

SLCC Premedical Professions Club American Chemical Society Spring 2023 Conference Report

(This Report is meant to be an extension of the report submitted by Ron Valcarce)

The members of the SLCC premedical professions club were fortunate enough to be able to attend the American Chemical Society Spring 2023 research conference. Our undergrad student researchers are grateful to have been given the chance to present our data gathered, while we came up with a cost-effective method to synthesize the anti-seizure drug Phenytoin. Our club members were also given the amazing opportunities to present undergraduate research, sit in on lectures featuring phenomenal guest speakers, and interact with experienced PHD level chemists and schools who continue further develop the entire chemical industry. By preparing for and attending this event our club members were able to better develop their research, organization, networking, and presentation skills. This ACS spring conference was an amazing chance for our club members to solidify their resume and help prepare them for applying to graduate level medical science program. Furthermore, our club members were given unique chance to be exposed to all the new cutting-edge chemical technology and discoveries that are being utilized to further develop medical treatment across the United States. Best of all, our club members were able to network with numerous members of the chemistry industry, with backgrounds in many different forms of medicinal chemistry.

- Networking with Chemistry Professionals Event (sponsored by YCC and SCC)
- Networking 101.
- Ins and Outs of getting into graduate school/ What to expect in graduate school.
- Undergraduate research poster session

The members of the SLCC premedical professions club will be forever grateful for being given the chance to attend the American Chemical Society Spring 2023 Research conference, to present the findings within their data and strengthen their academic careers.

We have completed our travel to the ACS National Conference in Indianapolis, Indiana and our Spring undergraduate research recruiting event (Pizza and Posters). We are grateful for the club funds our students received which made this travel possible. For the American Chemical Society National Meeting in Indianapolis, Indiana, we had 27 students conducted undergraduate research and presented 6 conference presentations. This was a diverse group of students representing three different SLCC Schools and 17 different academic pursuits:

Health Sciences	Humanities & Social Sciences	Science, Mathematics & Engineering
Pre-Medical	Philosophy	Chemistry
Nursing	Music	Biology
Kinesiology		Nanotechnology
Pharmacy		Biotechnology
General Health Sciences		Mechanical Engineering
Pre-Veterinary		Chemical Engineering
Pre-Dentistry		Materials Science
		General Engineering APE

These students also belong to one or more SLCC clubs, ACS Chemistry Club, Pre-Medical Professions Club, Pre-Pharmacy Club, Pre-Dental Club, Nanotechnology Club, and the Biotechnology Club. Each of these clubs is affiliated with the American Chemical Society and students in these clubs hold membership as a student affiliate of the ACS.

At the ACS National Conference, these students participated in various scientific sessions where they presented 9 projects on the following research topics:

- **Inquiry-Based Structural Assessment of Two-Component Metal Nanostructures Electrodeposited in Patterned Polymer Templates**
- **Comparison of low-cost synthesis methods for pharmaceutical-grade purity of the anticonvulsant phenytoin using traditional reflux techniques verses microwave-assisted extraction**
- **Building a successful ACS Student Affiliate through professional development, community outreach, community service, and undergraduate research**
- **Analysis of volatile and semi-volatile flavor components in aged whiskey and filtered vodka using headspace gas chromatography/mass spectrometry**
- **Rearrangement of Indolizines and Quinolizinium Cations to quinolizinium salts by ring expansion**
- **Green synthesis of silver nanoparticles using tea leaf extract and evaluation of their stability and antibacterial activity**
- **Physical Nanotechnology Applications for Forensics: Development of Nano-features from Latent Fingerprints**
- **Evaluation of Commercial Fluoride Containing Products for Fluoride Species using Varied Sample Treatment**

Presenting at this national conference gave our students the opportunity to present alongside graduate students and professional career researchers where our students gained real-world insight from these professionals as well as receive valuable feedback on their projects. It should be noted that three of

our students on the fluoride project and two students from the phenytoin project received special undergraduate research presentation awards from the ACS.

Our students also participated in various workshops, attended presentations and symposiums, and explored the Exposition where all the latest, most cutting-edge scientific instruments are unveiled and demonstrated. We also organized many social outings and activities that are designed to promote camaraderie and friendship among our affiliate members as you can see from our itinerary below:

Saturday, March 25			
Time	Sessions	Attire	Location
2:30PM	Arrive from Salt Lake City & Check in to hotel.		Hotel Lobby
5:30 - 7:00 PM	HOSTED MEAL	Any	Bazbeaux Pizza
7:00- 10:00PM	Group Activity	Any	TBD

Sunday, March 26			
Time	Sessions	Attire	Location
7:00-8:30AM	Hotel Breakfast	Any	Hotel Lobby
8:00 AM	Pick-up ACS Conference Credentials	Any	Hotel Lobby
8:30 - 9:30 AM	Making the most of your ACS meeting - freebies	Business Attire	Hall B
9:30-11:00AM	Ins and outs of getting into graduate school	Business Attire	Hall B
11:00-12:30PM	*ChemDemo exchange - ATTENDANCE REQUIRED	Club Shirts	Hall A
1:00 - 4:00 PM	Graduate school fair	Business Attire	Hall I
2:00 PM - 3:30	Networking 101	Business Attire	Hall B
4:00- 5:30 PM	HOSTED MEAL - optional	Any	Goodwood Indy
6:45 PM - 8:30 PM	*Student chapter awards ceremony - ATTENDANCE REQUIRED [IF NOT AT POSTER SESSION]	Business Formal	Hall A
6:30PM - 9PM	Analytical Chemistry POSTER SESSION	Business Attire	Hall F-H
8:30 - 10:30PM	Student social - usually food + fun offered	Business Formal	Hall A

Monday, March 27			
Time	Sessions	Attire	Location
6:30- 9:30 AM	Hotel Breakfast	Any	Hotel Lobby
11:00- 5:00 PM	Science Exposition - Career Networking	Any	TBD
11:30- 2:00 PM	*Undergraduate research poster session - ATTENDANCE REQUIRED	Business Formal	Hall F-H
2:30- 4:00 PM	Eminent Scientist Lecture. Polly Arnold of Lawrence Berkeley National Laboratory	Any	Hall B
3:00 - 5:00 PM	*HOSTED MEAL - Catering in Hotel Lounge. BRING YOUR LAPTOP. EPORFOLIO WORKSHOP - ATTENDANCE REQUIRED	Any	Hotel Lounge
8:00-10:00 PM	*Sci-Mix - Successful Student Chapter Poster Session	Business Formal	Hall F-H

Tuesday, March 28			
Time	Sessions	Attire	Location
6:30- 9:30 AM	Hotel Breakfast	Any	Hotel Lobby
11:00 AM	CHECK OUT OF HOTEL	Any	
11:15-12:30 PM	Gallery Pastry Bar - optional lunch	Any	Gallery Pastry Bar
12:30	Head to airport	Any	

A highlight of this trip was when the ACS officers received the Outstanding Chapter Affiliate Award and Green Chemistry Award during the ACS Undergraduate Awards Presentation.

Another activity that our ACS officers and advisors arranged this trip was an ePortfolio dinner that was held the last evening of the conference. During this dinner, students came together to share and reflect on their experience and to showcase these High Impact Practice activities in their ePortfolios.

Below, I have also included a few photos of our experiences:







