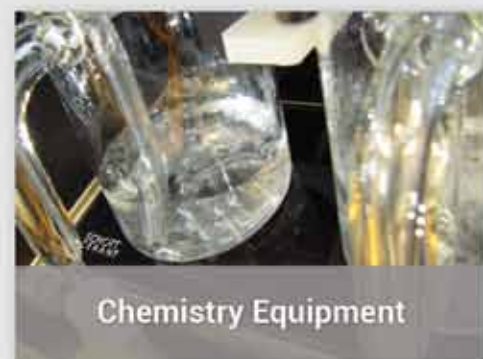




Sample Preparation



Surface and Interface Analysis



Chemistry Equipment

Gerhardt UK – Who are we?

Gerhardt UK are a supplier of a range of lab equipment covering: Sample preparation: from FRITTSCH, Domel and Kinematica including Mills, homogenisers and blenders.

Gerhardt Chemistry Equipment: for Protein, Nitrogen, Extraction for Fat, Fibre analysis and Trace metals.

DataPhysics Surface and Interface analysis equipment: including Contact Angle and Tensiometry.

FRITTSCH Particle size analysis equipment including laser particle size analysis, particle image analysis and sieving.

We pride ourselves in offering customers unrivalled pre- and post sales support. For further details about the full range of products we offer see our website.

www.cgerhardt.com

If you are familiar with Gerhardt UK then we have included some details of some of our latest products and developments in this newsletter. If you would like to receive our newsletter in the future please e-mail us on info@gerhardtonline.co.uk.

New Website for Gerhardt UK.

The new Gerhardt UK website is designed to fit onto PCs, tablets and mobiles. The emphasis of the website is also changing. Strong technical data already exists on our parent company and main supplier websites. So, it is our intention to use our website as a vehicle for customers to contact us for further information. With this in mind, it is necessary to provide just enough information about the equipment, to give the customer an idea of what it can do, before they contact us.

The website is structured to show our areas of expertise:

Sample preparation: Milling, cutting, homogenizing.

Protein/ N determination with Kjeldahl and Dumas

Soxhlet extraction plus acid hydrolysis – Product videos available

Fibre determination – Product video available.

Amino Acid Analysis

Particle size analysis

Surface and Interfacial tension analysis.

To see the new website go to www.cgerhardt.com.

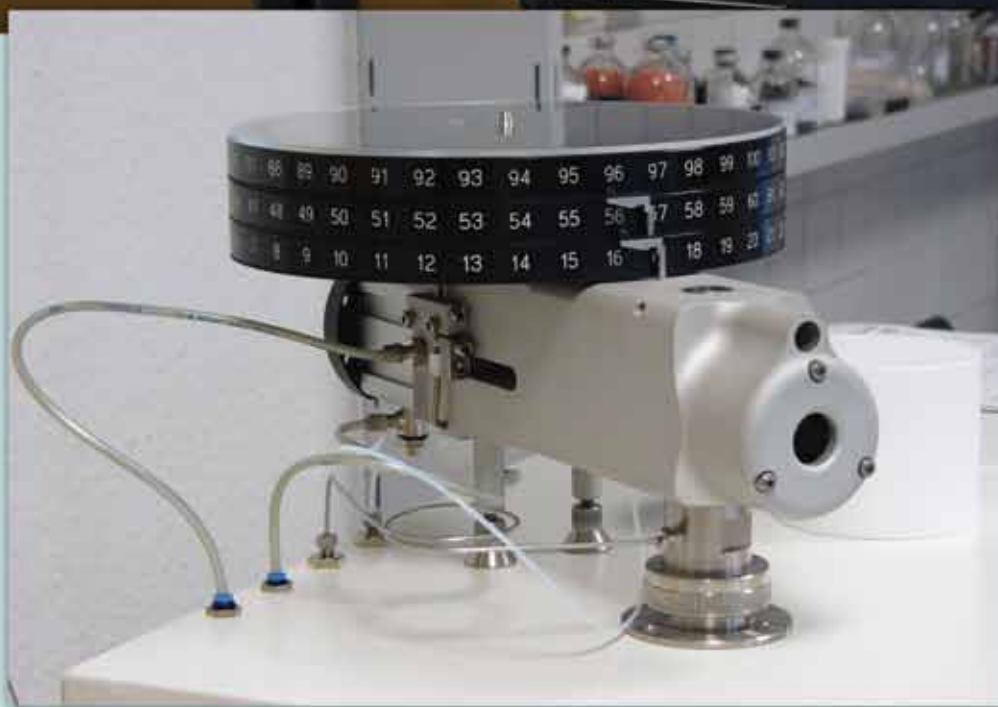




Gerhardt Dumatherm – Protein analysis by Dumas.



Gerhardt UK have successfully installed the first Gerhardt Dumatherm Dumas systems for N and Protein in the UK. Customers are now seeing the benefits in performance and ease of use. Gerhardt Dumatherm is extremely quick to start up and check before the days analysis begins. Leak checks are quick and easy with only a few points to check – all easily accessible. Sample size is used by Dumatherm manager software to determine the exact amount of Oxygen required for combustion saving a huge amount of gas. The whole sample is combusted and analysed giving representative, accurate and reproducible results on a wide range of samples.



An essential part of Dumas is the changing of catalysts and reduction chemicals. The Dumatherm makes this process very easy and very quick. Tubes can be changed and re-sealed in 5 minutes and the system re-stabilized in a further 10 minutes. Tubes can be supplied pre-packed for speed or packed by the customer.

Cost of analysis is kept very low by massively reducing the number of blanks and standards needed.

All consumables and spares are stocked in the UK and our service support is ready to react when needed.

Gerhardt are well known historically for being experts in protein by Kjeldahl. We are happy to advise on which method is most appropriate for your Protein analysis.

For further information or to organise a demonstration contact Paul on 01280 706772

Introducing FRITSCH Sample preparation and Particle Sizing Equipment.



Gerhardt UK Ltd are the exclusive UK (and Irish) agents for Fritsch sample preparation and particle size analysis instrumentation. Fritsch are the market leading manufacturer in laboratory sample preparation instrumentation. The Fritsch sample preparation product portfolio covers a range of laboratory instrumentation including the following:

- Planetary ball mills
- Ball mills
- Cutting mills
- Jaw crushers
- Disk mills
- Mortar grinder

In addition Fritsch offer a laboratory vibratory feeder, which can be used for the continuous feeding of sample material at a controlled rate and a rotary cone sample divider. The Fritsch rotary cone divider has been designed to replace traditional methods of sample dividing, such as coning and quartering.

For particle size analysis, Fritsch manufacture both sieve shakers and laser particle size analysers. The Fritsch sieve shakers, operate with a magnetic drive in the base of the instrument, which vibrates the sieve stack vertically. The sample material is propelled upwards and as it returns to the mesh of the sieve, it is forced through the openings. The regulated vertical action of the sieve shaker, produces optimum material sizes for sieving and ensures an even distribution over the sieve mesh.

For over 25 years, Fritsch have been manufacturing laser particle size analysers. In 1985, the concept of laser diffraction in a convergent laser beam with the patented Fritsch measurement process was introduced. This measurement

process has now become the international standard for fast, reliable and reproducible particle size analysis.

Laser diffraction / scattering is the most efficient way of determining the particle size distribution from 10 nanometres up to several millimetres. The sample is dispersed either as a dry powder in an air jet or as a liquid suspension. Fritsch offers two laser particle size analysers to cover a wide range of particle size distributions.

- The MicroTec plus covers a measurement range of 0.08 μ m up to 2mm
- The NanoTec plus covers a measurement range from 0.01 μ m up to 2mm.



Membrapure – Amino Acid Analyser.

membraPure

Water Purification Systems - TOC Analyser - Chromatography

The amino acid analyzer ARACUS with its modular concept is the ideal instrument for the analysis of amino acids in research, quality control and in the clinical laboratory.

It combines innovative technologies with the classical routine analysis of amino acids by the post-column derivatisation with ninhydrin.

This produces results with the highest precision, reproducibility and accuracy.

Physiological amino acids

Analysis of free amino acids in biological and medical applications (serum, plasma, urine, culture media) or food.

Proteinogenic amino acids

Analysis of proteins, peptides, feedstuff or nutrition after hydrolysis.

Analysis of specific amino acids

PKU or homocysteine are two examples of specific applications with dedicated short run programs.

The setup of the instrument allows the continuous analysis of up to 192 samples on an autosampler or with a manual injection system.

New modules expand the applications for the DataPhysics Optical Contact Angle & Humidity generators.

dataphysics
Understanding Interfaces

DataPhysics are about to launch a family of four devices for fully automated, video based, contact angle and drop contour analysis instruments, based around a newly assigned 'OCA50' frame.

All devices benefit from a motorised sample table with software controlled x-y-z positioning of the dispensed sessile drop.

Multiple direct dosing units ensure the precise positioning of needles for 'loading' of pendant and sessile drops into the environmentally controlled analysis area.

Special features include: software controlled motorised focus and adjustment of observation angle



and the analysis of micro-structures with drops as small as 0.2 nano litres.

The modular design philosophy of the OCA50 family of instruments, and the application specific software packages, that support it, enable our product specialists to configure a device to the exact demands of your individual studies.

Humidity generators.

The Humidity Generator and Controllers are designed for the automated regulation of the relative humidity, of ambient clean air, for a wide range of applications.

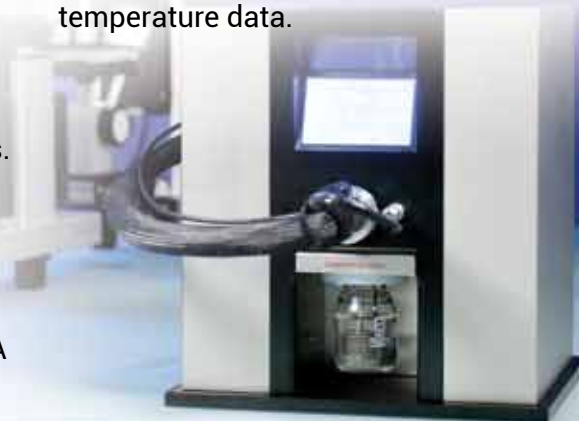
The generators are designed to be easily connectable to any temperature controlled measuring chamber: eg. The DataPhysics OCA range and/or the whole suite of

thermal analysis techniques, such as: TGA, TMA, DSC etc.

Additional key features include:

- Stand alone generation of dry air without an external pressurized gas supply.
- Easy control via touch-screen or optional software.
- Automated drying and regeneration of desiccant.

The software assists you in the intuitive use of the humidity generator by controlling the humidity directly in the measuring cell, the defining: execution and save/load of humidity profiles, the collection and evaluation of humidity and temperature data and the easy export of said humidity and temperature data.



Contacts

C. Gerhardt UK Ltd.
5 Avonbury Court, County Road, Brackley
Northamptonshire NN13 7AX

T: 01280 706772
F: 01280 706088

info@gerhardttonline.co.uk
www.cgerhardt.com

Product Specialists

Paul Campbell Gerhardt / Membrapure

Matt Gye Fritsch / Kinematica / Domel

Steve Robinson DataPhysics