



The Aethalometer®, the world's most relied upon real-time monitor for aerosol black carbon was invented by Magee Scientific 35 years ago and is manufactured by Aerosol d.o.o., Slovenia.

Over 1500 Aethalometers operating throughout the world have resulted in an unequalled history of in-the-field performance.



Aethalometer model AE-33 has patented DualSpot™ technology to eliminate aerosol loading effects of other filter-based measurements, seven wavelengths for superior discrimination between biomass burning and combustion emissions.

The AE-33 Aethalometer is unsurpassed for aerosol black carbon monitoring, especially for source apportionment, discriminating woodsmoke from diesel particulate emissions.

[www.aerosol.eu](http://www.aerosol.eu)  
[www.mageescientific.com](http://www.mageescientific.com)

Visit us at booth No. 6

## AIRMODUS

Airmodus Ltd  
Pietari Kalmin katu 1 F 1, FI-00560 Helsinki, Finland  
Tel. +358 50 5666043  
sales@airmodus.com

Why not count aerosol particles starting from 1 nm? Airmodus will help you do so. Airmodus particle counters are a versatile tool for ambient measurements, aerosol research, emission control - any field where counting submicron particles is a necessity.

And now you have the chance to start easy. Join Airmodus GoNano!

[www.airmodus.com](http://www.airmodus.com)

Visit us at booth No. 16



AVL is the world's largest independent company for the development, simulation and testing technology of powertrains (hybrid, combustion engines, transmission, electric drive, batteries and software) for passenger cars, trucks and large engines. AVL has more than 8,050 employees all over the world. In 2015, sales revenues reached EUR 1.27 billion.

**Development of Powertrain Systems:** AVL develops and improves all kinds of powertrain systems and is an expert partner to the engine and automotive industry. In addition AVL develops and markets the simulation methods which are necessary for the development work.

**Engine Instrumentation and Test Systems:** The products of this business area comprise all the instruments and systems required for engine and vehicle testing.

[www.avl.com](http://www.avl.com)

Visit us at booth No. 14



Twintec Baumot Group, is a global specialist in the area of exhaust after-treatment, and your partner for reducing exhaust emissions.

Founded more than 20 years ago and having accumulated extensive experience in the areas of drive technology and diesel engine overhauls, Baumot has developed its core competency in application management of innovative exhaust after-treatment systems. Operating 13 distribution and service centers on three continents, Baumot is your partner when it comes to progressive, reliable and economical solutions to reduce exhaust emissions, both for first installations and retrofit solutions.

[www.baumot.ch](http://www.baumot.ch)

Visit us at booth No. 2



Cambustion's world-leading range of aerosol and gas instrumentation continues to expand with the launch of the Aerodynamic Aerosol Classifier (AAC), a novel instrument for classifying aerosol particles according to aerodynamic diameter, without charging artefacts.

Cambustion's products include the CPMA for classifying particles by mass-to-charge ratio. Combined with our Unipolar Diffusion Aerosol Charger (UDAC) the CPMA can form a mass concentration standard.

The DMS500 offers 10Hz electrical mobility size/number spectra between 5nm-2,500nm, with integrated dilution making it ideal for both ambient and high concentration sources including engines, brake particles and biomass burning. Traceable calibrations are included for soot and spherical/compact particles..

[www.cambustion.com](http://www.cambustion.com)

Visit us at booth No. 13



Catalytic Instruments is a German company specializing in the production of innovative aerosol instruments based on "catalytic stripper (CS)" technology. Our booth exhibits examples of CS instruments for various flow rates with different form-factors.

For unique applications, Catalytic Instruments will work with the customer to provide individual solutions.

[www.catalytic-instruments.com](http://www.catalytic-instruments.com)

Visit us at booth No. 7



CPK has for many years specialized in the development of environmental solutions, chiefly in the field of automotive technology. Our main line of business is the development and production of systems for monitoring and controlling the after treatment of engine exhaust gases. We supply tried and tested systems for large commercial and industrial vehicles. CPK provides Systems for the OEM and retrofit market.

CPK Automotive, Gildenstr. 4c, 48157 Muenster, Germany.

[www.cpk-automotive.com](http://www.cpk-automotive.com)

Visit us at booth No. 19



Dekati Ltd. has provided high quality instrumentation for fine particle measurements successfully for over 20 years. Our measurement solutions include complete fine particle measurement setups including both sample conditioning and particle detection for <math><10 \mu\text{m}</math> particles.

The highlights of our product line include the ELPI®+ product family that enables real-time measurement of particle size distribution 6 nm-10  $\mu\text{m}$  from up to 180 °C and post-measurement chemical analysis of the size classified, collected samples. The latest addition to the Dekati® product line is the Dekati® eFilter™ that combines standard gravimetric filter measurement and real-time detection in one compact instrument.

[www.dekati.com](http://www.dekati.com)

Visit us at booth No. 17



GRIMM Aerosol Technik GmbH & Co.KG in Ainring is known by many environmental and occupational health & safety officers for their precise PM10 and PM2.5 measurement technology. Also other professional air quality consultants highly appreciate our "Made in Germany" optical dust measurement systems which were the first commercially available instruments of this kind on the market. Since the 1st of October, GRIMM Aerosol Technik GmbH & Co.KG is a member of DURAG GROUP.

*No matter which dust, we measure it, no matter where, we show it and no matter how small, we size and count it!*

[www.grimm-aerosol.com](http://www.grimm-aerosol.com)

Visit us at booth No. 11



Exhaust Gas Purification. We reduce emissions

Established in 1983, Hug Engineering AG – based in Elsau/Switzerland – is today acknowledged as one of the leading manufacturers of exhaust gas purification systems for diesel- and gas-powered engines in both stationary and mobile applications.

Hug Engineering provides efficient solutions and customized systems in the field of exhaust gas purification. We are one of the few manufacturers to develop, design, and produce every single key component ourselves.

Our global distribution network covers all the main international markets, guaranteeing customers prompt and continuous support in every area – sales, maintenance, replacement parts, and service.

Hug Engineering AG is a subsidiary of ElringKlinger AG, a global development partner and volume supplier to the automotive industry.

[www.hug-eng.ch](http://www.hug-eng.ch)

Visit us at booth No. 10



Innospec's dynamic Fuel Specialties business leads the market in innovative additive technology.

Our team has been at the forefront of the innovative Fuel Borne Catalyst (FBC) technology for many years with technical expertise, on-going investment in Research & Development and worldwide sales and distribution networks.

Adding a FBC to your engine's fuel is the most reliable and effective way to regenerate diesel particulate filters (DPF). With our unique range of fuel treatments you can completely regenerate a DPF and keep it working efficiently under normal driving conditions, without increasing secondary emissions, especially NO<sub>2</sub>.

[www.innospecinc.com](http://www.innospecinc.com)

Visit us at booth No. 22



JING Ltd is a Swiss company for real soot particle generating techniques and provides different types of high-performance soot generators for calibration, filter test, research activities and more.

The JING soot generators use gaseous and liquid fuel to produce soot and can be designed in nearly any size to fit special requirements on the particle characteristics and output (low and high mass). The best known product lines based on JING's techniques are CAST and miniCAST. Since 1999 products of JING have been doing its service for companies and universities in many countries. For special applications JING also provides individual solutions.

[www.sootgenerator.com](http://www.sootgenerator.com)

Visit us at booth No. 3



Innovation – Environment – People

With our products for energy and flue gas technology, we help our customers to make their systems safe, energy efficient and comfortable. Kutzner + Weber has been producing high-quality components for flue gas technology for more than 80 years. The company has become one of the leading partners of the heating industry in Europe thanks to close cooperation with leading partners in science and research.

Kutzner und Weber is a part of The Raab Group. The Raab Group is the only full-range supplier in the field of flue gas technology for heat generators, from supply air to the fireplace, from heat recovery systems to chimney outlets and more. .

[www.kutzner-weber.de](http://www.kutzner-weber.de)

Visit us at booth No. 21



Liebherr is not only one of the world's largest manufacturers of construction machinery. The more than 41,000 employees also help to shape technological advances in many other industries. The Liebherr Group is still managed by the Liebherr family.

For more than 60 years, Liebherr's range of products and services has been broad and sophisticated. Its design and technology is orientated around practical deployment scenarios throughout the world. Continually growing innovative strength and an uncompromising commitment to quality safeguard the highest level of benefit to the customer in all product areas.

[www.liebherr.com](http://www.liebherr.com)

Visit us at booth No. 9



We are a spin-off company of the institute for aerosol and sensor technology of the university of applied sciences northwestern Switzerland, and build on a decade of experience in nanoparticle instrumentation development.

Our philosophy is to keep things simple - in engineering, simple automatically means robust. We strive to build instruments that are simpler to use and need less maintenance than traditional nanoparticle detectors.

Our new product the partectorTEM is an ultra-portable nanoparticle surface area dosimeter with integrated TEM sampling for workplace and exposure monitoring. It is also suitable for environmental monitoring or airborne measurements.

[www.naneos.ch](http://www.naneos.ch)

Visit us at booth No. 15



NGK Spark Plug Co., LTD. develops portable and easy to handle multi-gas measurement system utilizing direct insertion type exhaust OBD sensors technologies to support exhaust emissions development.

The current available sensors are PM/PN, NO<sub>x</sub>, and A/F and you can choose the sensor module depending on your demands.

This can be used in engine & vehicle test facilities and for real driving emissions test to aid compliance with tighter regulations around the world.

We have poster presentation and pre-production sample display at exhibition, so please come to our booth to experience how light and easy to handle it.

[www.ngkntk.co.jp](http://www.ngkntk.co.jp)

Visit us at booth No. 20



OekoSolve AG has its headquarter with 16 employees in Plons SG/CH.

The company has a broad range of products, so they can supply electrostatic precipitators to the biomass industry up to 1'000 kW.

Electronic technology is their core competency. The electronic controls, the software, the high voltage modules, the insulators and electrodes are developed and made in house. Not only the core competence is their strength but also the production of the enclosures and mechanics of the precipitators.

Their future vision is supplying electrostatic precipitators to every single biomass boiler like the cars are fitted with catalytic converters.

[www.oekosolve.ch](http://www.oekosolve.ch)

Visit us at booth No. 5



Palas® GmbH Partikel- und Lasermesstechnik  
Karlsruhe / Germany

With over 60 patents submitted, Palas® has set the standard in aerosol and particle technology for more than 30 years. Through continuous innovation, we achieve extraordinary quality and durability in our products. The result is unique technical and economic advantages for our customers. Palas® has established itself as a global market leader in the fields of aerosol generation, aerosol dilution and aerosol particle measurement technology.

Our core competencies are for example:

Filter test systems Aerosol spectrometer systems Fine dust monitoring systems Nanoparticle measurement technology Particle generation systems Dilution systems Calibration systems.

[www.palas.de](http://www.palas.de)

Visit us at booth No. 4





### Experience Matters

Pure Clean Air / PCA is an Emission Control company which is founded in 1996 and works with clients around the world.

We serve our clients with Emission Control "à la Carte" and will find the solution which fits best to the customer's tasks.

Our amount of experience could grow over the past 20 years. We are rich in know-how and unique with our services. Our wide spectrum of activities includes engineering, training and delivery of catalyst, filters and complete systems. We are independent from any catalyst manufacturer and offer our clients best-in-class solutions, from start to finish.

[www.pure-clean-air.com](http://www.pure-clean-air.com)

Visit us at booth No. 1



With the full integration of the nanoparticle measurement technology business sector, Testo AG is pursuing the objective of a targeted and customer-oriented utilization of the synergies in Research & Development, as well as the extensive and proven possibilities and means available in industrial production, service and sales.

Testo AG is a world market leader in the field of portable and stationary measurement solutions. In 30 subsidiary companies around the world, 2,500 employees research, develop, produce and market for the high-tech company.

[www.testo-particle.com](http://www.testo-particle.com)

Visit us at booth No. 12



UNDERSTANDING,  
ACCELERATED

As the international leader in aerosol research instrumentation for over 50 years, TSI Incorporated designs and manufactures precision instruments which are recognized by researchers worldwide.

TSI will present its portable Nanoparticle Emission Tester 3795 for field direct measurement of solid PN emissions, compliant with Swiss regulation SR 941.242.

TSI will also present its new 1 nm Scanning Mobility Particle Sizer Spectrometer 3938E77 which can measure the size and number concentration with high resolution and speed from 1nm on.

TSI will introduce its new 3772-CEN Condensation Particle Counter, fully CEN/TS 16976 compliant.

Stop by at our booth and learn more about our products.

[www.tsi.com](http://www.tsi.com)

Visit us at booth No. 18



VERT® is an association dedicated to the promotion of Best Available Technology for emission control. The Core objective of VERT is the minimization of health burden caused by combustion engine emissions, esp. the elimination of Ultra Fine Particles (UFP)

Members of VERT are international manufacturers of engines, testing devices, DPF and SCR systems, as well as of substrate producers, chassis builders, among others.

VERT stresses and recommends the application of particle number measurement against a pure particle mass count as very light Ultra Fine Particles (UFP) cause a major threat to health. We set the highest quality standards for emission control technology by certifying emission control technologies (VERT® Label) and publishing the VERT filter list

VERT supports traffic pollution reduction programs all over the world, esp. in megacities.

<http://vert-certification.eu/>

Visit us at booth No. 8