

# Sustainable and All-natural High-Performance Fabric

*A BioMADE Project / Department of Defense Manufacturing Innovation Institutes*



**Technology:** Non-Woven Air Filter

**Project Participants:** Tandem Repeat Technologies, Inc

**Institutes' Role:** This project would not have been possible without the institutes' public-private partnership and unique contracting process.

**Technology Description:** This technology takes revolutionary manufacturing processes to make a face mask. The fibers used in this novel mask enhance the triboelectric properties for enhanced air filtering that surpass those of other natural and synthetic materials by several orders of magnitude.

**Impact:** This technology will be tested for Warfighter use in air filtration. When fielded, this technology has the potential to save lives and Federal funding. There is also potential commercial interest in making this technology available to everyone.

*Native (right) and smoke-exposed (below) pictures of Squitex air filter.*

