



NEWS RELEASE

Malvern's Morphologi G3 used in allergy research

21 July 2009: Malvern, UK: Newly published data demonstrate how the Morphologi G3 automated particle characterization system from Malvern Instruments is being used to examine pollen in support of allergy research. Capable of analyzing thousands of pollen particles in just a few minutes, with little or no user intervention, the Morphologi G3 represents a major breakthrough in allergic disease research. Compared with the manual microscopy techniques traditionally used for pollen purification and characterization, the Morphologi G3 delivers substantial savings in both time and manpower.

The clinical efficacy of allergy diagnostic and immunotherapy products is highly dependent on the composition of the active allergen used as source material. Effective characterization of source material during the manufacturing process is therefore essential. Analyzing pollen samples with the Morphologi G3 allows the automated characterization of pollen in terms of both size and shape. Results enable differentiation between multiple pollen types and, together with the particle images, allow the user to ensure that only the desired pollens are present in a sample. Mixed pollen samples can be further characterized to determine constituent proportions.

At the push of a button the Morphologi G3 analyzes hundreds of thousands of particles, delivering:

- particle shape, particle count and size information
- statistically significant data
- high resolution images of every particle
- full automation
- compliance with 21CFR Part 11
- integrated sample dispersion

Pollen samples were dispersed using the integrated Sample Dispersion Unit, via an instantaneous pulse of compressed air. Standard Operating Procedures defined the instrument's software and hardware settings. . Different types of pollen can be automatically classified based on their size, and shape. Full experimental details of the automated characterization of pollen using the Morphologi G3 can be downloaded from

[http://www.malvern.com/malvern/kbase.nsf/allbyno/KB001878/\\$file/MRK1186-01.pdf](http://www.malvern.com/malvern/kbase.nsf/allbyno/KB001878/$file/MRK1186-01.pdf)

Malvern, Malvern Instruments and Morphologi are registered trademarks of Malvern Instruments Ltd

Text Ends

Image, notes and contact details follow...

High resolution image attached or available from Trish Appleton,
Kapler Communications trish@kapleronline.com Ref: MAL/JOB/1766

CAPTION: Pollen grains



About Malvern Instruments

Malvern Instruments provides a range of complementary materials characterization tools that deliver inter-related measurements reflecting the complexities of particulates and disperse systems, nanomaterials and macromolecules. Analytical instruments from Malvern are used in the characterization of a wide variety of materials, from industrial bulk powders to nanomaterials and delicate macromolecules. A broad portfolio of innovative technologies is combined with intelligent, user-friendly software. These systems deliver industrially relevant data enabling our customers to make the connection between micro (such as particle size) and macro (bulk) material properties (rheology) and chemical composition (chemical imaging).

Particle size, particle shape, zeta potential, molecular weight, chemical composition and rheological properties measurements are now joined by advanced chromatography solutions (GPC/SEC), extending Malvern's technologies for protein molecular weight, size and aggregation measurements, and synthetic polymer molecular weight and distribution. The company's laboratory, at-line, on-line and in-line solutions are proven in sectors as diverse as cement production and pharmaceutical drug discovery.

Headquartered in Malvern, UK, Malvern Instruments has subsidiary organizations in all major European markets, North America, China, Korea and Japan, a joint venture in India, a global distributor network and applications laboratories around the world. www.malvern.com

For press information, please contact:

Trish Appleton, Kapler Communications
Knowledge Centre, Wyboston Lakes, Great North Road,
Wyboston, Bedfordshire, MK44 3BY, UK
Tel: +44 (0)1480 479280; Fax: +44 (0)1480 470343 trish@kapleronline.com

USA contact:

Marisa Fraser, Malvern Instruments Inc.
117 Flanders Road, Westborough, MA 01581-1042 USA
Tel: +1 508 768 6400 Fax: +1 508 768 6403 marisa.fraser@malvern.com

Please send sales enquiries to:

Alison Vines, Malvern Instruments Ltd
Enigma Business Park, Grovewood Road, Malvern, Worcestershire WR14 1XZ UK
Tel: +44 (0) 1684 892456; Fax: +44 (0) 1684 892789 salesinfo@malvern.com