For Immediate Release
16 November 2026

DNFI Award for Innovation in Natural Fibre Research 2026

Else-Marie Malmek, Juteborg Sweden AB
Wins 2026 DNFI Award

Prof. Dr. Zeynep Ömeroğulları Başyiğit, Bursa Uludağ University
and Ağaoğlu Textile Industry R&D Center
Receives Honorable Mention

2026 DNFI Innovation Award

Else-Marie Malmek, System Scientist, entrepreneur, CEO of Juteborg Sweden AB, has won the 2026 DNFI Award for Innovation in Natural Fibres Research.

Juteborg is a System Design & Innovation partner and a supplier of JuTech™, high tech composites based on jute. JutePP®, a product within the JuTech™ portfolio, is a granule developed for injection molding and 3D Printing. It is strong enough to replace fiber glass as reinforcement in automotive, defense, construction/interior, textile, and marine applications.



The strength of JutePP® is due to a specific jute yarn, developed by Juteborg together with the University of Borås (www.hb.se), partly financed by Vinnova/LIGHTer. The material is extruded together with polypropylene (PP) (recycled/virgin/bio) and some additives. Since Juteborg uses a twin-screw extruder, each granule contains a specific length of jute fiber, so the quality is consistent and fulfills industry requirements.

JutePP® has been tested by commercial users and is proven to be lighter weight and more cost effective than original automobile components. This means the automotive industry can use JutePP® to comply with the*" Regulation on circularity requirements for vehicle design, and on management of end-of-life vehicles" 2026, (ELV 2000/53/EC Directive),* with existing tools.

The Jury was impressed with the strong potential for commercial application of JutePP®, along with the development of new natural fibre markets, and for substitution of natural fibres in place of manmade fibre material. The Jury were aware that jute-reinforced polypropylene is not a new concept, but the method of preparing granules suitable for mould injection and 3D printing provides an easy and commercially relevant way of including these natural fibre reinforced composites in typical products.

Honourable Mention

In addition to the annual DNFI Innovation Award, the Jury chose to award Honourable Mention to **Prof. Dr. Zeynep Ömeroğulları Başyiğit**, Bursa Uludağ University, Türkiye; in collaboration with **Ağaoğlu Textile Industry R&D Center**.

Their innovation introduces a new textile coloration process in which naturally occurring colored soil is used directly as the coloring material for 100% cotton woven fabrics, replacing conventional synthetic pigment colorants.

The core innovation is not simply the substitution of one colorant with another; it is the redesign of the textile coloration route around the principle of *"natural fibre colored by nature"*. The process converts naturally sourced soil into a printable suspension without synthetic pigment manufacture or chemical extraction and integrates it into conventional rotary screen printing. This enables adoption within existing industrial textile infrastructure rather than requiring a new production platform.



Figure 2. Textile products dyed with soil pigments



The technical breakthrough lies in making soil particles compatible with the printing paste, binder system, drying/fixation conditions and fabric substrate, while achieving reproducible coloration and end-use performance.

Award Ceremony

The honorees will be officially welcomed during the annual meeting of DNFI on Wednesday 13 January 2027 in Frankfurt. The formal award ceremony will be held on Thursday 14 January 2027 on a stage in Messe Frankfurt during Heimtextil.

The anonymous five-person Jury included a research leader, researcher, director, senior manager, and adjunct professor with advanced degrees in industrial engineering, mechanical engineering, materials science, and fiber and polymer science. The jury represented an impressive array of technical competence, research leadership, and experience across multiple fibres. Their voluntary service in support of natural fibres is much appreciated.

About DNFI

The Discover Natural Fibres Initiative (DNFI) is a platform for those who appreciate and acknowledge the importance of natural fibres and support their production and use.

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, natural fibres, flax, industrial hemp, jute, mohair, ramie, silk, sisal and wool participate in DNFI.

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 entirely volunteer supported. There are no membership dues, the initiative has no budget or paid Secretariat and does not conduct projects. Instead, DNFI facilitates communication and collaboration through the exchange of information, including statistics on fibre production, value and employment, and updates on developments in fibre markets. DNFI raises awareness through reports, press releases and seminars, and encourages innovation through an annual award.

Membership in DNFI is open to anyone with an interest in the growth of natural fibre industries. To become a member, simply register on-line at www.DNFI.org.

Contact:

Elke Hortmeyer
Chair of DNFI
Secretariat@DNFI.org
www.DNFI.org

Else-Marie Malmek
Juteborg Sweden AB
Skärvallsgatan 6B,
426 79 Västra Frölunda, Sweden

else-marie.malmek@juteborg.se
+46 708 295454
www.juteborg.se

Prof. Dr. Zeynep ÖMEROĞULLARI BAŞYİĞİT
Bursa Uludag University
Vocational school of higher education of Inegol
Department of Textile, Clothing, Footwear and Leather
Textile Technology Programme
Bursa/TR
zeynepbasyigit@uludag.edu.tr;
h.cakir@agaoglu.com
www.uludag.edu.tr; www.agaoglu.com