

Pitcon Product Showcase



HPLC columns

Waters' SunFire silica-based HPLC columns are designed to provide low-pH stability, high efficiency, and superior batch-to-batch reproducibility. According to the company, reversed-phase C₁₈ and C₈ bonded silicas provide the best peak shape for basic compounds. Waters Corporation, Milford, MA.

www.waters.com

Circle 100



LC-MS system

Agilent's HPLC-chip/MS LC-MS system is based upon microfluidic technology for use in a range of life science applications. The company's HPLC chip is smaller than a credit card and replaces the traditional column in a nanoflow LC-MS setup. According to the company, the chip eliminates 50% of the traditional fittings and connections typically required in LC-MS. The chips can be manufactured to incorporate internal columns as long as 1.5 cm and most commercially available packing material used for chromatographic separations. Agilent Technologies, Inc., Palo Alto, CA.

www.agilent.com

Circle 103



Liner-exchange system

Gerstel's ALEX automated liner-exchange system is designed to perform the task of replacing GC inlet liners in the company's cooled injection system at user-defined intervals. The system can be used for GC analysis of samples in complex matrices such as pesticides in fruit and vegetable extracts. A software operation feature is fully integrated into the Agilent ChemStation software for a one-sequence system operation. Gerstel, Inc., Baltimore, MD.

www.gerstel.com

Circle 101



Evaporative light-scattering detector

Alltech's ELSD 2000ES evaporative light-scattering detector reportedly provides universal detection capabilities with enhanced sensitivity for demanding applications. According to the company, the detector offers instrument control and dual-mode operation. Designed to detect components less volatile than the mobile phase to low nanogram levels, it can be used as a stand-alone or to complement information from UV and MS detection. Alltech/Grace Vydac, Deerfield, IL.

www.alltechWEB.com

Circle 104



Oligonucleotide columns

Dionex offers its DNAPac PA200 high-resolution oligonucleotide columns. The columns are designed to provide high-resolution separations of single-stranded nucleic acids, and are capable of achieving *N* from *N*-1 resolution over a range of oligomer lengths and under a variety of denaturing conditions, including high temperature and high pH. The packing material is composed of 130-nm quaternary ammonium functionalized resin particles bound to 8- μ m solvent-compatible, nonporous substrate. Dionex Corp., Sunnyvale, CA.

www.dionex.com

Circle 102



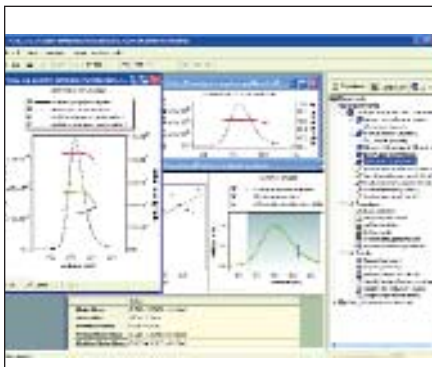
Derivatization reagent

A derivatization reagent from Regis Technologies, 3 N hydrochloric acid in butanol, is used for newborn metabolic screening by tandem MS. According to the company, production under cGMP protocols ensures lot-to-lot consistency. The reagent is available in a variety of packaging types. Regis Technologies, Inc., Morton Grove, IL.

www.registech.com

Circle 105

Pitcon Product Showcase



Light-scattering software

Wyatt's Astra V HPLC software system is designed for on-line HPLC measurements and off-line batch measurements for use with the company's instruments. Applications include data collection and analysis for absolute molecular weight and size determination, data collection and analysis for quasi-elastic light scattering, concentration measurements from refractometers, and the determination of intrinsic viscosity from the company's differential viscometer. Wyatt Technology Corporation, Santa Barbara, CA.

www.wyatt.com

Circle 106



Monolithic HPLC columns

Phenomenex's Onyx monolithic silica HPLC columns include a variety of silica gel-based reversed- and normal-phase columns. The columns were developed for standard HPLC separations in the chemical, pharmaceutical, biotechnology, food/beverage, and environmental industries, including LC-MS applications. Phenomenex, Inc., Torrance, CA.

www.phenomenex.com

Circle 109



HPLC components

Shimadzu offers model LC-20A Prominence HPLC components. A solvent delivery system provides a 3-nL/step resolution and a dual microplunger design, with a cycle time of 10 s for a 10- μ L injection. Dual-solvent rinsing and a temperature-controlled rack changer for continuous processing are available. Components are network-ready with web-based instrument control utilizing the model CBM-20A system controller and Microsoft Internet Explorer. Shimadzu Scientific Instruments, Inc., Columbia, MD.

www.shimadzu.com

Circle 107



Static and dynamic headspace system

Teledyne's HT3 Static/Dynamic headspace system runs static and dynamic headspace techniques. The system sweeps the sample and traps volatile organic compounds, and users can switch between static and dynamic techniques in a single schedule. Applications include pharmaceutical residual solvents and organic volatile impurities, environmental prescreening and dissolved gases, blood/alcohol and abused inhalants, foods/flavors, polymers, and petrochemicals. Teledyne Tekmar, Mason, OH.

www.teledynetekmar.com

Circle 110



Pipette controller

Hamilton's SoftAide pipette controller is an ergonomically designed pipette controller for serial pipetting. The instrument is designed for precise measuring and dispensing of volumes ranging from 0.1 to 200 μ L. The pipette controller offers LED display for mode and speed selection. Hamilton Company, Reno, NV.

www.hamiltoncompany.com

Circle 108



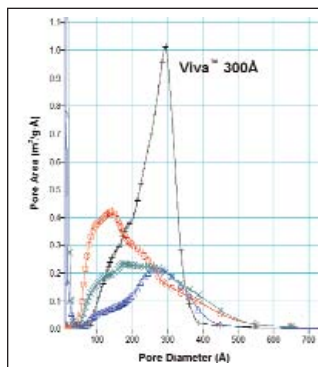
HPLC system

Jasco offers XLC high-pressure LC instrumentation, designed to deliver solvents at pressures in excess of 15,000 psi. Each component can be programmed individually or software-controlled. The columns range from 10 mm to 100 mm \times 1.0 to 4.6 mm with particle sizes of 1.5, 3.0, and 5.0 μ m. The system's UV-vis detector coupled with the company's software can collect 100 data points/s. The autosampler can sample from 384-well plates and standard vials with a cycle time < 30 s. Jasco, Inc., Easton, MD.

www.jascoinc.com

Circle 111

Pitcon Product Showcase



Wide-pore silica

Restek's Viva wide-pore silica offers a large surface area represented by 200–300 Å pores (67.3%) with a narrow pore-diameter distribution. According to the company, these characteristics improve selectivity for biomolecules and other high molecular weight analytes by providing accessibility to more pores of uniformly larger diameter. Restek Corporation, Bellefonte, PA.

www.restekcorp.com

Circle 112



TLC analysis software

Analtech's TLSee TLC analysis software is designed for ease of use in analyzing thin-layer chromatography. It allows users to import TLC plates using a digital camera or desktop scanner, display and store TLC plates, convert TLC spots into chromatograms, integrate peaks automatically or manually, perform calibration and analysis for quantitative calculations, compare data from any lane on any plate with other lanes or plates, store and print methodologies and calibrations, and more. Analtech, Inc., Newark, DE.

www.analtech.com

Circle 113



Injection and collection system

Gilson's model GX-281 liquid handler injection and collection system features a large-bed capacity and consumes 35 in. of linear bench space. It uses an integrated barcode scanner for automatic bed layout generation and prerun bed verification, and the Z-arm can accommodate heights of 200 mm. An optional 200-mL/min fraction collection valve is located at the base of the Z drive, and the solvent delivery system has no syringes. Gilson, Inc., Middleton, WI.

www.gilson.com

Circle 116



GPC system

Polymer's model PL-GPC 50 integrated GPC system is designed for polymer characterization and analysis. The platform offers fully integrated triple detection including refractive index, viscometer, and light-scattering detectors. Other detector options and combinations are offered, supported with integrated software control and processing. Polymer Laboratories, Inc., Amherst, MA.

www.polymerlabs.com

Circle 114



Column packing

EKA's Kromasil DIOL column packing material is designed for both HPLC and SFC applications. By utilizing a high concentration of the dihydroxypropyl functional group, the packing material reportedly provides an alternative selectivity in normal-phase and reversed-phase modes. The column packing material is based on high-purity Kromasil 60 Å silica and is available in 5- and 10- μ m particle sizes. Both are available in bulk and in slurry-packed 2.1–50 mm i.d. columns from EKA Chemicals, Dobbs Ferry, NY.

www.akzonobel.com

Circle 115



Dry vacuum pump

The model XDS35i dry vacuum pump from BOC Edwards is designed to provide a vacuum completely free of lubricants. The bearings are isolated from the vacuum environment by a bearing shield. There are no bearings, grease, or oil under the vacuum. According to the company, the instrument has a constant pumping speed of 35 m³/h or 21 cfm on either 50- or 60-Hz frequencies. BOC Edwards, Wilmington, MA.

www.bocedwards.com

Circle 117

Pitcon Product Showcase



Universal temperature control unit

The 24V universal control unit from Analytical Sales is designed to provide versatile and reliable control for the company's HPLC column heaters and coolers. The RS232 external control is standard, and dual remote preset temperatures can be programmed easily. The PTC-050CS control unit is designed to comply with the electromagnetic emission standards of the EU Directive, U.S. standards, and Canadian standards so the heaters and coolers to be used with full compliance and safety throughout the world. Analytical Sales and Services, Inc., Pompton Plains, NJ.

www.analytical-sales.com

Circle 118



Atomic emission detector

The model JAS 2370AA atomic emission detector from Joint Analytical Systems is designed to provide detection of most elements within volatilized compounds at picogram-level sensitivities. Typical GC applications include QA and QC and research laboratories. Joint Analytical Systems (America), Inc., Marlton, NJ.

www.jas-usa.com

Circle 121



Switching valves

Rheodyne's TitanHP high-pressure multiposition switching valves are offered in 6- and 10-port variations in stainless steel or PEEK. The valves provide high-pressure multiposition capability with interchangeable liquid ends. The 6- and 10-port valves are interchangeable and use a smaller universal driver assembly. The valves are rated at 5000 psi and 30,000 duty cycles. Rheodyne, Rohnert Park, CA.

www.rheodyne.com

Circle 119



SFC instrument

Thar's SuperDiscovery FC SFC instrument merges analytical and preparative chromatography. The instrument uses carbon dioxide in the primary mobile phase as a substitute for hexane or heptane. The system can separate fractions into as many as 12 vials of various volumes and dimensions. Thar Technologies, Inc., Pittsburgh, PA.

www.thartech.com

Circle 122



LC system

Waters's Acquity LC system is designed to deliver high levels of speed, sensitivity, and resolution for chromatography separations. The system is in a class of liquid chromatographs that combine the enabling power of 1.7-mm hybrid column technologies with innovative instrumentation and software to enhance laboratory productivity. Waters Corporation, Milford, MA.

www.waters.com

Circle 120



Fluorescence detector

Hitachi's model L-2480 fluorescence detector has a 3-D optical axis design, beam-collecting mirrors, slit flow cells, and an optimized transmission beam monitor. The detector is designed to provide an SNR ≥ 600 , and slit width is switchable between 15 and 30 nm. The system offers an automatic wavelength check, GLP compliance, flexibility to accommodate various analytical applications, and front panel access for maintenance. Hitachi High Technologies America, Schaumburg, IL.

www.hitachi-hita.com

Circle 123

Pitcon Product Showcase



LC-TOFMS system

The Unique LC-TOFMS system from LECO is designed for liquid sample analysis. According to the company, the system's speed and performance provide rapid acquisition rates and required data density. The system includes Microsoft Windows-based ChromaTOF software for data handling. LECO Corporation, St. Joseph, MI.

www.leco.com

Circle 124



Automatic developing chamber

CAMAG's ADC2 automatic developing chamber is designed for thin-layer chromatography. The chamber controls environmental or analyst-induced variations to provide reproducible TLC results. CAMAG Scientific, Inc., Wilmington, NC.

www.camagusa.com

Circle 125



MS system

JEOL's AccuTOF-DARTMS system can analyze solid, liquid, and gaseous samples at atmospheric pressure in real time. The instrument does not require solvents or sample preparation and can analyze samples directly on surfaces such as concrete, currency, food, pills, and clothing. It is designed to make MS more accessible for a wide range of applications, including homeland security, forensics, drug development, healthcare, and toxicology. JEOL USA, Inc., Peabody, MA.

www.jeol.com

Circle 126

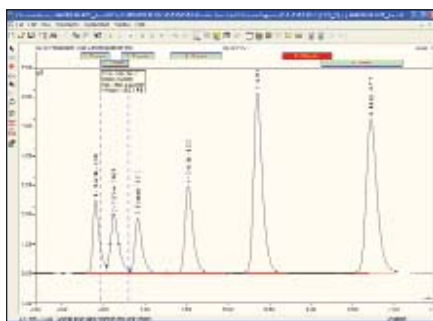


Process development columns

Tosoh's ToyoScreen process-development columns feature prepacked Toyopearl resins. The columns can be used for resin screening, process optimization experiments, or microgram-amount purifications. They are offered in hydrophobic interaction, affinity, and ion-exchange chemistries in 1- and 5-mL formats. Tosoh Bioscience, LLC, Montgomeryville, PA.

www.tosohbioscience.com

Circle 127



Chromatography management system

Dionex's Chromeleon chromatography management system software offers a multiuser client-server system and can control and manage data for more than 35 instruments in research and development laboratories. It is designed to maintain 21 CFR Part 11 compliance and is capable of controlling both Waters Alliance and Agilent 1100 LC systems. The software runs on Microsoft Windows XP Professional and the Microsoft SQL Server 2000 database. Dionex Corporation, Sunnyvale, CA.

www.dionex.com

Circle 128



LC-MS-MS

Applied Biosystems and partner MDS Sciex offer the API 5000 LC-MS-MS system for use in small-molecule quantification, including DMPK and ADMET studies. According to the company the system provides an average ninefold increase in sensitivity and fourfold improvement in signal-to-noise ratio. Applied Biosystems, Foster City, CA.

www.appliedbiosystems.com

Circle 129

Pitcon Product Showcase



Ion chromatograph

Metrohm-Peak's model 761 compact ion chromatograph-conductivity detector has more than 300 applications for anions, cations, transition metals, amines, organic acids, and citrate in a prestored "quick start" system. The standard system includes an injection valve, a serial dual-piston pump, a column, an MSM II suppressor module, a high-performance conductivity detector, and a biocompatible PEEK flow path. Metrohm-Peak, Inc., Houston, TX.

www.metrohm-peak.com

Circle 130



Detector array

Viscotek's Tetra Detector Array GPC-SEC multiple detector is designed for characterization of natural and synthetic polymers, biopolymers, and proteins. The array consists of a low-angle light-scattering detector, four-capillary viscometer detector, refractometer, and selectable-wavelength UV-vis. Detectors are housed in a heated over-compartment with temperature control for temperatures up to 80 °C. The array allows users to determine absolute molecular weight, molecular size < 1 nm, and intrinsic viscosity in one experiment. Viscotek, Houston, TX

www.viscotek.com

Circle 131



Capillary columns

Protocol's CV MS-grade GC capillary columns are certified and verified by the company. According to the company, the columns are produced using the highest quality materials for increased sensitivity, accuracy, and low column bleed. Protocol Analytical, LLC, Metuchen, NJ.

www.prostds.com

Circle 133



Pyrolyzer system

The Frontier Labs model 2020iD multifunctional pyrolyzer from Quantum Analytics utilizes a computer-controlled, vertical microfurnace for use in four operating modes: thermal desorption, simple pyrolysis, and heartcutting of evolved gas analysis fractions. Accessories include a 48-position autoshot autosampler and libraries that use a search algorithm for evolved gas analysis and pyrolysis. The system can be fully integrated with Agilent's hardware and software. Quantum Analytics, Foster City, CA.

www.lqa.com

Circle 134



Magnetic cap vials

Sun Sri offers a range of magnetic top vials to fit LEAP, Gerstel, and other autosamplers. The vials' bimetal seal offers the crimping characteristics of an aluminum seal with the magnetic properties of tinned steel. Screw-cap vials allow repeated access to vial contents. The model 9-MC magnetic adaptor, in conjunction with the J-Cap, offers the use of a variety of 9-425 screw thread vials, including many microsampling vials. Sun Sri, Duluth, GA.

www.sun-sri.com

Circle 132



Syringeless filter

The Mini-UniPrep syringeless filter from Whatman is housed in polypropylene. The filters reportedly decrease sample batch processing time by one-third for enhanced lab productivity, reducing the need for consumables, including syringes, sample cups, and transfer containers. The filters are compatible with most autosamplers and are available in 0.2- and 0.45- μ m pore sizes. Whatman, Inc., Clifton, NJ.

www.whatman.com

Circle 135

Pitcon Product Showcase



Packaging tubes

MicroLiter offers free-standing, reusable, plastic tubes for packaging its closers and limited-volume inserts. The tubes' caps are color-coordinated for identification purposes and can be cut for a squeezable open-and-close container. MicroLiter Analytical Supplies, Inc., Suwanee, GA.

www.microliter.com

Circle 136



Preparative SFC system

Mettler-Toledo's MultiGram III Berger preparative SFC system is designed to meet the growing demand for higher sample throughput for chiral and achiral drug purification applications. According to the company, the system provides higher flow rates and the ability to accommodate an expanded range of high-capacity preparative columns. Purified samples are recovered in small volumes of organic solvents. The instrument reportedly offers sample output of 10 g/h or more per compound. Mettler-Toledo AutoChem, Inc., Columbia, MD.

www.mtautochem.com

Circle 137



LC-MS column

Silvertone offers the Cadenza CD-C18 3- μ m column with 100,000 plates per column. The 3- μ m d_p stationary phase reportedly provides 25–50% less backpressure. Typical applications include LC-MS and difficult separations including structural isomers, peptides, metabolites, and derivatives. Silvertone Sciences, Philadelphia, PA.

www.silvertonesciences.com

Circle 139



Polypropylene vial

The Versa 1.5-mL polypropylene vial from J.G. Finneran includes a snap-seal finish, an 11-mm crimp finish, and 8-425 and 9-mm screw thread finishes. The 12 \times 32 mm vial also is offered in amber. J.G. Finneran Associates, Inc., Vineland, NJ.

www.jgfinneran.com

Circle 140



TOF proteomics system

Bruker's Ultraflex II TOF-TOF proteomics system is offered with integrated LC-MALDI capability. The system reportedly offers attomole detection limits for MS-MS, accurate mass MS, and result-driven work flows that can be configured for LC-MALDI TOF-TOF and LC-ESI-MALDI analyses. Bruker Daltonics, Inc., Billerica, MA.

www.bdal.com

Circle 138



Sample preparation products

Argonaut offers the EVOLUTE ABN sample preparation products for the extraction of a wide range of acid, basic, and neutral compounds from biological fluid samples. The products are developed as a solution to the problems of matrix effects in analyte quantification by LC-MS-MS. The polymer-based sorbent is water-wettable and has a pore structure that is designed to minimize extraction of endogenous material from fluid samples. The equipment is available in 96-well plates, standard and tab-less SPE columns. Argonaut Technologies, Inc., Redwood City, CA.

www.argotech.com

Circle 141

Pitcon Product Showcase

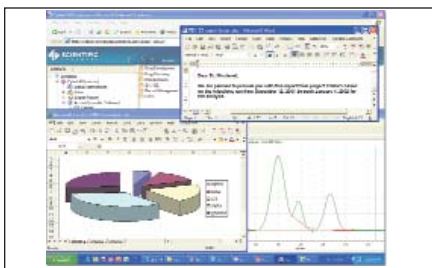


Solvent evaporator

LEAP's Cyclone rapid solvent evaporator is an alternative to centrifuge-based or hot gas blow-down tubes. The instrument allows heat, vacuum, and vortexing on as many as four trays or four microwell plates. The chamber can be opened during a run and the evaporator will automatically continue to run when closed. Optional equipment includes various heat-conducting trays and vial adaptors. The evaporator can be programmed with as many as six steps of specific temperature, vacuum, and vortex level on PC-based software. LEAP Technologies, Inc., Carrboro, NC.

www.leaptec.com

Circle 142



Laboratory software

Scientific Software offers version 2.0 of its OpenLAB laboratory software. The software is designed to manage laboratory instruments and electronic content in one framework. It can manage electronic content from instruments, standard PC application software, and mail in a searchable and protected manner. Features include record retention, check in-check out, on-line archiving, and versioning. The software provides integrated instrument control for more than 260 different chromatographs from more than 25 hardware manufacturers. Scientific Software, Inc., Pleasanton, CA.

www.scisw.com

Circle 145



HPLC columns

Macherey-Nagel offers the dual-mode NUCLEODUR Sphinx RP columns based upon ultrapure NUCLEODUR HPLC silica. According to the company, the stationary phase's covalently bound octadecyl and phenyl groups expand the scope of selectivity in comparison with conventional reversed-phase packings. The column is designed for the separation of molecules containing aromatic and multiple bonds. Endcapping steps reportedly minimize surface silanol activity and enable the analysis of strong basic compounds. Macherey-Nagel, Duren, Germany.

www.mn-net.com

Circle 143



Miniature electron multipliers

BURLE's miniature Channeltron electron multipliers are designed for MS and homeland security applications. The electron multipliers are available in several configurations and can be formed into different shapes and sizes. The gain of the detectors is adjustable up to 5×10^7 , works in a vacuum up to $5 \times 10^2 \pm$ torr, and can be operated in analog or pulse-counting modes. Applications include leak detectors and dedicated, environmental, and industry sensors. BURLE Electro-Optics, Inc., Sturbridge, MA.

www.burle.com

Circle 146



Gas station

Parker Hannifin's FID-2500 gas station is designed to produce up to 2.5 L/min of hydrocarbon-free air from an existing compressed air supply and 250 cc/min of fuel-grade hydrogen from deionized water. Features include ergonomic cabinet design, catalysis module, visual operational status display, gas purity, and automatic water filling. The generators allow users to supply, control, and automate gas supplies. The station reportedly provides zero air with hydrocarbon content less than 0.05 ppm (50 ppb), measured as methane. Parker Hannifin Corporation, Haverhill, MA.

www.parker.com

Circle 144



Multimode ion source

Agilent's 1100 series LC-MSD multimode ion source can operate simultaneously in ESI and APCI modes or in ESI- and APCI-only modes. It can ionize virtually the entire range of analytes in a single run without exchanging or alternating sources and can operate at flow rates as high as 2 mL/min for high-throughput LC-MS. Applications include high-throughput analyses for pharmaceutical, environmental, and forensics. Agilent Technologies, Inc., Palo Alto, CA.

www.agilent.com

Circle 147

Pitcon Product Showcase

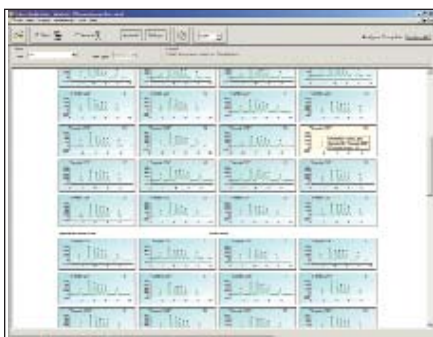


HPLC syringe filters

Lab-Chrom-Pack offers its La-Pha-Pack Pro-Fill plus HPLC syringe filters with glass-fiber pre-filters. The filters contain glass-fiber pre-filters, an additional PVDF membrane, and an injection-molded ring around the housing. The membrane type and pore size are printed on the filter. Lab-Chrom-Pack, Tullytown, PA.

www.labchrompack.com

Circle 148



Data analysis software

Nanostream offers data analysis software modules to support a variety of applications, including purity assessment, log P, and solubility/permeability assessment. Chromatogram visualization and general report features allow users to assess and report results. The migration of the data acquisition and visualization software to the .net platform facilitates integration with other instrumentation, including automation systems and detectors. Nanostream, Inc., Pasadena, CA.

www.nanostream.com

Circle 151



Turnkey techniques

Thermo Electron has developed turnkey analytical techniques that enable environmental laboratories, government agencies, and water suppliers to comply with European norm ISO 9377-2. The techniques analyze sample compounds in the C₁₀-C₄₀ range in both water and soil matrices. Thermo Electron Corp., Waltham, MA.

www.thermo.com/chromatography

Circle 149



Postcolumn system

The Pinnacle PCX postcolumn derivatization system from Pickering is designed to precisely and selectively separate analytes. The system's pulse-free syringe pump runs only during the injection cycle. According to the company, the instrument works with most brands of HPLC systems and is supported with validated applications to separate complex mixtures and detect a range of compounds with sensitivity, stability, and reproducibility. Features include an automatic piston wash, automatic flush cycle, and network-enabled PC software control. Pickering Laboratories, Inc., Mountain View, CA.

www.pickeringlabs.com

Circle 152



Light-scattering detector

The model 8060 nitrogen-specific HPLC detector from Antek is designed for the pharmaceutical, biomedical, biotechnical, agricultural, foods, and petrochemical industries. According to the company, the detector's equimolar response allows quantitation of all nitrogen-containing compounds, using readily available nitrogen standards. The detector reportedly can quantitate unknown compounds without using the unknown as a reference and offers a linear calibration curve > 10⁴ and a detection limit of 0.1 ng N. Antek Instruments, Houston, TX.

www.antekhou.com

Circle 150



Chromatography refrigerators

Marvel Scientific's chromatography refrigerators are designed to provide a secure environment for chromatography applications. Models are available in both undercounter and large one- or two-door models. Model 6CHR provides 173 L of chamber space and features a clear, tempered glass door, a single access port, and a microprocessor-based temperature control system. Models 21CHR and 42CHR provide 595 L and 1218 L of chamber space, respectively, and feature vapor-proof duplex outlets. Marvel Scientific, Richmond, IN.

www.marvelindustries.com

Circle 153

Pitcon Product Showcase



LC-MS system

Waters' Protein Expression system is an LC-MS system for multiplexed proteomics. It consists of the company's Micromass Q-ToF Premier mass spectrometer, the nanoACQUITY UPLC system, Protein Expression columns, and Expression informatics tools for MassLynx 4.0 software. It incorporates instruments, chemistry, bioinformatics, methods, technical expertise, hands-on support, and training. The instrument is designed to perform mass measurement LC-MS with parallel collision-induced dissociation of tryptic peptide precursor ions to yield a global expression dataset. Waters Corporation, Milford, MA.

www.waters.com

Circle 155



Capillary GC columns

Varian's VF-5ht capillary GC columns are part of the company's FactorFour series of capillary GC columns. The columns are designed for use in the petroleum, cosmetic, food, and polymer industries and separate complex mixtures of high-boiling, high molecular weight compounds such as triglycerides in butter or long-chain hydrocarbons in petrochemicals and cosmetics. According to the company, they offer stability at temperatures as high as 400 °C and have up to 4X lower bleed than comparable columns. Varian, Inc., Palo Alto, CA.

www.varianinc.com

Circle 154



Pyrolysis system

CDS Analytical's model 5200 reactant gas pyrolysis system includes a built-in analytical trap to aid in pyrolyzing samples in air off-line. After pyrolyzing, the trap is heated automatically and the sample is then sent to the GC system for analysis. The system is fully programmable in 1 °C increments with temperatures as high as 1400 °C and allows programs with as many as eight steps for each run. Optional accessories include loading sample probes and a polymer identification library. CDS Analytical, Inc., Oxford, PA.

www.cdsanalytical.com

Circle 156



Prepackaged solutions

CHATA's CHEM+NECT prepackaged sterile, filtered, and degassed solutions are offered with stability data to validate long-term consistency. The company uses reagent-grade components that can be connected to most HPLC systems and prepared according to company specifications. CHATA Biosystems, Fort Collins, CO.

www.chatasolutions.com

Circle 157



Gas generators

Gas generators from domnick hunter are designed specifically to meet the requirements for most LC-MS and GC instruments. The generators includes ultrahigh purity hydrogen gas generators and zero-air units. The generators have a stackable design. domnick hunter, Charlotte, NC.

www.domnickhunter.com

Circle 158



Gas chromatograph

Shimadzu's GC-2014 series gas chromatograph is designed for routine analysis and a wide range of applications, including capillary and packed-column analysis. The instrument offers automatic and manual flow or pressure control, with a reported 0.0084% retention time repeatability. Flow rate can be set by keypad, and an LCD screen graphically monitors flow rate and column inlet pressure. Shimadzu Scientific Instruments, Columbia, MD.

www.shimadzu.com

Circle 160



Plasma burner and controller

Ionics dual plasma burner and controller is designed for use with the Sievers sulfur and nitrogen chemiluminescence detectors (355 SCD and 255 NCD, respectively). It reportedly provides a 200% or greater increase in selectivity and stability for both the SCD and NCD, and a 40% improvement in sensitivity for the NCD. Features include a burner safety shroud, a heated base for baseline stability, and longer-lived ceramic tubes. The instrument includes a drop-in burner mount, in-line electronic flow sensors, a digital display with added controls and functionality, a narrower footprint, and an embedded nitrosamine option control for the NCD. Ionics Instruments, Boulder, CO.

www.ionicsinstruments.com

Circle 159



Refractometer

Rudolph's model J357 extended-range automatic refractometer is designed with instrument level 21 CFR Part 11 compliant software for the pharmaceutical industry. A measure button automatically heats or cools a sample to predefined temperatures and then measures the sample. The instrument has a temperature range of 15–100 °C with ± 0.00004 RI and ± 0.00002 RI accuracy and repeatability, respectively, and a resolution of 0.00001 RI. Rudolph Research Analytical, Flanders, NJ.

www.rudolphresearch.com

Circle 161

Circle 87

Pitcon Product Showcase

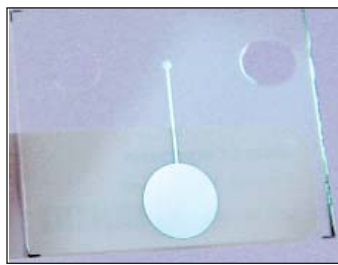


Microviscometer

Petrolab's Grabner MINIVIS 445 viscometer is designed to measure the kinematic viscosity of fuels and oils. According to the company, the microviscometer provides excellent correlation to standard ASTM D445 capillary viscometers. It is designed to be fast, portable, rugged, and easy to operate, and offers a combined measurement of the kinematic viscosity, dynamic viscosity, and density of liquids. Measuring range of 0.3–1500 mPas and –20–100 °C temperature range. Petrolab Company, Latham, NY.

www.petrolab.com

Circle 162



Disposable silver electrodes

Dionex offers disposable silver electrodes for the electrochemical detection of cyanide, thiocyanate, bromide, iodide, sulfide, and thiosulfate following anion-exchange chromatography. The electrodes are designed for ease of use and reproducibility without compromising peak symmetry, resolution, or sensitivity. According to the company, they provide rapid system equilibration and reliable electrode-to-electrode and lot-to-lot reproducibility. Dionex Corporation, Sunnyvale, CA.

www.dionex.com

Circle 163



Charged aerosol detector

ESA's CAD charged aerosol detector is designed to provide all-in-one HPLC detection for nonvolatile compounds, including drug compounds, lipids, proteins, polymers, carbohydrates, and peptides. The detector reportedly provides high sensitivity at low nanogram levels, allows quantitation across a dynamic range of four decades for detecting compounds in widely varying amounts, and provides consistent response independent of chemical structure. ESA, Inc., Chelmsford, MA.

www.esainc.com

Circle 164

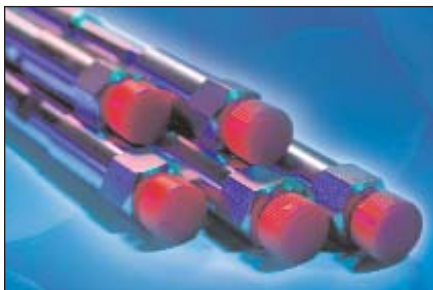


Reagent bottle top dispenser

Hamilton's SofTop Quik dispenser is an adjustable volume bottle top dispenser that is designed ergonomically. The instrument is constructed with ceramic and calibrated precision glass for chemical compatibility and precision. The dispenser is available in six volumes ranging from 0.2 to 60 mL. Hamilton Company, Reno, NV.

www.hamiltoncompany.com

Circle 165



HPLC columns

The Ascentis HPLC columns from Supelco feature endcapped C18 and RP-amide phases. According to the company, the columns have ultrahigh purity silica and are designed with high surface coverage. Supelco, Bellefonte, PA.

www.sigma-aldrich.com/supelco

Circle 166



Light-scattering detector

Wyatt offers its DAWN EOS 18 light-scattering detector for HPLC. The detector has a 30 mW gallium-arsenide 690-nm laser light source and contains connections and onboard digital signal processing hardware for two external devices such as RI and UV detectors. It also offers an analog output from the 90° detector for interfacing to strip chart recorders. Options are available for flow-to-batch conversion, thermostatic control, depolarization, and interfacing to PL210 and Waters Alliance 2000. Wyatt Technology Corporation, Santa Barbara, CA.

www.wyatt.com

Circle 168



Postcolumn reactor

SSI/LabAlliance's Sensivate postcolumn reactor features a compact footprint, independent reagent pump control, and the ability to upgrade from one to two channels. The reactor coil units are disposable, and the heaters allow reactions at temperatures as high as 150 °C. The system requires one inlet connection from the column and one outlet connection to the detector. The instrument is available with one or two reactors and one or two pumps. All connections are accessible from the front panel, and the system offers the ability to set upper and lower pressure and temperature limits as well as system shutdown relay. SSI/LabAlliance, State College, PA.

www.laballiance.com

Circle 167



Isotope and sample tracking system

Lablogic's STacy isotope and sample tracking system is designed for real-time stock control and tracking of radioisotope compounds and samples in drug metabolism studies. The system is fully compliant with GLP and 21 CFR Part 11 and is interactive, allowing users to define location trees and sample transaction types. The system interfaces with most databases and allows users to assign access on a user-by-user basis to permitted access levels. A barcoding facility creates, prints, and reads labels. Lablogic Systems Limited, Sheffield, UK

www.lablogic.com

Circle 169

Pitcon Product Showcase



Immunoaffinity columns

Grace's VENTURE immunoaffinity columns and SPE cartridges are available for the analysis of food, endocrine disruptors, and pollutants. According to the company, the columns avoid tedious sample preparation steps, increase accuracy, and are automated easily. Grace Vydac, Hesperia, CA.

www.grace.com

Circle 170



Metal frits

Mott's pressed and sintered porous metal frits are designed to be used in the manufacture of LC columns to filter microbial and inorganic contaminants. According to the company, the frits protect HPLC columns from particulate contamination and distribute dissolved samples evenly. According to the company, the metal frits can withstand pressures as high as 2000 psi and are capable of resisting highly caustic solvents. They are nonshedding as well. Mott Corporation, Farmington, CT.

www.mottcorp.com

Circle 172

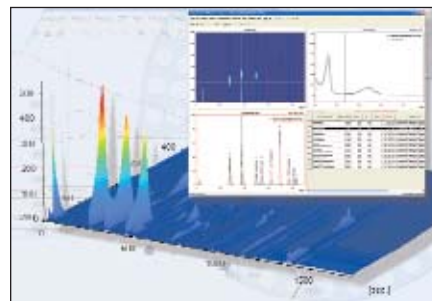


Headspace vial heater

ChromLab offers a headspace GC vial heater to thermostat headspace vials before GC analysis. The heater is designed to hold five 20-mL headspace vials and has a digital readout and a hinged insulated cover for preheating a 2.0-mL gas-tight syringe. According to the company, the instrument's temperature range is 35–150 °C, with a temperature stability of ± 0.1 °C. Typical applications include headspace GC analysis of retained solvents in flexible packaging material, VOCs in water, volatile chlorides in petroleum products, and ink solvents. ChromLab, Malvern, PA.

www.FastGCChromLab.com

Circle 171



Chromatography software

DataApex offers version 2.4 of its Clarity Chromatography Station software. The software is designed to acquire and evaluate data from up to four chromatographs at a time. Features include a photo-diode array detector module, control modules for Agilent's 6890N GC system and 1100 HPLC system, a LAN A/D converter, and elemental analysis software. The software includes support tools for GLP/21 CFR part 11 compliance and can run under most current versions of MS Windows. DataApex, Prague, Czech Republic.

www.dataapex.com

Circle 173



HPLC system

The ExpressLC-800 eight-channel, single-module system from Eksigent is an integrated HPLC system for high-throughput applications such as ADMETox screening, analytical method development, and combinatorial drug analyses. According to the company, the system can increase sample throughput by six times and occupies less than 25% of bench space. Eksigent Technologies, Livermore, CA.

www.eksigent.com

Circle 174



GC-MS accessory

SGE's ms-NoVent II GC-MS accessory is designed to allow column change or maintenance without the need to shut down the MS system and without air contamination. The fluidic valve device is installed directly onto the inlet of the ion source and prevents air from entering the mass spectrometer while the column is disconnected. SGE, Inc., Austin, TX.

www.sge.com

Circle 176

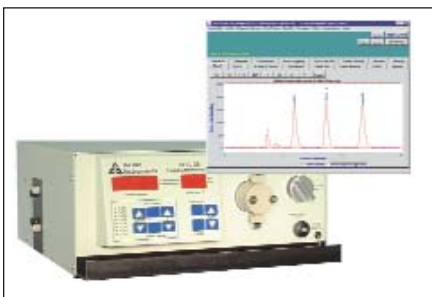


Evaporation system

Horizon's DryVap concentrator is designed to emulate the traditional Kuderna-Danish method for concentrating organic extracts for GC and GC-MS analysis. The concentrators automatically perform the nitrogen blow down step. The system can process as many as six samples independently with programming of parameters for each station. The instrument can evaporate solvent volumes ranging from 2 to 200 mL. Horizon Technology, Inc., Atkinson, NH.

www.horizontechnic.com

Circle 175



Variable-wavelength chromatography system

D-Star Instruments offers the DLC-20 Plus integrated variable-wavelength chromatography system, designed for use in on-site plant analysis applications or teaching labs. System features include stainless steel or PEEK components; a variable-wavelength detector with analytical flowcell; a 0–9.99 mL/min, 2500 psi pump with pulse damper and prime-purge valve; a backpressure regulator; and an injection valve with a position sensor for start-run signal. D-Star Instruments, Inc., Manassas, VA.

www.d-star.com

Circle 177

Pittcon Product Showcase



Temperature controller

The ThermaSphere TS-130 HPLC column temperature controller from Phenomenex is an integrated system designed to control column temperature in the 25–80 °C range with ± 0.1 °C repeatability and absolute accuracy of 0.5 °C. Two touchpad buttons provide access to programming functions, and the unit does not require adjustment or recalibration. A single analytical column as long as 30 cm and with an outer diameter of 3/8 in. can fit in the column compartment. Phenomenex, Inc., Torrance, CA.

www.phenomenex.com

Circle 178



Filter holder and filter

Isolation Technologies' preparative in-line filter holder with replaceable filter is designed for use with preparative columns and HPLC systems. The filter element protects the column, check valves, injectors, and detectors and maintains performance by removing particulate matter and insoluble material from the mobile phase and sample matrix. Reportedly, it can be placed in the flow path before or after the column with little or no effect on peak shape. The filters are offered in i.d. of 10.0, 15.0, 21.2, 30.0, and 50.0 mm. Isolation Technologies, Inc., Hopedale, MA.

www.iso-tech.com

Circle 179



GC modules

Gerstel's MACH modular accelerated column heater column modules incorporate low thermal mass technology with direct resistive heating and integrated temperature sensing. The modules use standard capillary columns. GC parameters can be controlled through Agilent's ChemStation software, and as many as four modules can be controlled through one system. Gerstel, Inc., Baltimore, MD.

www.gerstelus.com

Circle 180