

**Wednesday—August 21**

### EHS Leadership and Diversity

Colorado Convention Center, Bluebird Ballroom 3B

8:00	Opening remarks	Koza, M.
8:05	Better than inspecting: Reimagining laboratory safety	Kolodziej, C.
8:30	It's just community college, right? Reasons why lab safety/safety culture and its implementation are vital in the 2-year institution	Henry, D.
8:55	Crystal chemist HoPEs	Saut, C.
9:20	Empowering student laboratory safety officer (LSO) programs to strengthen academic safety culture	Donaghy, C.

### Raising Safety in Research

Cosponsors: CCS, COMSCI, MPPG  
Financially supported by Corporation Associates

Engaging Graduate Students in Laboratory Safety: Opportunities for empowerment, collaboration, and professional development		
8:00	Opening remarks	Chang, C.
8:05	Empowering student safety	Claros Mendieta, A.
8:25	Towards a safety-first mindset in research laboratories	Vigil Hernandez, C.
8:45	Peer lab safety initiatives to promote better safety culture across university labs	Diaz, A.
9:05	Creating a collaborative safety culture: Incorporating EH&S into safety initiatives and departmental discourse	Kramer, R.
9:25	Intermission	
9:40	ExxonMobil PALS: Strengthening academic lab safety culture	Reed, K.
10:00	Student lead safety initiatives: Good for students, institutions, science	Santamaria, A.
10:20	Developing the safety culture at Michigan State University	Vogt, T.; Beringer, J.
10:40	Initiatives to increase safety awareness in graduate chemistry laboratories	Dutta, D.; Aguirre, L.
11:00	CA panel discussion	through 12:00

### Scaling up safety in individual research projects

2:00	Opening remarks	Chang, C.
2:05	Safety and regulatory concerns in psychedelic research	Hulley, E.; Shuger, V.
2:25	Safety in an undergraduate/graduate laboratory, working at the interface of biological chemistry	Conrad Oppenheimer, V.
2:45	Los Alamos National Laboratory: Our safety culture and practices	Porterfield, D.

3:05	Safety improvements for the synthesis of menaquinone derivatives	Markham, S.
3:25	Intermission	
3:35	Importance of fire extinguisher training among graduate student laboratory teaching assistants: A general chemistry laboratory fire incident	Moisanu, C.
3:55	Shifting safety culture from rules- to risk-based at a research active primarily undergraduate institution	Knoche Gupta, K.
4:15	Driving safety culture: The impact of the University of Chicago accident incident reporting system	Karkj, C.
4:35	Intermission	
4:45	Advances in student-led safety at the University of Minnesota	Robinson, E.
5:00	One hundred and fifty lab safety teams by the 150th anniversary of ACS: A LST expansion plan	Aleksich, M.
5:15	Implementation of lab safety teams at Colorado State University to increase student participation in developing a safety culture	Schlink, D.
5:30	Panel discussion	through 6:00

### What's that smell? Relating organoleptics to the volatile chemistry of cannabis

Colorado Convention Center 201

2:00	Opening remarks	Coffin, M.
2:05	How it all fits together - genome-scale metabolic model establishes relationships between potency and aroma in cannabis	Lange, B.
2:30	Cannabis volatilomic: Using volatile fingerprinting to classify cannabis	Marceau, H.
2:55	Deciphering the aroma and flavor chemistry of cannabis: From terpenes to flavorants	Oswald, I.
3:20	Exploring the chemical diversity within cannabis phenotypes using comprehensive GCxGC and sensory analysis	Paryani, T.
3:45	Intermission	
3:55	How do details in the supply chain impact cannabis infused beverages' stability and quality?	Han, H.
4:20	Temperature's role in shaping cannabis extracts' volatile chemistry and lipid profile	Sosa, M.
4:45	How to build an aroma lexicon for cannabis	Gilbert, A.
5:10	Closing remarks	Coffin, M.



**American Chemical Society**  
Division of  
Chemical Health & Safety

## Fall 2024 Meeting & Expo August 18-22, 2024 Denver, CO—In-person & Hybrid

### About Us

DCHAS is a technical division of the American Chemical Society. We have more than 1,200 members, and we partner actively with other ACS entities as well as other sister organizations. We are the parent division of the ACS Cannabis Chemistry Subdivision.

### CHAS Open Business Meeting

Monday, August 19  
11:30 AM – 2:00 PM

Colorado Convention Center 107

**All are welcome! Don't miss it!**

### CHAS Social

Monday, August 19  
5:30-8:00PM CST

Deep Roots Winery & Bistro  
2875 Blake St., Denver, CO

**Again! All are welcome! Don't miss it!!**

Thank our sponsors:



### Vision

Protecting people and the planet through excellence in chemical health and safety.

### Mission

Foster a collaborative global community that promotes best practices in chemical health & safety.

### Sessions

Held in Bluebird Ballroom 3C  
Colorado Convention Center  
unless otherwise marked  
All times in Mountain Standard Time

### Other sessions of interest

#### Advances in PFAS Research and Outlook (8/12-8/21)

ENVR: cosponsored by CEI, CHAS, and PHYS

#### Update on cannabis as an agricultural crop and beyond (8/19 AM)

AGRO: cosponsored by CHAS

#### WCC celebrates chemistry beyond the binary (8/20 PM)

WCC: cosponsored by ANYL, BMGT, CARB, CATL, CHAS, CHED, CINF, COMP, HIST, I&EC, INOR, MEDI, NUCL, PHYS, PMSE, POLY, PROF, RUBB & TOXI.



See the DCHAS website for news, presentation slides, safety resources, and volunteer opportunities!

## Sunday—August 18

### Research ethics & safety ethics

Cosponsors: ETHX and PROF

2:00	Opening remarks	Koza, M.
2:05	Fostering the development of core values—safety, ethics, responsibility, and professionalism—at a 2 year college	Wood-Black, F.
2:30	Ethics in chemical & laboratory safety	Hill, R.
2:55	People know what they need to do; they just need to be reminded	Wiediger, S.
3:20	Ethics and the legal aspects of lab safety	Kaufman, J.
3:45	Intermission	
3:55	Research ethics: Is lab safety sufficient?	Fivizzani, K.
4:20	Experimenting with chemicals: Do you have the right information?	McEwen, L.
4:45	Safety culture and laboratory ventilation	Gordon, E.
5:10	Panel discussion	Through 6:00

## Monday—August 19

### Chemical Health and Safety Awards

2:00	Award presentation	Chance, B.
2:05	Chemical safety education and leadership development opportunities for graduate student researchers	Bresnahan, B.
2:30	Award presentation	Chance, B.
2:35	How self-directed learning inspired chemistry PhD students to approach safety professionals as partners	Martin, J.
3:00	Award presentation	Chance, B.
3:05	Use of the CAMEO Suite to mitigate hazards before and during chemical pollution emergencies	Thrift-Viveros, D.
3:30	Award presentation	Chance, B.
3:35	Ralph Stuart: Innovator, Educator, Mentor	Izzo, R.

### Machines that go "Ping!"

Colorado Convention Center 505

2:00	Opening remarks	Coffin, M.
2:05	Revolutionizing cannabis testing with advanced instrumentation	Smith, J.

2:30	Detecting high-impact volatile sulfur compounds in <i>Cannabis</i> using sulfur chemiluminescence	Martin, T.
2:55	Synthesis and characterization of hydrogenated cannabidiol and its evaluation of preclinical <i>in vitro</i> cytotoxicity screening	Tesfatsion, T.
3:20	Intermission	
3:30	Hot topics and hotboxing: Latest research on cannabis inhalation	Roggen, M.
3:55	THC and THCV boiling points are much higher than previously thought	Brasuel, M.; Kachadourian, R.
4:20	Spectroscopic process analytical technology for cannabis manufacturing	Friedmann, E.; Finney, K.
4:45	Panel discussion	Through 5:05

### In Memoriam: A Remembrance of Ralph B. Stuart III

	Canceled	
--	----------	--

### Sharing Stories to Foster Safer Chemistry for Students & Professionals

Colorado Convention Center, Mile High Ballroom 4C

Principal sponsor: ORGN; Cosponsor: CHAS

2:00	Opening remarks	Organizer
2:05	What survivors of laboratory incidents want you to know	Izzo, R.
2:40	Continuous flow as enabling technology for intrinsically hazardous chemistry: Diazotization, azidation, and click chemistry with an explosive alkyne	Amador, A.
3:15	Linking psychological safety with laboratory safety: How diversity, equity, inclusion, and respect plays a role in the laboratory	Dunn, A.
3:50	Intermission	
4:05	Enhancing experimental chemistry through ten principles of safe synthetic chemistry	Merlic, C.
4:40	Fostering culture, using what makes us human to develop a safety mentality	Wood-Black, F.
5:15	Balancing chemical risk mitigation and energy efficiency in academia	Incarvito, C.

### Sci-Mix posters

Colorado Convention Center Hall A-C; 8–10 PM

Ultrasonic or microwave modified continuous flow chemistry for the synthesis of tetrahydrocannabinol: Observing effects of various solvents and acids	Cruces, W.
Analytical methodology for EU target list residual pesticides in cannabis	Cornelius, R.; Stinson, A.
Nanotoxicity: physico-chemical characteristics of nanomaterials	Martin-Aranda, R.

## Tuesday—August 20

### General papers

8:00	Opening remarks	Decker, D.
8:05	Integrating artificial intelligence in safety chemistry education: A paradigm shift towards enhanced learning and risk mitigation	Wood-Black, F.
8:30	Withdrawn	
8:55	Chemical asset prioritization: Methodology and software development to identify chemicals with security concerns: Part:1 Hazard and asset assessment method development	Nelson, A.
9:20	Chemical asset prioritization: Methodology and software development to identify chemicals with security concerns: Part 2: Building a database for global distribution: Challenges and lessons learned	Nelson, A.
9:45	Intermission	
9:55	Safety considerations for scaling up from lab to pilot plant	Martinelango, K.
10:20	Decontamination efficacy determinations for clandestine laboratory remediation	Durnal, E.
10:45	From researcher to embedded safety professional (and a few other places in between): Fostering a safety culture	Moore, A.
11:10	Decoding the molecular dance: <i>In silico</i> exploration of cannabinoid interactions with key protein targets for therapeutic insights	Ramirez, G.

### Cannabis safety: Where we are today

Colorado Convention Center, Bluebird Ballroom 3B

2:00	Opening remarks	Phifer, R.
2:05	Keeping it safe: Cannabis and you	Wilhelm, M.
2:30	Cannabis science education and research at the Community College of Denver	Frost, J.

2:55	Risk assessment in cannabis vaporization: Identifying potentially problematic ingredients in the marketplace	Vreeke, S.
3:20	Beyond Control Charts and compliance: Exploring cannabis safety from a Deming/Juran perspective of quality	Wilson, J.
3:45	Comprehensive safety assessment of diverse cannabinoids: A scientific inquiry	Pittiglio, M.
4:10	Intermission	
4:25	Mycotoxins in cannabis and cannabis products	Boyar, K.
4:50	Understanding the relationship between water activity and moisture in cannabis flower	Glaros, J.
5:15	Role of laboratory accreditation and professional certification in the cannabis industry	Phifer, R.

### Safety considerations in the laboratory for students with disabilities

Focus on Hearing, Visual, and Mobility Accommodations

2:00	Opening remarks	Redden, P.
2:05	Providing safe and successful experiences for students who are deaf and hard-of-hearing in the academic chemistry laboratory	Ross, A.
2:35	Don't put blind faith in safety	Neybert, A.
3:05	Safety for students with mobility issues in the lab	Redden, P.
3:35	Panel discussion	Through 4:00
Lab Design and Overview of Accommodations		
4:00	Opening remarks	Redden, P.
4:05	New resource: Teaching chemistry to students with disabilities, 5th edition	Redden, P.
4:25	Universal Design: Building safe and accessible science laboratories	Dulay, M.
4:55	Insights and strategies for promoting laboratory safety for students with disabilities	Flores Gallardo, P.
5:25	Panel discussion	Through 5:50