



Cotton
Incorporated

Request for Proposals 2023

Product Development and Implementation Division

Objective

The Product Development and Implementation division at Cotton Incorporated is currently seeking research proposals on the following subjects. Cotton Incorporated's main goal is to promote the consumption of cotton among consumers. Therefore, our main focus is on applied research where the results can be quickly implemented into production.

The topics of interest for the RFP are as follows:

Innovative Research

1. To analyze and modify conventional pretreatments, finishes or processes for cotton that will help to lower the carbon footprint for the substrate. The recommended modifications shall be implemented, and results recorded to compare the modified treatment or process to conventional methods to support the claim for lower carbon footprint.
2. Research the latest development that highlights low water or waterless dyeing for cotton and cotton blends. This project shall include the actual process from concept to physical samples of the dyed substrates along with data comparing the dyed sample using the new method against the conventional dyed sample.
3. Develop ideas to implement with cotton for biodegradable/flushable nonwoven wipes where cotton use is limited in the current market. The concept prototypes shall include data collected on the end of life for the newly developed product.
4. Develop concepts to implement for disinfecting nonwoven wipes made of cotton meant for cleaning applications. The efficacy of the nonwoven wipes shall be determined.
5. Using 3D virtual apparel prototyping software platforms such as CLO 3D, Browzwear or other 3D fashion design platforms, develop relationships between the physical and digital twin for cotton fabrics. The display of the fabric on the platform shall mimic the real behavior of the fabric.

New Products

1. Develop a new non-apparel product that is scalable into a commercial commodity from mechanically recycled cotton. The new product shall have practical application in real life.

2. Develop a new method to mechanically recycle cotton fabrics while preserving fiber length as compared to conventional technology.
3. Identify and/or develop new concepts/products from cottonseed meal/oil for both textile and non-textile applications.
4. Develop a cotton or cotton-rich water or air filtration media. The product developed shall be used to collect data detailing its performance for filtration.
5. Develop replacements for the foam rubber underlays/paddings that are used in the carpet industry especially for the area rugs. The replacement shall contain cotton that is coated with bio-friendly material that can provide traction to the underside of the carpet.
6. Develop innovative cotton textile products and/or processes involving yarn, fabric, finishing, manufacturing, emerging technology, sustainability, and circularity.

Preference will be given to projects that are **smaller in scope** and can demonstrate **initial results in 6-12 months**, with the option of being continued if results show promise. All projects must be completed by the end of 2023.

Background

The mission of Cotton Incorporated is to increase the demand for and profitability of cotton. Proposals with good commercial potential to impact the market are typically given priority. Applicants are encouraged to visit our company website for additional information about Cotton Incorporated: www.cottoninc.com

Pre-Proposals

Applicants are strongly encouraged to submit a pre-proposal before spending their time writing a full proposal. The pre-proposal can be as simple as an email that explains in a few paragraphs the basic concept, approach of the research, and the *estimated amount of funding needed* to run the project. Providing this information will allow us to work together to define targeted objectives that are mutually agreeable before a complete proposal is written. Please limit the number of pre-proposals submitted to less than five per person. In the submission, the exact topics to which the proposals will be submitted must be identified. Once the pre-proposal gets approved, applicants will then be asked to submit a full proposal. Sufficient amount of time will be provided

to complete the proposal. Pre-proposals in electronic format are due by **Friday, June 3rd, 2022**. Also, please note that pre-proposals sent after the due date will not be considered.

Pre-Proposal Submission

Please submit pre-proposals in electronic format by **Friday, June 3rd, 2022**. Full proposals will only be requested for specific projects that meet our criteria. Please submit pre-proposals to:

Mary Ann Ankeny

Vice President, PDI Operations

Textile Chemistry Research, Cotton Incorporated

919.678.2394

TCR-Proposals@cottoninc.com