

Special Issue on
Spectroscopy Applied to Fibers

CALL FOR PAPERS

Growing interest has been devoted in the last years to materials derived from renewable and sustainable resources mainly due to the increasing concerns associated with environment. Forest biomaterials are an emerging alternative source of energy, chemicals, and materials. The importance of natural fibers as potential materials is widely recognized, and research in this field is expanding around the world. However, a solid knowledge is necessary to transform natural fibers into useful materials and chemicals. Owing to this, this special issue intends to develop a deeper understanding about the structure and properties of natural fibers and its derivatives by means of spectroscopy characterization.

We invite investigators to contribute original research articles as well as review articles that will stimulate the continuing efforts to understand the unique characteristics associated with natural fibers using various spectroscopic techniques as key tools. We are particularly interested in articles describing the application of spectroscopies in understanding the interactions taking place between the main components of natural fibers such as cellulose, hemicellulose, and lignin.

Potential topics include but are not limited to the following:

- ▶ Spectroscopy investigation of natural fibers wood and pulp fibers
- ▶ Characterization of polysaccharides such as lignin, xylan, pectin, and chitin
- ▶ Investigation of natural fiber modifications after chemical, biological, or physical treatment
- ▶ Fourier transforms infrared spectroscopy
- ▶ Near infrared spectroscopy
- ▶ UV-visible spectroscopy
- ▶ Raman spectroscopy
- ▶ Solid-state CP/MAS ^{13}C NMR spectroscopy
- ▶ X-ray photoelectron spectroscopy
- ▶ X-ray diffraction

Authors can submit their manuscripts through the Manuscript Tracking System at <http://mts.hindawi.com/submit/journals/jspec/sanf/>.

Lead Guest Editor

Matheus Poletto, University of Caxias do Sul, Caxias do Sul, Brazil
mpolett1@ucs.br

Guest Editors

Olga Nazarenko, Tomsk Polytechnic University, Tomsk, Russia
olganaz@tpu.ru

P. M. Visakh, Tomsk Polytechnic University, Tomsk, Russia
visagam143@gmail.com

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First Round of Reviews

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