

## The latest News for Mass Spectroscopists

**Advion**

Advion is the partner of choice for pharmaceutical, biotechnology, academic and government researchers seeking to enhance their mass spectrometry and chemical synthesis workflows. Advion has developed a broad portfolio of purpose-built mass spectrometers, nanoelectrospray ionisation sources, and flow-chemistry synthesis systems and consumables characterised by their reliability, quality, flexibility and fit for purpose design.

### Expression Compact Mass Spec (CMS)

The low cost, [personal Compact Mass Spectrometer system](#) is to continuing evolve and now offers a range of platforms including:

- Acting as a HPLC mass spec detector using a fully integrated software package for Agilent 1100 and 1200 series HPLCs, or acting as an accessory detector for other HPLC manufacturers
- Acting as a stand-alone mass spec analyser for synthetic chemists and peptide researchers, offering immediate mass spec answers at the chemists work bench to speed the discovery process
- In stand-alone, manual injection mode for teaching labs
- In operation with flow synthesis systems to optimise reaction conditions and maximise production.
- In operation with an auto-sampler for high throughput labs
- In operation with CAMAG accessories to automatically extract materials for TLC plates and analyse them immediately for mass identification

So for the same price as a dedicated HPLC MS detector from other manufacturers you can choose a higher specification, multi-function, mass spectroscopy instrument to meet many needs within your research department.



### Advion users in Australia

The Advion users in Australia now include RMIT University and Monash University. We wish them well with their research.

### Mobile mass spec!

[Advion advise](#) that the expression compact mass spectrometer (CMS) is now available with a TACOM-compliant Mobile Attenuation Mounting (MAM) system. This will allow the CMS to be placed in a mobile laboratory environment and driven for the equivalent of the life of the vehicle while remaining fully functional to all specifications.

“The fast adoption of the expression CMS has brought us into contact with many global FDA agencies, state labs, Level 1 responders, and others who wished to install our CMS in a mobile laboratory setting. In essence, they wanted to take our CMS to a field-based point-of-assay. In certain instances, large corporations wished to have the unit fully transportable within large plant settings. Our response was to design, develop, independently test, and verify our MAM system to international operating standards” says David B. Patteson, President and CEO. “We are certain this will open an even larger market for the CMS, with sizable quoted opportunities now underway around the world.”

At a simpler level this robust design of the CMS allows the unit to be trolley mounted and moved from location to location to meet the needs of a busy multi-user environment and also use the systems for teaching.

For further information contact Scientifix Product Specialist Ken Baker: 0419 155 545 or [ken@scientifix.com.au](mailto:ken@scientifix.com.au)

# Scientifix Mass Spectroscopy Update

## Nano-electrospray Ion Source group

*Introducing Chip-Mate..the dedicated NanoLC interface.*

The Chip-Mate is an enclosed nanoelectrospray ion source that uses the ESI Chip® technology and couples it to a nano-LC column via the proven Advion LC coupler system.

The ESI Chip performance along with automated spray sensing and next nozzle switching capabilities improves the sample analysis workflow and reduces the number of failed nano-LC runs.



Compatible with any nano-LC pump system with flow rates of 100 nL/min to 600 nL/min, the Chip-Mate is based on Advion's ESI Chip technology for proteomics, small molecule quantification and biomarker/biosimilar sample analysis.

- Automatic spray sensing and next-nozzle capability reduces the number of failed nano-LC runs
- Identical performance from nozzle to nozzle due to micro fabrication in silicon and much simpler to set up than conventional pulled capillary devices
- Maximum flexibility due to compatibility with a wide range of nano-LC pumps and columns

If you need to get more information from your Nano-LC runs to extract information about complex samples call us.

**Advion latest news and application notes:**  
[www.advion.com](http://www.advion.com)

**Advion WEBINARS:** [www.advion.com/news-events/webinars](http://www.advion.com/news-events/webinars)

**Most recent webinar:** Concerns the use of the Advion TriVersa NanoMate for Lipidome Profiling using the LESA (Liquid Extraction Surface Analysis) accessory.

We hope you enjoy the presentations provided by Advion Inc.

**Hosted by:** Dr. Gavin Reid. Associate Professor at Michigan State University

**Title:** "Lipidome Profiling with LESA..High-resolution mass spectrometry, chemical modification and liquid extraction surface analysis for lipidome profiling of Colon Adenocarcinoma cell line"

## protea<sup>®</sup> innovation for bioanalytics

### New Surfactant Technology

Protea has developed an extensive line of acid-labile surfactants for use in sample preparation, electroelution, electrophoresis, mass spectrometry, and other life science research workflows.

The Progenta line of acid labile surfactants has been designed to provide an optimal combination of powerful detergent properties and rapid degradation kinetics, for conversion of the detergent molecules into smaller organic compounds that do not possess surfactant properties or present as contaminants in subsequent analyses. Each surfactant has been completely characterised by NMR to accurately determine the degradation characteristics and the critical micellar concentration (CMC) for a measurement of detergent strength.



The progenta family of surfactants includes anionic, cationic, zwitterionic detergents, which provide for a wide range of surfactant properties and applications. Competing products suffer from weaker surfactant properties, slower degradation kinetics under harsher conditions, and the production of larger breakdown products that present as oily contaminants for downstream workflows.

**Protea latest news and application notes:**  
[www.proteabio.com](http://www.proteabio.com)

**Protea WEBINARS:** [www.proteabio.com/webinars](http://www.proteabio.com/webinars)

**Most recent webinar:** Presents a number of work flows for new and exciting applications of the LAESI DP-1000 Direct Ionisation System

**Hosted by:** Protea team members Haddon Goodman and Callee Walsh

**Title:** "New Applications for the LAESI DP-1000 System"