Advion
19 Brown Road • Ithaca, N.Y. 14850
www.advion.com

- TriVersa NanoMate is the latest in chip-based technology from Advion that combines the strengths of liquid chromatography, mass spectrometry, fraction collection, and chip-based infusion in one integrated system. It allows researchers to obtain more information from their complex samples than with LC/MS alone.

Customer Profile

"The TriVersa NanoMate revolutionized nanospray."

School of Biosciences, The University of Birmingham Birmingham, UK

Dr. Helen Cooper
Senior Lecturer
School of BioSciences

Research focus:
- Peptide fragmentation
- Proteomics
- PTM analysis
- Top-down proteomics

Mass spectrometers:
- Thermo LTQ FT Ultra
- Thermo LTQ Orbitrap Velos ETD
- Thermo TSQ Vantage

Customer since: 2005

No. of TVNM: 3

Q: What is the focus of your lab's research?

My primary research is focused on characterization of biomolecular and non-biomolecular structures utilizing FT-ICR and orbitrap mass spectrometry. We are particularly interested in electron-based fragmentation techniques, such as ECD and ETD.

Specifically, we want to develop mass spectrometry methods to identify, characterize and quantify peptides; to understand peptide fragmentation hence identify and characterize proteins; to understand an array of biological processes through the identification and structural elucidation of post-translationally modified proteins and peptides.

Q: Why did you incorporate the TriVersa NanoMate® into your laboratory?

We use the TriVersa NanoMate for direct infusion and coupling to LC. Advion's chip technology has revolutionized nanospray as far as ease of use. The ESI Chip is robust and bypasses any problems with non-uniformity. It allows us to move simply to the next nozzle if there is an issue with spray. The spray sensing capability is very clever and necessary for our overnight runs. We also use the TriVersa for our direct surface analysis of dried blood spots.

Q: To whom would you recommend the TriVersa NanoMate for their research?

I would recommend the TriVersa NanoMate to anyone with a mass spectrometer who uses nanoelectrospray.

Recent Publications

Novel glycosylation sites localized in *Campylobacter jejuni* flagellin FlaA by liquid chromatography electron capture dissociation tandem mass spectrometry
Zampronio, C.G.; Blackwell, G.; Penn, C.W.; Cooper, H.J. *J. Proteome Res.,* DOI: 10.1021/pr101021c

Hemoglobin Variant Analysis via Direct Surface Sampling of Dried Blood Spots Coupled with High-Resolution Mass Spectrometry
Edwards, R.L.; Creese, A.J.; Baumert, M.; Griffiths, P.; Bunch, J.; Cooper, H.J. *Anal Chem.,* **2011 Feb**
DOI: 10.1021/ac1030804