



PRESS RELEASE

**Mass Spectrometry Analysis of Low Solubility, High Molecular Weight Compounds**

**BioChromato Inc.** has published a **new application report** that details how their **ionRocket sample preparation device**, used in combination with Direct Analysis in Real Time Mass Spectrometry (**DART®-MS**) enables routine analysis of **low solubility, high molecular weight compounds**.

Phthalocyanine based pigments are widely used for organic semiconductors and organic electroluminescence displays due to their clearness, high light stability, and durability. However, the chemical structure of Phthalocyanine based pigments are difficult to analyze due to their high molecular weight and low solubility. The application report provides data illustrating how DART®-MS with ionRocket sample introduction enabled structural information to be determined concisely and rapidly. The analysis was done under atmospheric conditions, and without pre-treatment.

The BioChromato ionRocket is a temperature-heating device for direct thermal desorption and pyrolysis of samples, prior to ionization and analysis by mass spectrometry. Using ionRocket a

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temperature gradient from ambient up to 600°C can be achieved in just a few minutes. This enables insoluble, high molecular weight materials to be pyrolyzed and then introduced into the DART®-MS gas stream.

To read this application report in full please visit <https://biochromato.com/analyticalinstruments/ionrocket/applications/phthalocyanine-pigments/>.

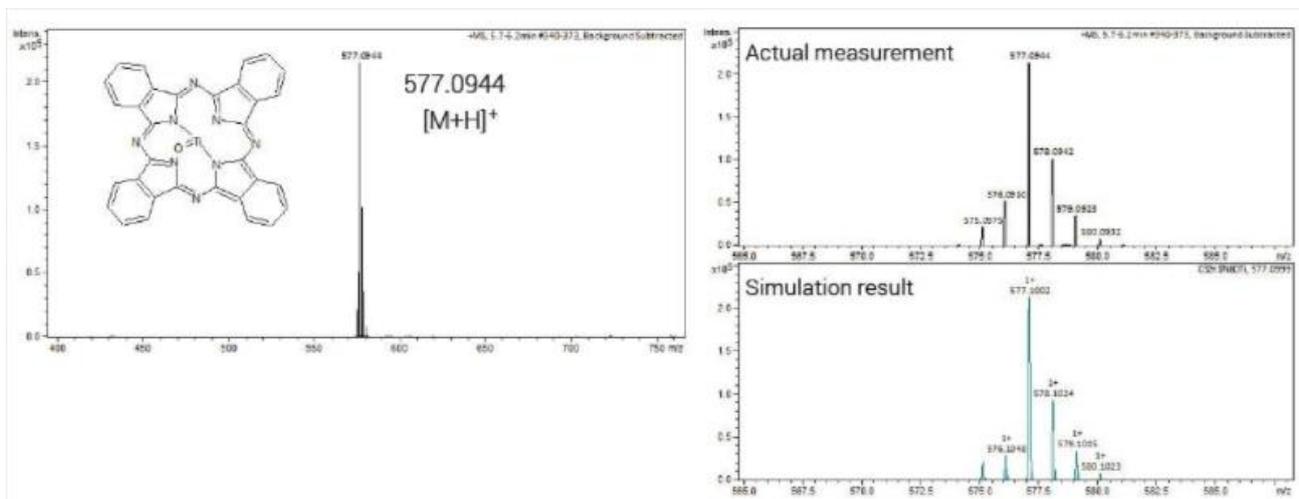
For further information on the ionRocket sample preparation device please visit <https://biochromato.com/analyticalinstruments/ionrocket/> or contact BioChromato Inc. on +81-466-23-8382 / [europa@bicr.co.jp](mailto:europa@bicr.co.jp) / [northamerica@bicr.co.jp](mailto:northamerica@bicr.co.jp) and [enquiries@bicr.co.jp](mailto:enquiries@bicr.co.jp).

Founded in 1983, BioChromato Inc is a respected Japanese manufacturer of unique high-quality products for chemical laboratories. Through its team of experienced technical experts and network of specialist distributors - BioChromato's aim is to enhance the efficiency of research and development through its development of problem-solving laboratory instruments and consumables.

**Illustrative images:** (available on request)



Caption: An ionRocket DART-MS system in use and 'simple sample preparation'



Caption: DART®-MS spectrum of titranylphthalocyanineat at 500°C DART®-SVP pre-set temperature: 400°C, ionization mode: DART® (+)