



The **Realisation** of Research

Diamond Based Sensing of Airborne Particulates

Case ID:

23-013

Web Published:

Jan 4, 2012

Category(s):

Sensors

Description:

Sensing Airborne Particulates

Available For: Licensing

Summary

Real time detection and identification of biological particulates in the air.

The Technology and its Advantages

Current methods for measuring airborne particles are based on an archaic capture and count technique which is expensive and laborious, and normally only provides an average over 24 hours.

This technology is a new approach capable of simultaneously identifying and counting the number density of spores, pollen, bacteria (or other biological particle) in the atmosphere in real-time.

With legislation to cover the release and monitoring of bioaerosol particles in work place environments (e.g. compositing sites) from the FDA and EU imminent, this new technology can provide a bench mark for real time management of this issue.

The method relies on the breakdown of the particles in a plasma which provides a unique pattern depending on the particle's material, density and composition. This is measured using potentiometric tomography, a process that has been pioneered at UCL.

Market Opportunity

This is a platform technology that potentially has numerous applications across the environmental and healthcare sectors, ranging from industrial monitoring applications through to pollen monitoring and finally military/security applications within the Chemical, Biological and Radiological and Nuclear sector.

Intellectual Property Status

PCT application filed 23 November 2010.

Further Information

Further Information

For further information please contact UCL Business PLC. T: 020 7679 9000 E: t.fishlock@uclb.com

For Information, Contact:

Tim Fishlock
Business Manager
UCL Business PLC
020 7679 9000
t.fishlock@uclb.com

Inventors:

Daren Caruana
Dimitris Sarantaridis

Keywords:

Direct Link:

<http://uclb.technologypublisher.com/technology/8635>