


Crushing Chemistry

❁ NSF Center for the Mechanical Control of Chemistry ❁

February 2026

Catch Our 2025 REU Cohort in Action at the ACS Meeting in March!


Sunday, March 22, 2026 | Time: 6:30 PM - 8:00 PM | Location: B/C - Exhibit Hall
Division of Colloid and Surface Chemistry Poster Session

 • **Paige Burch** - *Reactivity and selectivity of nucleophiles under mechanochemical conditions*


Monday, March 23, 2026 | Time: 12:00 PM - 2:00 PM | Location: B/C - Exhibit Hall
Division of Chemical Education Poster Session


 • **Alessandro D'Amico** - *First-principles cluster expansion model of binary Cr alloys*


 • **Jessica Chung** - *Understanding piezoelectrics and redox reactions under mechanochemical control*

 • **Mackenzie Gray** - *Studies on copper catalyzed azide-alkyne cycloaddition (cuAAC) reactions by ball-milling*

 • **Sophia Guinea** - *Further mechanochemical applications of 3D printed vessels*


 • **Faye Liu** - *Mechanochemical effects on complex nitridocarbonate compounds*

 • **Jonathan Lopez-Hernandez** - *Leveraging machine learning to predict promising mechanochemical reactions*

 • **Ahmad Tantish** - *Quantifying energy dissipation into free-flowing powders*

 • **Channon Wilson** - *Mechanochemical synthesis of 2D superconducting nanowires*

Tuesday, March 24, 2026 | Time: 12:00 PM - 2:00 PM | Location: B/C - Exhibit Hall
Division of Organic Chemistry Poster Session

 • **Sophia Servagno** - *Comparing mechanosynthetic and solvothermal pathways for gas activation with organocalcium reagents*

Forces That Shape Chemistry: Mechanochemical Pathways to Direct Bond Formation in Solids

This month, Dr. James Rondinelli, a Walter Dill Scott Professor of Materials Science and Engineering at Northwestern University joined our CMCC Mechanochemistry Discussions Seminar. He discussed how mechanical stress can be used to control chemical bonding, structure, and reactivity in solid-state materials, revealing new force-driven pathways for chemical transformations and expanding design strategies in mechanochemistry. Visit our channel to watch his seminar and learn more!

We want to hear from you! Scan the QR code to take a short survey about our seminar series.



Scan the QR code to access the Spanish version!
¡Escanee el código QR para acceder a la versión en español!



Welcome Our Newest Members at the CMCC!



PD

Bumseop Kim



GR

Jubaer Tanjil Jami



GR

Princess Vargas



UG

Stephanie Galindo

HUNTER



UG

Ndeye Khadidiatou Mbodj



UG

Olivia Gorski



UG

Phillip Solo



GR

Ephraim Frimpong



Postdoctoral Researcher



Graduate Student



Undergraduate Student

New Science with Impact Podcast Featuring CMCC Staff



The Director of Outreach and Education at the CMCC, Dr. Frankie Antillon, was featured on the *Science with Impact* podcast, created and produced by Dr. Vanessa Rosa from the NSF Center for the Chemistry of Molecularly Optimized NETWORKS (MONET). This episode is based on a panel discussion from the SACNAS NDiSTEM Conference, where STEM professionals came together to share their experiences and discuss strategies for transforming broader impacts at every level, from one-on-one mentorship to community-wide engagement.

Photo Left to Right: Frankie Antillon, Carmina Chavez, Jennifer Aleman, Austin Shelton, and Vanessa Rosa.

Scan the QR code to watch the podcast episode!

