## CASH-LOCK: A Way to Find Out What You Are Wearing

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Today the industrial reality is stimulated to be more respectful of our planet by a public opinion that is increasingly attentive to environmental issues. In the world of textiles, to enhance the company in the eyes of the consumer, some companies declare their products recycled and advertise themselves as a green brand (phenomenon known as Greenwashing). This type of activity strongly hinders the development of a sustainable economy, deceives the consumer and makes him lose faith in any form of eco-friendly behavior. Given the global situation on this issue, it is necessary to protect the consumer through laws and regulations that prevent this operation. However, until the competent authorities receive a cost-effective and reliable test to distinguish between recycled and virgin fibers, no checks will be possible and that is why there is no regulation on recycled fabrics. Thus was born the need to distinguish real recycled fiber from virgin ones, in order to prevent companies from exploiting the green brand and protect the development of the eco-sustainable economy that the world needs and deserves.

## **Awards Won:**

Sigma Xi, The Scientific Research Honor Society: Honorable Mention Physical Science Award