

Securing the staff and removing contamination in a research centre

Scottish Universities Environmental Research Centre (SUERC) provides Scottish universities with collaborative access to specialist research equipment and expertise. The centre hosts, for example, a comprehensive suite of radioisotope dating techniques.

Because the cleanrooms in SUERC laboratories need to have an extremely high level of air quality, they have been built as positive pressure rooms with HEPA filters purifying the air.

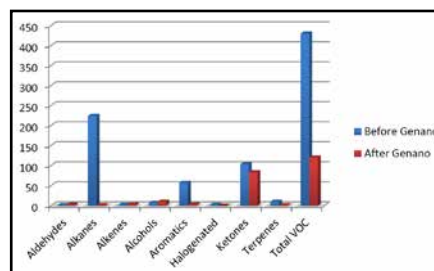
Due to internally raised concerns, one area of SUERC premises was closed in 2012 for a thorough air quality study. Although minor issues were observed, the target area met the regulatory requirements for health and safety at the work place. However, SUERC was committed to raise the air quality to a higher level to keep the health risks to the staff at a minimum. Additionally, they found the regular changing of HEPA filters inconvenient and the cost of the filters expensive.

SUERC and Genano started collaboration by performing an initial air quality

analysis; bringing in Genano air purifiers in three cleanrooms; and performing a second air quality analysis after the Genano air purifiers had been running for 3 weeks.

The HEPA filter purification was left working normally, in order to have comparable results before and after using Genano.

The results for the VOC measurements are summarised in Graph 1. After using Genano, the total amount of VOCs in the air went down to one third of the original level.



Graph 1. VOC measurements before and after using Genano air purifiers. Acetone (ketone) is used for equipment disinfection in the laboratories.

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Dr. Delia M. Gheorghiu

In 2015, SUERC confirmed that Genano air purifiers had also helped solve a contamination issue in their premises.

“We had sulphur contamination issues in the past in the ³⁶Cl laboratory of the Cosmogenic Isotope Analysis Facility. We have HEPA filters in the laboratory but, as the sulphur is present everywhere and brought in by various means, filtering the input of air by HEPA was not enough for our standards”, describes Dr. **Delia M. Gheorghiu** from NERC Cosmogenic Isotope Analysis Facility at SUERC.

“The problem has been now sorted after thoroughly cleaning the pressing tools that we use for our samples with ammonia and by relocating one Genano air purifier from the staff lounge into our laboratory. After this we have had no more contamination issues in our samples”, says Gheorghiu.

More information on Genano air purifiers:
www.genano.com