



Spring 2023 Newsletter

The SARS CoV2 pandemic has been declared officially over and life is beginning to return to normal, although with a heavy price in terms of lives lost and those affected by social and economic events of the past few years. The Executive Committee of SAZACS is aiming for a return to normalcy in the activities we provide to our members in Southern Arizona. This newsletter updates section activities in the past year since the last newsletter in the Spring of 2022. Before we get into that however, here is the list of the current officers of the local section:

Ms. Kara Saunders	Chair 2023	kara.c.saunders@gmail.com
Dr. Phil McBride	Chair-elect 2023	phil.mcbride@eac.edu
Dr. Brian Zacher	Immediate past Chair	bzacher@email.arizona.edu
Mr. Steven L. Brown	Treasurer 2022-2023	slbrown3@cox.net
Ms. Wendy Hyatt	Secretary 2023-2024	we.hyatt@gmail.com
Dr. Charles Weidner	Councilor 2023-2025	chuck.weidner@gmail.com
Mr. Pedro Flores-Gallardo	Alt. Councilor 2023-2025	floresgape@gmail.com

Please feel free to contact your section officers with any questions or concerns you may have. There were many other SAZACS members involved as volunteers to help 'keep the wheels turning' in 2022-2023:

Dr. Grazyna Zreda	Community outreach chair
Dr. Cynthia Burham	2022 Awards chair
Dr. Mehrnoosh Hashemzadeh	2023 Awards chair
Ms. Trina Shartsis	Womens Chemistry Group chair
Dr. Brooke Beam-Massani	Communications chair
Dr. Iman Daryaei	Chemistry Olympiad coordinator
Ms. Ashleigh Dahlstrom	Younger Chemist chair
Mr. Nipuna Weerasinghe	Webmaster
Ms. Pat Schumann	
Dr. CJ Pommier	
U of A Student Members (SMACS)	

Remarks from the 2023 Chair



(Ms. Kara Saunders)

Dear Southern Arizona ACS Members,

I hope this message finds you well. As we slowly begin to emerge from the pandemic, we are turning our attention to strategic alignment with National. Despite the challenges presented to us by COVID-19, the local section is determined to advance forward while continuing to provide value to all chemists as the field evolves over time.

Our strategic planning event will bring together members of our local section to discuss our strengths, weaknesses, and opportunities for growth. Our aim is to develop a shared vision for the future and a roadmap for achieving our goals.

In the very near future section members will be receiving a survey to provide input on what the section governance should focus on moving forward. I encourage as many members as possible to participate in this event and to share their thoughts and ideas. Your input is essential as we plan for the future of our local section. Together, we can ensure that our local section continues to be a thriving community of chemists and chemistry-adjacent academics, professionals, and students.

Details of the event, including location, will be announced soon. I look forward to seeing you all there.

Best regards,
Kara Saunders

Introducing the 2023 Chair-elect



(Dr. Phil McBride)

Dear Southern Arizona ACS Members,

The American Chemical Society (ACS) has made a tremendous impact on my career. Through my membership in ACS I have been introduced to some amazing leaders in chemistry and provided resources that helped me in my career. The dinner meetings are where I first met some of the leaders of our local section. I felt welcomed and valued, was able to network, socialize, enjoy good food, and learn about the role of chemistry in education and industry. I welcome the opportunity to promote chemistry and its role in society, across Arizona as your 2022 Chair-elect.

I have always had a passion for science and especially chemistry, which stems from some wonderful teachers, a father who was a college chemistry professor, great mentors, and my association with ACS over the past 30 years.

I received a Bachelor's degree from the University of Arizona, a Master's degree from Northern Arizona University, and a Ph.D. in Chemistry from Miami University in Ohio, with a dual emphasis in organic chemistry and chemical education. It was at Miami that I developed a deeper level of understanding and love for chemistry. This is also where I first learned about the Biennial Conference on Chemical Education (BCCE), sponsored by the Division of Chemical Education of the American Chemical Society. I met some amazing people across the nation that have made an impact on me. One of the highlights of this conference is playing trumpet for the Al D. Hyde and the Key Tones. I look forward to our return to the stage for the 2024 Biennial Conference on Chemical Education at the University of Kentucky in Lexington, Kentucky! This will be our 20th anniversary performance!

One of my passions is exciting students about science. I am a strong advocate for outreach to our local schools and communities. I host a Student Chemistry Adventure (S=CH-A) for high school students, organize a 4-day, 3-night, summer STEM camp for youth in grades 7-9, and was one of the organizers of the Gila Valley Health and STEAM Festival.

I look forward to serving our local section to promote chemistry and its role in society. Together we can make a difference in our communities.

Respectfully,



Councilors Corner (Dr. Charles Weidner)

As a member of the ACS Council I represent you as section members relative to actions that the Council has before it. It is also my responsibility to report back to section members on Council news that is relevant to section members.

The spring 2023 meeting was held in Indianapolis with a hybrid format from March 26-30. There were 12,623 registrations (10,792 in-person and 1,831 virtual). A summary of Council actions:

- The Committee on Nominations and Elections presented to the Council the following nominees for selection as candidates for President-Elect, 2023: Mary K. Engelman, Dorothy J. Phillips, and Florian J. Schattenmann. The fourth nominee withdrew for personal reasons prior to the Council meeting. By electronic ballot, the Council selected Dorothy J. Phillips and Florian J. Schattenmann as candidates for 2024 President-Elect. These two candidates, along with any candidates selected via petitions, will stand for election in the Fall 2023 National Election.
- On the recommendation of the Committee on Membership Affairs (MAC), Council approved the 2024 Schedule of Membership (SOM). This SOM included maintaining the current member dues (Premium: \$160, Standard: \$80, Community Associates Basic: \$0) updates to the dues waiver for disabled chemists, removing the 70 year age requirement for Emeritus status, and allowing Society Affiliates access to the Standard as well as Premium packages.
- The Committee on Local Section Activities (LSAC) announced the launch of the ACS Speaker Directory, a new resource for our component group leaders to access a wide range of speakers for their in-person, hybrid, and asynchronous events. See
- The Committee on Meetings and Expositions (M&E) is actively engaged in collaborative efforts to re-imagine ACS meetings, targeting increased value and relevancy. Councilors can expect to receive more information on the Future of Meetings project in the coming weeks, starting next month with the M&E Chair comment in C&EN.

- Council Special Discussion

President Judith Giordan introduced and led a special discussion on the ongoing review of Society Committees. She sought Councilor input of positive ideas, key issues, and opportunities to improve the structure of committees. Four specific prompts were posed to Councilors for their input and suggestions:

1. Ideally, for ACS to have a committee structure that is forward thinking and able to address opportunities for members, ACS and the chemistry enterprise, we would...
2. Current and future key issues impacting ACS, the chemistry enterprise and our committees include...
3. I wonder what the positive impact on committees, member involvement, and ACS would be if we were to...
4. I wish that committees at ACS could...

Councilors provided their ideas and thoughts, and relevant Society units will receive this input within the next several weeks.

- Resolutions

The Council passed several resolutions:

- In memory of deceased Presidents Brian M. Rushton and Dr. S. Allen Heininger.
- In memory of deceased Councilors Yorke E. Rhodes and Maurice M. Bursey.
- In sincere appreciation of the Indiana Local Section, host Section for the spring 2023 ACS meeting

SAZACS Elections

The sections election of officers occurred in Nov 2022, with 49 members voting. Results of the elections for 2023 Officers:

Chair	Ms Kara Saunders
Chair-elect	Dr. Phil McBride (accepted as a write-in candidate)
Secretary	Ms Wendy Hyatt (2023-2024)
Alternate Councilor	Mr. Pedro Flores Gallardo (2023-2025)
Councilor	Dr. Charles Weidner (2023-2025)

SAZACS 2022-23 events

Fall 2022 Dinner Meeting

The second SAZACS dinner meeting of 2022 at Dantes Fire on Oct 27th was a presentation to ~30 members by the section's Womens Chemistry Group (WCG) entitled Who We Are, What We Do and Where We Are Going. This was a great opportunity for the WCG to interact with members of the section and show off the incredible community outreach they do.

Women's Chemistry Group: Who We Are, Where we've Been, Where we're Going...
SAZACS Dinner Meeting Dante's Fire 2526 E. Grant Road October 27, 2022 6:00 PM

The WCG, under the wing of the local ACS section, welcomes women chemists of all ages, as well as any women interested in science. We meet monthly to offer fellowship, mentoring, and to plan outreach activities. Our activities include participating in STEM Adventure for grades 5 to 8 by offering the ever- popular booth to make Silly Putty, judging at the Southern Arizona Science and Engineering Fair (SARSEF) while focusing on encouraging young ladies in science (grades K - 5), hosting a luncheon at RMRM last October focused on Women in Science, and presenting chemistry demos and posters at the Tucson Botanical Gardens in the spring.

Chemluminary Award

The Southern Arizona section was recognized as a finalist for the WCC Activity Chemluminary Award presented in Aug at the ACS Meeting and Exposition held in Chicago. Our Womens Chemistry Group was nominated for their luncheon presentation "Successful Women in STEM, What they've Done and What they're Doing". at the 2021 Rocky Mountain Regional Meeting. WCG representative Dr. Sylvia Kolchen was sponsored by the section to attend and present a poster along with Ms. Trina Shartsis on the nominated event. Although they didn't win the award, it did provide us with an opportunity to highlight the great activities the WCG does for our section. Thanks to all the members of WCG for your volunteer work!



2022 Awards and Recognition

Dr. Cynthia Burham Chair 2022

Dr. Mernoosh Hashemzadeh Chair 2023

The section Awards committee was in a state of flux in 2022 with turnover in the Chair position preventing us from hosting a reception for award winners within the section. We did however get nominations for The High School Excellence in Teaching Award and Dr. Tara Archuleta from TUSD was selected as the winner.

CBC Undergraduate Research Fair Poster awards 2022 (4/21/2022)

Physical Sciences Emerging

1st Place – Natalya Stanisic 200.00

2nd Place – Kawthar AlElg 100.00

Physical Advanced

1st Place – Parker Geffre 200.00

2nd Place – Greg Clarke 100.00

High School Excellence in Teaching Award

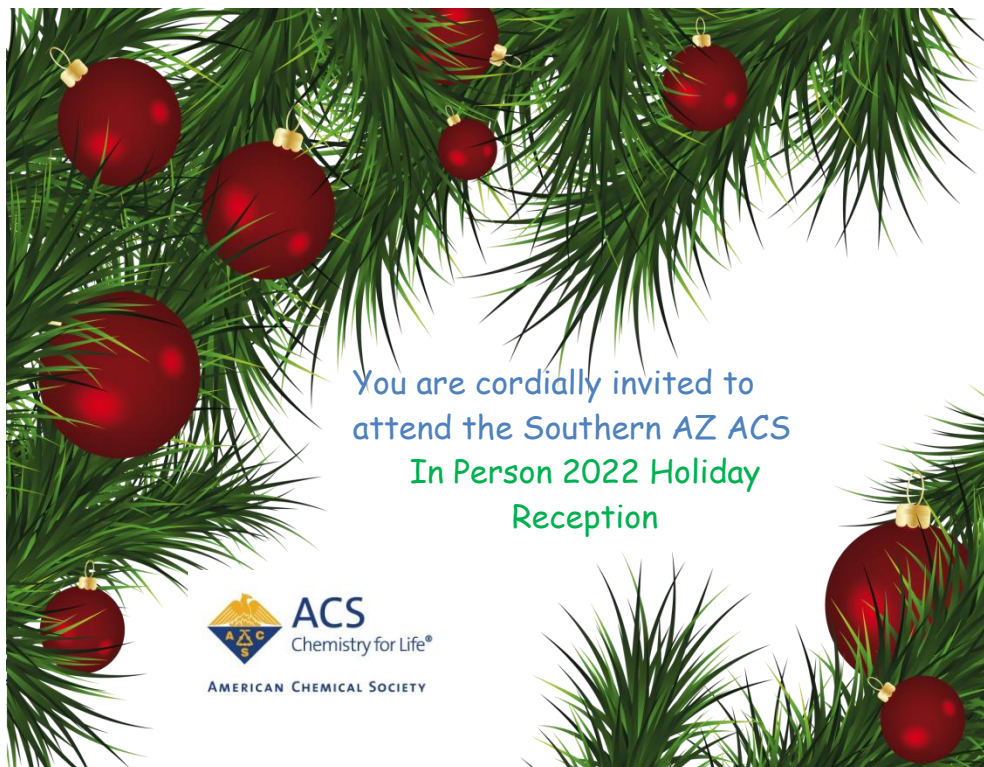


Dr. Tara Archuleta from TUSD's University High School won the 2022 High School Teacher award. As our award winner, she will receive a check for \$500. Another \$500 will be gifted to University High for her to use to support her teaching. Her nomination will also be submitted for consideration at the next Rocky Mountain Regional Meeting.

Additional awards sponsored by SAZACS

2022 Holiday Reception

Our annual SAZACS Holiday Reception was held at Brother Johns on Stone Ave on Dec 6. This event provided an opportunity to socialize and network with other ~ 25 other SAZACS members. A slide show providing information on what the section was up to in 2022 with respect to dinner meetings and community outreach was also prepared and run during the event. Donations for the Emerge Center Against Domestic Abuse were also collected during the event.



2023 National Chemistry Olympiad

The 2023 US National Chemistry Olympiad (USNCO)-Local Exam was held on-line and in person (based on the preference of science/chemistry teachers).

13 students from 4 high schools (University High School, Basis North, Queen Creek, and Mica Mountain) participated in the local section exam. Of these, 8 students were able to make it to the National Exam:

1- Kathrine Lam- UHS
2- Amber Li- UHS
3- Owen Korab- QC
4- Benjamin Jasper-QC

5- Jimmy Kwon-Basis N
6- Sophia Tsai- Basis N
7- Garrett Dincher- MM
8-Jodie Osmun- MM

Congratulations to all these students and thanks to their teachers who helped make this year's event possible. I am so proud that the number of female candidates increased significantly this year.

Dr. Iman Daryaei
Education Chair

SAZACS Community Outreach

Dr. Grazyna Zreda, Chair

2022 Chemists Celebrate Earth Day

The section participated in the Tucson Earth Day event at the Childrens Museum on April 23 from 9 AM - 1 PM. This was an in-person event with hand-on activities for the kids as well as free admission to the Museum for all kids! The theme was 'The Buzz About Bugs- Insect Chemistry'



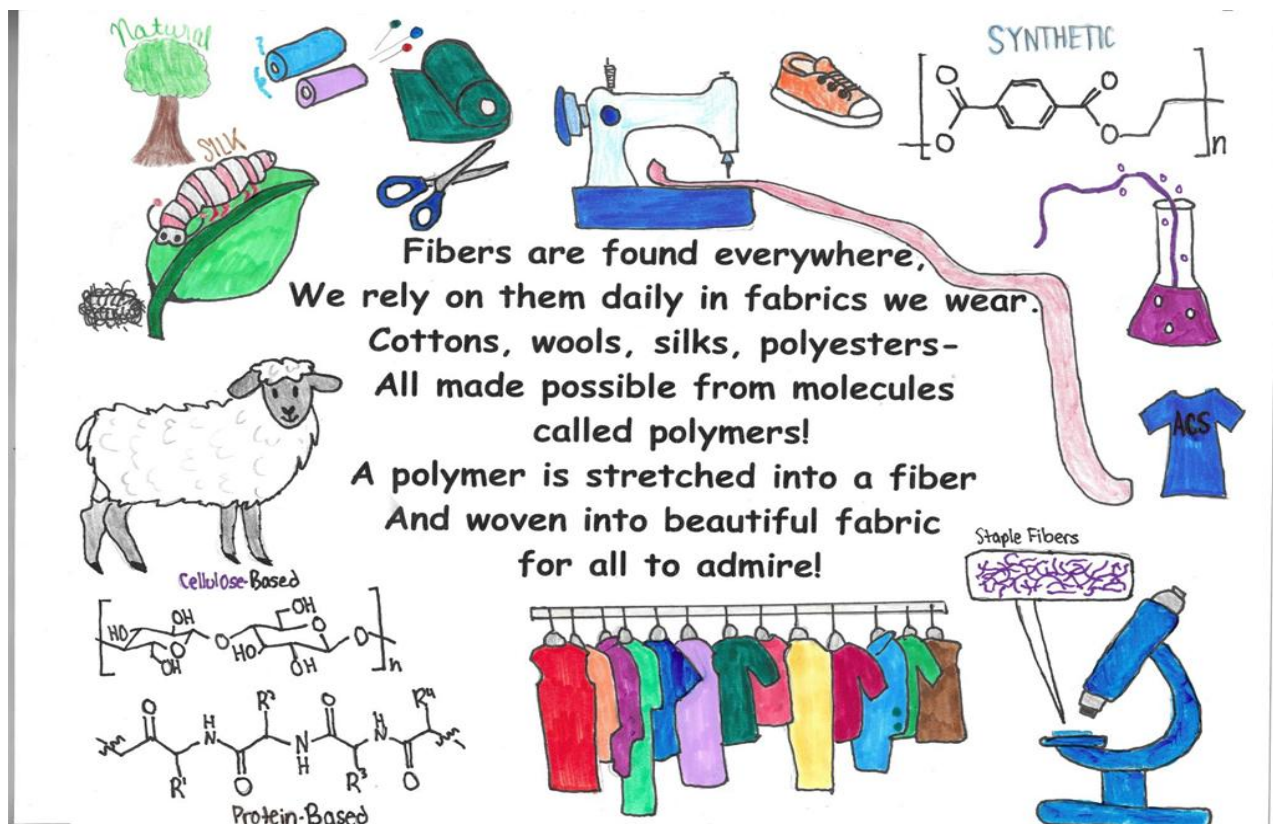
We were one of the 38 exhibitors at the event. According to the organizers, the event had over 2,700 attendees. As a part of our exhibit, we provided five different hands-on activities: investigation of the nature of dye using cochineal, investigation of smells and building mirror molecules, studying properties of slime, investigation of surface tension and studying the structural color of Blue Morpho butterfly wings. Our volunteers and presenters were section members as well as Tanque Verde High School ChemClub students.



2022 National Chemistry Week Contest local winners

We received 52 submissions from grades 3-5 and 10 from 9-12. Winner of the grade 3-8 was Breeelyn Spruce from Innovation Academy. Winner of the grade 9-12 was Andrew Smith from Tanque Verde HS. Both winners received \$25 gift certificate. In addition, we awarded 2 honorable mentions to Rilyn Stamp (4th grade, Innovation academy) and Jolene Simakhodskiy (5th grade, Innovation Academy). The award consisted of \$15 gift certificate. All participating students received a certificate of participation which were sent to the corresponding schools.

Grade Category	Student	School	Teacher	Place
3-5	Breelyn Spruce	Innovation Academy	Niki Tilicki	First Place
9-12	Andrew Smith	Tanque Verde High School	Kala Phelps	First Place
3-5	Railyn Stamp	Innovation Academy	Niki Tilicki	Honorable Mention
3-5	Jolene Simakhodskiy	Innovation Academy	Sabina Vaswani	Honorable Mention



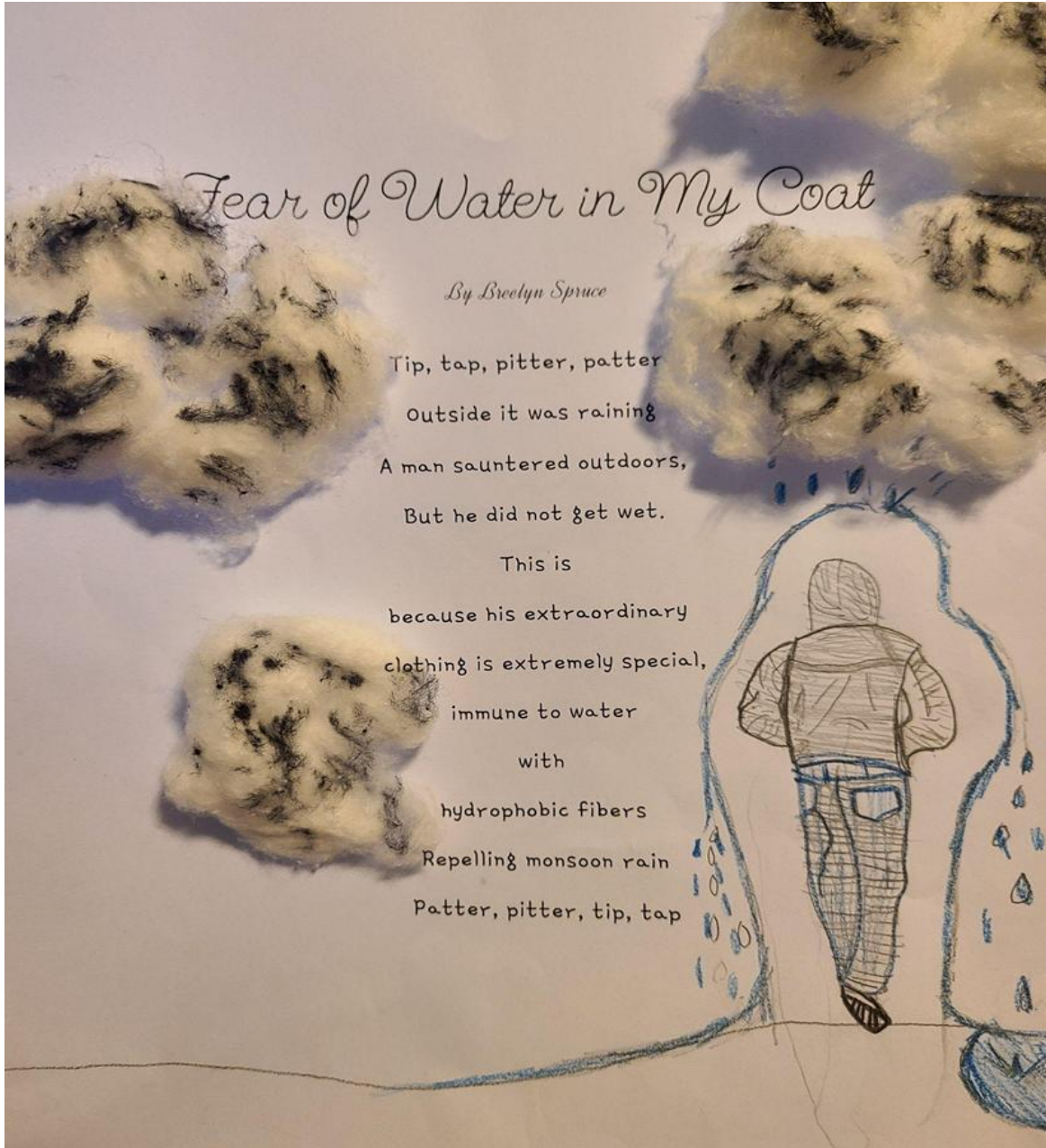
Andrew Smith Tanque Verde High School

Fear of Water in My Coat

By Breelyn Spruce

Tip, tap, pitter, patter
Outside it was raining
A man sauntered outdoors,
But he did not get wet.

This is
because his extraordinary
clothing is extremely special,
immune to water
with
hydrophobic fibers
Repelling monsoon rain
Patter, pitter, tip, tap



Breelyn Spruce Innovation Academy

Time to Dye!

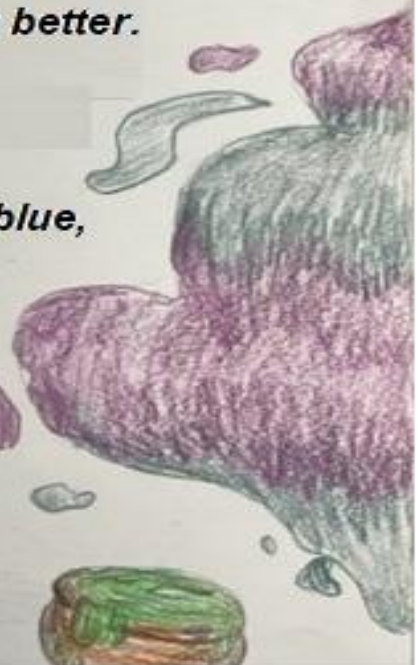
A poem by: Jolene Simakhodskiy



*Look through your closet and find a drab sweater,
You immediately want to make it better.*

*Get hot water and some dye,
Mix with colors soaring high.*

*Soak the sweater with pink and blue,
Make a sweater right for you.*



Chemistry Camp 2022 (Dr. Terry Matsunaga)

Twelve students with Autism Spectrum Disorders (ASD) and their parents attended the demonstration where a series of chemistry experiments were conducted in the Koffler labs at the University of Arizona.

Mr. Steven Brown oversaw the entire event, first offering a lecture on laboratory safety and then proceeding to explain chemical principles behind such concepts as



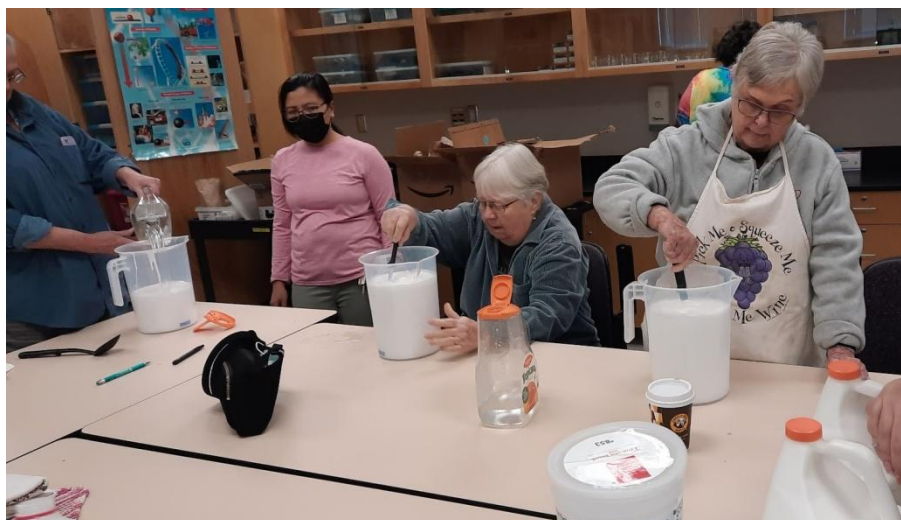
chromatography and polymer chemistry to name but a few. Experiments were conducted by the students with the help of SMACS volunteers and ACS members. Also assisting were graduate students from Speech, Language, and hearing Science (SLHS) under the mentorship of Jennifer Casteix, Associate Clinical Prof in SLHS. Parents were invited to a speakers forum from representatives of the

Disability Resource Center, Sonoran Center of Excellence in Disabilities, and representatives from Pima Community College and the Autism Society of Southern Arizona.

Overall, an exciting and informative day for these middle schoolers from Southern Arizona.

AZ STEM Adventure (WCG)

The AZ STEM Adventure was held Nov 18 2022. Every fall, 1,000 4th through 8th grade students from across Arizona adventure through a one-day glimpse into the world of science, technology, engineering, and math (STEM) through this collaborative event. WCG sponsors the Silly Putty Event where 468 individual student samples were prepared as the relation to a chemical reaction was described. At the Stem Adventure 2022, we put on the first non-virtual Silly Putty Event since 2019 following 2 virtual years (where we did have lots of online visibility!) The overall SARSEF Stem Adventure 2022 was a hybrid with a virtual component for those who chose; we had 450 students making samples, but no virtual coverage.



SARSEF 2023

Once again the WCG participated in SARSEF during Mar 4-11, 2023 by helping to judge science projects virtually. A total of eight gift cards and certificates were awarded to female students from K-5th grade

2023 Chemists Celebrate Earth Week



This year's event was held in-person at the Tucson Childrens Museum on April 22. The theme of the event was "The Curious Chemistry of Amazing Algae" and a wide variety of hands-on activities including the ever popular slime, UV beads and algae/chlorophyll demos. The event attracted hundreds of children and their parents to the SAZACS booth.



Thanks to Rob Root, Pat Schumann, Sarah Olson, Parker Loomis, Sophie Richard, Westley Roberts, Savannah Johnson, Kathryn Brown, Chuck Weidner, Royce Marian, Ashleigh Dahlstrom, Nate Schmidt, Addison Morris, Annika Koessler, Tiffany Le, Julia Meindl, Connor Moore, Christine Le, Maggie Basler, Marissa Ebel, Nolan Radomsky and Bela Buslig for volunteering and a big shout out to Graznya Zreda for organizing this.

Outstanding SAZACS Outreach Volunteer of the Year (2022)

SAZACS Executive Committee voted unanimously to name Ms. Sharon Gardlund the 2022 SAZACS Outreach Volunteer of the Year. In Sharon's own words:



My volunteering efforts, for which I am honored to be nominated for this award, were only made possible by the close and total collaboration with a group of very dedicated and hard-working ladies, the members of our Women's Chemistry Group, without which none of our endeavors would have continued to grow and succeed.

The Women's Chemistry Group ("**WCG**") is an informal organization of academic and professional women, sponsored

by the Southern Arizona section of the American Chemical Society, **SAZACS**. The WCG features monthly networking plus various outreach projects primarily directed at attracting young ladies into STEM related careers.

The WCG traces its origins to the **early 2000's** when Pat Schumann, longtime SAZACS rep to the National ACS, initiated the group as an offshoot of the national ACS Women in Science initiative. The WCG program featured monthly first Friday networking breakfast gatherings for local women in chemistry related positions, and participation in **Science Olympiad** and other outreach opportunities.

I was an early member of the WCG, and my first volunteer activity for the group was designing and staging Crimebusters event for Science Olympiad in 2006 and 2007. I became chair and activity coordinator of Women's Chemistry Group in 2008.

Our present annual agenda includes monthly networking and planning breakfasts, participation in the SARSEF sponsored Arizona Stem Adventure, the SARSEF Regional Science and Engineering Fair, exhibiting at the Tucson Botanical Gardens (or most currently, the Children's Museum OV site at Tohono Chul Park), and donation gathering Happy Hours in December and May.

I serve as communicator/scheduler, volunteer procurer, and supply coordinator for these events as well as being an active participant.

Spring 2008 featured the initiation of an annual participation in the **SARSEF Science Fair**, in which the WCG awards a certificate and Barnes & Noble gift card for the best female project in each grade level competition, K-5. The annual **WCG Silly Putty Event** started in **Fall, 2009**. This popular event, part of the annual SARSEF sponsored Stem Adventure, has enabled over 10,000 students over the years to take home their own silly putty sample.



From the outset, this has been a big crowd pleaser and we have tried to present the activity as an adventure in chemical experimentation, describing the formation of silly putty in terms of ingredients, conditions, and careful measuring, bolstered by banners showing the chemical composition of the reactants.

A third outreach event was added to our annual schedule in the spring of **2010**, when we were invited to set up an April

weekend chemistry exhibit for the enjoyment of families visiting the Butterfly Magic event at the **Tucson Botanical Gardens**. Our **2017** exhibit featured 5 hands-on exhibits including the Mole Table to celebrate Mole Day Oct 23. This activity resumed “post pandemic” this spring at **Tohono Chul Children’s Museum site** featuring four “hands on” exhibits: pH and natural indicator dyes (red cabbage juice!); the many uses of Agave; a Silly Putty table; and my contribution, an exhibit featuring red dyes from various sources, especially the cochineal beetle, and paper chromatography of inks. WCG, in conjunction with UA WISE (Women in Science and Engineering) and SMACS (Student Members, ACS) groups, presented a poster session at the SAZACS September dinner meeting featuring 9 famous women chemists to celebrate the ACS celebration of the 100th anniversary of Marie Curie’s 1911 Nobel Prize.

The posters have been exhibited at our various events and a second set of 11 posters of more recent women scientists were produced for a luncheon featuring 3 successful women scientists as speakers at the SAZACS sponsored RMRM meeting in Fall **2021**. The **Happy Hours** feature collections for the Emerge! Center Against Domestic Abuse, YWCA’s Your Sisters Closet program, Primavera Foundation, and Sister Jose’s Women Center for homeless women.

In Appreciation for their volunteer service

Mindy Dodge, Christopher Cabello, Iman Daryaei, Brooke Beam-Massani, Kara Saunders, Phil McBride, CJ Pommier, Pat Schumann, Laura Stratton, Grazyna Zreda, Steve Brown, Brian Zacher, Ben Zarin, Chuck Weidner, Trina Shartsis, Amy Graham, Pedro Flores Gallardo, Sharon Garlund, Ellen Caldwell, Silvia Kolchens, Shirley Bemis, Gwen McCaffrey, Will Staaz, Kathy Feuling, Merita Clark, Neda Lane, Nipuna Weerasinghe, Sarah Olson, Bela Buslig, Amy Graham, Wendy Hyatt, Ashleigh Dahlstrom, The Women Chemistry Group, Isabelle Harrison and Cristian Chavira, The University of AZ Chemistry Club (SMACS), Tanque Verde High School ChemClub students