

# Request for Proposals 2024

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 are as follows:

- 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
  will be implemented, and results recorded to compare the modified treatment or process
  to conventional methods to support the claim for lower carbon footprint.
- Research recent developments that highlight low water or waterless preparation and dyeing for cotton and cotton blends. This project will include developing prepared or dyed fabric samples using the highlighted new technology along with data comparing the new process against a conventionally processed sample.
- 3. Develop ideas to implement cotton in biodegradable nonwoven application that would compete with single use plastics or replace synthetic fibers that do not biodegrade. The concept prototypes will include data collected at the end of life tracking the biodegradation of the newly developed product.
- Develop concepts to implement for disinfecting nonwoven wipes made of cotton meant for cleaning applications. The efficacy of the developed nonwoven wipes will be determined.
- 5. Develop a new non-apparel product that is scalable into a commercial commodity from mechanically recycled cotton. The new product will have practical application in real life.
- 6. Identify and/or develop new concepts/products from cottonseed meal/oil for both textile and non-textile applications.
- 7. Cotton Incorporated has developed a method to take cotton textile waste back to its glucose building blocks. The proposed project will use the glucose obtained from this Cotton to Sugar project (managed by Cotton Incorporated) as an intermediary chemical

- to formulate a viable new product. Also, the economics involved in developing the new product must be generated.
- 8. Develop new bio-based composite product from by-products of cotton plant.
- 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 2024.

## **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 four 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 23rd, 2023**. 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 23rd**, **2023**. 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

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