# Low Cost Disposable Sensors for Biomedicine

## ID# 2018-4723





System Overview

## **Technology Summary**

A thin, flexible, bioabsorbable material, galactomannan film has been developed that can be paired with biocompatible conductors to create sensors suitable for on or inside the human body. The thin, flexible sensors can conform to the body and collect biometrics over time, with minimal discomfort. The sensors can be designed to dissolve on its own over time.

## Application & Market Utility

This technology provides for a wearable, smart-phone interfaced system for real-time monitoring of temperature and biometrics (ECG, EMG). The invention consists of a flexible printed circuit board and a water-soluble sensor patch. All health monitoring can be accomplished in a single platform. Provides long-term, real-time monitoring for each individual. The water-soluble patch eliminates the electronic waste from disposal. The invention could be useful in the personal healthcare market; for sale at hospitals, clinics, pharmacies, and over-the-counter suppliers.

## **Next Steps**

Seeking research collaboration and licensing opportunities.

## **TECHNOLOGY READINESS LEVEL**

4-7

#### Seeking

Investment | Licensing | Research

#### Keywords

- conformal sensor
- biodegradable sensor
- implantable sensor
- galactomannan film

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