

May 2025

CMCC Successfully Completes Second Year NSF Review!

We're pleased to announce the **CMCC has successfully completed its second-year review by the National Science Foundation (NSF)** and a panel of esteemed experts. The feedback highlighted that the CMCC is making "significant progress in understanding mechanochemical reactions," acknowledging the challenging interdisciplinary nature of our work spanning atomic to macroscopic scales and complex force, temperature, and pressure distributions. The panel also recognized our initiation of "several promising and significant Broader Impact projects," attributing these successes to the "synergy, collaboration and interdisciplinary training fostered by the CMCC leadership." We want to extend our sincerest congratulations to **all CMCC members** for this achievement and express our deepest gratitude for your tireless efforts. Your meticulous preparation, from reports to presentations, was invaluable. This positive outcome is a direct result of your hard work and the collaborative spirit that defines the CMCC!

Walthère Spring and the Science of Pressure

DISTILLATIONS MAGAZINE



The Science History Institute, in collaboration with members of the CMCC, recently published an article on Walthère Spring, one of the first chemists to use mechanical pressure to push chemical reactions forward. Written by Melissa Rossi, the article traces Spring's path from a young gunsmith to a professor at the University of Liège. It highlights his development of a mechanical press that allowed him to explore how solids change and react under pressure. The article also discusses Spring's difficult professional relationship with fellow mechanochemist M. Carey Lea, as they debated who made certain key discoveries. The piece places Spring's work in the early history of mechanochemistry and connects it to the field's resurgence as a greener approach to chemical synthesis.

Scan the QR code to read the full biography



Welcome Our Newest Members at the CMCC!



Dr. Brandon McClimon
Staff Scientist in the
Carpick group at
University of Pennsylvania



Briar Hilsabeck
Graduate student in the
Altman group at
Texas A&M University



Leonard Majaducon
Graduate student in the
Karunadasa group at
Stanford University

May 2025

CMCC Launches New Summer Bootcamp for REU Students

CMCC ❖ **Bootcamp**

This month, the CMCC will host a new summer bootcamp at Texas A&M University for its Research Experiences for Undergraduates (REU) students. This intensive weeklong training introduces core concepts in mechanochemistry, provides hands-on experience with essential research tools, and helps students build the strong scientific foundation needed to succeed in their summer projects. In addition to technical skills, students will engage in collaborative workshops and networking sessions designed to foster teamwork and professional growth. With participants placed at one of our eleven partnering institutions nationwide, the CMCC bootcamp creates an early opportunity for students to connect, collaborate, and prepare as a unified cohort before beginning their research across the broader CMCC network.

The CMCC Launches Mechanochemistry Innovation Hub at Texas A&M University



The CMCC has officially opened the Mechanochemistry Innovation Hub (MIH) at Texas A&M University. This dedicated space supports collaboration between CMCC researchers and industrial partners, providing the infrastructure needed to develop new tools and advance the adoption of mechanochemical processes. The MIH houses a range of specialized equipment, including a Controlled Force Reactor, Resonant Acoustic Mixer, twin screw extruders, planetary ball mills, and vibratory ball mills such as the Retsch MM400 and MM500. The hub represents a major step forward in building capacity and accelerating innovation in the field of mechanochemistry.

Welcome Our Newest Members at the CMCC!



Christopher Tong

Graduate student in the
Freedman group at MIT



Michael Lee

Graduate student in the
Freedman group at MIT



Ira Martyniak

Graduate student in the
Freedman group at MIT