The ZLC: an Informative Low-Cost Technique for Diffusion Measurements.

Stefano Brandani, University College London, Centre for CO2 Technology, Department of Chemical Engineering, Torrington Place, London WC1E 7JE/UK

The ZLC has been applied to a range of gaseous and liquid systems on both crystals/powders and bound/pelletised nanoporous materials. A genera review of the ZLC technique and its variants, in particular the Tracer ZLC, is presented. The Tracer ZLC offers the advantage of direct comparison with microscopic techniques, as well as being always linear and isothermal. A discussion of the possible errors in the analysis of the experiments is introduced with particular emphasis on the experimental checks that should be performed based on theoretical studies.