# Seminario de Química Orgánica

Tema: "**Nanocellulose - A new ageless bionanomaterial**"

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**Abstract**

There has been an explosion of interest in the use of biomass as a source of renewable energy and materials. One focus of this activity has followed from the recognition that, by suitable chemical or mechanical treatments, it is possible to produce materials with dimensions in the nanometer range from many naturally occurring sources of cellulose. Nanocellulose-based materials are carbon neutral, sustainable, recyclable, and nontoxic; they thus have the potential to be truly green nanomaterials with many useful and unexpected properties. What is not to love? The introduction of cellulose in nanocomposite materials has been identified as one of the four biggest discoveries since 2000 in the *Nanotechnology Research Directions for Societal Needs in 2020* with the mass use in nanotechnology of renewable and earth-abundant raw materials as the "Holy Grail" to attain and barriers to overcome by 2020.