



Dr. Vigneshwaran Nadanathangam

Senior Scientist,

Central Institute for Research on Cotton Technology, Mumbai

Email: nvighneswaran.circot@icar.org.in

Dr. N. Vigneshwaran is a Senior Scientist at the Central Institute for Research on Cotton Technology (Indian Council of Agricultural Research), Mumbai. He finished his doctoral research at IIT Delhi in 2005 in molecular biology towards fabrication of fiber optic based biosensor for detection of diabetes with reference to fluorescence of haemoglobin advanced glycation end product. With h-Index of 11 & authoring 29 research publications, his early research focused on microbiological

synthesis of silver nanoparticles for application onto cotton textiles to impart antibacterial properties. Later on, he started researching on synthesis of zinc oxide nanoparticles and application onto cotton fabrics to impart both antibacterial and UV-protecting properties. This process of Nano-zinc oxide production using soluble starch as stabilizing agent was commercialized to a chemical company at Chennai, India in 2007. In the same year he received Young Scientist Award from the Association of Microbiologists of India.

From 2008 onwards, his research work has been focused on the production of Nanocellulose by energy efficient process using a combination of chemical, biological and mechanical means and is funded by ICAR through a World Bank supported scheme (National Agricultural Innovation Project – NAIP). His work received great appreciation by ICRISAT & NAIP (ICAR) during Agri-Tech Investors' Meet at the NASC Complex, New Delhi on 18-19 July 2013. Based on the promising results and enthusiasm shown by various stakeholders, a nanocellulose pilot plant is now being established at CIRCOT, Mumbai. He is also involved in a Department of Science & Technology (DST) India sponsored project in collaboration with IIT Madras & a private company with a target to convert the nanofibres produced by electrospinning process into yarns for use in technical textiles.