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Microscopy Sample Containment System

Flexible and disposable system to allow the easy analysis of samples that require isolation and containment.

Current equipment to isolate sensitive or hazardous samples for microscopy are expensive, occupy significant lab space and are time consuming to prepare and use. This new system provides a disposable, flexible and easy alternative for samples which require containment.

In microscopy work there is often the need to isolate a sample from the laboratory atmosphere. This is typically to protect the analyst from potentially hazardous material contained in the sample; or to protect the sample itself from either gases or moisture which might react with or deteriorate the sample.

The current method to analyse such samples is to use a fume hood or glove box which are expensive and can occupy significant lab space. They also require additional preparation time and lack the flexibility to easily change or reposition the sample during analysis.

Microscopy Sample Containment System

This new sample containment system, developed by material scientists at the UK's Atomic Weapons Establishment (AWE), overcomes the drawbacks of using a fume hood or glove box and offers a lost cost alternative to quickly allow samples to be prepared for analysis.

Benefits

- **Reduces Risk to Analyst** - suitable for contaminants, contagions, and hazardous samples to protect the technician.
- **Sample Protection** - creates an inert atmosphere to protect sensitive samples from the environment.
- **Equipment Agnostic** - can be used with any microscope or spectrometer and is not specific to any particular instrument or manufacturer.
- **Flexible and Portable** - samples can be prepared within the containment "bubble" in one location and be easily moved elsewhere for analysis / storage.
- **Easy to Use** - avoids the need to use complex and difficult to setup equipment. Samples can also be easily swapped or manipulated / repositioned if required.

Description

The new containment system removes the need for a large scale containment housing for the entire imaging equipment. In addition to being a more flexible solution, it advantageously frees up the larger less portable containment systems for other users.

The new system also takes less preparation time and is significantly less expensive, offering a disposable alternative to fume hoods and glove boxes.

Applications

- Hazards / contaminants
- Contagious / bio-hazards
- Cell culture / biological samples
- Forensic sample storage / analysis
- Samples sensitive to moisture / air

Intellectual property

- GB patent granted (GB2544376B)
- USA and EU patents at National Phase

More information

For more information about licensing this technology, or to speak to us about our other life sciences related IP, please contact us.

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