



DNFI Innovation in Natural Fibres Award 2021

The deadline for award submissions is
10 September 2021

August 25, 2021
For Immediate Release

The Discover Natural Fibres Initiative (DNFI) was created in January 2010 as an outgrowth of the International Year of Natural Fibres 2009, declared by the United Nations General Assembly. DNFI is a voluntary association of individuals and organizations who work to further the interests of natural fibres by serving as a platform for information exchange, including statistics on fibre production and use, and by working to raise awareness of the benefits of natural fibre industries to the world economy, environment and consumers. Anyone with an interest in natural fibres is welcome to join DNFI by registering on the web site.

Nominations for the 2021 DNFI Innovation in Natural Fibres Award are being accepted through 10 September 2021.

Candidates for the DNFI Innovation Award 2021 should send the appropriate submission form to DNFI, e-mail: Secretariat@DNFI.org. Forms are available on the DNFI web site.

Awards will be judged in three categories:

- Innovative products/components or applications
- Innovative processes/procedures
- Research and science

Evaluation criteria are:

- Outstanding scientific work and technical feasibility
- Level of improvement or effectiveness of the innovation over existing products or processes
- Degree to which the innovative product or process has been implemented
- Potential for opening new outlets, markets or sectors for products made of natural fibres

Deadline:

- Closing date for applications: 10 September 2021

Judging Procedures:

- A sub-committee of DNFI members will choose the award winner.
- The results of the judging shall be final. There will be no right of appeal.

Previous Winners:

The 2017 DNFI Annual Innovation in Natural Fibres Award was won by **Ms. Marie-Isabel Popzyk**, Scientific Assistant at RWTH Aachen University and **Dr. Roland Klein**, Group Manager at the Fraunhofer Institute in Darmstadt/Germany. Their submission, "Reduction of the moisture

absorption of natural fibers and production of no-twist yarns for use in structural components,” showed that up to 100% bio-based, natural fibre reinforced plastics (NFRP) with low moisture absorption can be developed for application in structural components.

The 2018 DNFI award was won by **Velener Textil**. The winning process, “WECYCLED® - Real added value for weaving mills and our partners in the textile chain,” was submitted by Mr. Ernst Grimmelt, CEO and Sales Manager for Yarns, under the category of Innovative processes/procedures. With the WECYCLED® system Velener Textil collects spent cones from partner mills and separates the unused cotton yarn in special sheltered workshops that meet the highest standards of employee safety and environmental protection. The company has developed a sophisticated method to recycle the recovered cotton into new yarns that fulfill the requirements for color fastness, strength and other attributes in high-quality consumer products. Commercial applications include the production of bed linen and knitted clothing.

The 2019 DNFI award was won by **Dr. Debasish Das**, Professor, University of Calcutta, Department of Jute and Fibre Technology, and **Dr. Subhas Ghosh**, Professor, Eastern Michigan University, School of Visual Built Environments, College of Engineering and Technology. The two researchers collaborated on the development of a biodegradable cotton-jute fabric with a waterproof coating that can substitute for non-biodegradable PVC-coated polyester. The new cotton-jute fabric is suitable for use in outdoor fabrics such as tarps, awnings, canopies, or automobile hooding material. In addition to being biodegradable, the natural fibre material meets fire-retardancy standards and allows the transfer of moisture vapor to avoid the accumulation of humidity on the underside of fabrics, while remaining waterproof.

The 2020 DNFI Award was won by **Dr. Nouredine Abidi**, Professor and Director, Fiber and Biopolymer Research Institute (FBRI), Texas Tech University. He developed a process to produce a plastic substitute from cotton by dissolving the fibres to form a gel which can be transformed into bioproducts, including plastic films. Cotton fibres are approximately 99% cellulose, and cellulose-derived bioplastics are inherently biodegradable in landfills and composting facilities. Testing shows that when cotton cellulose bioplastic films are buried in soil, decomposition begins in about 3 weeks. However, when these bioplastic films are kept in normal household conditions, they remain stable with no sign of degradation. Therefore, products made from bioplastic film would have properties similar to those of plastics currently in common use.

More About DNFI

The Discover Natural Fibres Initiative is a platform for those who believe in natural fibres. DNFI facilitates the exchange of information and experiences and works to advance the common interests of all natural fibres in the face of competition with oil-based and wood-based manmade fibres. Representatives of natural fibre industries as diverse as abaca, alpaca, angora, cashmere, coir, cotton, flax, industrial hemp, jute, mohair, ramie, silk, sisal and wool participate in DNFI.

DNFI is entirely volunteer supported. There are no membership dues, the Initiative has no budget or Secretariat and does not conduct projects. Instead, DNFI facilitates communication and collaboration through the exchange of information.

Membership in DNFI is open to anyone with an interest in the growth of natural fibre industries.

www.DNFI.org