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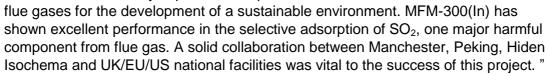
Unique Features of XEMIS Demonstrated by Latest MOF Research

In a paper published recently in *Advanced Materials*, the unique capabilities of the Hiden Isochema XEMIS sorption analyzer were used to investigate gas separation

by a novel metal-organic framework (MOF)¹. Such materials are candidates for selective removal of harmful sulfur dioxide (SO₂) from combustion flue gases, to improve air quality and reduce the risks to human health posed by air pollution.

The article reports the uptake of N_2 , CO_2 and SO_2 over a very wide range of equilibrium pressures, from 3 mbar to 180 bar, on small (research-scale) samples of MFM-300(In), a functionalized and robust indium and carboxylate-based MOF. This work would not have been possible without the functionality, flexibility and accuracy provided by the XEMIS.

Dr Sihai Yang, Lecturer in Inorganic Chemistry at the University of Manchester and one of the lead authors, said: "It is very important to capture toxic



For further information please contact <u>info@hidenisochema.com</u> or your local Hiden Isochema representative.

[1] Savage, M., Cheng, Y., Easun, T. L., Eyley, J. E., Argent, S. P., Warren, M. R., Lewis, W., Murray, C., Tang, C. C., Frogley, M. D., Cinque, G., Sun, J., Rudić, S., Murden, R. T., Benham, M. J., Fitch, A. N., Blake, A. J., Ramirez-Cuesta, A. J., Yang, S. and Schröder, M. (2016), Selective Adsorption of Sulfur Dioxide in a Robust Metal–Organic Framework Material. *Adv. Mater.*. doi:10.1002/adma.201602338

About Hiden Isochema

Hiden Isochema is recognized as an established leader in sorption instrumentation with over 20 years' experience in sorption analyzer design and development. Hiden Isochema's gravimetric sorption analyzers are installed in hundreds of high profile academic and industrial R&D labs worldwide. They are used for a diverse range of applications from materials characterization in the pharmaceutical industry to the analysis of the catalysts used in petrochemical refining. We offer a range of fully automated gravimetric and manometric sorption analyzers, dedicated breakthrough analyzers and unique climate control systems.

For further information on this or any other Hiden Isochema product contact Hiden Isochema at info@hidenisochema.com or visit www.hidenisochema.com

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