Wearable Sweat Sensors

Mallika Bariya of the Ali Javey Research Group

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The July BSAC Researcher Seminar Series will feature Mallika Bariya of BSAC Co-Director Professor Ali Javey’s group.

Human sweat has emerged as an appealing biofluid for non-invasive monitoring of health and physiology. Developments in wearable sweat sensors has created the possibility of continuous in situ sensing of sweat biomarkers for personalized and predictive healthcare.

The presentation will focus on the Javey Lab’s seminal work on continuous, in situ, multiplexed sweat sensing. Specifically, collecting and interpreting information by analyzing composition, on-demand secretion methods, sweat rate determination with microfluidics, and recent work on high-throughput, low-variation fabrication of sensing components. Also, the need for correlation studies in relation to understanding how sweat constituents reflect overall health will be presented.

Mallika Bariya joined Professor Ali Javey’s group as a PhD student and NSF Graduate Research Fellow in 2016. Her research focuses on electrochemical sensing technologies for healthcare applications, with particular focus on developing and using sweat sensors to understand how non-invasive parameters can reflect deeper physiology.