Preface | lix

The European Polymer Conference 2007 on "From Polymer Structure and Rheology to Process Modeling" was held at Gargnano (BS) on May 27-June 1, 2007. The conference was focused on the process problems for a better understanding of the basic macromolecular structure, including novel complex macromolecular architectures, rheology and modeling. Several topics were covered, including complex molecular assemblies, multiphase polymer systems, composite and nanocomposite materials, reactive systems, numerical simulation of flow behavior in polymer processing thus encompassing many scientific disciplines including mathematics, computer science, physics, chemistry, materials science, engineering and medicine. The goal was to provide a broader context of scientific exchange along the themes of complex molecular assemblies, multiphase polymer systems, composite and nanocomposite materials, reactive systems, numerical simulation of flow behavior in polymer processing.

Accordingly, the various contributions presented in this volume range from macromolecular structure to process modeling through rheology and morphological control. Examples of the role of detailed macromolecular architectures, multiphase systems including surfaces and interfaces, fillers and nanofillers as well as reactive systems on the rheological behavior and the various aspects of process modeling are presented.

Finally, it is important to mention that the truly international character to the conference resulted in various contributions deriving from industrial companies as well as Academic Research Centers all over the world, thus enlarging our visions in research trends.

Michele Laus