

Sharing sustainability perspectives enabled by advances in dynamic covalent chemistry from the Center for Plastics Innovation, University of Delaware, Newark, Delaware, USA.

Circularity in polymers: addressing performance and sustainability challenges using dynamic covalent chemistries

Dynamic polymeric materials are uniquely positioned to enable plastics waste reduction thanks to chemical innovations, advances in thermomechanical models, and the emergence of economic and environmental assessments of materials circularity. This review presents a multidisciplinary overview of the challenges and opportunities towards the design of sustainable and recyclable macromolecular materials for a circular economy via advances in dynamic covalent chemistry. Cover artwork was created by Kelly Walker.



