processes

an Open Access Journal by MDPI

IMPACT FACTOR 2.8

CITESCORE 5.5

Polyolefin Catalyst: Synthesis, Characterization, and Application

Guest Editor:

Dr. Muhammad Atiqullah
Interdisciplinary Research center for Refining & Advanced chemicals (IRCRAC), King Fahd University of Petroleum & Minerals, Dhahran 31261, Saudi Arabia

Deadline for manuscript submissions:
closed (5 April 2024)

Message from the Guest Editor

Dear Colleagues,

Polyolefins are the thermoplastics with the largest volume, and represent a highly topical subject in both academia and industry. The early 1950s witnessed a boom in polyolefin synthesis. The Nobel Laureates Karl Ziegler (Germany) and Prof. Giulio Natta (Italy) made seminal breakthroughs in the catalytic synthesis of polyethylene and polypropylene, respectively, using organoaluminum-activated titanium chlorides. On the other hand, Standard Oil and Phillips Petroleum researchers independently introduced a chromium catalyst to prepare high-density polyethylene. This transition-metal-catalyzed olefin polymerization route made industrial polyolefin manufacture possible at 15-25 bars and 90-120 °C. The above pioneering catalyst contributions revolutionized the olefin polymerization organometallic catalysis and chemistry that we currently observe, read about, and teach. Their overall impact on polyolefin education, research, training, the manufacturing process, industry, application, and worldwide business is too colossal to report. Polyolefins, as a polymer and material science discipline, constitute an unending journey with an unreachable destination.

processes

IMPACT FACTOR 2.8

CITESCORE 5.5

an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Giancarlo Cravotto
Department of Drug Science and Technology, University of Turin, Via P. Giuria 9, 10125 Turin, Italy

Message from the Editor-in-Chief

You are invited to contribute either a research article or a comprehensive review for consideration and publication in *Processes* (ISSN 2227-9717). *Processes* is published in open access format – research articles, reviews, and other content are released on the internet immediately after acceptance. The scientific community and the general public have unlimited, free access to the content. As an open access journal, *Processes* is supported by the authors and their institutes through the payment of article processing charges (APCs) for accepted papers. We would be pleased to welcome you as one of our authors.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.
High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, Inspec, AGRIS, and other databases.
Journal Rank: CiteScore - Q2 (Chemical Engineering (miscellaneous))

Contact Us

Processes Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/processes
processes@mdpi.com
𝕏@Processes_MDPI