



# CMCC Mechanochemistry Discussions

Online Seminar Series

## *Mechanochemistry: New Opportunity for Polymer Synthesis and Chemical Recycling*

Livestreaming at  
10:00 AM (CT)

THURS., July 18, 2024



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<https://sites.google.com/site/jbnusynthesis/boss>

on the CMCC YouTube Channel:

<https://www.youtube.com/channel/UC7eCYPKbGTKpgO7W2bNABxg>

### ABSTRACT:

Mechanochemical polymer synthesis is an emerging field that is expanding the boundaries of polymer science. Our research group has been engaged in ball-milling polymer synthesis since 2016. We have observed that many solution-based polymerizations can be successfully adapted to solvent-free solid-state conditions, advancing the principles of green chemistry. Additionally, combinations of monomers and reagents that are incompatible in solution can be effectively utilized under mechanochemical conditions. Recently, we discovered the simplest depolymerization system for polyesters and polycarbonates using mechanochemistry. This webinar presents case-by-case examples to illustrate why mechanochemical polymer synthesis is an attractive and promising area of research.



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