



Central institute for Research on Cotton Technology (CIRCOT) located at Mumbai is a premiere research institute of the Indian Council of Agricultural Research (ICAR), under department of Agricultural research and Education (DARE), Ministry of Agricultural, Govt of India, doing research in cotton. They developed a state of art INDIA'S FIRST Nanocellulose Pilot plant having production capacity of 10 Kgs per 8 hours.

Cellulose is the most abundant biomass material in nature. Extracted from natural fibers, its hierarchical and multi-level organization allows different kinds of nanoscaled cellulosic fillers—called cellulose nanocrystals or microfibrillated cellulose (MFC)—to be obtained. Nanocellulose is being regarded as the next generation renewable reinforcement for the production of high performance composite. Recently, such cellulose nanoparticles have been the focus of an exponentially increasing number of works or reviews devoted to understanding such materials and their applications. Some studies over the last decades have shown that cellulose nanoparticles could be used as fillers to improve mechanical properties, thermal stability and barrier properties of Rubbers.

Nanocellulose is also being used in other application like cement, paper, improve antibacterial resistance of hospital bed sheets, plastics, paints, pigments and inks.

Our Techcentre has a state of art facility for testing on rubber, Research and Development, product development and a strong technical expertise, and CIRCOT has commenced the R & D with us, on a patent sharing agreement, on conclusion of the research. Please visit us on - <http://www.techcentre.in/services.html> for more details on the centre.