

JANUARY 2019

# MassMedia

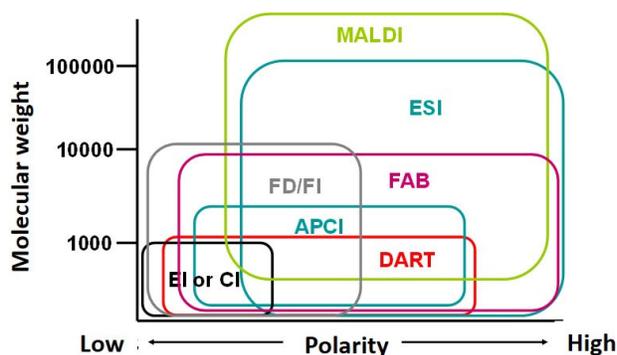
PETROLEUM | ENVIRONMENTAL | FOOD | FORENSICS | MATERIALS | GAS MONITORING | MALDI IMAGING



Mass Media Newsletter featuring latest news about JEOL mass spectrometry developments and applications.

## Ionization Methods for JEOL Mass Spectrometers - A Guidebook

There is no one ionization method to support all applications. JEOL mass spectrometers support a variety of ionization methods, including ionization combined with chromatography, ionization using direct sample loading, hard ionization, soft ionization, etc. Our soon-to-be-published guidebook describes the principles and characteristics of these methods and introduces their applications. [Request your copy here.](#)



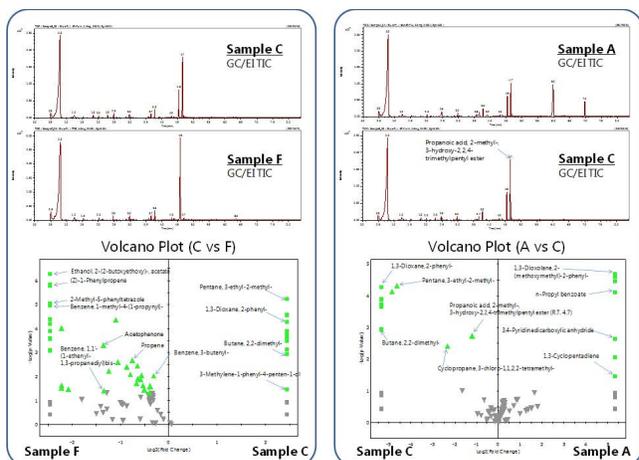
## msFineAnalysis Qualitative Software for GC-MS

For qualitative analysis of High Resolution GC Mass Spec data, JEOL has developed msFineAnalysis software that integrates both EI and soft ionization data (GC/CI, PI, FI) with library search, exact mass, and isotope data. The software compares molecular formula information acquired from the NIST library search with soft ionization exact mass data analysis to ensure accurate qualitative results. It automatically examines the NIST library search results, reduces the possibility of false positive identifications, and selects the correct components from multiple candidates with similar scores. For unknown components not registered in the NIST libraries, it estimates molecular formulas by using the soft ionization data, acquires partial structure information and estimates structural formulas by using the EI data. msFineAnalysis takes qualitative GC-MS analysis to a whole new level, and is a major addition to the capabilities of our [AccuTOF-GCx PLUS](#). The latest GC technology is here in our Peabody demo lab. Let our experts show you what this High Sensitivity GC/MS with high speed acquisition and high resolution can do!



## AnalyzerPro Software for Comprehensive GC-MS Analysis

Advances in mass spectrometry are enabling analysis of micro samples and unknown components that were not observable before. As the volume of information acquired from mass spectrometry increases, researchers are calling for simple techniques to analyze numerous components observed, and as a result, there is a rise in demand for comprehensive analytical techniques including multiple classification analysis. Get the most from the data you collect in just a fraction of the time using the JEOL [AccuTOF-GCx PLUS](#) mass spectrometer. [SpectralWorks AnalyzerPro® software](#) has powerful data mining capabilities for chromatographic deconvolution, chemometric analysis and database searching.



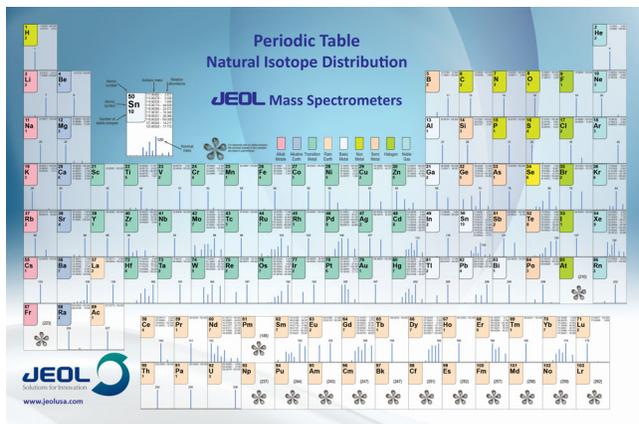
Recently we used SpectralWorks AnalyzerPro Software to analyze six vinyl acetate resins using pyrolysis-GC and PCA, and also analyzed differences between two resin samples using Volcano Plot analysis.

[Comprehensive Analysis + Unknown Component Analysis of Vinyl Acetate Resins Using Pyrolysis GC-MS](#)

[Using Volcano Plots to Compare Vinyl Acetate Resin Samples Measured by Pyrolysis GC-MS](#)

## It's the International Year of the Periodic Table!

Here at JEOL USA, we've created a special version of the Periodic Table with exact masses and isotope data – perfect for Mass Spectrometry! If you'd like a poster for your wall, let us know! [Request a poster here.](#)



## See us at Pittcon

Headed to Philadelphia for Pittcon? Come see our latest in mass spec technology and talk with our experts in **booth #3035**.



## Upcoming Events and Meetings

Visit with us at **Pittcon**, **ACS**, **ASMS**, and several other events this year. Check out our latest [calendar of events](#) including details on oral and poster presentations at **American Academy of Forensic Sciences** in February.

## Published Papers and Books

**Analysis of Drugs of Abuse – Ed. Rabi Musah**

Congratulations to our colleague [Prof. Rabi Musah \(SUNY Albany\)](#) for her recently published book, Analysis of Drugs of Abuse. Chapters feature a comprehensive set of protocols that can be used to analyze drugs of abuse, including prescription drugs, new psychoactive substances and psychoactive plants. [Learn more about this new volume.](#)

Satoh, T.; Kubo, A.; Hazama, H. [Matrix-Assisted Laser Desorption Ionization Imaging Mass Spectrometry of Drug Distribution in Mouse Brain Tissue by High-Resolution Time-of-Flight Mass Spectrometry.](#)

Fouquet, T.; Cody, R.B.; Ozeki, Y.; Kitagawa, S.; Ohtani, H.; Sato, H. [On the Kendrick Mass Defect Plots of Multiply Charged Polymer Ions: Splits, Misalignments, and How to Correct Them](#)

Cody, R. [Ambient Profiling of Phenolic Content in Tea Infusions by Matrix-Assisted Ionization in Vacuum](#)

Cody, R. B.; Tamura, J.; Downard, K. [Quantitation of Anthocyanins in Fruit Extracts and Nutraceutical Formulations with Paper Spray Ionization Mass Spectrometry](#); Journal of Mass Spectrometry 2018, 53, 58-64.

Cody, R. B.; Fouquet, T. [Resolution-Enhanced Kendrick Mass Defect Analysis of Polycyclic Aromatic Hydrocarbons and Fullerenes in the Diffusion Flame from a Butane Torch](#); Journal of the American Society for Mass Spectrometry 2018, 29, 2110-2113.

[Faces of Mass Spectrometry - ASMS](#)

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## High Resolution Mass Spectrometers

To learn more about JEOL Mass Spec products, [start here!](#) Search by application or products.

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