

# **TRANSIENT PARAMETERS OF A COATED QUARTZ CRYSTAL MICROBALANCE SENSOR FOR THE DETECTION OF VOLATILE ORGANIC COMPOUNDS (VOCS)**

## **Abstract**

A PVC blended lipid membrane coated quartz crystal microbalance has been prepared to mimic human olfaction system. Transient response curves of the sensor on exposure to methanol, ethanol, chloroform, acetone and benzene were studied. Transient parameters, viz., simple parameters consisting of peak heights, derivatives, slopes and integrals, and polynomial parameters consisting of coefficients from the curve fitting equations, were extracted from the transient response curves and used as data for the subsequent chemometric data analysis. The sensor showed good separation and classification of VOCs

## **Author Keywords**

Lipid membrane sensor; QCM sensor; Transient response; Volatile organic compounds