Volume 2, Issue 1
February 2004

MEINHARD®

Meinhard Glass Products Company News

Company News

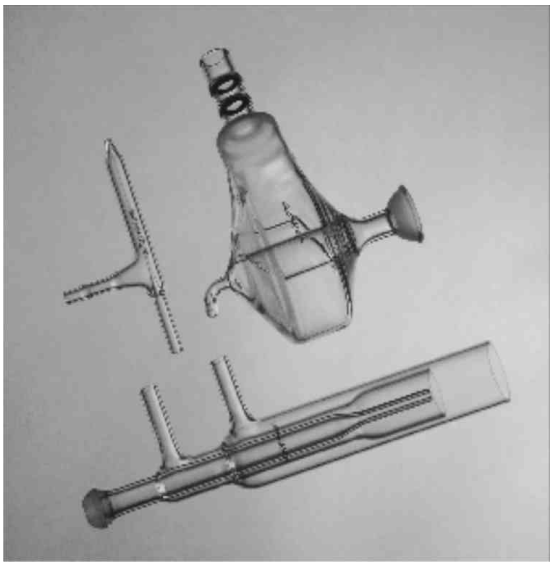
In 2004: Prices (Mostly) Unchanged, Product Portfolio Expanded, Discount Coupons, and Nebulizer Giveaway

Only a few prices will go up from 2003 and a few also will go down. Among the latter is the very popular torch for the Optima 4000-series ICP. Because of the demand and consequent increased production capacity, ML131020 will list at just $217 in 2004, a decrease of nearly 20% from last year. There will be no general price increase for 2004.

In response to numerous customer requests, we are adding quite a few items to our inventory including ceramic injectors for all major ICP and ICPMS instrument models. We are also pleased to offer the new FBS-series of laminar flow boxes from Spetec, to provide portable cleanroom facilities in conventional laboratories (see page 3). At Pittcon 2004, we expect to display a new series of nebulizer fit kits featuring cleanroom fittings and materials.

We will continue to offer top-of-the-line sample introduction components from Elemental Scientific. These corrosion-resistant devices, fabricated in Teflon PFA and polypropylene, are a great complement to MEINHARD® products in terms of performance, resistance to HF, and contamination control in general. Only ESI meets the exacting standards and reproducibility you expect from MEINHARD® nebulizers.

Meinhard Glass Products will continue to offer the increasingly popular Spetec line of peristaltic pumps as the exclusive North American distributor. Preferred by OEMs, Spetec offers the best of peristaltic pump heads; they promote tubing longevity plus stable and reproducible flows for your ICP or ICPMS. If pump-induced fluctuations are problematic, be sure to see the Perimax Antipuls, which uses two sets of out-of-phase rollers to eliminate pulsations.



On the back page, next to the address label, of this issue, you will find a limited-time discount coupon that entitles you to 15% off your order from Meinhard Glass Products.

We will be exhibiting at Pittcon, March 7 – March 11, 2004, Booth 3670. Be sure to stop by for another limited-time 15% discount coupon, and your chance to win one of five MEINHARD® nebulizers to be given away each day!

Meinhard Glass Products will release a new catalog in April. We will be updating our website, www.meinhard.com, in the April – May timeframe. Be sure to check out all the new content and to watch for upcoming web specials on our products.

Meinhard Glass Products
Product News
Publications
Industry News

Solving Analytical Challenges with Direct Injection Nebulization in ICP & ICPMS

The Direct Injection High Efficiency Nebulizer (DIHEN) is rapidly gaining acceptance for its unique ability to facilitate the analysis of highly volatile solvents and very small sample volumes, and to effect selective detection in chromatographic effluents. The Meinhard® High Efficiency Nebulizer has been conclusively shown to be the best of the micronebulizers, providing the smallest droplet size and highest transport efficiency. When this design is adapted to a direct injection configuration in the DIHEN, essentially 100% of the sample is transported to the plasma. As a result, substantial improvements in sensitivity can also be obtained.

At FACSS XXX, in an outstanding symposium, organized by Prof. Akbar Montaser, there were several presentations which demonstrated the particular effectiveness of the DIHEN for chromatographic detection by ICPMS and for small-volume samples by ICPMS and ICP. The DIHEN has even been used for on-line analysis of metals that are electrochemically extracted from expensive biomolecules (an extremely small sample size) and to facilitate the unraveling of complicated biological redox pathways. At the 2004 Winter Conference, direct injection was identified as the most efficient, most interference-free means of introducing highly volatile hydrocarbon solvents into an ICP for optical or MS detection.

Using a Meinhard-designed adapter with your conventional demountable torch, the DIHEN replaces the injector. It is inserted through the center of the torch until the nozzle is set to 2 – 4 mm below the top of the inner tube. At a normal carrier flow of 0.2 – 0.4 L/min (about 50 psi), the DIHEN will naturally aspirate at 30 – 150 µL/min and deliver 100% of the sample to the plasma.

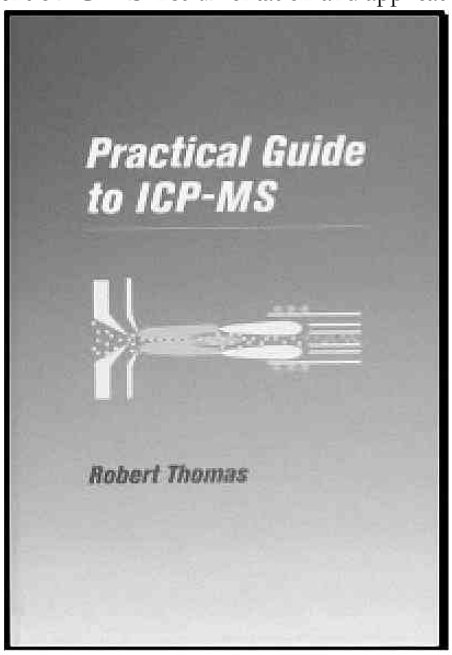
Please see www.meinhard.com or call for further information.

New book: A Practical Guide to ICP-MS

To many, ICPMS is a complicated research technique which requires a dedicated, highly skilled operator. Rob Thomas has written his Practical Guide to ICP-MS in a sincere and successful effort to debunk that myth and many others about contemporary ICPMS instrumentation. This book is aimed at those of us who have neither the time nor the inclination to study any of the few excellent, highly academic texts that are available. The book's purpose is to get you conversant and capable as quickly as possible.

The book published by Marcel Dekker (www.dekker.com), compares leading edge ICPMS instrumentation to ICP-OES, ETV-AA, and other atomic spectrometry techniques, with an emphasis on practical applications and considerations. Major topics include: plasma generation, sample introduction, ion formation, the interface region, ion focusing, mass selection devices, ion detection, peak measurement protocols, methods of quantitation, common interferences, contamination issues, sample preparation, routine maintenance, alternate sampling accessories, common applications, and selection criteria for those who are in the market for a new instrument.

Robert Thomas, the principal at Scientific Solutions (www.scientificsolutions1.com) in Gaithersburg MD, has more than 30 years experience, and 50 publications, in trace element analysis. For more than 20 years, Rob has been involved in the development of ICPMS instrumentation and applications.



Contact us at Sales@meinhard.com, or by fax at (303) 216-2649, for more extensive information.

Industry News: Teledyne Tekmar to Purchase Leeman Labs

Teledyne Technologies Incorporated has announced that Teledyne Tekmar Company has entered into an agreement to acquire the assets and business operations of Leeman Labs, Inc. at the end of February. Leeman Labs' product lines will augment Teledyne's existing laboratory and continuous monitoring instruments used in environmental applications. Leeman Lab's inductively coupled plasma spectrometers are used by environmental and quality control laboratories to detect low levels of inorganic contaminants in water and other environmental samples.

Meinhard Glass Products Product News Product News Services

Portable Cleanroom Technology from Spetec GmbH and MGP

With a particle isolation factor of more than 10,000 (for particles = 0.5 μm), the new FBS series of low-cost laminar flow boxes from Spetec provides superior, local cleanroom conditions. They are ideal for isolation of the sample introduction areas and auto-samplers used with ultra-sensitive techniques such as ICPMS and ETV-AA, to minimize the possibility of atmospheric contamination.

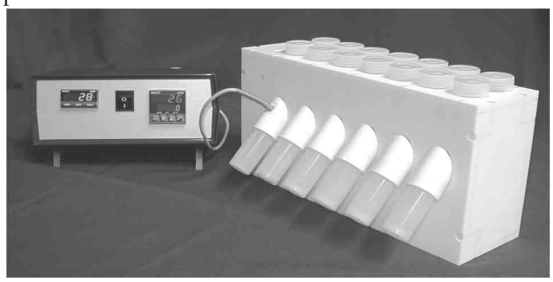
Designed for use on a bench top, the FBS series laminar flow boxes are available in sizes ranging from 24" x14" x 28" to 72" x 24" x 28", and start at about $3,300. Available accessories include: an exhaust system, conventional interior lighting, UV lighting for biohazard control, laboratory cabinets, and a frame base with casters in powder coat or stainless steel. The basic filter module can also be suspended from the ceiling to create an air curtain in doorways, or equipped with heavy-duty vinyl curtains to facilitate access to an otherwise isolated instrument.

These portable clean rooms are suitable for sample storage and sample preparation where contamination control is essential. When the FBS series is equipped with an exhaust system to remove furnace vapors, it will fully accommodate most commercial GFAA instruments providing cleanroom environmental conditions in an ordinary laboratory.

The FBS series of laminar flow boxes is available exclusively in North America from Meinhard Glass Products, and will be on display at Pittcon. Please contact us for a quote or further information.

Need a Controlled Environment Evaporation/Preconcentration Device for Ultra-trace Analysis?

Consider the EVAPOCLEAN, which has been developed at the Institute of Physics of the Earth in Paris, and is being manufactured by ANALAB, our partner in France.



The semiconductor industry and high purity chemical suppliers often use evaporation techniques for pre-concentration and/or matrix removal for IPA, NH4OH, H2SO4, and many other solvents prior to ICP-MS analysis.

An open Teflon beaker on a hot plate, even in a clean room, is highly susceptible to contamination from airborne materials as well as from nearby samples in process.

Because the procedure takes place in a closed system, with thermostatic control (up to 250 ºC), the EVAPOCLEAN provides a clean, better-controlled environment for sample processing. The programmable heating unit stores up to 4 programs, each having up to 16 segments. Evaporation / condensation cells are fabricated from non-contaminating, corrosion-resistant, high purity grade fluoropolymer materials, machined under controlled conditions. Models are available to process between 1 and 12 samples, simultaneously or independently, with container sizes ranging from 17 mL to 180 mL. The EVAPOCLEAN can also be equipped to carry out acid digestion of samples.

Please contact us for pricing, availability, and further information.

Save on Service and Software Upgrades for Your ICP and AA!

With a combined experience of more than 50 years, Select Services, Inc. offers fast and reliable service at much lower rates for ICP and AA products from TJA and ARL. You can also budget your annual service support costs through Select Services' Priority Response Maintenance Agreements.

To keep your 61E, Trace, and ARL ICPs at optimum performance, Select Services is pleased to offer ICP Manager software upgrades from Microactive Pty. ICP Manager is a 32-bit software package that runs on Microsoft Windows 98, NT 4 SP6.oa, 2000 SP2, or XP platforms. Not only does it offer more flexibility and ease of use, ICP Manager provides audit trail recording, multiple user level access security, easy to use method development formats, scan management and fast result transmission capabilities. All this and it is 21 CFR 11 compliant too! Call Select Services for trial software and pricing information.

Select Services, Inc. is committed to responding quickly and will save you money. For all your ICP and AA service needs please call (800) 731-5774.

Meinhard Glass Products

A Division of **A**nalytical **R**eference **M**aterials **I**nternational Corporation
700 Corporate Circle, Suite A
Golden Colorado, 80401 USA

Tel: (303) 277-9776 Fax: (303) 216-2649
Email: Sales@Meinhard.com
Web: www.meinhard.com

Fax this coupon with your order by April 30, 2004 for a 15% discount off list price.

No. 022004

Meinhard Glass Products
700 Corporate Circle, Suite A
Golden CO 80401

Fax: (303) 216-2649
Tel: (800) 634-6427

Promotional Discount Expires: April 30, 2004. This offer may not be combined with any other promotion.

FAX-O-GRAM

Please indicate your needs. When finished please FAX this form back to us at (303) 216-2649

Catalog Type:

- ☐ **Meinhard Glass Products** Catalog
- ☐ ARMI **General** Catalog
- ☐ ALCAN **Aluminum** Catalog

Please Respond:

- ☐ I ***need additional*** information.
- ☐ Please ***contact*** me.
- ☐ Please ***leave*** me alone.

Customer Classification:

- ☐ Foundry / Producer / General Industry
- ☐ Commercial Lab
- ☐ Academia
- ☐ Other — (Please list in comments area)

Method of Analysis:

- ☐ ICP / ICPMS
- ☐ OE Spectroscopy
- ☐ XRF Spectroscopy
- ☐ Other — (Please list in comments area)

Comments:

Name

Address

Phone E-mail Address

Quick Quality Survey

Products:	☐ Excellent	☐ Good	☐ Fair	☐ Poor
Services:	☐ Excellent	☐ Good	☐ Fair	☐ Poor

1-800-Meinhard