

PRESS RELEASE

Pharmaceutics Lab Improves Concentration of Aqueous Samples

BioChromato has published an interview with the Department of Biomedical Pharmaceutics at Gifu Pharmaceutical University in Japan that describes how its Smart Evaporator C1 fitted with 4-Kit has revolutionised its aqueous sample preparation.

The Department of Biomedical Pharmaceutics, headed by Professor Kiyoyuki Kitaichi, is well known for its pioneering collaborative research on illegal drugs, pharmaceuticals, and new health food ingredients. However, traditionally Professor Kitaichi's laboratory staff had relied upon using nitrogen blowdown equipment to concentrate aqueous samples. Drying low volume samples was especially problematic as the method required adding organic solvent several times to enable water to be fully removed – a methodology that took up to 60 minutes and consumed a lot of nitrogen gas.

Professor Kitaichi commented "We typically start our sample preparation by adding organic solvent and water to biological samples such as blood, tissue, drug products, natural product extracts, and then run an extraction process. The resultant aqueous sample extracts, containing drugs, their metabolites or health food ingredients are then concentrated or completely dried prior to the sample being redissolved in mobile phase and injected into



HPLC or LC-MS for analysis. Using our Smart Evaporator C1 it is now possible to concentrate aqueous samples quickly and easily, which was a problem with the nitrogen blowdown equipment. Our concentration process now takes just minutes rather than an hour and eliminates the need for wasteful use of nitrogen gas. The new Smart Evaporator concentration methodology is especially useful for compounds which have a high affinity for water. To further increase our productivity we also invested in a kit (4-Kit) for use with the Smart Evaporator C1 that allows you to concentrate 4 samples at a time".

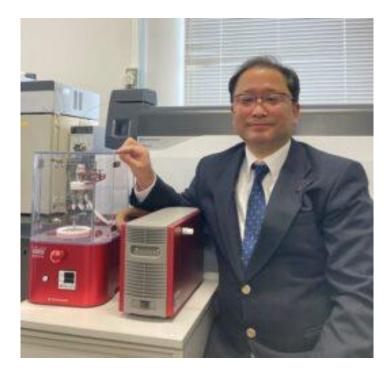
Drawing upon BioChromato's patented Spiral Plug evaporation technology, the compact, benchtop Smart Evaporator C1 offers fast and effective evaporation in tubes or vials without solvent bumping thereby eliminating risk of sample loss, cross contamination and saving researcher time. Proven to be the ideal lab tool for simple removal of high boiling point solvents such as water or DMSO, the C1 also excels at safe drying temperature sensitive compounds and efficient evaporation of small volume samples.

To read the interview in full visit <u>https://biochromato.com/testimonials/smart-</u> <u>evaporator/no.38/</u>. For further information on the Smart Evaporator C1 please visit <u>https://biochromato.com/smart-evaporator/</u> or contact BioChromato Inc. on +81-466-23-8382 / europe@bicr.co.jp / northamerica@bicr.co.jp and <u>enquiries@bicr.co.jp</u>.

Founded in 1983, BioChromato Inc is a respected Japanese manufacturer of unique highquality 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: Professor Kitaichi with a Smart Evaporator C1



Caption: Smart Evaporator C1 – available in four colours

MARCH 2022

Biochromatopr23.doc