

The Polyolefins: Today and Tomorrow (of the Most Promising Large Volume Materials for the 21st Century)

Paolo Galli*

전 BASSELL 기술부문 사장

(paologalli_gp@aliceposta.it*)

Polyolefins (POs) are an extremely technologically and commercially interesting and successful family of materials. They include large volume materials such as Polyethylene (PE), Polypropylene (PP) and specialty materials. They all are part of the family of materials which certainly had an outstanding scientific and technological development which has boosted the most aggressive, endless, always increasing, successful growth speed compared with any other large volume family of materials. I can say that, having lived the entire cycle of life of the Polyolefin adventure, from its problematic beginning till the eventual successful developments of the last 25 years, it has been quite an unforeseeable and unexpected story not shared by the majority. The main reasons of such behavior and present situation are in the inherent complexity of their catalytic systems, difficult to understand and manage, with all the following consequences in terms of process versatility, reliability and costs, lack of product properties and new materials creation possibility and commercial availability. I will present the unique cases of technological and commercial successes in polyolefins based on my personal experience in industry and research.