SHOW REVIEW

By Tamsyn Cox

The 62nd annual Pittsburgh Conference & Expo took place at the Georgia World Congress Centre in Atlanta, from 13-18 March and as always International Labmate Ltd (ILM) was at the forefront collecting all the latest news from product launches and business acquisitions to the most deserving of award winners. Exhibitors also shared their views with Tamsyn Cox, ILM Features Editor and provided valuable feedback. All this, and more, can be found within this Pittcon Show Review…

Business Spotlight

Some big instrument makers declared their intentions to continue making acquisitions to broaden their product lines, while others indicated their intent to remain independent and reliant largely on homegrown advances...

At the first Pittcon since it acquired Varian, **Agilent Technologies, Inc** talked about the synergies of the newly expanded company, and introduced the following products and resources: 240 and 220 Ion Trap GC/MS systems, combining multiple ionisation and scan modes with rugged 7890A GC; Intelligent System Emulation Technology for the Agilent 1290 UHPLC, facilitating instrument-to-instrument method transfer; CrossLab supplies portfolio, providing high-quality supplies for major brands of GC instruments; 971 Flash Purification System, offering fast, easy, secure purification of new synthetic compounds; Second-generation Low Thermal Mass GC system, combining faster cycling with convenience of standard data system software; and the 2011-12 Essential Chromatography and Spectroscopy Catalogue, which is 50% larger than the previous edition.

Agilent also highlighted the addition of Fourier transform infrared technology to its spectroscopy portfolio with the recent acquisition of A2 Technologies. Spectroscopy was a key factor in the Varian acquisition, and the A2 instruments for petrochemical, environmental, aerospace, art conservation academia and geosciences analyses fit well into Agilent's spectroscopy portfolio.

"Strong demand for our newly expanded consumables portfolio, vacuum products and molecular spectroscopy systems in Q1 nicely complemented organic growth of Agilent's tradition product lines," said Mike McMullen, President, Agilent Chemical Analysis Group. "Momentum is building and we are well on the way of delivering on the promise of Varian."

"Additions to our portfolio like NMR are very strategic parts of this bigger company," said Nick Roelofs, PhD, President, Agilent Life Sciences Group. "For example, NMR is frequently used alongside mass spectrometry for structure determination. We will continue to invest in advancing these complementary technologies and are well-positioned to serve high-growth markets."

THE 'NEW SOUTH'

Why, after 13 years of absence, has Pittcon returned to Atlanta?

Today the city is a highly ranked Bioscience community with a leading research mentality and a State that is home to in excess of 300 bioscience companies, including several industry leaders within drug discovery and genetic analysis, such as the American Cancer Society, and food and beverage companies such as Coca-Cola. The city houses a number of universities and technical colleges and is considered the hub of the Southeastern US thanks in part to Hatsfield-Jackson Atlanta International Airport – one of the worlds busiest airports and a top international gateway making it very accessible airport for Pittcon visitors. Atlanta is also home to the world's first global news network, CNN, thereby further installing its image as a metropolis, the largest aquarium in the world and a whole host of unique venues and restaurants, including the revolving Sun Dial Restaurant and Bar perched on top of the 723 feet Westin Peachtree Plaza hotel. So, perhaps despite the last Atlanta Pittcon in 1997 being hit by a freak but major storm, the expo shouldn't have stayed away from this evolving 'New South' for so long.

Pittcon prides itself on offering a unique blend of educational programmes, over 100 Short Courses, 2,000 technical presentations and face-to-face customer and supplier opportunities. A New Exhibitor Area offered visitors the chance to see 115 first time exhibitors, while Centennial Park in the middle of the expo floor provided a rest stop with exhibitor videos on show. Opportunities for conferees to network with colleagues were abundant and included an international mixer, three exposition mixers, Conferee Networking Sessions, an onsite employment service, an exhibitor and distributor service complemented by an International Visitors Centre, and a Twitter Café

Although overall registration has been on the decline and fell below the 20,000 mark in 2008 with total exhibitors dipping below 1,000 to 960 in 2010, Pittcon 2011 seemed decidedly upbeat and furthermore, Atlanta seemed to be healthy for the attendance figures. The Exposition included 979 exhibiting companies from 29 countries, occupying 2,059 booths*, with 193 companies (19.7%) from 31 countries outside of the United States, showcasing their latest laboratory instrumentation, equipment and services across a broad range of applications and technologies, including separation sciences, mass spectrometry, spectroscopy, nanotechnology, laboratory automation and informatics and total attendance hit 17,199 - up slightly from Orlando in 2010 (16,876), although still exceeded by Chicago in 2009 (19,018). Although the exhibitor figure is noticeably less than the 1,006 exhibitors in 2009, it would appear that economic recovery has revived buyers' interest and business conditions are stronger than they were a year ago at least. This appears to have resulted in a strong and steady Pittcon that indicates the economy is moving in the desired direction.

EXHIBITORS COMMENTS

When asked about the success of Pittcon for AstraNet, **Ray Wood, Business Development Manager** had this to say: "For visitors to the booth the first two days were busy, but it tailed off on the Wednesday and Thursday. We had a good number of leads of a high quality, but more importantly made contact with several prospective distributors in countries where we currently need coverage.

On a value-for-money judgment we believe that Pittcon 2011 was a success for us, in promoting our products and meeting with distributors and trade partners. We will certainly be exhibiting at Pittcon 2012 in Orlando.

I was impressed with Atlanta as a venue for Pittcon 2011. It was well organised, everyone was very friendly and helpful and the free shuttle-bus service excellent. I'd say they were working very hard to get us to come back to Atlanta – and I hope we do."

STAY CONNECTED

A key theme this year was the importance of social media. Pittcon 2009 held the first ever 'Pittcon Tweet-Up' - a meeting of people with science and social media in common. Over the past few years Pittcon has embraced social media to give new opportunities for exhibitors to connect with attendees. Pittcon 2011 featured a Twitter Feed in Centennial Park as well as the Twitter Cafe in the Pittcon booth. The Twitter Feed allowed exhibitors to announce promotions, new products and much more to conferees congregating in the Park area. Meanwhile, conferees were able to stay updated on events happening on the Expo floor and share their opinions and comments about Pittcon 2011.

Tamsyn Cox, Features Editor at Interntaional Labmate (ILM), had the opportunity to hear more about Pittcon's aim to incorporate social media into the Pittcon mainstreem, from Pam Wasielewski, Marketing Assistant, The Pittsburgh Conference and Jon N. Peace President, Pittcon 2012: "Incorporating social media into Pittcon was a goal for Pittcon 2011 and will continue to be a goal for Pittcon 2012. We would like to continue to promote the use of social media sites like Twitter, Facebook and Linkedin before, during and after Pittcon. Social media sites allow conferees and exhibitors to communicate before Pittcon, making it easier to meet up during Pittcon. For example, the Pittcon Tweeters met both Tuesday morning and evening to catch up and discuss the latest in social media. Sites like these also allow conferees and exhibitors to continue discussions throughout the year that they might have started at Pittcon.

"We are hoping to offer more monitors with Twitter Feeds for next year as well as continue the Twitter Cafe. Conferees and exhibitors coming to Pittcon are part of a community, by staying active on our Facebook, Linkedin and Twitter pages we have the ability to stay in contact with the Pittcon community throughout the year," said Pam.

*Pittcon statistics available at time of print

Jon N. Peace, President of Pittcon 2012, added: "They may have met electronically through social media prior to the Conference or may continue their relationship electronically after having met at the Conference. In either case, the opportunity for the face-to-face contact at Pittcon and the ability to continue the contact after Pittcon are complimentary."

In keeping with this technological approach Pittcon 2011 launched its official Conference and Exposition Smartphone App. The complimentary app included complete event information such as the Technical Program, exhibitor listing, Short Courses, and local area and conference related maps. The Pittcon 2011 app is available for use on Androids, Blackberrys, iPhones, and iPod Touches allowed attendees to build their agendas, network with their colleagues, send tweets, and receive regular conference updates.

Marian Nardozzi, Pittcon's senior marketing and communications specialist, commented: "Our statistics tell us that the number of those attendees using Smartphones has increased 150% over this same time last year, and according to Nielson, Smartphone usage is expected to outnumber regular phones by the end of 2011. Pittcon has always been about bringing the latest innovations and research to our attendees, so it only made sense for us to provide this technology to our audience."

POINTS OF VIEW...

Analtech's Ken Grant (@iChromatography) was responsible for organising the Pittcon Tweet Up events on the Tuesday and chatted to Tamsyn Cox at ILM about the integration of social media at exhibitions...

How can social networking enhance the Pittcon experience?

"I can't imagine anything replacing face-to-face meetings - rather these communications tools allow us to enhance the face-to-face experience. For example, before social media (aka 'the dark ages of five years ago') there might be a phone call or two, maybe some postcards to either attract people to your booth or set up a meeting, other than that, you hoped that you would run into the right people at the show. Now, everyone starts the conversations a few weeks before the show on twitter, facebook, LinkedIn, or any number of tools - then, starting the Friday before the show, you start seeing messages like, 'just arrived in Atlanta, does anyone from Pittcon want to meet for dinner' - this is days before the show even starts. Then, throughout the show messages are exchanged quickly about a great poster, or a session coming up in the next hour, or the next opportunity to win a great prize - I truly believe these social media tools help make the whole experience better at the show. After the show it's easier to remain connected… and that even opens the door for other possible connections."

Were the Tuesdays' Tweet Up's well received by attendees?

"This is the third year we've held Pittcon Tweet Ups - in 2009 a few of us got together for breakfast in Chicago - in 2010 we decided to have a morning event at the show and an evening event at a local restaurant - that seemed to really work well for a lot of people, so we did the same thing this year in Atlanta - the morning Tweet Ups seem to be places where we exchange ideas, talk about some best practices, and brainstorm - the evening events are more casual - both events are a lot of fun. The feedback I've heard from several people is how much they learn and connect at these events - the nature of social media seems to encourage connection."

Pittcon 'Tweet Up'

How can this social tool be further incorporated into Pittcon and other such shows?

"That is the question we're all exploring! Pittcon has done an incredible job of embracing these tools - this year there was a Twitter Cafe where anyone could come and post their messages even if they didn't have a twitter account - and there were screens posted showing the Pittcon Twitter feed. The great thing about all of this is that all Pittcon or any other show has to do is provide the space in which these tools can be used, the attendees can then provide all of the content they wish. In many ways, everyone gets to partner together, support each other, and connect in major ways."

Ken added some intriguing last thoughts: "Recently there's been more than a couple of books and studies centred around the concept of 'Where do ideas come from?'. The conclusion from all is that great ideas occur when one person's hunch meets up with another person's feelings about a subject and these concepts get to knock up against each other. Many say that there's one place where this traditionally took place - the city - but that now these concepts and ideas can knock up against each other in social media as well. Again, I see real possibilities here as researchers from all over the world are able to share a notion or two through these tools before an event like Pittcon, get together at the event and brainstorm, then continue the conversation for several months until they announce that they've made a major breakthrough in their field."

AN UPBEAT OUTLOOK

A key topic of Pittcon last year was location and frequency; despite the reported surge in life science research taking place in Florida, and the debate as to whether Pittcon should reside itself to being a sharper bi-annual show, as companies such as Bruker are in favour of, Orlando is not a popular choice despite it's return in 2012.

Jon N. Peace had the following to say and his feelings remain upbeat for Orlando: "In a down economy, conferee attendance at Pittcon 2010 was comparable to attendance at Pittcon 2009 in Chicago. In addition, for most exhibitors, the number and quality of leads were up from 2009. Note that while total attendance was down, the decrease was the result of reduced staffing levels by exhibitors. Orlando has the potential to draw both local and international attendees. There has been an ongoing effort in the State of Florida to diversify their economy with the main focus being biotechnology. There are more than 600 life science companies in Florida, employing more than 26,000 people. Several major institutes have located in Florida, such as, The Burnham Institute for Medical Research, Max Plank Institute, Torrey Pines Institute for Molecular Studies. In addition, technology parks, public and private, are being developed, including Lake Nona Science and Technology Park, the Innovation Centre at the University of Florida, University of Miami Life Science Park. All this activity increases the potential for drive-in traffic. In addition, Orlando is the preferred Pittcon site for international attendees. In 2010, attendance from Latin America, Western Europe and Asia increased over 2009. Our exhibitors, therefore, have an opportunity to connect with potential customers that they would not otherwise have had without exhibiting internationally. A less obvious benefit is that the reputation of the Technical Program at Pittcon is enhanced by the diversity of the attendees; making Pittcon a must-attend show for many conferees."

When asked if he would consider making Pittcon a bi-annual event to alternate with the like of Analytica, he said: "Pittcon is an annual show and will continue to be an annual show for the foreseeable future. The reasons include: conferees purchase instruments every year and Pittcon is the most valuable vehicle whereby they can evaluate the various products and make their purchase decisions in a most productive environment; Conferees come to Pittcon for the educational experience and the once-a-year opportunity to interact with other scientists and network with their peers and colleagues; and Pittcon has approximately 1,000 exhibitors as our customers. Each of these companies has a different product development and marketing cycle. For some, Pittcon is their main exhibiting event and it would be a disservice to these customers to hold a biannual event. Obviously, each exhibitor and conferee makes a decision each year to attend based on purchasing needs, educational needs, location, introduction of new products and marketing cycle. However, we believe it is in the best interest of the vast majority of our community to continue to host Pittcon annually."

The Theme for Pittcon 2012 is 'Get Connected'. "Our goal is to foster the communication onsite in Orlando and long afterward through social media," said Jon N. Peace.

Pittcon 2012 will be held at the Orange County Convention Centre, Orlando, Florida, from 11-15 March.

Business Spotlight

In December 2010 **Thermo Fisher Scientific** and **Dionex Corporation** announced that their Boards of Directors have unanimously approved a transaction under which Thermo Fisher would acquire all of the outstanding shares of Dionex. A spokesperson for Thermo Fisher advised that the integration planning is well underway and once complete it will create a leading chromatography offering by adding Dionex's ion and liquid chromatography portfolio to Thermo Fisher's existing chromatography capabilities. The acquisition will improve performance and productivity for customers by combining Thermo Fisher's leadership in mass spectrometry with Dionex's leading chromatography offering while also strengthening the software growth platform by combining Dionex's Gold Standard Chromatography Data System with Thermo Fisher's leading laboratory information management systems. The Company's presence in attractive applied markets, including environmental analysis, water testing and food safety will be expanded and Thermo Fisher's footprint in China and other growing Asia-Pacific markets will increase.

Marc Casper, CEO of Thermo Fisher

"We believe the combination of Thermo Fisher and Dionex is extremely compelling from a technology, market and financial perspective," said Marc N. Casper, President and Chief Executive Officer of Thermo Fisher. "The transaction is consistent with our strategy of accelerating growth by increasing our depth of capabilities to serve attractive end markets. Specifically, it complements our strong presence in China, where we've established the headquarters for our global environmental instruments business and continue to build our commercial infrastructure to meet the needs of customers in growing water quality, consumer safety and life sciences markets."

Frank Witney, President and Chief Executive Officer of Dionex, added: "Thermo Fisher's commitment to innovation will fuel our ongoing technology development, and their global manufacturing and commercial presence will significantly strengthen our ability to deliver quality products and services to our customers around the world."

When asked if Pittcon provided a valuable return for Ocean Optics, **Rob Morris, Marketing Director**, said: "We had a very successful Pittcon 2011, with nearly double the leads from the prior year and great interest across a wide range of products. My observation is that people seem much more amenable to shopping around this year than last, and there was good energy in the hall and on the floor.

Atlanta is a good convention town, but I'm not sure how the location may have contributed to the show's success; we've done well in Chicago and Orlando in the past. Pittcon is no longer our number 1 show – for our business, Photonics West has become more important – but it's still a major event on our schedule. We'll be celebrating our 20th anniversary in 2012 and we're from Florida, so we're looking forward to Orlando next year."

"Being able to attend one of the world's largest annual conference and expositions for laboratory science, gives Endecotts a great way to meet distributors and customers. It is an opportunity to discuss market potential, share experiences and explore new ideas. The show enables us to highlight our product range, especially new products," said **James Townsend, Managing Director, Endecotts**

Business Spotlight

Grace Davison Discovery Sciences announced the opening of a new technical service Knowledge Centre in Southern India for customers in the pharmaceutical and biotechnology industries.

The new facility is located in Genome Valley (close to Hyderabad), a growing biopharmaceutical area with more than 100 biotechnology companies and major generic pharmaceutical manufacturers.

The Knowledge Centre was opened to support Grace's customers in the areas of laboratory separations, bulk purification, excipients and pharmaceutical intermediates. Grace's expertise in these areas ultimately assists pharmaceutical companies to bring potentially life saving medications to market sooner.

"To better meet our customer demand, we are geographically expanding where it will benefit our growing client base the most," said Joanne Green, Vice President and General Manager of Grace Davison Discovery Sciences. "We continuously strive to improve our technologies, products and services. The new facility is part of our strategy to build on our footprint in the region and to position for further expansion in the future."

The centre will serve as a resource for Indian customers, as well as being an Asia Pacific support hub for the region. In addition, it will be a global Knowledge Centre for product development and applications support for Grace Davison Discovery Sciences. Other services provided will include customer training, validation and testing for a variety of products and product demonstrations. The new centre complements existing application laboratories in the United States, Europe and China.

The centre is one of several recent additions to Grace's global presence to meet a variety of customer needs. In the last seven months, the company has opened new facilities in Chongqing, China and Hai Duong, Vietnam, and completed the acquisition of a manufacturing company in Wuhan, China. In addition, at the end of 2010, Grace began expansions at existing manufacturing facilities in Sorocaba, Brazil and Kuantan, Malaysia.

Dr Thorsten Thiel, Bruker Director of Marketing Communications, had this to say about Bruker's future plans: "Bruker will continue every odd year to promote its latest innovations at Pittcon based on a large booth presence identical to what we had in Atlanta - next time in 2013 in Philadelphia. In even years, Bruker will showcase its expanded product portfolio using a large booth at Analytica in Europe. In these even years, Bruker will have a relatively small booth at Pittcon but will continue to host a press conference."

Mike Travers, VP Marketing & Sales at VHG Labs believed Atlanta to be a ggod choice of location: "The 2011 show was the most productive Pittcon event that we have attended in recent years. I believe that it was a good decision to bring the show back to Atlanta after a long absence. I would like to see Pittcon expand its list of host cities to include: Anaheim or San Francisco and Las Vegas. By expanding west of the Mississippi, Pittcon could increase its ability to attract visitors from the western US, western Canada, and possibly Asia. Additionally, VHG chose to be located in the ICP Aisle, which affords visitors the opportunity to meet with a concentrated number of exhibitors offering complimentary products without the need to walk the full show. We believe that by locating in the ICP neighborhood we increased both the quality and quantity of our leads.

We make a point of introducing our latest innovations at Pittcon. We strive to bring something new for users of both aqueous and metallo-organic calibration standards. We are already starting to consider what we might bring to Pittcon 2012."

Analysis Equipment of Outstanding Quality

Endecotts presented a variety of their sieves and shakers at Pittcon 2011. Endecotts sample analysis equipment is used in more laboratories worldwide than products supplied by any other manufacturer.

The company offers a wide range of sieves with different sizes, depths, choice of materials and certified degrees of inspection to meet every National and International standard and virtually every specification, including ISO 3310 and ASTM E-11.

Endecotts test sieves not only look good but also are designed and manufactured to offer qualities that make them extremely precise and accurate whilst offering good handling, nesting and strength. Whether it's a standard test sieve, or something special for industries such as diamond, coffee or agriculture you'll find the same meticulous quality in design and manufacture.

The company's expertise in sample analysis has enabled them to develop a wide range of shakers suitable for all types of sieving and samples - shakers designed to produce the optimum sieving action for fast reproducible results. They also produce sample preparation equipment and sample dividers and can supply everything from sample collection, milling and drying equipment to moisture analysis and viscosity testing equipment. With agents and distributors in over 80 countries worldwide, Endecotts can quickly supply a wide range of high quality sample analysis products to their customers around the globe.

Circle no. 77

Mini GC Gets Pittcon Recognition

Pittcon 2011 brought a second year of great recognition for **Forston Labs**. In 2010, Forston introduced their Lab Navigator, a portable, hand-held analytical toolset. This won a Top 10 Editor's choice for this small company in its first year of operation. For the 2011 show, Forston introduced the Forston/Seacoast Mini GC as an addition to its suite of sensors and other portable analytical devices. This combination brought Forston not only a Reader's Choice award for chromatography systems, but an honorable mention from the Pittcon people as well.

Forston's Mini GC packs the power of a gas chromatograph in a 6"x7"x4" cube weighing less than 5lbs. Communicating with Forston's hand-held LabNavigator, test results from the GC along with up to 5 other sensors and a GPS unit can be easily integrated for immediate answers in field applications as well as uploaded periodically into a LMS. The technology in the GC has grown from a family of sensors used in military applications and it is particularly suited for volatile organics. Forston is also working on designing applications within the food and beverage industries as well as mining and agricultural uses. Both Seacoast and Forston were met with great excitement from the attendees of Pittcon, due to the GC's size, flexibility and capabilities. While the LabNavigator is currently confined to the US market, the Forston GC with its supporting software is available internationally.

Circle no. 78

P S Analytical Revisits Pittcon

PS Analytical continues to focus its attention both on the application of its products for determining mercury and also on the more fundamental aspects of the science. The conference poster session included five contributions form PS Analytical's research team in association with academic groups around the world. The titles of these posters clearly illustrate the range of PS Analytical's research interest: Antimony speciation in sweeteners using liquid chromatography hydride generation atomic fluorescence spectrometry (HPLC – HGAFS); Mercury speciation and total mercury in fish and seafood products; Online determination of mercury in sour natural gas streams; Online measurements of arsenic and mercury using atomic fluorescence spectrometry; and speciation of inorganic arsenic in food by hydride generation atomic fluorescence spectrometry with online ultraviolet (UV) digestion (HPLC-UV-HG-AFS). PS Analytical's products range from laboratory applications to fully-fledged process analysers that fulfil industry needs including safety requirements.

PS Analytical plays a full part in the development of international standards and has also worked closely with the National Physical Laboratory to develop the vapour pressure equation for mercury measurements. Specifically the team have reliably determined the uncertainty of these measurements; thereby strengthening the value clients can place on the mercury measurements as determined by PS Analytical's atomic fluorescence spectrometry instrumentation.

Circle no. 79

Portable Dynamic SPME Air Sampler

Torion Technologies Inc showcased their new AIRION-3 portable dynamic air sampling system at Pittcon 2011. The AIRION sampler is a new SPME-based portable dynamic air sample collection system. It is designed to collect air samples on Torion's CUSTODION® SPME Syringes for analysis on Torion's person portable GUARDION® GC-TMS or any other commercial GC or GC-MS system. The AIRION-3 is portable, reliable and easy to operate. The A-3 weighs less than 2lbs, is palm portable and battery powered. It can be used to collect gaseous samples in the field, laboratory, and other locations of interest where fast sample collection and analysis is important.

The AIRION-3 is palm portable at 1.8lbs (0.82Kg) and a size of 4.2" x 2.3" x 6.8" w x d x h (107 x 58 x 173mm). It is powered by a rechargeable battery and can be operated for sample collection for up to 27hrs at 1L/min flow rate in a single charge. Variable flow rates from 5mL/min up to 5L/min are possible. The AIRION-3 case is a high impact steel fibre filled Lexan that is antistatic and RFI/EMI-shielded. The diaphragm air pump unit features an LCD display with 2 lines of 16 characters for easy programming and viewing of sample collection parameters. The air sampling manifold is a proprietary design and fabricated with inert materials for preservation of sample integrity. The manifold accommodates easy insertion of the Torion's novel CUSTODION® sampling syringes for collection of target analytes onto a solid phase micro extraction (SPME) fibre. Sampling duration and timing are programmable and feature control of elapsed time, flow rate, and accumulated volume. The AIRION-3 can be linked to a PC via an RS232 COM port for programming and downloading sampling parameters and data. The coupling of the AIRION-3 PDAS with Torion's new person portable GUARDION® GC-TMS provides the user with powerful tools for collecting and analysing air samples in the field.

Circle no. 80

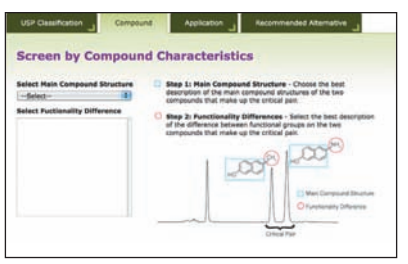
Pipetting Flexibility in a Small Footprint

Hamilton Robotics has added the NIMBUS iProbe to its line of compact liquid handling workstations. The new NIMBUS iProbe features up to four independent channels that can be configured with any combination of 1ml or 5ml pipetting heads. This instrument provides flexible pipetting choices to and from microplates or tubes in volumes from 1 µl to 5,000 µl. NIMBUS iProbe performs a wide range of liquid handling steps such as tube-to-tube, tube-to-plate, and plate-to-plate transfers including pipetting from non-standard labware. The flexibility offered by independently spaced channels is ideal for hit picking and sample prep from tubes, and the 5ml capability enhances high-volume applications such as vacuum-based solid phase extraction. The NIMBUS iProbe includes a new, intuitive graphical user interface that facilitates simple instrument programming.

The NIMBUS iProbe represents an extension of the NIMBUS line. The original NIMBUS 96-channel system has established a strong track record as an affordable, small footprint automation platform for microplate applications such as plate replication, serial dilutions and reagent additions. The NIMBUS 96 and iProbe feature a high-density deck layout in a footprint small enough to fit into a laminar flow hood. Both NIMBUS systems incorporate Hamilton's unique air-displacement pipetting and CO-RE (compressed O-ring expansion) technology for high precision and accuracy. NIMBUS platforms offer capacitance liquid level detection (cLLD) along with labware gripping, plate stacking, heating/shaking, vacuum filtration and magnetic separation options. A range of third-party devices can be integrated on and off the deck.

Circle no. 81

Reversed Phase LC Column Selection Tool and Online Application



Phenomenex, Inc introduced the Reversed Phase Column Screener at Pittcon 2011. This is a resource that helps chromatographers select the most effective HPLC or UHPLC column for their methods from the company's extensive offering. Phenomenex provides a wide range of reversed phase columns, including flagship brands Kinetex®, Gemini-NX®, Jupiter®, Luna®, Synergi®, Axia™ and Onyx™. Based on decades of customer support and research, the Reversed Phase Column Screener allows users to search by compound characteristics, pharmacopeia classification, column used, or application. The comprehensive tool provides a convenient way to reference and access application notes on the Phenomenex web site. The Screener can be accessed online at http://www.ColumnMatch.com, where a hard copy may also be requested.

When the chromatographer enters compound characteristics, the Screener will provide primary and secondary recommendations for fully porous particle columns with complementary selectivities, and a core-shell particle option for ultra-high performance. Recommended mobile phase starting conditions are also provided. Users in the United States can order columns directly from this site. Chromatographers who search by application will find a range of options including amino acids, food additives, veterinary drugs and steroids. Once a relevant application has been identified, a complete method note is provided. Users may also search by USP classification to determine which columns they can use to stay within method guidelines.

Circle no. 82

UHPLC+ Solutions for Inverse Gradient

Dionex Corporation was pleased to announce the release of the UltiMate® 3000 x2 Dual UHPLC+ Solution for Inverse Gradient to achieve a uniform response in liquid chromatography with charged aerosol detection (CAD®). The application of the inverse gradients allows quantification of compounds even if there is no standard available for them and before the elucidation of their chemical structure. In this solution, the Dionex Corona® ultra™ detector or the newly introduced Corona ultra RS detector provides nearly universal response for nonvolatile and some semi volatile analytes and is also fully compatible with the high analysis speed of the UHPLC+ system. This turnkey solution provides isocratic conditions even when running gradient chromatography. The unique UltiMate 3000 x2 system applies the inverse of the analytical gradient after the column, but before the Corona detector. The effect of this is to provide consistent response of all non-volatile analytes (and some semi-volatile analytes) independent of the chemical structure of the analytes and of the analytical gradient used. With a consistent response, unknown compounds can be quantitated either through their relative area, or by using a generic response curve of a known analyte.

The new Corona ultra RS detector includes features that enhance the usability and extend application use, such as an on-board switching valve that allows the detector to be used independently of other detectors, without the need for system reconfiguration. The same valve can be used to divert unwanted components from samples. An optional variable ratio flow splitter is available to make it easier to use the CAD in parallel with MS without compromising resolution. The Corona ultra RS detector is fully compatible with HPLC and UHPLC methods and provides a consistent response independent of the molecule's chemical structure for nonvolatile and some semi volatile analytes with or without a chromophore. The UHPLC+ Solution for Inverse Gradient kit includes all necessary fluidic parts for inverse gradient including the unique Dionex Viper™ and nanoViper™ fingertight connectors for zero dead volume connections. The enterprise ready Chromeleon® Chromatography Data System (CDS) software version 7.1 with its unique eWorkflows tool supports the perfect match of the two combined gradients independent of the separation column volume resulting in a solution with the highest operational simplicity possible.

Circle no. 83

The New Energy Dispersive X-ray Fluorescence Spectrometer

The new EDX-LE from **Shimadzu Scientific Instruments** is an energy dispersive X-ray (EDX) fluorescence spectrometer designed specifically for screening elements regulated by RoHS/ELV directives. Its automated analysis functions improve operability without sacrificing a high level of inspection reliability. The EDX-LE is equipped with a detector that does not require liquid nitrogen, thereby achieving lower operational costs and easier maintenance. It has been optimized for the RoHS/ELV screening of materials, individual parts and other samples that are substantially homogenous. The spectrometer is suited to screening a limited range of samples for fixed control criteria. The time required from start of measurement to judgment is as short as one minute for some samples. This is very helpful in screening inspections for the five elements (Br, Cd, Cr, Hg and Pb) regulated by the RoHS directive.

Additionally, the EDX-LE offers various features that promote simple screening. Users can customise the easy set-up functions according to the management method. Threshold values can be set for each material or element, and the screening judgment also can be changed according to the input method used for threshold values. The EDX-LE provides improved security for software operations. The condition protection function lets users set restrictions for screening conditions and other settings. The spectrometer also features an automatic X-ray tube aging function to prevent malfunction in systems that have not been used for long periods of time.

Circle no. 84

Business Spotlight

Tan Surakanpinit

In order to support a growing customer base in South East Asia in the fields of automated sample preparation for GC/MS and LC/MS analysis, **Gerstel** has founded a wholly-owned subsidiary in Singapore: Gerstel Limited Liability Partnership (LLP). Gerstel already has subsidiaries in the US, Japan and Switzerland. In a further 70 countries worldwide, Gerstel is represented by carefully selected and fully trained distributors. Gerstel LLP will be run by Tan Surakanpinit. Ms Surakanpinit brings extensive international experience in the chromatography laboratory instrumentation business into her new position and her responsibilities will include supporting distributors and developing new business opportunities in the Asia Pacific Territories, including Singapore, Malaysia, The Philippines, Taiwan, Vietnam, Thailand, Australia and New Zealand.

Furthermore, in order to support a growing customer base in Latin America, Gerstel has established an office in Sao Paolo, Brazil. Gerstel Brasil will be run by Alberto E. Aguilar-Sartori, Regional Sales Manager Latin America. Mr Aguilar is supported by Mrs Patricia Ballard, Service and Applications Specialist - Latin America.

Chromatography leader **Waters** said technology advances are more important than acquisitions. The firm's last major acquisition was the 2009 purchase of supercritical fluid chromatography specialist Thar Instruments. Waters used Pittcon this year to showcase the first Thar instrument, a sub-2-µm-particle ultra-performance chromatograph, to be sold under the Waters name.

When asked about the quality of leads generated through Pittcon attendance, **Jeremy Warren, Chief Executive at NanoSight**, said: "We exhibit at perhaps 25 trade shows annually, this was our sixth Pittcon. Counter to an undercurrent of the widely held view that large shows like this have had their day, this was a pretty successful Pittcon for NanoSight. We had Zeta Potential to launch and the booth traffic was good. Of the 140 leads we scanned around 50% were distributors, where we are already well served, but the remainder had a good spread of potential users. Our discussions with competitors and potential collaborators were also productive, and are an important part of Pittcon as an industry meeting place. As always the press representation is strong and for us this was one of the best features this year. Atlanta works better than Orlando, but we do plan to return in 2012."

"Pittcon attendance held steady at comparable levels to the past few years, and exhibition floor activity was good. It's a good show for our comprehensive line of syringes and hand-held pipiettors, and we saw a lot of interest in our MICROLAB 600 semiautomated diluter/dispenser, which has many applications in routine lab work. We continue to see market excitement about our compact and affordable NIMBUS automated liquid handling workstations, because they can do so much in a small footprint. Other advancements that we showcased in our booth included our new superhydrophobic tips and the new automation-friendly FlipTube. Advancements in these automation accessories can still make a huge difference in throughput and contamination reduction, and these products generated a lot of sales leads at Pittcon. This conference will continue to be an important part of our tradeshow mix as we look ahead to future years," said **Rick Luedke, Marketing Manager, Hamilton Robotics.**

Business Spotlight

AB Sciex and **Alturas Analytics, Inc** took the opportunity at Pittcon to announce collaboration to accelerate the adoption of dried blood spot (DBS) analysis for drug discovery and development. This analysis is designed to help pharmaceutical companies save costs and increase productivity by simplifying the collection, storage and shipment of samples for pre-clinical and clinical studies in the drug development process.

As part of the collaboration, scientists at Alturas are using QTRAP® 5500 technology from AB Sciex as well as novel micro-flow chromatography technology from Eksigent to further develop novel workflows based on microflow LC/MS for dried blood spot analysis and validate them to ensure they meet Alturas' Quality Assurance requirements. The new workflows are designed to require smaller sample volumes and provide sensitivity and low coefficient of variations. Compared to traditional bioanalysis, dried blood spot analysis requires fewer animals during preclinical trials and less blood drawn during clinical trials. With this approach, scientists can obtain the same or better information than currently possible with traditional sampling techniques.

The viability of dried blood spot analysis in pharmaceutical science is enhanced by dramatic increases in sensitivity, which is available with the combination of the AB Sciex QTRAP® 5500 System and the Eksigent ExpressHTUltra LC system. The AB Sciex QTRAP® 5500 System merges high sensitivity and speed on a platform that integrates quantitative and qualitative analysis, representing a more versatile type of triple quadrupole than other systems. The Eksigent system provides the advantages of high pressure micro-flow LC/MS and ease of operation.

The new workflows that Alturas scientists are developing for use across the industry utilise MRM3 capabilities - uniquely available on the QTRAP system - eliminate the interference traditionally associated with dried matrix spot analysis, help expand the limits of quantitation and improve selectivity to a level required by drug discovery scientists. The high performance of the AB Sciex as well as the power of the Eksigent system, also reduce the time needed to conduct analysis, boosting productivity.

"AB Sciex continues to push the limits in the development of new workflows that add value for our customers. The combination of our leading technology with Alturas' expertise and the Ekisgent technology creates a new value proposition that is unmatched in the industry," said Dave Hicks, Vice President and General Manager of the Pharmaceutical and Academic Business, AB Sciex.

EXHIBITORS COMMENTS

"Pittcon 2011 in Atlanta marked the first opportunity for a large part of the scientific community to see Agilent's greatly expanded portfolio of instruments and consumables post Varian acquisition. Agilent's presence at the conference and trade show reflected this with the biggest booth of any exhibitor by far. Visitors could inspect and learn about systems for nuclear magnetic resonance spectroscopy, molecular spectroscopy, X-ray diffraction, dissolution and vacuum technology in addition to traditional Agilent GC, LC and mass spectrometry systems, software, services and consumables. One highlight of the exhibit was the handheld FT-IR spectroscopy system from the more recent acquisition of A2 Technologies.

The overarching message delivered by executives and staff members working the booth is that Agilent is a bigger, better company because the recent acquisitions complement the existing product lines, and strengthen the company's ability to continue to outgrow the marketplace. For the first time ever, Agilent used social media at Pittcon. The AgilentChem Twitter account was projected on a large monitor with more than 100 tweets posted during the show about upcoming technical presentations and posters, giveaways, new products, and more. The booth also was set up as a venue in the geolocation apps Foursquare and SCVNGR so customers could use their smart phones to check in, complete challenges, and win prizes," said **Eric Endicott, Global Public Relations Manager, Chemical Analysis & Life Sciences, Agilent Technologies.**

New Density Meters

At this year's Pittcon, **Krüss** presented their new density meter series DS7800 and DS7900. The self-explanatory touch-screen and intuitive handling makes these new density meters a real highlight in daily laboratory use. Data can easily be transported to a workstation via Krüss LabSoftware – on a users computer they will see a similar screen as on the device itself. The DS7900 has a measuring range of 0.00000 – 1.99999 g/cm³ with an accuracy of 0.00005 g/cm³. The DS7800 operates within 0.0000-1.9999 g/cm³ and its accuracy is 0.0001 g/cm³. A built-in Peltier thermostat ensures a precisely regulated temperature with a repeatability of +/- 0.02°C. The density meter possesses a calibration certificate in accordance with N.I.S.T. density standard. It's particularly suitable for application fields in the GLP/GMP range. Individual user management with separate passwords can be programmed.

The devices can be used in a widespread range, for example, determination of mixing ratios, quality and quantity controls. Operational areas are within in the chemical industry, pharmaceutical and cosmetics industry, breweries and beverage manufacturers, sugar and sweet material industry, pulp and paper industry, electronic industry, petrochemical industry and waste water management.

Highly precise density measurements can now be accomplished fast and simple at low sample costs – an ease of work and an improvement of results at the same time. "This year's Pittcon was even more important to Krüss than the previous shows. We had our new density meter on display, which attracted many visitors to our booth. Joining us in our booth was Frank Brombley, who is in charge of our North American campaign. The campaign was launched at this Pittcon exhibition. During the next 2 years, Frank is going to build up a distributor network as well as our new branch Krüss USA. Our visitors gave us positive feedback on the idea of being able to buy Krüss products directly in America. We are very excited to see where we stand in two year's time from now," said Sigrid Winecki, Marketing Manager, A. Krüss Optronics.

Circle no. 85

Innovation in Colour Measurement at Pittcon

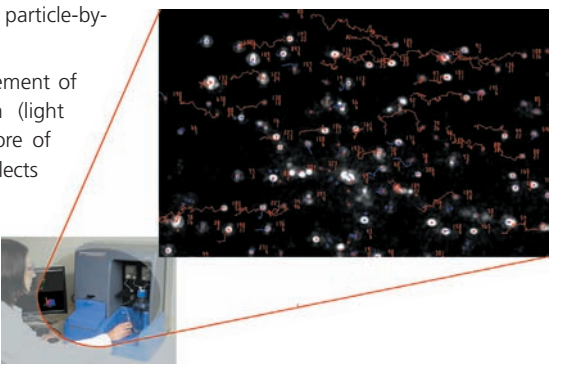
The **Lovibond®** stand at Pittcon 2011 showcased two new exciting developments to the industry: a technical concept that is already saving time, cost and the environment; and a newly introduced Non-Contact Spectrophotometer for the colour measurement of traditionally hard-to-measure products. With Lovibond® PFXi instruments now installed, users are already benefiting from the capabilities of Remote Calibration and Management via Internet (RCMSi). Regular servicing and checking of instruments against calibration standards ensures correct operation and compliance but, historically, instruments were returned to service centres: involving time, shipment costs and environmental impact.

RCMSi eliminates this need. Users can calibrate the instrument on-site yet still receive an authoritative Certificate of Calibration from an ISO17025 / ISO9001:2008 certified facility. Measurements are taken in the field and communicated to a secure server at the Lovibond® facility where software remotely monitors the calibration process. Successful results and a Certificate of Calibration are then communicated electronically to the user. The new Lovibond® NC45 Non Contact 45/0° geometry benchtop spectrophotometer drew great interest from the crowds specifically from the food industry where ingredients and products are particularly difficult to measure: samples such as powders, pastes, gels and sauces.

Previously, such samples required protection from physical contact and would need to be prepared for measurement, for example, by being pressed behind glass. The NC45 enables sample measurements from a distance, eliminating any surface distortion. Now powders, pastes, gels and sauces can be measured in their natural, unaltered state, as the eye sees the sample.

Circle no. 86

The Most Versatile Tool for Nanoparticle Characterisation Now with Added Benefits



NanoSight debuted the Zeta Potential Analysis applying Z-NTA, particle-by-particle characterisation of surface charge, at Pittcon.

Zeta Potential Nanoparticle Tracking Analysis (Z-NTA) adds measurement of surface charge to simultaneous reporting of size, composition (light scattering intensity), fluorescence and count. As with NTA, the core of NanoSight's world-accepted nanoparticle measurement systems, it collects data on a particle-by-particle basis. No other methodology comes close to providing such simultaneous, multiparameter nanoparticle characterisation.

Zeta potential is measured particle-by-particle, simultaneously for the complete sample population to provide data that is number weighted not intensity weighted. Size and light scattering intensity are also reported. Polydisperse and complex suspensions are readily characterised. No labelling is required but a fluorescence mode option is available to further differentiate suitable-labelled sub-populations. All data sets are validated by real time observation of particles moving under both electrophoretic and Brownian motion.

The user benefits are clear to define. Variations in zeta potential with size are analysed with positively and negatively charged particles being reported separately even when they exist together. Sub-populations of similar sized particles of different materials, differentiated by their propensity to scatter light, are separately reported and counted. As with size distribution measurement, changes in Zeta Potential distribution with pH, concentration and temperature may be studied. Similarly, aggregation and flocculation may be studied quantitatively in real-time. Suitable labelling can highlight one sub-population for analysis despite high background noise. With applications transcending the life sciences through the materials sciences, NanoSight have installed more than 300 systems worldwide as NTA-based characterisation becomes increasingly accepted as the technique to quantitatively study nanoparticles.

Circle no. 87

Particle Characterisation System Attracts Attention at Pittcon

Malvern Instruments new Morphologi G3-ID particle characterisation system was on show at Pittcon 2011. Visitors to the Malvern booth were able to learn about the early access program for the system through which potential users can find out more about the technology and its applications. Combining automated particle size and shape analysis with chemical identification using Raman spectroscopy, the Morphologi G3-ID allows you to automatically target particles of interest for chemical identification, enabling the rapid characterisation of sparsely dispersed materials. Suitable for particles from 0.5 µm to 10mm, the Morphologi G3-ID enables characterization of hard to tackle samples in a few simple steps. Its many applications include: determining the chemical composition of powder blends and granules; measuring the API particle distribution of one component in a mix; chemical identification of foreign particle contaminants; and ascertaining whether a particle contains single or multiple chemical components. "We had a good Pittcon, as judged by most measures, and certainly reaped the rewards of our pre-show communications efforts in encouraging visitors to our booth," said Randy Byrne, VP-Marketing at Malvern Instruments Inc. "There was a tremendous amount of enthusiasm around Malvern's newer particle characterisation offerings based on imaging technology, and the new Raman spectroscopy option for chemically identifying specific particulates. This interest in our Morphologi G3-ID imaging system with chemical identification helped our booth traffic surpass even some of the most well attended years of Pittcon, exceeding our expectations."

Circle no. 88

Supplies Program for Major Gas Chromatography Instrument Brands

Agilent Technologies, Inc introduced the Agilent CrossLab supplies portfolio, providing high-quality supplies for major brands of gas chromatography systems. Benefits include boosting lab productivity and performance while consolidating purchasing to reduce administrative burdens. "With Agilent CrossLab, our customers can now access supplies backed by Agilent innovation and 40 years of chromatography know-how, for multiple instrument brands," said Cikui Liang, Business Manager, Agilent Chemistries and Supplies Division. "Customers can streamline how they select and purchase GC supplies while enjoying Agilent's commitment to product quality, technical support and product availability."

The growing Agilent CrossLab portfolio is manufactured to perform seamlessly with GCs from Bruker, Varian, PerkinElmer, Shimadzu and Thermo Scientific. Products include Agilent's innovative Ultra Inert inlet liners for active compounds, plasma-treated non-stick liner O-rings and inlet septa, autosampler syringes, autosampler vials, capillary column ferrules and column nuts, to name a few. The CrossLab portfolio complements lab resource management and multivendor services from Agilent by increasing lab productivity and providing a single source for solutions.

Circle no. 89

Improved Supercritical Fluid Extractor

Supercritical Fluid Technologies (SFT) introduces a new bench top supercritical fluid extractor (SFE), the model SFT-110XW. This latest addition to the SFE product line builds upon the strengths of its popular predecessors, the SFT-100 and SFT-100XW. The completely redesigned restrictor valve with integrated micrometer allows for very precise flow control, which is essential for demanding applications. A completely removable oven lid and large side panel allow the user easy access to the high-pressure vessel(s). An indicator light on the SFT-10 pump module alerts the user to proper operation of the Peltier pre-cooler, ensuring CO_2 is maintained in the liquid state. A robust outlet from the restrictor ensures that users will not accidently damage the outlet tube when inserting it into the collection container. Extraction vessels up to 500ml, single or dual configurations, afford maximum versatility.

Supercritical fluid extraction has become a popular alternative to traditional extraction methods that use organic solvents. Fast, efficient extraction of a variety of materials may be achieved using supercritical carbon dioxide. The SFT-110XW SFE is well suited for both research and process development applications. Precise control of temperature, pressure, and flow rate is essential for successful, reproducible extractions. The use of dual sapphire syringe pump technology, integrated pre-heaters, and precise flow control provides the precision required to achieve these goals. Process parameters developed in the laboratory are the key to the successful scale-up to pilot or production scale equipment.

Circle no. 90

Updates Ensure Faster and More Efficient Data Reporting in Laboratories

Artel launched version 3.3 of its Pipette Tracker™ software. Tightly integrated with the Artel PCS® (Pipette Calibration System), Pipette Tracker provides a total management system for quality control of any pipette population. The updated software brings even more convenience to laboratories by proactively notifying quality control managers and laboratory technicians through email when pipettes are due for calibration and/or preventive maintenance. The updated Artel Pipette Tracker software provides more tools to analyse pipette calibration and maintenance records, making it easy to identify poor performance trends early on. The software allows laboratories to set action limits, which will alert users when a pipette is nearing its individual performance specifications, allowing preventive maintenance to be performed before pipette failure occurs. All calibration data is collected directly from the Artel PCS and stored in secure databases, facilitating easy report generation and compliance with Title 21 of the Code of Federal Regulations (CFR) Part 11, which defines the criteria under which electronic records and electronic signatures are considered to be trustworthy, reliable and equivalent to paper records. Aside from the usability updates, the Artel Pipette Tracker version 3.3 is also faster and able to manage larger pipette inventories than earlier versions. In addition to recording each pipette's calibration data from the PCS, Pipette Tracker version 3.3 maintains information on each preventive maintenance or repair event. This allows the laboratory to generate a complete history of calibration and maintenance data for each pipette with the click of a button, and receive early warnings if a pipette approaches its tolerance limits. The pipette calibration data can be analysed in a variety of ways to generate customisable reports, including plotted graphs for easy visualisation of the data. Pipette Tracker makes it possible to manage pipettes of any volume range with, including large-volume pipettes. This feature allows the user to manage the entire pipette population of an organisation in a single software program.

Circle no. 91

Business Spotlight

David Nislick, Chief Executive Officer, Excelitas Technologies

With a continued focus on delivering innovative, customised technology products and solutions to its global commercial and defense customers, the former Illumination and Detection Solutions (IDS) business of **PerkinElmer** was formally re-launched at Pittcon 2011 as **Excelitas Technologies Corp.**

Now owned by private equity firm Veritas Capital, Excelitas Technologies has 3,000 employees, manufacturing operations in the US, Canada, Europe and Asia and projected 2010 revenues of over $300 million. The company will continue to support original equipment manufacturer (OEM) and aftermarket customers across a diverse range of specialty markets including: medical, analytical instrumentation, clinical diagnostics, industrial, safety and security, and aerospace and defense.

"We are proud to be launching Excelitas Technologies and under the new ownership of Veritas Capital, we anticipate even stronger support for the innovation and growth initiatives that are envisioned to accelerate value creation for all of our stakeholders," said Chief Executive Officer, David Nislick.

"On behalf of Veritas Capital and our Limited Partners, we are very excited to be associated with Excelitas Technologies and its 3,000 employees around the world. The company has a long tradition of innovation and excellence in providing solutions to its customers and we look forward to continuing that tradition in the years ahead," said Bob McKeon, Founder and Managing Partner of Veritas Capital.

Excelitas Technologies offers customers deep applications expertise along with a broad portfolio of cutting-edge technology solutions including Xenon-based lighting, LED-based lighting, Thermal Infrared Detectors, Low Light Level Detectors, Emitters, High Reliability Power Sources, Energetic Safety Systems, and Precision Time Standards.

Phenomenex, Inc and **Shimadzu Scientific Instruments** announced at Pittcon a marketing collaboration for LC and GC systems. Under the terms of the agreement, Shimadzu systems and Phenomenex columns will be offered together in a complete solution in the United States.

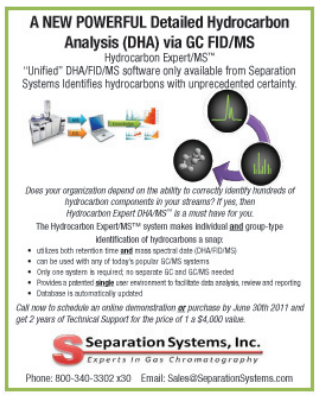
As part of the Total Solutions Program, purchasers of Shimadzu analytical scale HPLC, UHPLC, LCMS or GC/GCMS systems will be given a Phenomenex welcome package that includes a technical consultation to evaluate the application and determine which complimentary column to select from among the company's many brands including Kinetex®, Lux® and Luna® for LC and Zebron™ for GC. LC system users will also receive a Phenomenex SecurityGuard™ column protection system to protect and extend the life of the column, along with a column selection tool, technical notes and application-specific trouble-shooting guide. GC system buyers will receive a column selection guide along with technical notes on GC method development and accessories.

"This total solutions program brings two leading companies together to serve the customer with top-of-the-line products that work together," explained Doug McCrory, Vice President of Phenomenex. "A perfect example of this is utilising Kinetex core-shell technology on a Nexera UHPLC system to produce efficiencies unmatched in the industry."

"We are pleased to combine the instrument and chromatographic media technologies of the two companies to better serve our customers," said Kiyoshi Kawamoto, Vice President, marketing of Shimadzu Scientific Instruments. "Both Phenomenex and Shimadzu are dedicated to research, innovation and customer satisfaction, so it's a good fit."

"The energy on the Pittcon show floor was high this year and we were glad to see that attendance remained stable. All of our workshops were very well attended and our sales leads were on par with last year. There was a high level of interest in the application of our relatively new Kinetex core-shell columns. We saw a particularly high level of interest in analytical solutions for the Gulf oil spill situation, perhaps in part because we had a poster on this topic. Visitors to our booth and workshops were also looking closely at our Strata line of SPE sorbents, as there seems to be more and more interest in sample preparation," said **Karen Brauneck, Corporate Communications Manager at Phenomenex.**

New Aromatics and Saturates Analyser



Separation Systems, Inc is proud to introduce a powerful new analytical system to simultaneously determine both the physical and chemical characteristics of petroleum streams with a boiling point range of 200 - 11000 F (121 – 5930C). The system utilises a proprietary programmable sample inlet, GC/FID and GC/MS along with the company's industry leading SimDis Expert® (v.9) simulated distillation analysis software.

Samples are introduced to the inlet and then homogeneously passed onto a high performance capillary column. The sample components eluting from the column are then precisely split utilising novel micro-fluidic technology and directed to the FID and MS detectors; simultaneously. Through the use of the ASA Expert (Aromatic Saturate Analysis) functionality embedded in the SimDis Expert® software, sample data is obtained from both the GC/FID and GC/MS data systems and combined into a single 'environment' that dramatically simplifies data acquisition, analysis, review, and report generation. Compositional results are characterised and include: 4 saturates classses, 12 aromatic classes, 3 thiophene classes and 6 aromatic species.

The system eliminates the need to perform any physical separation of the hydrocarbon fractions (ASTM D2549, D2786 and D3239) saving both time and money. Critical cut points and subtle changes in stream composition are quickly determined for faster, better decisions.

Separation Systems, Inc is a highly experienced provider of both turnkey and customised GC and GC/MS analysis systems for the bio-fuels, fossil fuels, petroleum, petrochemical, chemical, industrial gases, and power industries. The privately owned company is located in Gulf Breeze, FL USA.

Circle no. 92

New Multi-Functional EGA/PY-3030D Pyrolyser

Frontier Laboratories Ltd celebrated its twentieth anniversary by opening Frontier Laboratories US, participating in its first Pittsburgh Conference and introducing the Multi-Shot Pyrolyzer EGA/PY-3030D. Frontier Laboratories US will support its U.S. distributors with technical training and applications expertise. The Company's' goal is to ensure that every Frontier customer receives the best instrumentation, the best training and the best after sales care in the industry.

The EGA/PY 3030D pyrolyser is a fourth-generation, multi-functional GC inlet that is used to chemically characterise most liquids and solids. Like previous Frontier pyrolysers, the 3030D utilises a temperature programmable vertical micro-furnace. Every aspect on this evolutionary product has been re-engineered in order to decrease cycle time, simplify maintenance procedures and improve data quality. The 3030D comes with a two-year warranty – a first in the analytical instrumentation industry

The new Multi-Shot Pyrolyzer offers a choice of six analytical techniques: evolved gas analysis (EGA), thermal desorption (TD), reactive pyrolysis (RxPY), single-shot pyrolysis (Py), multi-shot thermal desorption/pyrolysis and heart cutting (HC-EGA). Analytical results from the various techniques can be processed using Frontier's F-Search Polymer Identification software. Four MS libraries are available. The Polymer library matches an unknown using the entire peak profile of the pyrogram, the pyrolysates library searches and matches individual compounds. The EGA library compares the EGA thermogram of the unknown with those in the library. The additives library contains the mass spectra of over 360 additives commonly used in the polymer industry.

Circle no. 93

EXHIBITORS COMMENTS

Kevin McLaughlin Sr. MarComm Coordinator at Shimadzu commented on their booth traffic: "Shimadzu had an excellent experience at Pittcon 2011. Our booth traffic was consistently strong and we generated a significant number of inquiries for our new instruments, including our triple quad LCMS, TOC analysers, and new GCMS. Overall, our lead count was higher than last year and, more importantly, the quality of the leads looks great. Atlanta was a welcome change from the usual rotation of Chicago, New Orleans, and Orlando. Everything was very well organised and easy to get to/from the hotels and convention centre.

Overall, Pittcon remains the largest analytical instruments show in the US and is vitally important to our business. It remains the only show where Shimadzu can display our full breadth of instrumentation to scientists from around the country and the world, and is a great barometer for our business. We certainly plan on exhibiting at Pittcon in 2012. While final plans haven't been made, we expect to maintain the same space as this year."

"Pittcon always provides Lovibond Tintometer with an excellent forum to meet new prospects, discuss on-going projects and network with customers. As a leading, international supplier of colour measurement equipment, we see our solutions being utilised in applications as varied as Petroleum & Oils; through Beers & Malts; to Powders & Pastes; so it can be challenging to find an event that draws so many visitors from such a diverse source. Pittcon addresses this need and 2011 was no exception. The Lovibond® stand attracted guests from the petroleum, pharmaceutical, coatings and chemical industries to name just a few. The introduction of the Lovibond® NC45 was also exceptionally well received by suppliers and manufacturers in the food industry who are looking for the solution to measure awkward ingredients such as pastes, sauces and powders. Pittcon certainly provided the optimal environment to announce this important new product release from Lovibond," said **Marke Reid, Director Sales and Marketing, Lovibond Tintometer.**

A+ Single-Element Standards

VHG Labs (USA) featured its A+ Certified Single-Element Aqueous Calibration Standards. The A+ line has been developed by VHG Labs to provide the highest levels of quality and traceability available today in solution standards. A+ standards offer our customers absolute confidence in their ICP, ICP-MS and AA/GFAA analysis--ensuring the highest possible levels of productivity from their laboratory instrumentation.

Every A+ Standard is prepared from high purity raw materials, acids and 18Mohm DI water. Each is certified using High Performance ICP-AES (HP-ICP-AES), a method developed by the National Institute of Standards and Technology (NIST). This method assures the highest accuracy, with a statistically derived expanded uncertainty and complete traceability to NIST Standard Reference Materials (SRMs). The purity of each of the standards in our A+ line is confirmed by an ICP-MS analysis for trace impurities. VHG Labs is the only manufacturer of spectrochemical solution standards using HP-ICP-AES. As a result, our A+ Standards customers enjoy the highest level of confidence that their analysis will be accurate and precise every time.

VHG Labs also offers a broad range of multi-element aqueous standards that are manufactured from our A+ Single Element Standards so our multi-element aqueous products are just as pure, accurate and precise as our single-element standards. In addition they offer a full line of both single and multi-element metallo-organic standards.

All of the certified reference materials produced by VHG Labs are manufactured in our ISO 9001:2008, ISO Guide 34:2009 facility and certified in their ISO/IEC 17025:2005 facility.

Circle no. 94

The New Person Portable Gas Chromatograph

Torion Technologies, Inc showcased the new GUARDION®, still the world's fastest and most portable capillary gas chromatograph – toroidal ion trap mass spectrometer (GC-TMS) at Pittcon 2011. The new GUARDION GC-TMS features a low thermal mass capillary gas chromatograph (GC) with high-speed temperature programming (>2 °C/sec) and a miniature toroidal ion trap mass spectrometer (TMS) with a nominal unit mass resolution over a mass range of 50 to 500 Daltons. The system is totally self-contained, weighs less than 32 pounds with all accessories, is battery (24 V) operated, and has an on-board helium GC carrier gas supply cartridge (2500 psig, 90cc). The world's smallest self-contained GC-TMS is packaged in a new, specially designed, hardened enclosure with dimensions of 15.0" (wide) x 15.5" (deep) x 9" (high). The GC-TMS features electronic pressure control (EPC) of the carrier gas and an on-board rechargeable battery system for renewable power.

Samples are introduced into the GC-TMS using Torion's novel CUSTODION® SPME syringes. Target analytes in air, headspace, liquid or dissolved solid samples are rapidly trapped on the active coated surface of the SPME fibre, which is mounted in an easy-to-operate injection moulded syringe. The GUARDION GC-TMS provides step-by-step sample injection instructions via the system's 7" LCD colour touchscreen and graphical user interface (GUI). Results are reported in an easy-to-understand tabular format that is displayed on the GUARDION's LCD touchscreen. The GUARDION's on-board firmware controls all GC and TMS system operations automatically without user intervention. However, Torion's PC-based operating CHROMION™ software enables the user to edit the GC- TMS method parameters, calibrate the instrument, and develop target analyte libraries for automated detection and identification of target chemical compounds based on their characteristic retention times and mass spectra. The new GUARDION miniature GC-TMS system is ideally suited for rapid, highly sensitive and selective detection of a wide variety of compounds including, explosives, toxic industrial chemicals, environmental pollutants, food constituents and contaminants, and a variety of other hazardous and non-hazardous substances.

Circle no. 95

Awards end in Tie Break

PITTCON

The Editors Choice Awards is selected by a panel of editors registered at Pittcon and honours the most significant and important technological advancement introduced at the exhibition. The Award, which is presented to the best new products in Gold, Silver and Bronze categories, has become an important feature of the exhibition and provides those awarded with a distinguishable platform to market and further develop their products.

This year was particularly memorable, as a small English firm making its Pittcon debut walked away with bronze, while two privately owned companies shared the top honour – receiving the same number of votes were the Citius LCMS from Leco and the TrueSurface Microscopy Raman Spectrometer from WiTec.

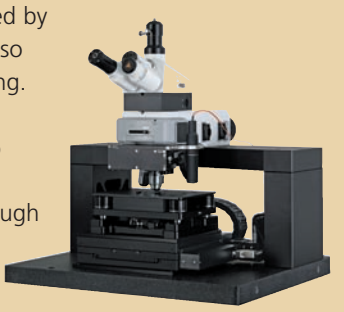
Left to right: Harald Fischer, Marketing Director, WiTec; Tamsyn Cox, ILM Features Editor; and Dr Joachim Koenen, Managing Director, WiTec, with the winning True Surface Microscopy mode.

Nicholas Hall, National Sales Director of Separation Science at LECO (left) with Tamsyn Cox, ILM Features Editor (right)

True Surface Microscopy won Gold for **WITec** at the Editor's Award for the most outstanding new product at the conference. **True Surface Microscopy** was chosen due to its ability to simplify the Raman Imaging process on large, rough or inclined samples.

"We are absolutely delighted and nearly overwhelmed to receive such a well respected award," said Dr Joachim Koenen, Managing Director of WITec. "This is a great motivation to continue our successful philosophy of constantly introducing new technologies to provide our customers with cutting edge technology for their research."

Due to the importance and scale of Pittcon, WITec had chosen the exhibition to showcase its True Surface Microscopy for the first time in the US. WITec´s new True Surface Microscopy mode allows confocal Raman imaging guided by surface topography. True Surface Microscopy follows the surface topography with high precision, so that even rough or inclined samples always stay in focus while performing confocal Raman imaging. To achieve this unique capability, the WITec alpha500 series integrates a highly precise sensor for optical profilometry. The topographic coordinates from the profilometer measurement are used to perfectly follow the sample surface in confocal Raman imaging mode. The result is an image revealing optical or chemical properties at the surface of the sample, even if this surface is very rough or heavily inclined. On such surfaces this information was only partially accessible thus far and with the new imaging mode, samples that had previously required extensive preparation in order to obtain a certain surface flatness can now be effortlessly and automatically characterised as they are.



alpha500 with attached sensor for profilometry

WITec shared the top honour with **Leco** as their **Citius LC-HRT** was also deemed as deserving Gold. The Citius LC-HRT represents a substantive innovation in High Performance Mass Spectrometers for the LCMS market. The system utilises LECO's Folded Flight Path™ (FFP™) technology to provide full-range mass spectra at speeds of over 100 spectra per second, and resolutions of up to 100,000 with high-performance mass accuracy. The system provides the versatility of ESI, APCI, and DESI (desorption electrospray) ionisation sources as options to complement its high-performance MS capabilities and unchallenged dynamic range.

"The Citius LC-HRT system provides high integrity, high information-content mass-spectral performance, with the data analysis tools our customers have come to expect from Leco," said Jeff Patrick, Separation Science Product Specialist, Leco Corporation. "Leco is very pleased to offer an LC-TOFMS package that requires no compromise in speed, resolution, mass accuracy, or dynamic range."

Left to right: Tamsyn Cox, ILM Features Editor; Hsiao-Lan Chang, Millipore Porduct Manager; and Vivek Joshi, Millipore Research Scientist and Silver Award product inventor.

The **Samplicity Filtration System** from **Merck Millipore** - an innovative new technology that provides a convenient, high throughput alternative to syringe-tip filters when preparing samples for chromatography - received the Editor's Silver Award for best new product. The Samplicity system allows up to 8 samples, even those with high viscosity or particulates, to be simultaneously vacuum-filtered in seconds. Samples are quickly and easily loaded using a pipettor and are filtered directly into LC vials. The filtered samples are immediately ready for subsequent analyses

"The enthusiasm shown by the media and by scientists at Pittcon validates the need for a fast, ergonomic system to relieve the tedium of filtration sample preparation," said Rebecca Duguid, Product Marketing Manager for Analytical Sample Preparation at Merck Millipore. "Until now, researchers had limited options for speeding up sample prep," said John Sweeney, Head of EMD Millipore's Life Science business field. "Syringe-tip filtration is a serial process that can slow down an entire workflow. At the other end of the spectrum are robotic systems, which are expensive and offer too much capacity for labs that handle a few dozen samples per day. The Samplicity system provides relief from the repetition of manual filtration and offers a throughput capacity well-aligned with the needs of most labs."

The Millipore Samplicity Filtration System

AstraNet Systems Ltd, a UK Based micro-business, was awarded the Editors Bronze Medal for its **AstraGene**, DNA analysis spectrophotometer. AstraGene was recognised for its novel yet simple operation, while its ability to recover 100% of the tiny 2µL sample, with no risk of contamination or operator hazard was also mentioned. Mike Mills, Managing Director of AstraNet, commented that this was a fantastic achievement when considering the huge number of exhibitors at the show and the significant multi-national companies that were also nominated in this category.

Ray Wood, Business Development Manager at AstraNet further noted that the novel sampling accessory, that makes AstraGene a powerful tool in handling small and precious samples, was complemented by their state-of-the-art spectrophotometer that uses fibre-optic coupling and a CCD array detector to eliminate all moving parts; so increasing reliability and reducing maintenance to an absolute minimum, while effectively eliminating the need for any re-calibration.

Tamsyn Cox, ILM Features Editor with Ray Wood, Business Development Manager at AstraNet and the Bronze Award

Other nominations were: Micro ESR, Active Spectrum; Mini Flash Touch, Ametek (Grabener); Assure NMR software and the Maxis 4G MS, Bruker; GC-Tof MS, DANI Instruments' Calidus micro GC, Falcon; Mini GC, Forston Labs; EGA/PY 3030D, Frontier Lab; Aqualog Absorbance/Fluorescent spectrometer, Horiba; NanoPhotometer Pearl, Implen; Spiral Tof-Tof and InTouch Scope SEM, JEOL; Excellence Flash DSC 1, Mettler Toledo; 889IC Sample Centre, Metrohm; Centrifan PE, Modular SFC; Perfinity Workstation, Perfinity/Shimadzu; Epsilon 3 EDXRF, PANalytical; LCMS 8030, Shimadzu; Niton FXL XRF, Thermo Fisher Scientific; and the Unifi software integration package, Acquity UPSFC and Acquity UPLC 2D Tech, Waters

Breakthrough Redefining High-Performance Mass Spectrometry

At Pittcon 2011, **Bruker** announced the introduction of maXis™ 4G, its next-generation electrospray UHR-Qq-TOF mass spectrometer. Building on the success of the highly innovative maXis platform, the maXis 4G again redraws the capability map for delivering ultimate mass resolution and mass accuracy at UHPLC speed without compromising sensitivity.

The maXis 4G is a uniquely powerful mass spectrometer offering Full Sensitivity Resolution (FSR) greater than 60,000 FWHM whilst maintaining mass accuracy better than 600 ppb, even while acquiring at speeds of up to 30 full spectra per second, thus ideally matching the requirements of UHPLC rapid separations. With over 4 orders of quantitative dynamic range, the maXis 4G system is fully equipped for quantitative reporting even at trace levels with a novel challenge to the industry of an extracted ion chromatogram specification (XIC) of 1 millidalton. The maXis 4G also boasts an industry-leading sensitivity specification, which Bruker – again uniquely in the industry – records at full resolution. Other high-end Qq-TOF systems may nominally reach 40,000 resolution, but only at the expense of a dramatic sensitivity loss by large factors due to special resolution-enhancing, but sensitivity degrading techniques like ion beam slicing and W-mode.

Several design advances allow the maXis series to occupy a technology class all of its own, delivering the only simultaneous full sensitivity and high-resolution (FSR) specification in the industry. Patented in-flight ion optics refocus ions even during the TOF process itself, and allow the full resolving potential of the long flight path to be utilised, unobstructed by multiple reflectrons or ion beam

slicers which all degrade sensitivity dramatically.

The maXis 4G IonCoolerTM 4G technology energetically focuses ions entering the TOF region to yield maximum sensitivity without mass resolution loss. The cumulative effect enables unprecedented FSR performance, perfectly addressing requirements in a number of challenging fields of analysis across a wide mass range, from intact proteins to small molecules. Routine and accurate biopharmaceutical quality control of products, such as antibody proteins and antisense molecules, has entered a new era with the introduction of maXis 4G and new BioPharma Compass™ software, a combination of unrivalled capabilities for the effective resolution of large molecules, simultaneous identification of trace impurities and a software tool tailored to the needs of an industry requiring seamless and user- enabled control.

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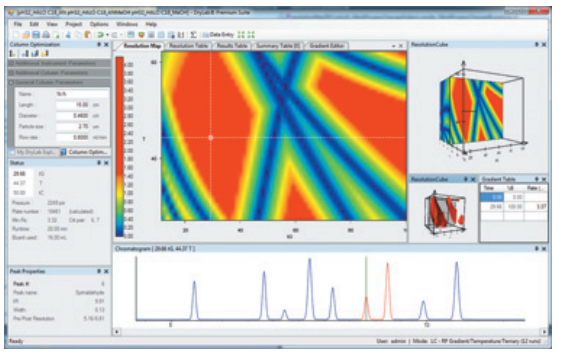
Joaquin Lubkowitz, President of Separation Systems, Inc, said: At Pittcon we reconnect with many longtime esteemed international users. We appreciate Pittcon's efforts to reach out to the fuels and biofuels market segments worldwide with greater success this year that we are showcasing products that stretch the use of the GC/FID/MS systems." Adela Fernandez, VP of Finance & Marketing, added: "Pittcon Atlanta gives us a chance to showcase many great Atlanta restaurants while discussing future business with our customers."

After 20 years of success in Japan, Frontier Laboratories opened a US office in October and exhibited at Pittcon 2011 for the first time. Tamsyn Cox, ILM Features Editor, asked **Robert Freeman of Frontier Laboratories** what their aim as a new exhibitor was and if this was achieved: "2011 is a pivotal year for Frontier. This is our 20th anniversary; we are introducing a 4th generation pyrolyser and have established a US subsidiary. This year our marketing strategy has taken a new direction. Frontier wants customers to think of the products as 'Frontier' products. We need to establish our brand in the US and use our technical expertise to create demand for the Frontier products. Our booth at PittCon was just one of the steps in our 'branding effort. Our products were featured in three booths – our own booth and our two distributor's booth. We put together and distributed our first press kit; we presented four technical papers and worked closely with our distributors to ensure that they were sufficiently trained to represent our new products to the majority of attendees.

We are pleased by the response of both our distributors and the walk-round attendees. Our distributors used us as a technical sounding board; they often brought interested parties to our booth when there was a need for a more in-depth technical explanation. We are pleased by the quality of leads and are overjoyed at the number of off shore leads that came our way. Having a booth at Pittcon represents a major shift in our marketing strategy; we are looking forward to Orlando in 2012."

PerkinElmer have decided that Pittcon is not top of their agenda any more and have instead focused their attention on more specific regional events: "As always, PerkinElmer's conference and tradeshow activities are an important opportunity for us to communicate with customers, partners, analysts and investors around our exciting technologies, current research, and end-market expertise. That said, PerkinElmer has developed a new and rigorous schedule of regional customer events that are specific to the pharmaceutical, food, environmental, and energy end-markets as well as more intimate in setting. We decided to not exhibit at Pittcon, but to deploy these and additional resources to engage in different, more effective initiatives that connect us with customers and provide a better venue for our technologies and solutions. As in years past, PerkinElmer scientists attended the conference and participated in Pittcon's scientific programme through a number of oral and poster presentations. We are very excited about our new vision and building more direct and stronger relationships with our stakeholders and continuing our commitment to developing high quality analytical instruments. With this new approach in engagement, we will be able to spread resources over time in order to have more quality time with our stakeholders offering opportunities to bridge meaningful relationships with the analytical instrument industry. "

Celebrating 25 Years of Chromatographic Development



In celebration of 25 years of DryLab and 30 years of the **Molnár-Institute**, the latest DryLab® 2010 version 4.0 was unveiled at Pittcon 2011.

DryLab® 2010 version 4.0 combines 25 years of development and chromatographic know-how with the very latest advanced modelling technologies in accordance with recent regulatory recommendations. Offering improved data import functionality, advanced peak tracking tools and 1-, 2- and 3-dimensional model calculation in a single software package. The new version also has a new design with the look and feel of modern Windows® programs, as well as user friendly window management, personalised layout, new visualisation tools and a number of novel features.

DryLab® 4.0 is an integrated software package for method development and robustness evaluation - providing optimal robust methods in minimal time, millions of highly precise virtual chromatograms available at one mouse click and the evaluation of flow rate, column dimensions, gradient parameters and instrument parameters without the need for further experimentation. It also enables the easy application of Quality by Design principles to HPLC method development - affording scientific foundation for systematic method development and richer chromatographic understanding, multifactorial modeling, visualisation, transparency and flexibility.

"Pittcon 2011 gave us a great opportunity to present the latest version of the DryLab software. Customers could see first hand the recent advances in the software, which have been largely in response to the face-to-face discussions with users in events such as Pittcon. The quality of booth traffic this year was better than in the past. See you in Orlando next year," Dr Imre Molnár, President of Molnár-Institute for applied chromatography.

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Significant Version Upgrade for Leading LIMS Platform

Thermo Fisher Scientific, Inc announced the Thermo Scientific SampleManager 10.0 LIMS (laboratory information management system), a solution that is designed to deliver significant new time and cost savings for scientists and lab managers across the broadest range of process industries. SampleManager™ 10.0 improves access to data across the enterprise; delivers key business metrics to management; facilitates compliance with ISO, GLP and other regulatory requirements; and optimises workflows and quality management. SampleManager LIMS is the corporate standard at leading organisations in oil and gas, food and beverage, environmental and water, metals and mining and other process industries. It provides an intuitive user interface and logical workflow for laboratories looking to optimise their operations by standardising processes across geographies and streamlining data exchange across enterprise systems. It is designed to integrate with existing ERP, PIMS and MES systems and with other applications and instruments in and out of the laboratory, providing one standard user interface and allowing for easier standardisation for global enterprises. Users will gain greater efficiency with integrated solutions that deliver a new kind of connected productivity regardless of the analytical challenge.

For lab managers and users, SampleManager includes built-in functionality, including instrument calibration, operator training records and stock/inventory dashboard that deliver improved efficiencies, compliance and resource management.

For IT and systems administration, a new Microsoft .NET development environment provides a comprehensive and intuitive tool kit for making system extensibility simple, delivering time and cost savings that is critical to process sustainability, including rapid prototyping and easier integration.

For management, data visualisation tools deliver the functionality necessary to integrate and connect all parts of the organisation so that management can monitor and measure performance against key business metrics; user decisions are more responsive and informed. The need to fully integrate lab-generated data with existing enterprise systems requires organisations to optimise existing investments in laboratory and enterprise systems. Management must have continuous access to all of the data necessary to make informed decisions and monitor the health of their operations.

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