

Flexible & Wearable Electronics Application Experiments



Kinetic Analysis B.V.

Kinetic Analysis specializes in human motion data. We capture data using next-generation sensors and customised measurement tools, resulting in highly accurate input that improves people's lives.

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Problem to be solved

Over 5% of the world population dies from the consequences of lung disease (COPD, Asthma, long-COVID), and this population keeps growing. There is currently poor insight for patients and professionals due to a lack of real-world data on lung functioning. Feedback is required to improve (self) management of living with lung problems.

Solution provided by SmartEES

Previous work shows smart textiles' added value in capturing lung health data. The current project has developed a smart shirt that monitors lung health and improves people's quality of life while saving on healthcare costs. SmartEES2 shirt can measure respiration and transmit the measured data to the wearer via a mobile app. SmartEES2 involves practical development steps to prepare for scaling this innovative product on an industrial level.

Business model & impact

The Lungshirt developed by KA is addressing several markets. A direct to consumer market for Sport and Singing coaching which will allow them to start selling their T-shirt without the medical certification. In future, the medical market will be addressed through Healthcare professional prescription for various pathologies: pulmonary infectious, COPD, respiratory insufficiency, Asthma, Post-Stroke and post-COVID long-term care. Speech and language rehabilitation presents another identified market opportunity.

