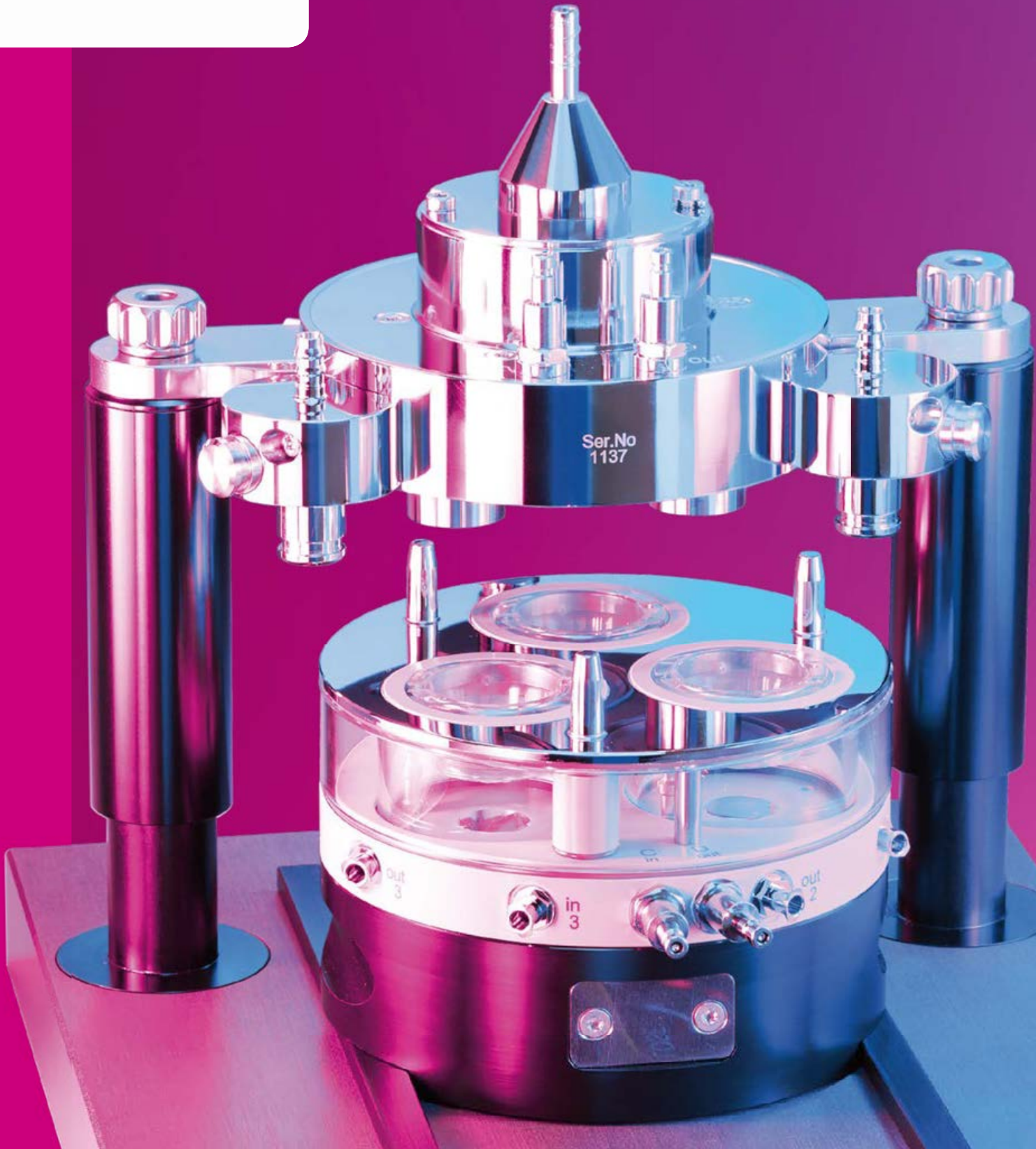




**Cultex**<sup>®</sup>  
Laboratories

*The Airborne  
Exposure Experts*



# The world's first choice for *in vitro* toxicology and cytotoxicity research at the air-liquid interface

As far as *in vitro* toxicology at the air-liquid interface (ALI) and cell cultivation are concerned, more and more customers worldwide are opting for the superior Cultex® technologies from Germany: companies from a wide range of sectors, public and private research institutions, universities, environmental organizations and other NGOs.

For good reason: product solutions from Cultex® ensure reliable, consistently reproducible results in the analysis and study of complex gases/gas mixtures, atmospheres and nanoparticle mixtures.

Cultex® systems are internationally recognized as the gold standard for the realistic simulation of atmospheric conditions (indoor and outdoor).



## First Choice for Exposure Solutions: CULTEX® RFS

The CULTEX® RFS is the world's first Radial Flow System for cell-based exposure. The innovative development sets new standards for the constant and controlled flow of particles and ensures reliable, reproducible and consistent results in the investigation of complex gas and nanoparticle mixtures via the patented radial arrangement of the inserts.



## First Choice for Cultivation Solutions: CULTEX® LTC-C

The CULTEX® LTC-C (Long-Term Cultivation – Continuous) was designed to automatically supply cell cultures with medium at different time intervals over longer periods of time (weeks). The fully automated system requires less manual work compared with standard cell culture techniques, saves manpower and removes the individual influence of the operator.



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# The Cultex<sup>®</sup> Advantage for our Customers

For more than twenty years, the name Cultex<sup>®</sup> has stood for extensive application-oriented research and technological advancement.

The Cultex<sup>®</sup> specialists' expertise, practical experience and research know-how allow flexible process and project solutions, benefitting Cultex<sup>®</sup> customers all over the world – from the tendering to process design and through to the concept and implementation of complex projects.



# Application-Oriented Research Ensures

In the field of long-term cell culture as well as in the area of *in vitro* toxicology and cytotoxicity research at the air-liquid interface, Cultex® Laboratories GmbH has played a leading role for many years. Twenty-four international patents for linear and radial *in vitro* exposure systems emphasize the Cultex® expertise as a world-class solution provider.

Founded in 2007, the company has its headquarters in the prestigious Medical Park Hannover in northern Germany. The location, in close proximity to major companies and institutions for medicine and technology, ensures close links with numerous interdisciplinary research networks.

## Translating experience into practice

Cultex® has many years of laboratory experience in the field of exposure and cultivation of cell-based systems. Both in-house research as well as contract research is conducted in the company's own *in vitro* research laboratory. Because of this unique practical knowledge, Cultex® has developed technically outstanding and continuously optimized systems and solutions for clients' application practices across diverse industries all over the world.



# res Superior Quality



## Individual, flexible, modular

No two projects are alike. That's why Cultex® offers substance-specific system solutions individually attuned to the particular application, process and project. Requirements can be subject to change. For that reason, Cultex® solutions are designed to be easily modified, complemented, extended or upgraded at any time throughout the entire project duration.

- **This is because most Cultex® systems are modular in design and can be flexibly combined with a variety of other components.**
- **This ensures increased planning and investment certainty at the highest technical level with simultaneous optimum economic viability.**



# Worldwide and Local

Providing the best possible customer service is of great importance for Cultex® Laboratories GmbH. To help ensure worldwide excellent technical advice and comprehensive support services, we are working in your region with selected partners. This allows us to quickly and individually respond to your enquiries and support you in the implementation of your project.



# The Lead in Quality and Expertise

The superior Cultex® product solutions are the result of years of in-house research. Continuous development and expertise, not available to this extent anywhere else, have resulted in this decisive technological advantage.

Product solutions from Cultex® Laboratories enable reliable, constantly reproducible results - be it in the analysis of complex gases, mixtures and atmospheres, or in automated cell cultivation for *in vitro* toxicology.

The use of highly inert materials, precision design by Swiss experts and manufacture by selected specialized companies in Germany ensure the highest quality world-wide for all Cultex® systems.

## Full service spectrum included

Cultex® Laboratories GmbH offers clients professional consultation and planning support in projects focusing on the identification and characterization of the effects of harmful substances with inhalational pathways by using tailored *in vitro* techniques.

Our research and development activities, also in conjunction with our extensive experience and knowledge of over 30 years means that we are continuously extending the spectrum of testable substances with inhalational effects, such as chemicals, volatile compounds, complex mixtures or particles. We offer state-of-the-art advice on that which is technically feasible.

We are represented at national and international conferences, workshops and fairs. These events are an excellent first-hand source of information about our latest research results and technologies. They provide an opportunity for us to consider your problems together with you and to discuss ongoing developments within *in vitro* toxicology.



## CULTEX® RFS:

# Benefiting from the technological edge

Better is the enemy of good – especially when it comes to extreme precision, meaningful results and the reproducibility of results. That is why we brought the CULTEX® RFS onto the market: the world's first Radial Flow Solution for cell-based exposure. CULTEX® RFS is the consequential further development of our patented CULTEX® linear glass modules and, defined by the unique radial arrangement of the inserts, is a new standard for constant and controlled particle flux in *in vitro* toxicology at the air-liquid interface (ALI).

### Compact Radial Flow System for parallel cell-based exposure

Like the “big” CULTEX® RFS, the newly developed Compact version of our Radial Flow System is characterized by the highest precision in design and manufacture – essential prerequisites for stably running exposure processes and for obtaining more resilient, reproducible data.

The CULTEX® RFS Compact is designed to house one type of cell culture insert size. The new modular system consists of two main parts, the aerosol-guiding module and the sampling module. The sampling module, housing up to 6 cell culture inserts, can be used for analyzing the biological effects of the test atmosphere in all insert positions, which are separately supplied with medium. Another option allows exposure of the cultures to the test atmosphere and clean air (negative control) in parallel by guiding the aerosol via the central inlet to 3 insert positions, whilst the remaining 3 insert positions are connected to clean air.



The modular concept of CULTEX® product solutions allows simple, investment-safe upgrading of the CULTEX® RFS with a wide range of enhancement systems:

- CULTEX® EDD – well-engineered Electrical Deposition Device to increase the deposition efficiency for micro-sized and nano-sized particles



## CULTEX® LTC-C:

# Computer-controlled Long-Term Cultivation System

The CULTEX® LTC-C Long-Term Cultivation System is the innovative solution for fully automated cell cultivation at the air-liquid interface (ALI) and allows cultivation periods of up to several weeks in continuous operation. Up to four incubator modules can be operated simultaneously. The main application field of the CULTEX® LTC-C is the generation of comparable cultures for mechanistic and toxicological studies.



- CULTEX® DG – our Dust Generator recommended as essential peripheral equipment for the exposure of cells to dry powder aerosols
- CULTEX® HyP – our high-precision Hydraulic Press for the production of homogeneous dust cakes for uniform aerosol generation and reproducible results
- CULTEX® Inserteromat – a helpful device for the excision of the delicate microporous membranes from cell culture inserts for histopathology
- CULTEX® Process Plate – facilitates the processing of Falcon® and Transwell® inserts

# Cultex<sup>®</sup> – always providing the best solutions for your use!

It is our endeavor to provide each and every one of our clients with the exactly customized support required for successful progression of a project: outstanding service, first-class consultation, the latest research reports and the most efficient product solutions worldwide for *in vitro* toxicology and cytotoxicity research at the air-liquid interface.

What can we do for you?

Please get in contact with us and let us know what you require. We look forward to talking with you personally and would be pleased to develop a proposal exactly suited to your requirements.

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