Advanced in vitro exposure systems





Particle Size and Structure

TEM-Grid Inserts



Collect particles only





If you are mainly interested in the properties of your deposited particles and fibres on the micro- and nanoscale, you should consider collecting them directly on our VITROCELL[®] TEM Grid Inserts.

The grid with the consequently un-altered particles can then easily be placed in a commercial TEM and be analyzed without any impact on particle size or structure.

VITROCELL® TEM Grid Inserts are available in 6-well or 12well format and can be used in every exposition module with these sizes.

Example: TiO2 nanoparticles



TEM-Images of deposited TiO2-Particles, magnification A: 800-fold, B: 125.000-fold (images courtesy of KIT)

Features:

- trapping only of solid aerosol components (particles, fibres)
- o comparable to deposition on cellular systems due to identical geometry and deposition mechanisms
- $\circ\,$ representative sampling with the possibility to evaluate radial and angular homogeneity
- \circ easy and safe transfer from sampling to TEM device
- suitable for all exposure principles used by **VITROCELL®**
- o available in 6-well and 12-well format



About VITROCELL®

VITROCELL® exclusively concentrates on the developing, producing, installing, training and servicing of advanced *in vitro* exposure systems.

The VITROCELL® Systems' team is driven by their vision for new in-vitro standards through state-of-the-art technology, highly qualified workmanship and absolute client dedication. VITROCELL® has successfully collaborated with clients from leading research institutes, contract research organizations, regulatory authorities or industrial laboratories across the world. Working with our team experts, all modules have been tailored to create durable and complete turnkey-systems for *in vitro* inhalation toxicology. Gases, environmental atmospheres, nano particles and complex mixtures are analyzed on lung cells at the air/liquid interface using these systems. VITROCELL® technologies are also applicable to solutions for skin research.

Over a decade of devotion to research in this specific field has given our team of design & precision manufacturing specialists the opportunity to mentor highly diversified and complex projects from conception to completion. We strive to become a constructive member of each research team, providing support when it is needed, advice when it is required and modules of the highest quality, which are even polished by hand before leaving here to be integrated into your workspace. Every piece of our German engineered equipment is manufactured to the highest of standards – yours.

For more information please scan the QR-Code:



VITROCELL® Systems GmbH Fabrik Sonntag 3 79183 Waldkirch Germany Tel. +49 7681 497 79-50 Fax +49 7681 497 79-79 Email: info@vitrocell.com www.vitrocell.com

