

## Abstract

Microfluidic technologies are an exciting set of new platform technologies that can be used to enable the miniaturization of fluid flow and analysis in a number of areas such as medical diagnostics, food and environment testing and drug screening. Achira Labs is a start-up company in Bangalore focused on the development of microfluidic technologies that can serve as a platform to perform rapid, affordable and multi-analyte testing in the medical diagnostics space. I will talk about some of our experiences in this regard and the technology portfolio that Achira Labs has built. The talk will focus on two different platform technologies that we have created – one involves methods to load micron sized reagent blocks into a microfluidic device and the other is a novel fabric-based platform to perform ultra low-cost testing.

## Brief Bio:

Dhananjaya Dendukuri is currently Chief Executive Officer & Co-Founder of Achira Labs, a Bangalore-based start-up that is building a microfluidic platform for point-of-care medical diagnostics. He received his Ph.D. in Chemical Engineering from MIT in 2007 in the labs of Profs. Patrick Doyle and Alan Hatton, where his thesis work on synthesizing polymeric particles in microfluidic devices received the Senturia Prize as the best dissertation in the area of micro and nanotechnology at MIT in 2008. Prior to that, Dhananjaya obtained a MASC in Chemical Engineering from the University of Toronto in 2002, Dhananjaya also has a B.Tech in Chemical Engineering from the Indian Institute of Technology, Madras. His other honors include an 'Institute Blue' from IIT-Madras (1999) for his outstanding all-round performance. Dhananjaya's work at Achira was recently recognized through his being named as one of 20 individuals to receive the Massachusetts Institute of Technology's (MIT's) Technology Review's prestigious TR35 awards in India.