A global presence. Focused on individuals.

Our innovations happen behind the scenes. Yet we touch people the world over by developing, manufacturing and marketing discovery systems and products that improve human health.

For over 75 years, we’ve been building a global reputation in hospitals, labs, and universities, where our life science research instruments are relied upon to perform vital roles day in and day out. Whether helping to solve complex biological problems, investigate the causes of disease, or find potential new cures, Beckman Coulter is focused on innovations that ultimately lead to healthier lives.
Automated Target Preparation for Affymetrix Genotyping and Gene Expression Assays

The Biomek™ FX™ Target Prep Express solution is a collaboration between Affymetrix and Beckman Coulter’s Life Sciences Automation team. It provides a suite of automated target preparation methods validated for select Affymetrix assays. The standardized solution simplifies the complex workflow and provides enabling flexibility for higher throughput and improved results.

Automated Nucleic Acid Isolation and Purification

Agencourt sample preparation reagents, coupled with our Biomek Series automated workstations, provide a top-notch solution for a variety of applications, thus enhancing the productivity, results and economics of your research. Our patented SPRI technology allows for easy automation of nucleic acid extraction and purification without sacrificing superior performance. The SPRI systems are designed for PCR® product purification, dye-terminator removal, gDNA extraction from whole blood and serum, cDNA purification, simple plasmid purification, nucleic acid isolation and purification from plant material, nucleic acid extraction from mammalian tissue samples, total RNA extraction from tissue, and total nucleic acid extraction from formalin-fixed, paraffin-embedded tissue samples.

DNA Centrifuge System

The Allegra series of benchtop centrifuges are high performance centrifuges that perform quick and easy cell harvesting. The Allegra 25R enables DNA isolation and post-reaction cleanup with higher performance for standard and deep-well plates.

Empowering real discoveries.
The emergence of next generation sequencing (NGS) technologies has enabled scientists to generate vastly increased data sets from their sequencing experiments. The increase in throughput, however, is supported by workflows that are relatively complicated and labor intensive, requiring skilled labor and significant hands-on time to prepare samples for each instrument. Beckman Coulter has created a simplified automated workflow that utilizes Solid Phase Reversible Immobilization (SPRI) paramagnetic bead-based technology to create an automated system for fragment library preparation.

**SPRIworks Fragment Library System**

SPRIworks* Fragment Library Systems are fully automated fragment library constructions solutions that consist of a the SPRI-TE Nucleic Acid Extractor, a method card and a cartridge containing all of the reagents necessary to carryout library construction and size selection. Each system can process up to 10 libraries in parallel providing a comprehensive medium throughput solution that reduces complexity and improves consistency of library quality. Solutions are available for Illumina**, Roche 454** and Life Technologies** SOLiD 4, and Ion Torrent PGM (100bp) NGS platforms.

**SPRIworks HT**

SPRIworks HT* provides high throughput sample preparation for Illumina NGS platforms. The Biomek-based solution includes a kit with reagents for library construction, size selection and enzymatic cleanups. A method suite, built on the Biomek† FX® Dual 96-multichannel pipetting head and Span-8 liquid handler, enables preparation of up to 96 libraries with size selection in just six hours or three hours with no size selection. In addition to library construction, the system offers unmatched flexibility of SPRI-based per-well size selection allowing samples for multiple applications to be processed on a single plate. For added efficiency, downstream methods for quantitation, normalization and pooling are included.

**Biomek NGS Sample Preparation Methods**

Robust Biomek systems enable low to high throughput automated NGS sample preparation using any commercially available library preparation reagent kit. A growing portfolio of demonstrated*** methods exists for many popular kits including a selection of Illumina’s Truseq and Nextera lines of products. The Beckman - Illumina co- marketing agreement will drive continued method development for their high demand kits. These fully tested methods each include an intuitive user interface and other software tools that enable quick implementation, standardized processing, and error reduction yielding high quality Sequence-Ready libraries.

* For Research Use Only; not for use in diagnostic procedures.
** Trademarks are the property of their respective owners.
*** Beckman Coulter makes no warranties of any kind whatsoever express or implied, with respect to demonstrated methods, including but not limited to warranties of fitness for a particular purpose or merchantability or that the method is non-infringing. All other warranties are expressly disclaimed. Use of the method is solely at your own risk, without recourse to Beckman Coulter.
Beckman Coulter provides a wide range of specialized reagents, platforms and software designed expressly to help cellular analysis researchers automate, standardize and simplify key processes.

**Flow Cytometry Reagents**

A variety of cellular analysis reagents covering a broad range of today’s fluorochromes meet the diverse needs of today’s flow cytometry laboratories including several complete systems that combine reagents, calibrators, controls, software and hardware. Our offering includes 13 different direct fluorochrome labels with our off-the-shelf monoclonal antibodies, and reagents for human and non-human antigens and numerous reagent lines that comprise hundreds of products including new lines for signal transduction, and immunotoxicology. Many of Beckman Coulter’s life sciences’ reagents take advantage of the company’s patented tandem dye technology and offer unsurpassed quality for high complexity multi-color analysis to researchers and clinicians. As an industry innovator, we continuously look for new methods to advance the science of cytometry. Our exclusive organic fluorochrome, Krome Orange dye, has been optimized for superior optical performance including high signal-to-noise ratios and minimal intra-laser compensation requirements.

Our Custom Design Service (CDS) provides customized solutions to meet your needs, and through peer-to-peer partnerships with our scientists, you have access to unique solutions. We have an expanded CDS portfolio, offering multicolor cocktails in a dry, temperature-stable format. In addition, our dry reagents provides a means to simplify and expedite sample preparation and handling. Dry custom panels are supplied in a single use cocktail per tube ready for addition of sample. The CDS design process, combined with technological advances from Beckman Coulter, ensure the consistent performance required for long-term studies.

**MoFlo XDP**

The MoFlo** XDP has set the standard for cell sorting with both functionality and speed. It is designed to provide researchers improved productivity with an array of biosafety features and easy-to-use software. This high-speed, configurable system has solid-state lasers, high viability, high yield, an analysis rate of 100,000 events per second and sort rates of up to 70,000 events per second.

**Kaluza Software**

Kaluza* Software is a revolutionary flow cytometry analysis software solution designed for high content data. Kaluza provides visualization tools, speed and an innovative simplicity to the flow community. With unique features such as tree plot, radar plot, comparison plot, mouse-over functionality, and a radial context menu allowing you to work without cumbersome menu navigation, it will make your life easier in the lab and provide you with a greater understanding of the data generated. Kaluza employs patent-pending technology that allows for real-time analysis of high content files, allowing you to spend your valuable time on discovery.

**MoFlo AstriosEQ**

The MoFlo AstriosEQ leverages the stable fluidic design of the original MoFlo** and the electronic processing of the MoFlo XDP to expand sorting capabilities with an array of laser options. Seven pinholes spatially separate seven lasers providing flexibility and enabling complex, multi-color sorting. Updated Summit Software permits 6-way sorting into tubes and sorting into plates having as many as 1536-wells. While Intellisort II makes it the only true beadless drop delay determination and monitoring system that avoids foreign particles during instrument setup.

*Not for use in diagnostic procedures.

* MoFlo XDP and MoFlo Astrios are class 1 laser products.
**CELLULAR ANALYSIS (CONT.)**

**CyAn ADP**

The CyAn ADP™ high performance flow cytometer is a state-of-the-art flow cytometer that utilizes multiple laser excitation sources to analyze biological cells, beads and bacteria. This provides a high acquisition and analysis capability of up to 100,000,000 events. The CyAn ADP has two models to accommodate a diverse range of applications, within a small footprint, with up to 11 parameters, including 9 colors.

The CyAn ADP can be automated through integration with the Biomek FX²/NX² Laboratory Automation Workstations, making it an ideal tool for high content and high throughput screening tasks.

**Gallios Flow Cytometer**

The Gallios® Flow Cytometer provides efficient acquisition of superior quality data from up to 10 colors with advanced optical design for enhanced sensitivity for multicolor assays. Gallios is optimized for unparalleled signal-to-noise resolution in all parameters. The Gallios offers up to four highly reliable, solid-state lasers in standard red and blue, with violet and yellow lasers available as an option.

By incorporating the optional 405nm violet laser and an optional 561nm yellow laser, the Gallios Flow Cytometer offers a greater choice of fluorochromes to perform sophisticated multicolor experiments. With the new 561nm laser system you can analyze multiple fluorescent proteins simultaneously, as well as benefit from a greater ability to detect red fluorescent proteins. The lasers are independently focused in the auto-beam tower using an innovative steering mechanism that provides optimal excitation at the flow cell for reliable high quality results. Its quick and easy setup of automated walk-away processing improves your workflow while its remote diagnostics minimize downtime and allow you to maximize lab productivity. With customized forward scatter to achieve the most accurate size measurement and optimized electronics for high resolution and fast, accurate processing, the Gallios offers superior resolution and cell/particle characterization without sacrificing analytical speed or data integrity. * For Research Use Only; not for use in diagnostic procedures.

**Vi-CELL XR® Cell Viability Analyzer**

The Vi-CELL XR automates the manual trypan blue cell viability assay. Objective percentage viability measurements are obtained in minutes. The instrument also provides real time cellular imaging. In addition to cell viability, the Vi-CELL reports cell concentration, size distribution, cell circularity and supports 21 CFR Part 11.

**Z Series† COULTER COUNTER**

The Z1 Dual Threshold model is a basic cell counter that provides cell concentration information. The Z2 model offers cell counting plus some basic sizing capabilities to supplement cell counting. Windows-based software enables off line analysis and storage of Z2 results. The Z Series instruments are compact, mercury free and conform to ASTM Standard F2149 for automated analyses of cells.

**Multisizer 4e† COULTER COUNTER**

The high resolution, accuracy and overall range (0.1 μm – 1600 μm) of the Multisizer 4e makes this instrument the choice for sizing and counting all types of cells — from bacteria to adipose. The use of a unique pulse edit algorithm provides an accurate size distribution of a cell population. In addition to static size measurements, the digital pulse processor in the Multisizer 4e allows dynamic size measurements in real time. The computer controlled instrument features software that fully supports 21 CFR Part 11. A validation package (V-Check) is available. The Multisizer 4e is the ideal research instrument for cell biology in any study involving cell size.

**Gallios Flow Cytometer**

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* For Research Use Only; not for use in diagnostic procedures.

^ Cyan ADP and Gallios Flow Cytometer are class 1 laser products.

* For Laboratory Use Only; not for use in diagnostic procedures
Because rapid adaptation with results you can depend on are critical to discovery, we enable you to automate your process, your way, by offering a full range of flexible and scalable systems. In addition to enabling next generation sequencing, cellular analysis and proteomics research, the Biomek family provides a complete portfolio of nucleic acid sample preparation solutions with the patented Solid Phase Reversible Immobilization (SPRI) paramagnetic bead based technology. At Beckman Coulter, we are looking into the future to provide solutions that suit your needs for today and tomorrow.

**Biomek 4000 Workstation**
The Biomek 4000 Laboratory Automation Workstation is a flexible, smart and intuitive liquid handling system. It’s simple icon-driven software and ready-to-use genomic and cellular application methods help you automate everyday laboratory processes and streamline your workflow. The workstation is integration friendly and easily adapts to your research needs.

**Biomek NX Workstation**
By incorporating a wide range of features into a small-footprint design, the Biomek NX Laboratory Automation Workstation puts every aspect of liquid handling — including pipetting, dilution, dispensing and integrations — into a single, automated system that’s as powerful and flexible as it is efficient and economical.

**Biomek FX Workstation**
In today’s environment, speed and performance are critical. The Biomek FX Laboratory Automation Workstation is ready for the challenge and is our most flexible liquid handling system. By combining whole plate processing and individual well pipetting on one platform, the Biomek FX system accelerates your laboratory processing. The Biomek FX system meets your needs today and is ready for expansion or upgrade as your throughput needs change.

**Biomek Assay Workstation**
The progressive Biomek Assay Workstation combines productivity with innovation by offering the flexibility and capacity needed to process your assays without user intervention. The Biomek Assay Workstation (available for FX and NX platforms) uses the power of SAMI Workstation EX scheduling software to optimize plate processing and ensure assay reproducibility.

**Discovery**

*Not for use in diagnostic procedures*
Biomek Labware and Microplates

Beckman Coulter offers a broad portfolio of consumables that includes universal labware such as 96-well microplates, thermocycler plates, deep-well plates, modular reservoirs, tube racks and more. To accelerate method set up, Biomek labware properties have been predefined in the Biomek software.

Biomek Pipette Tips

Biomek Pipette Tips from Beckman Coulter are the only tips on the market that are validated and approved for use on your Biomek liquid handlers. With a wide range of volume capacity — from 0.5 μL to a full 1 mL — Beckman Coulter offers pipette tips to meet any application requirement. Don’t compromise the integrity of your data by using generic tips. Biomek tips from Beckman Coulter are supported on a system level: color-coded tip racks, tip definitions, pipetting techniques, and templates are included. In addition, only Beckman Coulter offers the most comprehensive biological certifications on the market. Biomek tips from Beckman Coulter are certified to be human and mouse DNA-free, DNase/RNase-free, Trace Metals-free, and Pyrogen/Endotoxin-free, and are made only from 100% premium-grade virgin polypropylene.

Software Packages

Whether your automated process is a 60-minute single method or a 60-day multi-phase effort, our software will drive, schedule, monitor, and track your entire workflow. Additionally, data is seamlessly transferred between methods allowing you to easily generate reports about your runs, labware, and samples anytime.

Integrated Solutions

Beckman Coulter turns automation tools into workflow solutions. From simple on-deck devices to complete robotic systems, we customize Biomek-based systems for your specific application by integrating instruments such as:
- Temperature controlled storage
- Plate readers and imagers
- Plate transport devices
- Plate washers
- Tube handling – capping/decapping devices
- Bar code readers
- Microplate centrifuges
- Safety and bio-containment enclosures
- And many other devices

AUTOMATED SOLUTIONS (CONT.)

Discovery
in motion.

* Not for use in diagnostic procedures
Providing over 60 years of global leadership in centrifugation, Beckman Coulter designs, manufactures, sells, and services a complete line of centrifuge systems. By offering unique rotors and innovative bottles, tubes and accessories, coupled with advanced centrifugation software, Beckman Coulter delivers intelligent centrifugation solutions to laboratory science.

Our two highest performance families are the Optima Series Ultracentrifuges, offered in both floor and tabletop models, and the Avanti Series High-Performance and High-Capacity Centrifuges. Our continuum of centrifuge solutions also includes general purpose benchtop and microcentrifuges.

**ULTRACENTRIFUGATION**

**Optima X Series** ultracentrifuges feature a sophisticated on-board computer with intelligent eXPert software, easy-to-use touchscreen control, enhanced bio-safety, remote monitoring* and security and tracking features.† The eXPert software provides optimized run methods, run simulation software, calculation tools, rotor and tube catalogs, automatic run records and more. All models are designed with quiet-drive technology (operates at less than 51dBA) and are energy efficient with regenerative braking, which returns energy to the local circuit, and thermoelectric cooling for low power consumption. Models include Optima XPN-100, XPN-90, XPN-80, XE-100, and XE-90.

**Optima MAX Series** tabletop ultracentrifuges include the Optima MAX-XP and the Optima MAX-TL. The Optima MAX-XP tabletop ultracentrifuge is the premium model and delivers fast run times with up to 150,000 RPM (2,500 revolutions per second) and is exceptionally quiet — producing only half the sound output of other models. The user interface is intuitive, customizable and available in an array of native languages, with control via a full-color touchscreen. Optional remote monitoring and control of the system is also available. Not only does the Optima MAX-XP fit inside a standard biosafety hood, but it can be ordered with HEPA filtration for enhanced safety. The Optima MAX-TL tabletop ultracentrifuge is the entry-level model which delivers optimum functionality and efficiency with a compact, quiet package. It can reach up to 120,000 RPM. The MAX-TL is compatible with existing Beckman Coulter TL-Series rotors and labware. It also offers multilingual software, full color LCD touchscreen and multi-level approach to BioSafety*.

**AVANTI SERIES**

**High Performance and High Capacity**

The Avanti J Series High Performance and High Capacity Centrifuges deliver high-throughput and flexibility to laboratory research. With its high g-force microplate applications, six-liter runs, increased BioSafety* systems, ergonomic design and sustainability, the Avanti J-26S brings a new level to versatility. The Avanti J-30I performs subcellular separations in either swinging-bucket or fixed-angle rotors with g-forces over 100,000 x g and the small footprint of the Avanti J-E makes it suitable to fit into any lab. Finally, the Avanti J-HC is a high-capacity, high-throughput bioprocessing centrifuge capable of rapidly processing runs from three to nine liters.

The J6-MI is designed to deliver high level performance in separation techniques (in volumes up to 6L) for bioprocessing, research and blood separation laboratories.

**General Purpose Benchtop**

The Allegra and Microfuge Series Benchtop Centrifuges provide excellent performance and versatility. Designed specifically with key applications in mind, we offer the:

**ALLEGRA SERIES**

**Allegra X-14 Series** (at 120V) and the Allegra X-15R with unique cell culture flask adapters and exclusive ARIES rotor technology, which detects and corrects opposing load imbalances up to 50 g.

**Allegra X-30 Series** multipurpose centrifuge, with a diverse library of 13 rotors in an extremely compact enclosure — only 18 inches/46 cm wide.

**Allegra X-5** our NEW!! Clinical Benchtop centrifuge specifically designed for routine sample processing of serum, plasma, whole blood and other body fluids. This small footprint centrifuge is ideal for high-throughput labs where there is a need to be able to spin up to 140 (13mm) or up to 100 (17mm) blood tubes. This new centrifuge also offers adapters that pair up with certain Beckman Coulter clinical analyzers.

**Allegra 25R** high-performing DNA benchtop centrifuge.

**Allegra 64R** high-speed benchtop centrifuge.

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* Features listed are on the Optima XPN instrument
* BioSafe and BioSafety are terms intended to describe the enhanced biocontainment features of our products.
CENTRIFUGATION (CONT.)

MICROFUGE SERIES

**Microfuge 20** our NEW! Series refrigerated (Microfuge 20R) and non-refrigerated (Microfuge 20) models offer powerful g-forces for fast pelleting with a RCF up to 20,627 x g and speeds up to 15,000 RPM, maximum capacity of (36 x 1.5/2.0mL) with the BioCertified** fixed angle rotor FA361.5, up to 10 predefined programs and four different rotor options to choose from. The Microfuge 20R precleaning program precools samples fast minimizing the time precious samples spend inside the microcentrifuge. The Microfuge 20R maintains 4°C at maximum speed for all rotors.

**Microfuge 16** spins quietly at 16,163 x g for fast pelleting or isolation of DNA, RNA, proteins and viruses. In addition, it fits easily in the tightest of workspace environments with a height under 7 inches (17.6 cm) and a footprint measuring 8.9 by 10.5 inches (22.6 x 26.6 cm).

**Innovative Labware**

**TUBES**

Since they're specially designed for innovative application solutions, our patented ultracentrifuge tubes deliver improved efficiencies, including Quick-Seal for versatility, g-Max for small volume at greatest efficiency, konical for the most concentrated pellet and OptiSeal for the easiest sealing with no tools.

**HarvestLine System Liners** are disposable centrifuge bottle liners that provide a significant improvement in the centrifugation of biological material. They simplify sample pellet retention and storage after decanting by eliminating time-consuming manual scraping of harvested solids from labware and hence enhance operator biosafety. These liners are used with a selection of Avanti Series High-performance Centrifuge rotors.

Rotors

Our extraordinary library of innovative rotors are designed, manufactured and tested with our centrifuges as a system, from the inside out, to make sure you receive separations that continually exceed your expectations. The increased efficiency of our rotors can reduce run times. Many rotors offer biocertification** for added safety, when you need it. Whatever your application, we have the system to meet your need.

Multi-level Biocontainment for Laboratory Safety

The Beckman Coulter BioSafe Centrifuge Systems’ unique multilevel approach to containment provides the most comprehensive solution to biosafety. From innovative labware like the Aerosolve Canisters and HarvestLine System Liners to bio-certified** rotors to centrifuges with HEPA filtration — the BioSafe Centrifuge Systems provide enhanced biosafety.

**Brillance at every turn.**

* BioSafe is a term intended to describe the enhanced biocontainment features of our products.
** BioCertified is a term used to describe our products which have been tested and validated to demonstrate containment of microbiological aerosols by an independent, third-party facility. Improper use or maintenance may affect seal integrity and, thus, containment.
Particle Characterization uses the Coulter Principle (electrical sensing zone method), enhanced laser diffraction, polarization intensity differential scattering, photon correlation spectroscopy (PCS), electrophoretic light scattering and BET surface area analysis, providing answers and solutions for those involved in the testing and measurement of the physical properties of particles. Besides offering a blend of innovative instruments, Beckman Coulter is dedicated to providing researchers, scientists and engineers in numerous industries with valuable information.

ProteomeLab† XL-A/XL-I
Analytical Ultracentrifugation
This powerful tool allows particle size, aspect ratio, and aggregation analysis of a wide variety of particles ranging in size from the molecular scale to a few microns in diameter. Regarded as a fundamental tool in the field of protein science, this robust and elegant system is finding new acceptance in the world of particle characterization. With multiple optical detection systems, extremely high sensitivity, and the ability to measure particles in native buffer conditions with unparalleled resolution, the analytical ultracentrifuge is quickly becoming a “go to” technique for materials scientists.

DelsaMax Series
The DelsaMax Series represents the next generation of zeta potential and submicron particle size instrumentation.

With applications in biology, industrial materials, and nanotechnology, these instruments offer the most accurate, sensitive, and rapid answer to the toughest sizing and stability challenges.

Multisizer 4e COULTER COUNTER
The Multisizer 4e COULTER COUNTER is one of the most versatile and accurate particle sizing and counting analyzers, with an overall sizing range of 0.2 μm to 1,600 μm. Using the Coulter principle (electrical sensing zone method), the Multisizer 4e provides number, volume, mass and surface area size distributions in one measurement. A digital pulse processor even allows real-time dynamic size measurements over the length of the analysis. Its high resolution and accuracy make the Multisizer 4e an ideal tool in R & D for both industrial and biological applications.

LS 13 320 Series
The LS 13 320 Series is one of the most versatile and sophisticated laser diffraction particle size analyzers available. Designed from conception to be fully compliant to ISO 13320-1 (the ISO standard covering particle sizing by the laser diffraction method), the LS 13 320 Series combines up to four wavelengths of light, polarization intensity differential scattering (PIDS), and many powerful sample dispersion features to offer high resolution, reproducibility and accuracy in a size range from 0.017 μm to 2000 μm. Its FDA 21 CFR Part 11 compliance software and sample handling capability make the system easy to use and highly secure.
**Air Particle Counting**

**Portable Air Particle Counters**
Air particle counters by MET ONE are the industry leader in life science companies to ensure compliance to ISO14644 cleanroom monitoring applications. The MET ONE 3400 air particle counter is uniquely designed for both Aseptic fill, environmental monitoring, and cleanroom validation particle counting needs.

**Hand Held Air Particle Counters**
Affordable airborne particle counters, the all-new MET ONE HHPC+ Series handhelds. With plug and play transfer of airborne cleanroom particle counting data by easy-to-use USB, Memory Stick and Ethernet electronic data transfer, you’ll be spending less time in the cleanroom and more time on the results! Simple. Fast. MET ONE.

**Remote Air Particle Counters**
The MET ONE cleanroom monitoring systems and solutions, offer the life science industry the highest technology particle counting solution for aseptic fill drug production. The MET ONE 6000, MET ONE 6000P, and MET ONE 7000 air particle counters ensure compliance to ISO14644 and seamlessly provide robust particle counting and open-architecture seamless data management within all 21 CFR part 11 life science cleanroom environments.

**Liquid Particle Counting**

**Laboratory Liquid Particle Counters**
HIAC 9703+ liquid particle counters are the leader in Pharmaceutical USP <788> quality control and research applications. Designed for your liquid particle counting application needs, the HIAC 9703+ is highly configurable and easy to use. PharmSpec software makes data management easy and assures security for 21 CFR Part 11 environments. Easy. Accurate. HIAC.

**On-Line Liquid Particle Counters**
HIAC ROC remote particle counters are constructed for harsh environments. The HIAC ROC excels in high pressure and high temperature applications and offers carefree maintenance. Serving a wide range of oil analysis and mobile applications, multi-point system monitoring as well as point-of-use applications.

**Portable Liquid Particle Counters**
The HIAC PODS liquid particle counter is the industry’s fastest and most intuitive portable liquid particle counter in the world. Receive immediate oil analysis laboratory grade particle counting results in the field when you use the HIAC PODS. The HIAC PODS offers eight channels of accuracy ensuring your view the entire particle contamination profile and protecting the equipment from contamination failure.

**Characterized by ingenuity.**
CAPILLARY ELECTROPHORESIS

Beckman Coulter is the industry leader in CE technologies and tools. Capillary electrophoresis can be an effective replacement for slab gel electrophoresis and a complement or alternative to HPLC. Our developments encompass hardware, software and chemistries, with a long list of advancements that include laser-induced fluorescence, diode array detection, advanced CE data reduction and many CE chemistries. Our CE systems are used for therapeutic protein characterization, ion analysis, chiral analysis, basic drugs, nucleic acid purity and more.

CESI 8000* – High Performance Separation-ESI Module
“Available Early 2014”

The CESI 8000 represents a completely new technology for interfacing CE with ESI. We have combined electrophoresis and ESI into a single dynamic process, creating the first commercialized CESI-MS sprayer. Stable spray is achieved at ultra-low flow rates where ion suppression is virtually eliminated; ionization efficiency maximized giving an overall increased sensitivity. This innovative design has eliminated frustrations commonly associated with nanoscale techniques. The entire capillary is one dimension, from inlet to outlet, minimizing the hours spent resolving dead volumes, and clogging issues. As this is an open tube technique, there is virtually no carryover between samples. No other front end separation/ESI configuration to MS can approach in providing you the ability to have the best of two worlds.

PA 800 plus* Pharmaceutical Analysis System

The PA 800 plus† Pharmaceutical Analysis System has become the ideal standard for characterization of protein purity in the biopharmaceutical industry. Combining innovative system design, robust and efficient operation, and electronic tools enabling 21 CFR part 11 compliance, the PA 800 plus delivers critical purity and heterogeneity information necessary in highly regulated environments. Providing a single platform capability for assessment of protein purity, charge heterogeneity, microheterogeneity, and ion analysis, the PA 800 plus is the clear choice when it comes to characterizing your biopharmaceutical pipeline.

P/ACE MDQ*

The P/ACE MDQ† Series are automated, programmable capillary electrophoresis systems designed to perform fast separations from complex samples. Separations occur in a capillary, which is housed in an interchangeable cartridge with circulating liquid coolant, for efficient temperature control. This finely regulated temperature control allows the use of high-ionic-strength buffers and large-bore capillaries necessary for analyzing difficult samples. With CE, methods are faster to develop, easier to validate and less expensive to run. However, specialized system designs are recommended to optimize performance for different applications.

Genetic Analyzer

The GenomeLab GeXP* Genetic Analysis System is a versatile multi-functional genetic analyzer based on sensitive laser induced fluorescent detection capillary electrophoresis technology. This fully automated, high-throughput system along with the multiplex XP-PCR chemistry offers quantitative analysis of up to 30 gene expression or microbial targets in a single reaction. This system is also a fully automated, high-throughput sequencing, genotyping and fragment analysis analyzer. In a single setup with one gel and one capillary array within the same plate, short and long templates are sequenced rapidly with high quality reads, and DNA fragments are sized and analyzed quantitatively with high sensitivity and reproducibility. Fragment analysis applications include: SNP Scoring, Microsatellite Instability (STR), MLPA, MLVA, Loss of Heterozygosity and AFLP Fingerprinting.

* Beckman Coulter® system sold through SCIEX Separations, a part of AB SCIEX.
† Not for use in diagnostic procedures.
SERVICE and SUPPORT

World-class Service at Your Fingertips For more than 75 years, Beckman Coulter has maintained an unwavering commitment to service excellence worldwide. Whether you’re next door or across the globe, our field service organization and knowledgeable customer service teams stand ready to help you make the most of your investment, from installation and training to post-sales hardware, software and method support.

Protect your investment even further with world-class service plans from Beckman Coulter. Our flexible plans can be tailored to accommodate your workflow needs.

Beckman Coulter world-class customer service includes:

• Easy access to service and support via phone or Internet
• Exclusive access to field service engineers and original Beckman Coulter parts
• Customizable service agreements that offer variable levels of support
• Long-term commitment to supporting your laboratory investment

To ensure top performance for your lab, rely on exceptional service from a proven leader — Beckman Coulter.

Not all services available in all countries.
Beckman Coulter Life Sciences is dedicated to empowering discovery and scientific breakthroughs. The company's global leadership and world-class service and support delivers sophisticated instrument systems, reagents and services to life science researchers in academic and commercial laboratories, enabling new discoveries in biology-based research and development. A leader in centrifugation and flow cytometry, Beckman Coulter has long been an innovator in capillary electrophoresis, particle characterization and laboratory automation, and its products are used at the forefront of important areas of investigation, including genomics and proteomics.