ArboraNano

Canadian Forest NanoProducts Network

Canada

NANOCELLULOSE

What it Can Do for Your Business

NANOCELLULOSE is an emerging class of renewable nanomaterial which shows great promise as a valuable additive in a wide range of industrial, commercial and consumer products.

NANOCRYSTALLINE CELLULOSE or NCC is a type of nanocellulose. Biocompatible, biodegradable and sustainable, NCC is derived from wood, with a length ranging from 100-200 nm. With a higher tensile strength than steel, it can be used to reinforce plastics, make films that are transparent or have unique barrier properties, produce color and iridescence without the use of pigments, and improve the properties of coatings, adhesives, textiles, paper, composites and many other products. NCC is potentially available in vast quantities from Canadian forests.

AROUND THE WORLD, industries as diverse as aerospace, automotive, cosmetics, pharmaceuticals, oil exploration, healthcare, security, packaging, building materials, paper, chemicals, and composites are showing interest in exploiting the special physical, chemical, optical and electrical properties of NCC in their products.

CANADA IS THE GLOBAL LEADER in the manufacture and application of NCC, a nanomaterial obtained from wood. Canadian regulatory agencies have recently approved the use of NCC "without restriction", clearing it for inclusion as the first nanomaterial on Canada's Domestic Substance List. CelluForce Inc., the world's first commercial producer, began operation of its 1 ton/day facility in Windsor, Québec in January 2012; several other Canadian semi-commercial NCC production facilities are operational or under construction.

JOIN US

ArboraNano was created in 2009 through the BUSINESS-LED NETWORK of Centres of Excellence (BL-NCE) program of the Government of Canada. The ArboraNano Network funds industrial and academic researchers interested in investigating the use of NanoCellulose for new product development and product improvement. Projects involving the use of nanotechnology and forest-derived materials may also be eligible.

ArboraNano has assembled an UNUSUAL MIX of partners that have not traditionally collaborated to create a multi-industry, multi-disciplinary R&D effort involving industry, academia, and provincial organizations.

ArboraNano's UNIQUE FRAMEWORK provides a confidential environment where companies can safely explore their ideas and network with other companies to address common interests. Companies can work on their own, with other industrial partners, or with university researchers. If desired, ArboraNano can create an interface with the best Canadian university researchers or various provincial organizations. ArboraNano has access to different sources of nanocellulose, and has intellectual property guidelines and policies that are customized to meet the requirements of industry members.

EXPLORE THE POSSIBILITIES

ArboraNano is currently seeking companies that wish to explore the use of NanoCellulose for their product development efforts. To discuss the possibilities, please contact us before September 7, 2012:

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