Special Issue

Fiber Spinning: Materials and Techniques (Second Volume)

Message from the Guest Editor

Fiber spinning is one of the most complicated processes in the field of polymer processing. It is connected with the preparation of very thin and weak filaments, their collection to threads (yarns), and the final processing to textile or technical fibers and fabrics. Fiber spinning from melts is easier than from polymer solutions because when planning the subsequent processes it is necessary to overcome numerous issues connected with the choice of solvent, solution properties, and the selection of spinning method (wet, dry–wet jet, and dry), including the spinneret geometry, nature of coagulant, washing, orientation, drying procedures, and so on. Using solution spinning liquids of different chemical compositions requires a detailed consideration of their regeneration and recuperation methods. The most popular materials for precursors are cellulose and polyacrylonitrile fibers spun via solutions, as well as dopes that almost always contain additives. For these reasons, the preparation of composite fibers requires knowledge of physical and colloid chemistry, thermodynamics, rheology, chemical technology, mechanics, and other branches of science.

Guest Editor

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Materials (ISSN 1996-1944) was launched in 2008. The journal covers twenty-five comprehensive topics: biomaterials, energy materials, advanced composites, advanced materials characterization, porous materials, manufacturing processes and systems, advanced nanomaterials and nanotechnology, smart materials, thin films and interfaces, catalytic materials, carbon materials, materials chemistry, materials physics, optics and photonics, corrosion, construction and building materials, materials simulation and design, electronic materials, advanced and functional ceramics and glasses, metals and alloys, soft matter, polymeric materials, quantum materials, mechanics of materials, green materials, general. *Materials* provides a unique opportunity to contribute high quality articles and to take advantage of its large readership.

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