUNY Oswego Timothy Bodah Chemistry BS Stephanie Collins Biochemistry BS \*Dylan DiGrazia Chemistry BS Boston College, Chemistry PhD Eva Doty Chemistry BS Mariah Foll Biochemistry BS \*Christopher Gayvert Biochemistry BS Michelle Gloska Biochemistry BS \*Piper Goodleaf Biochemistry BS Garrett Hausman Chemistry BS Doctor of Optometry Program at Massachusetts College of Pharm & Health Sci Pruthuvi Heenatigala Chemistry BS Dakota Jackson Chemistry BS Renasha James Biochemistry BS \*Malik Jones Chemistry BS Anna Maslowski Chemistry BS Lab Assistant at ProSciento's Clinical Research Unit for Metabolic Drug and Device Development in Chula Vista, California. Maria Elena Mendoza Biochemistry BS \*Margaret Miller Biochemistry BS University Of Oklahoma Health Sciences Center, Biomedical Sciences Claire Millington Biochemistry BS Vincent Minozzi Biochemistry BS Quality Control INFICON, East Syracuse

Maastricht University, Research Master's in Fundamental Neuroscience

\*Philip Mosher

Biochemistry BS

Oshadhi Palanda	Chemistry BA	
Domenick Palmieri	Chemistry MS	
Brittany Paraody	Chemistry MS	
Bailey Phelps	Chemistry BS	
Anthony Pompa	Chemistry BS	Masters of Science in Chemistry at SUNY Oswego
Manoj Santhakumar	Chemistry BA	
*Daria Savitskaia	Biochemistry BS	Dental Hygiene at SUNY Erie, and then hopefully Dental School after that
Michael Scott	Biochemistry BS	
Ryan Smith	Chemistry MS	PhD at University of Nevada Reno
*Kimberlynn Sprague	Chemistry BA	Doctor of Optometry Program at Massachusetts College of Phar & Health Sci
Eldad Sylvestre	Biochemistry BS	
Roselyn Tofa	Biochemistry BS	
Justin Troelstra	Biochemistry BS	
Hannah Vail	Chemistry MS	Quality Specialist Safetec of America in Buffalo
*Sam Waldron	Chemistry BA	M.S.Ed program for literacy education at U Albany
Darryl Webber	Chemistry MS	
Suzanne Westmiller	Biochemistry BS	
Dylan Wiley	Biochemistry BS	
Callista Wlaschin	Chemistry BA	Doctor of Optometry Program at Massachusetts College of Pharm & Health Sci
Morgan Wolanin	Chemistry BS	R&D Chemisty at Coventya in Oriskany, NY

<sup>\*</sup>Students graduated with Honors

#### Dylan DiGrazia, Chemistry major from the Class of 2020 earned the SUNY Chancellor's Award for Student Excellence

Dylan is from Amesbury, Mass., he graduate with a 3.94 GPA while also minoring in Math and in Applied Statistics. He will be attending Boston College in the fall for the PhD program in Chemistry. His future goal is to work in industry and then eventually becoming a professor. He received many scholarships and awards including the Willy G. Schuh Jr. Outstanding Senior Award, Pearl A. Monroe Scholarship, Peter '75 and Andrea Guglielmo '73 Award, Freshman Chemistry Scholarship and Dean's Scholarship. He was heavily involved on campus as a member of the Phi Kappa Phi national honor society, president of the Outdoors Club, a tutor for the Office of Learning Services, a Math Camp assistant and General Chemistry Peer Mentor.

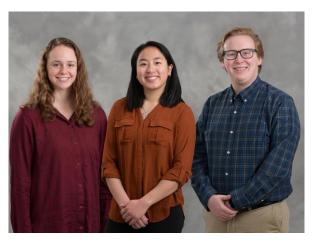


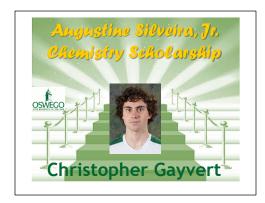
Photo from Jim Russell. Also in the photo with Dylan are the other 2 students from SUNY Oswego that received the award; from left, Chanel Meyer and Samantha Jenks

#### **Spring 2020 Department Awards**



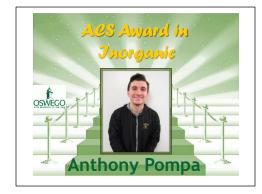


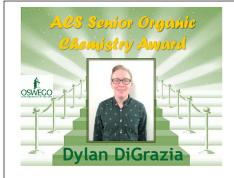




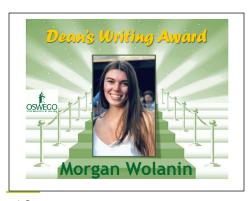
















#### **Summer 2019 Undergraduate Research Award Recipients**



Ryan Smith and Brittany Parody

Augustine Silveira Jr.

Research Award



Dylan DiGrazia

Peter '75 & Andrea

Guglielmo Bocko

'73 M '75 Award

#### **News from Alumni:**

**Jasmine Gomez '19** received a Graduate Assistantship in Areas of National Need (GAANN) Fellowship from Syracuse University. From her work at a REU at Binghamton in summer of 2018, she co-authored an article: <a href="https://pubs.acs.org/doi/10.1021/acsami.9b10440">https://pubs.acs.org/doi/10.1021/acsami.9b10440</a>

**Francesco Papa ('19)** Junior Sales Representative for Depuy Synthes (Johnson and Johnson). He is selling knee and hip replacements as well as some other orthopedic supplies.

Mark G. Hartell, PhD ('90) was recently promoted to Colonel, US Army. The ceremony was held at the US Army Medical Research Institute of Chemical Defense, Edgewood MD. COL Hartell previously served as the institute's Deputy Commander. The ceremony was officiated by BG Michael J. Talley, Commanding General, US Army Medical Research and Development Command and Fort Detrick and hosted by COL Denis G. Descarreaux Commander, US Army Medical Research Institute of Chemical Defense.COL Hartell was accepted into the US Army War College and has started work on a Masters in Strategic Studies.

Please contact us with an update for the next newsletter. We love to hear from our alumni!

https://www.oswego.edu/chemistry/after-oswego





# Jesse Vanucchi ('13) is employed as a Senior Lab Technician with Novelis in Oswego. Students got to learn all about his career and job opportunities at Novelis during a pizza lunch on November 15<sup>th</sup> sponsored by the Career Services Office.

#### **Alumni Visits**

Dr. Peter Bocko ('75) retired Chief Technology Officer of Corning Glass Technologies gave a talk on October 11th titled "Further Adventures in the Physical Chemistry of Glass: Modern Insights into Old Mysteries". A special meet and greet lunch was held for faculty and students sponsored by Alumni-In-Residence the program. See photo above. During his visit, he was also talked to Dr. Damkaci's students in the CHE 331 class about his career.

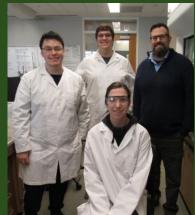
Dr. Larry Wilson ('75), the owner of Mariner Analytical. Gave a talk on 28th October titled: "Introduction to Design of Experiments (DOE) Chemists". A special meet and greet lunch was held for faculty and students sponsored by the Alumni-In-Residence program. photo above. During his visit, he was also talked to Dr. Damkaci's students in the CHE 331 class about his career as an Analytical Chemist.

Seth Putelo ('00) is employed as a GCMS Supervisor with SGS Galson in Syracuse. He made a visit to campus on November 5<sup>th</sup> as a guest speaker in our GST 110 course. He took a tour of Shineman Center and met up with chemistry faculty and staff to discuss his career path and job oppotunites at SGS Galson. Refreshments were sponsored by the Career Services Office.

Dr. Todd Pagano ('96) gave a Science Today lecture on February 19th "Addressing the Global Challenge of Access to Clean Water using Spectroscopy & Chemometrics". During his visit he attended a special meet & greet luncheon with chemistry faculty and staff. This lunch was sponsored by the Alumni-In-Residence program. He was also able to visit with many faculty and students throughout the day. Shown here below Todd talked to some of our current CHE 425 lab students about their experiments. He is a Professor of Chemistry and Associate Dean at RIT in Rochester NY.







#### Fred Scoles, Instrumentation Specialist Retires after 36 Years

Thank you to everyone that came out to help us celebrate Fred's retirement on October 25<sup>th</sup>. His guidance and expertise helped so many of us and we've been so fortunate to have him all of these years. He will surely be missed, but never forgotton. We wish him the very best as he starts this next chapter of his life.



















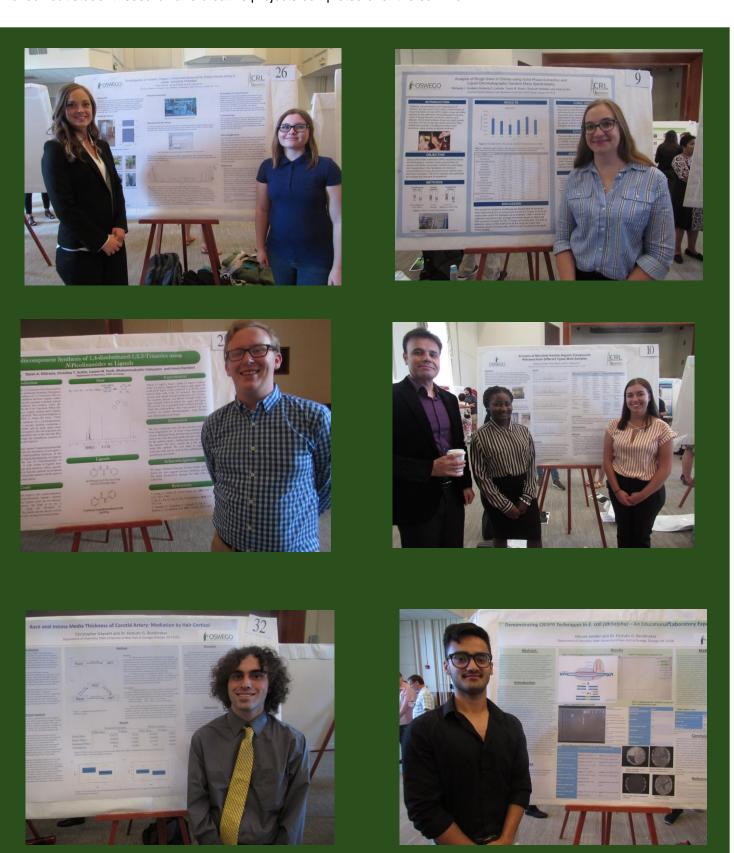






#### The 2019 Summer Scholarly and Creative Activities Symposium:

The symposium took place September 13<sup>th</sup> in the Sheldon Ballroom. It was a great opportunity for the community to check out student research and creative projects completed over the summer.



# Dr. Fehmi Damkaci earns 2020 President's Award for Scholarly and Creative Activity

Ongoing research efforts, leadership for an international research competition and a selfless disposition helped make Fehmi this year's winner of the President's Award for Scholarly and Creative Activity.



# A Company of the Comp

#### Dr. Julia Koeppe receives 2020 Provost's Award for Mentoring in Scholarly and Creative Activities

In four years at Oswego, Koeppe has mentored 50 registered student researchers in biochemistry. Dedication to the success of student researchers has earned Julia this year's Provost's Award for Mentoring in Scholarly and Creative Activities.

#### Christina Scalzo earns the 2019 CNY ACS Outstanding Acheivement in Chemistry Undergraduate Award

Along with the award Christina, a junior Chemistry major, received a \$125 Amazon gift card and a one year CNY ACS membership. Her outstanding GPA, leadership as President of the Chemistry Club and her involvement in undergraduate reseach made her the ideal candidate. Christina plans to attend graduate school in the future.



#### **Pre-Optometry Club News**

In the fall semester, the club invited to campus an admission's representative from Salus University. Chris Speece spoke to our pre-optometry students about Salus's admissions and program requirements.

In the spring semester, they invited a SUNY Optometry school representative to campus, Christian Alberto, he spoke to the pre-optometry students about their school's requirements.

Throughout the year they all supported each other though the application process to Optometry School. During the spring semester, they also organized a used prescription eyewear drive on campus to donate to an Optometry school that fixes them up for mission work.



## 4 Club Members will all be attending the Doctor of Optometry program at Massachusetts College of Pharmacy and Health Science MCPHS in Worcester this fall

#### Kimberlynn Sprague (Chemistry BA May 2020) Hometown: Red Creek, New York.

"I knew I wanted to do something to help people. I always volunteered throughout high school and I knew I wanted to find a career where I would be making a difference. I've had glasses since I was in the 4th grade and putting on that first pair was exhilarating; the world finally came into focus. I'm so thankful for my glasses and the optometrists who helped me because without them I would be missing so much of the world. Choosing optometry was a no brainer. My life was changed due to an optometrist and I want to be able to help others the same way I was helped."

#### Callista Wlaschin (Chemistry BA May 2020) Hometown: Clifton Park, New York

"I knew I wanted to be an Optometrist ever since I began working during school breaks at an Optometric private practice my sophomore year of high school. I chose this profession because I knew I wanted to be involved in the medical field. I wanted to alleviate daily burdens in people's lives and improve their overall quality of health. Optometry is a very distinct and a clean profession. The eye is such and small and specific organ, but it can tell you so much more as to what's going on in someone's body and the condition of their health. I wanted to combine my love for science with my love for patient care. Being an optometrist will allow me to not only create prescriptions but detect brain tumors, carotid artery blockages, diabetes and other diseases. Optometrists help prevent, detect and treat eye diseases and make personal connections with their patients."

#### Garrett Hausman (Chemistry BS May 2020) Hometown: Ronkonkoma, NY

"When I was a freshman I wanted to go to Medical school and become a radiologist. After some considered thinking I thought it would be in my best interest to not go to medical school, but still pursue my career in the medical school. That is where I was introduced to Optometry and knew that is what I would want to do for the rest of my life."

#### Veronika Malinowski (Chemistry BA Dec 2019) Hometown: Shirley, NY

"I knew since high school that I wanted to be an optometrist. I always wanted to go into a healthcare profession, but I didn't like needles or blood. I visited the eye doctor and could see myself in that field. I love the ability to form strong patient relationships as well as the instant resolution for treating patients."

#### THANK YOU TO OUR 2019-2020 CHEMISTRY CLUB OFFICERS:

President: Christina Scalzo

Vice President: Michael

Kirsch

Secretary: Olivia Colon

Treasurer: Brooke

Raymond

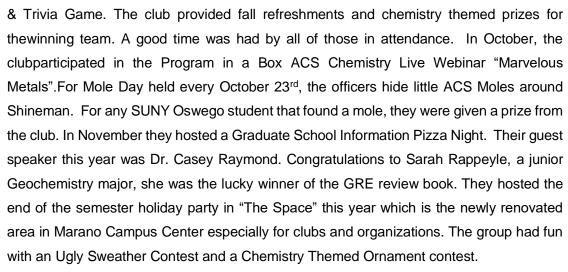






#### **Chemistry Club News:**

The club started off the school year in September with a Fall Social



In February, they hosted another Program in a Box ACS Chemistry Webinar "The Future of Food". This hot topic brought in many students from outside the organization as well and they even made press for it in the Oswegonian. The club participated in the Chemistry Themed Valentine Sale once again this year bringing some love to Shineman on Valentne's Day. The money raised from this year's event went to Embrace Relief Clean Water Well Project. In March, some club members volunteered their time for in Maker Madness, teaching local childen about polymer chemistry with homemade bouncey balls. Then the semester came to a hault with COVID...they were not able to host the end of the year party for our graduating seniors in May or any other planned events. Hopefully next school year, the club will be able to continue where they left off and plan some exciting events for our students. We have been told that many events will need to be virtual so stay tuned for next year's newsletter to see how they made out!







**Dr. John Franck** from Syracuse University came to campus on October 18<sup>th</sup> to give a talk on "Observing Water on the Nanoscale: Overhauser Dynamic Nuclear Polarization".

**Dr. Arian Goldman** from the University of Leeds in England visited campus on November 25<sup>th</sup> and gave a talk titled "From structural biology of integral membrane pyrophosphatases to inhibitors of malarial parasites".

**Dr. Olga Makhlynets** from Syracuse Universitry came on March 6<sup>th</sup> to give a talk on "Antimicrobial hydrogels for wound healing".

Seminar Speakers

Department of Chemistry Seminar Program 2019-2020

Seminar Program Cooridnator for 2019-2020:

Dr. Julia Koeppe

Meet & Greet Luncheons for all of these were sponsored by an Auxillary Services Grant.





#### Contact us for next year's newsletter

#### Mail

SUNY Oswego
Department of Chemistry
296 Shineman Center
30 Centennial Drive
Oswego, NY 13126

#### **Email**

chem@oswego.edu

#### Online Form

https://www.oswe go.edu/chemistry/ after-oswego

#### Thank you!

We would like to thank our generous alumni that made donations to our department last year. We used this money to support extra programs and to purchase equipment for our laboratories. Thank you very much.

If you are interested in making a gift to the college to support the department, you can go to alumni's secure on-line website (www.oswego.edu/givenow). To allocate the donation to our department, simply specify "Other Designation". You have four options available: Chemistry Department, a Chemistry Scholarship, the Augustine Silveira, Jr. Research Scholarship Fund, or the Chemistry Summer Research Fund. Checks can be made out to "Oswego College Foundation, Inc." and can be mailed to: University Development, 219 Sheldon Hall, Oswego, NY 13126. Please write your designation in the memo line. Or given online at https://alumni.oswego.edu/givenow