# Advanced in vitro exposure systems

VITROCELL<sup>®</sup> Gas Supply Systems







## VITROCELL® Gas Supply Systems

For the exposure of gases, particle-free mixtures and direct samples from the environment



## Possible sources of gases or particle-free mixtures:

#### • Gas cylinder

Gases and mixtures in various concentrations and specifications can be purchased from gas supply companies. The cylinders must have pressure and flow regulators. They can be connected to the VITROCELL® distribution system which then delivers the gases or mixtures to the VITROCELL® module.





Sampling bag/samples from indoor/outdoor environment
 A sampling bag is easily and directly connected to the
 module using the VITROCELL<sup>®</sup> SPIDER. The bag can be
 filled from various sources. If samples must be taken
 from the indoor/outdoor environment, VITROCELL<sup>®</sup>
 offers a special vacuum filling system for the sampling
 bag which is then transferred to the laboratory. This
 procedure is not suitable if the test atmosphere contains
 particles. If the collection of complex mixtures con taining particles is required, contact us directly for an
 individual solution.

#### Dynamic Gas Mixing System

There are various options to create individual mixtures with different dose levels. With the VITROCELL® Dynamic Gas Mixing System, it is possible to generate different dilutions of the test aerosol.

#### Features

- $\circ~$  Easy supply of gases and particle-free mixtures
- Sampling directly in the indoor/outdoor environment
   Doses can be varied by creation of different concentrations



### **About VITROCELL®**

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

The VITROCELL<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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.

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