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INTRODUCTION - MESSAGE FROM PETER STOW

Welcome to the Isomass newsletter. In this edition we'll be focusing on consumables and accessories for Inductively Coupled Plasma instruments. Although the featured companies and products can find application in other measurement fields as well.

Earlier this year Isomass exhibited at the Winter Plasma conference in Tucson, Arizona, a first for us. Any opportunity to get away from the Winter in Calgary! This conference alternates between Europe and the USA and seems to favour the southern states, with good reason. Surprisingly, Arizona is cold at night at this time of year but that didn't stop the conference being a great success for us, with many attendees stopping by our booth. The next time this conference is in North America it will be held on Amelia Island, Florida, January 8 – 13, 2018 and you can be sure Isomass will be there.

From Elemental Microanalysis we supply CRM's (Certified Reference Material). These are solutions containing certified concentrations of single elements, multi elements and custom mixtures. Elemental Microanalysis are better known for their consumables for elemental analyzers and the CRMs are a logical progression of their traditional market.

We've featured our next company's products in past newsletters and I'm sure they will feature again for they are very innovative. Well known for their acid resistant hotplates and racks, Analab has also developed products for reagent evaporation and concentration, pipette tips, laboratory polymer and glassware cleaning.

While not as well known in North America, many ICP and ICP-MS operators use Spetec products as they are one of the world's foremost suppliers of peristaltic pumps and are used in many commercial instruments. Along with the pumps and pump tubing, Spetec also manufacture a range of laminar flow boxes and clean room workbenches and these are the systems highlighted in this newsletter.



EMA STANDARDS

The EMA Standards brand is offered by Elemental Microanalysis – a UK specialist in analytical consumables and reference materials for 40 years and winner of the Queen's Award for International Trade in 2014. All EMA Standards products are manufactured from the highest purity materials under strictly controlled procedures with ISO 9001, ISO 17025 and ISO Guide 34 accreditation. These materials are designed to be suitable for analysis by ICP, ICP-MS, AA, IC and XRF.

Each product is supplied with a comprehensive certificate of analysis giving full details of the analysis and traceability. Please contact us for a sample certificate. All EMA Standards products follow the Elemental Microanalysis tradition offering a value price without any compromise on quality or performance.

Our standards are used in laboratories across a wide variety of industries including:



- Industrial Quality Control
- Environmental
- Pharmaceutical
- Government
- Research
- Food
- Chemicals
- Used oil analysis
- Oils and additives
- Agriculture

ANALAB



With their slogan "Sample preparation made easy", Analab has developed an entire range of devices to cover the different stages of sample preparation. Calling on years of experience Analab provides unique systems designed to eliminate sample contamination, maximize reagent purity, improve the quality of analytical blanks, enhance the reproducibility of the data and reduce costs.

An example of the above is the P'tips Cleaner for cold pipette tip cleaning. Pipette tips are decontaminated in conditions similar to those in which they are used with the same batch of reagent and at the same temperature. The decontamination method can be reproduced, several dozen tips are conditioned simultaneously and the procedure is easily reproduced on different batches of tips. The operator does not have to decontaminate pipette tips individually. After introducing the washing reagent into the storage container, the operator is not exposed to the risk of splattering, as the reagent transfer and storage operations take place in a sealed environment.

For hot cleaning there are the EasyTraceCleaner (ETC), ETC Junior and ETC Evolution. These use hot acid vapour to clean the items inside the cleaning vessel. By using hot acid vapour, the cleaning action is always with clean acid as the contamination is sequestered in the acid bath. These can be used for pipette tips, PFA, PTFE, PP, quartz and glass laboratory ware. The types of vessels to be cleaned include digestion tubes, auto sampler vials, microwave liners, storage or sampling bottles, pipette tips, UV cups etc. The Evolution is the fully automatic version of the ETC, filling and emptying the cleaning vessel with acid and rinse water. Finally an option for automatic drying is available.

With these cleaning systems the reagents for each washing cycle are used in small quantities (400-500ml) and can be used several times. Therefore there is a significant savings to the budget of the laboratory in the purchase cost of reagents or production and recycling costs of the acidic effluents.

SPETEC—CLEAN ROOM TECHNOLOGY

Increasing requirements for product quality and process reliability require a clean environment during manufacturing, treating and processing and for storage. Clean room technology plays an increasingly important role in nearly all high-tech sectors.



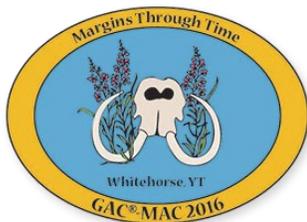
The basic principle for the development of clean room technology was established in the USA in the Sixties, when the principle of laminar flow was introduced. The ambient air is drawn in using radial fans and pushed through the filter and flow straightener. This generates a laminar flow, i.e. the air streams down in parallel flow lines. Particles are picked up by the parallel streams of air and transported out of the box. The air can escape through the perforated floor of the box. Through the use of a Spetec laminar flow box, the particle concentration is reduced from the laboratory environment to approximately 1500 particles within the box. This corresponds to a clean room category of DIN ISO 5 (equivalent to a class 100 clean room).

Spetec laminar flow boxes are available in a variety of sizes with filters up to 183 x 61 cm (72 x 24"), with side curtains or solid walls; on frames with casters, ceiling suspension or bench mounted; exhausting to vents or to the room.

The Spetec clean room curtains are made from strips of various thicknesses in a range of materials. They are always produced according to customer requirements. This allows us to offer you a customized product tailored precisely to your requirements. A variety of curtain fitting systems are available to suit the application.

By utilizing their technology it's possible for Spetec to provide a clean room cell that can be installed within an existing laboratory. This provides a possibility to create a clean room work environment at a relatively low cost complete with material pass through and separately vented access rooms if required.

CONFERENCES - Come visit us at the following conferences;



Pittcon 2016

Booth 2324 Analab
Booth 4040 Elemental Microanalysis
March 6-10, Atlanta, Georgia

Trace Organic Workshop

May 15-16, Saskatoon

GAC-MAC 2016

Booth 1
June 1-3, Whitehorse

The conferences we attend are listed on our website, www.isomass.com, and always updated.