Solid State Polymerization
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DESCRIPTION

The most current guide to solid state polymerization

Solid State Polymerization (SSP) is an indispensable tool in the design, manufacture, and study of polymers, plastics, and fibers. SSP presents significant advantages over other polymerization techniques due to low operating temperatures, inexpensive equipment, and simple and environmentally sound procedures. Combining fundamentals of polymer science, chemistry, physical chemistry, and engineering, SSP also offers many research applications for a wide range of students and investigators.

Gathering and filtering the latest literature on SSP, Solid State Polymerization offers a unique, one-stop resource on this important process. With chapters contributed by leaders in the field, this text summarizes SSP, and provides essential coverage that includes:

• An introduction to SSP, with chemical and physical steps, apparatus, advantages, and parameters

• SSP physical chemistry and mechanisms

• Kinetic aspects of polyesters and polyamides SSP

• Catalysis in SSP processes

• Application of SSP under high pressure conditions in the laboratory
• Engineering aspects regarding process modeling and industrial application

• Recent developments and future possibilities

*Solid State Polymerization* provides the most up-to-date coverage of this constantly developing field to academic and industry professionals, as well as graduate and postgraduate-level students in chemical engineering, materials science and engineering, polymer chemistry, polymer processing and polymer engineering.

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**ABOUT THE AUTHOR**

Constantine D. Papaspyrides is Professor and Director of the Laboratory of Polymer Technology in the School of Chemical Engineering at the National Technical University of Athens, Greece. He has been ex-President of the School and Visiting Professor/Consultant in Massachusetts Institute of Technology (MIT), Eidgenssische Technische Hochschule Zrich (ETH), E.I. du Pont de Nemours & Company, Inc. / Invista, Inc., and Ciba Lampertheim GmbH. He serves on the editorial board for the journals *Advances in Polymer Technology Journal* (Wiley) and *Progress in Rubber, Plastics and Recycling Technology Journal* (Rapra Technology).

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