Characterization By Fourier Transform Infrared (FTIR) Analysis For Natural Jute Fiber

Silva, I. L. A. (1); Bevitori, A. B. (1); Rohen, L.A; (1) Margem, F. M. (1); Monteiro, S N. (2)
(1) UENF; (2) IME

Resumo:
In past decades the world is ever more demanding materials that are not only less intensive in terms of processing energy but also environmentally friendly. Actually, global issues like generalized pollution and the planet warming are renewing the interest of natural materials in substitution for synthetic ones. The jute fiber, a natural fiber, has been investigated by various mechanical and thermal analyses. With the intention to further explore this fiber, a new method was used in this work, the infrared spectroscopy. The Fourier Transform Infrared (FTIR) was used to reveal the most typical absorption bands of specific molecular interactions of jute fibers, in order to understand the interaction that occurs between the jute fiber and a polymer matrix.