Special Issue

New Advances in Olefin Polymerization Catalysis

Message from the Guest Editor

Human societies need polyolefins, which have a better cost-to-performance balance and carbon footprint than all other presently available materials. On the other hand, we must find ways to make polyolefins compatible with a circular economy; for that, we need even better catalysts than those we have now, in order to produce polyolefin materials with an extended lifetime for nondisposable applications, and improved properties so the same performance can be achieved with less. On top of that, we should not abandon the ambition to depolymerize polyolefin chains through smart chemical designs or processes once their lifecycle has ended. This Special Issue aims to cover the latest progress and advances in the field of catalytic olefin polymerization in the aforementioned context. That includes but is not limited to the main families of catalysts (namely, Ziegler–Natta, metallocenes, nonmetallocenes) and activators, as well as the aspects related to reaction mechanisms, molecular kinetics, and polymerization process technology.

Guest Editor

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