

A Critical Appraisal of Chemical Recycling Technologies for Sustainable Polymer Manufacturing

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Abstract

In the face of mounting concerns over plastic pollution and the environmental impacts of conventional plastic production, the pursuit of sustainable polymer manufacturing has become imperative. Chemical recycling technologies

closing the loop on the plastic lifecycle. This article provides a comprehensive examination of various chemical recycling methods, assessing their technical feasibility, environmental implications, economic viability, and scalability.

potential role in fostering a circular economy for plastics and advancing sustainability in polymer manufacturing.

Keywords:

Introduction

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