

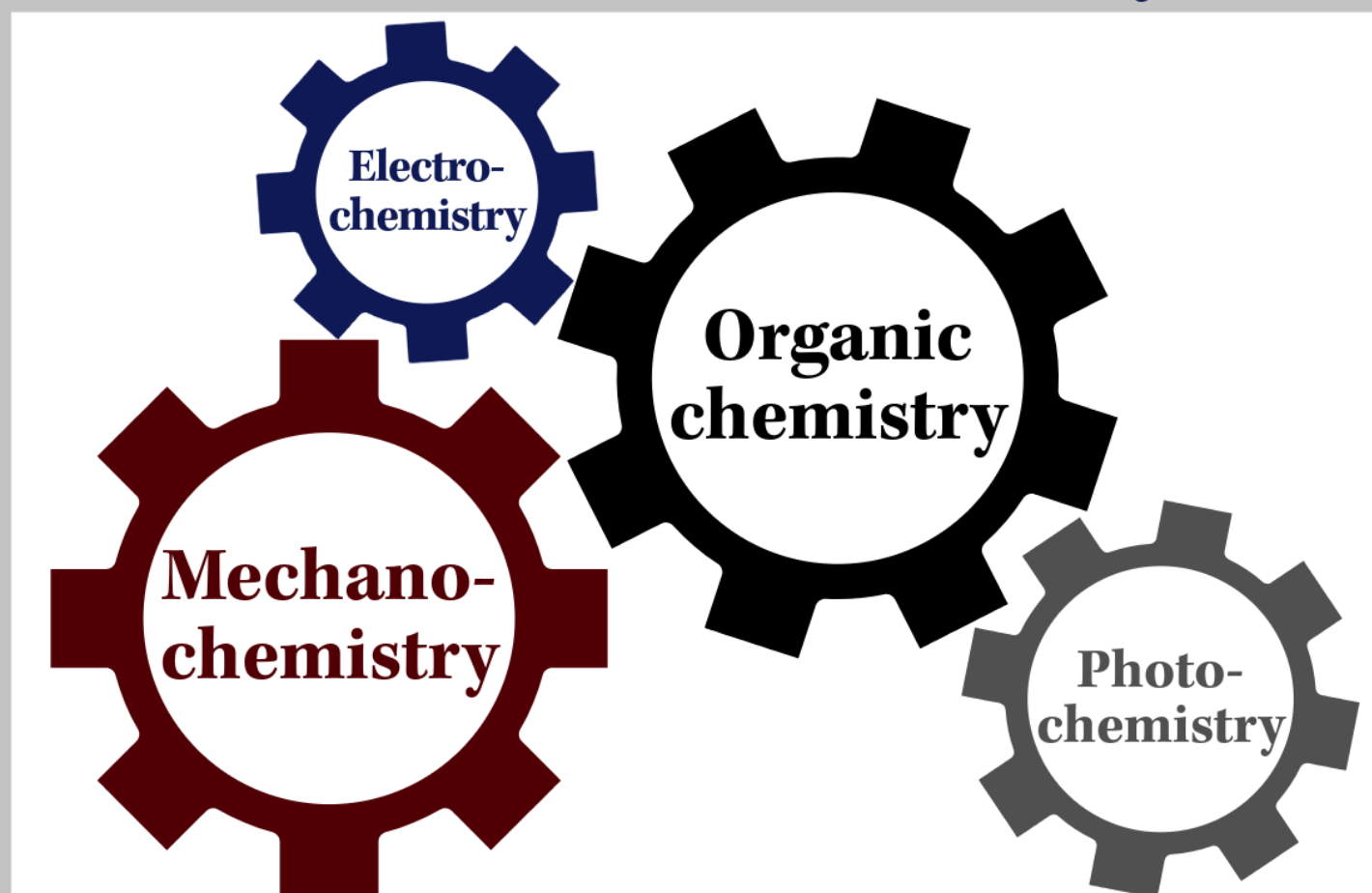
January 2026

CMCC Alumni Spotlight



Dr. Yerzhan Zholdassov is a former graduate student of the CMCC scientific community, where he conducted his PhD research on the mechanical aspects of chemical reactions under the mentorship of Dr. Adam Braunschweig at the City University of New York. Through his involvement with the CMCC, he expanded his understanding of green chemistry principles and gained an appreciation for how collaboration among scientists can drive innovation in chemistry. Dr. Zholdassov is now a Product Developer at Tesa, where he designs and develops functional adhesive tape products from concept to launch, integrating market demand, customer requirements, and sustainable production methods. He shared that his CMCC experience continues to influence his approach to product development and demonstrates the lasting impact of CMCC training beyond academic settings.

New Publication in *RSC Mechanochemistry*



Speight, I. R., & Mack, J. (2026). Moving mechanochemistry forward: accelerating and tuning organic synthesis by mechanochemistry. *RSC Mechanochemistry*, 3, 9-14. <https://doi.org/10.1039/D5MR90035B>

Mechanochemistry is rapidly expanding the way organic chemists approach synthesis, but its broader adoption will depend on deeper mechanistic understanding and continued collaboration across subfields. In this editorial, Dr. Isaiah Speight (William and Mary) and Dr. James Mack (University of Cincinnati) discuss how mechanochemistry complements existing synthetic tools, highlight opportunities in advanced molecule preparation, industrial scale processes, and outline the challenges that must be addressed to move the field forward. This piece offers valuable perspective for researchers interested in sustainable chemistry, reaction development, and invites organic chemists and mechanochemists alike to engage in shaping what comes next.

Scan the QR code to
read the full editorial



Mechano-photochemistry: Exploring Mechanical Control of Ground- and Excited-State Processes

This month, Professor Luis Manuel Frutos, a full professor from the University of Alcalá in Spain, joined our CMCC Mechanochemistry Discussions Seminar Series. He discussed how mechanical forces, specifically in a ball mill, can control ground and excited state processes. He highlighted how applying controlled mechanical forces can tune photochemical behavior by reshaping excited state energy landscapes, enabling changes in absorption and emission, reaction pathways, and even activating photoreactivity that is otherwise inaccessible. Visit our channel to watch his seminar and learn more about mechano-photochemistry!

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

