Supporting Information

Macrocycle-Functionalized RGO for Gas Sensors for BTX Detection Using a Double Transduction Mode

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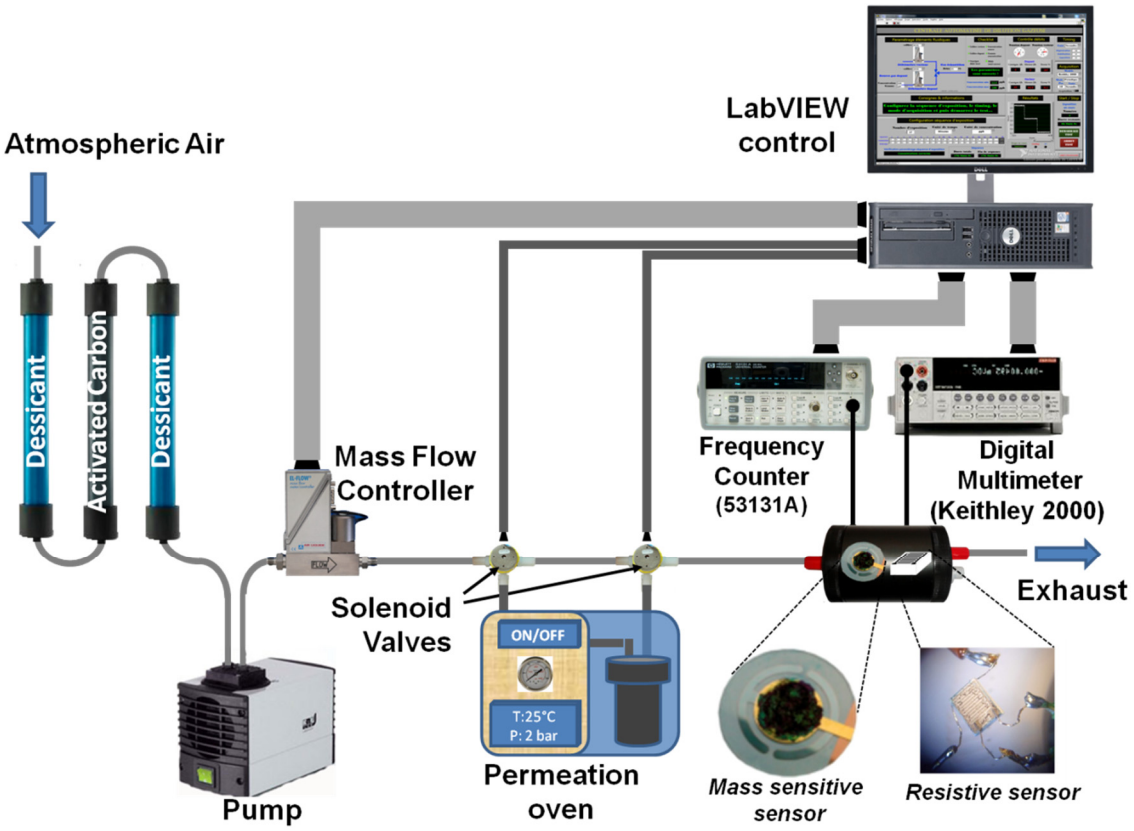

Figure S1. Experimental test bench used for the BTX sensing experiment.

For the concentration requirement the following formula is used:
Concentration = K X P / F
K is the molar constant (depending on the molecular weight)
P is permeation rate given in (ng/min)
F is the diluents flow (cc/min)
For lower concentration range we put a permeation tube into the oven while for higher concentration range (>500ppm) we used diffusion tube.

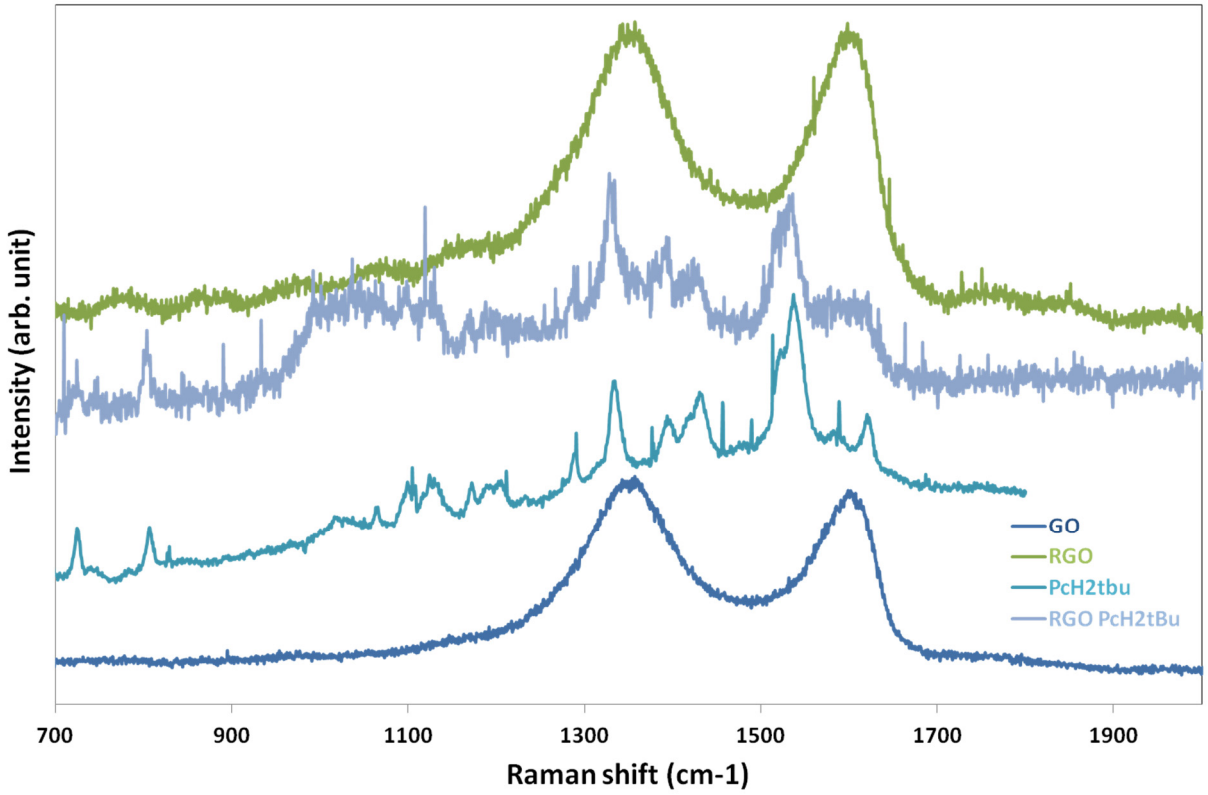

Figure S2. Raman spectra of GO, RGO, PcH2tBu and RGO/PcH2tBu.

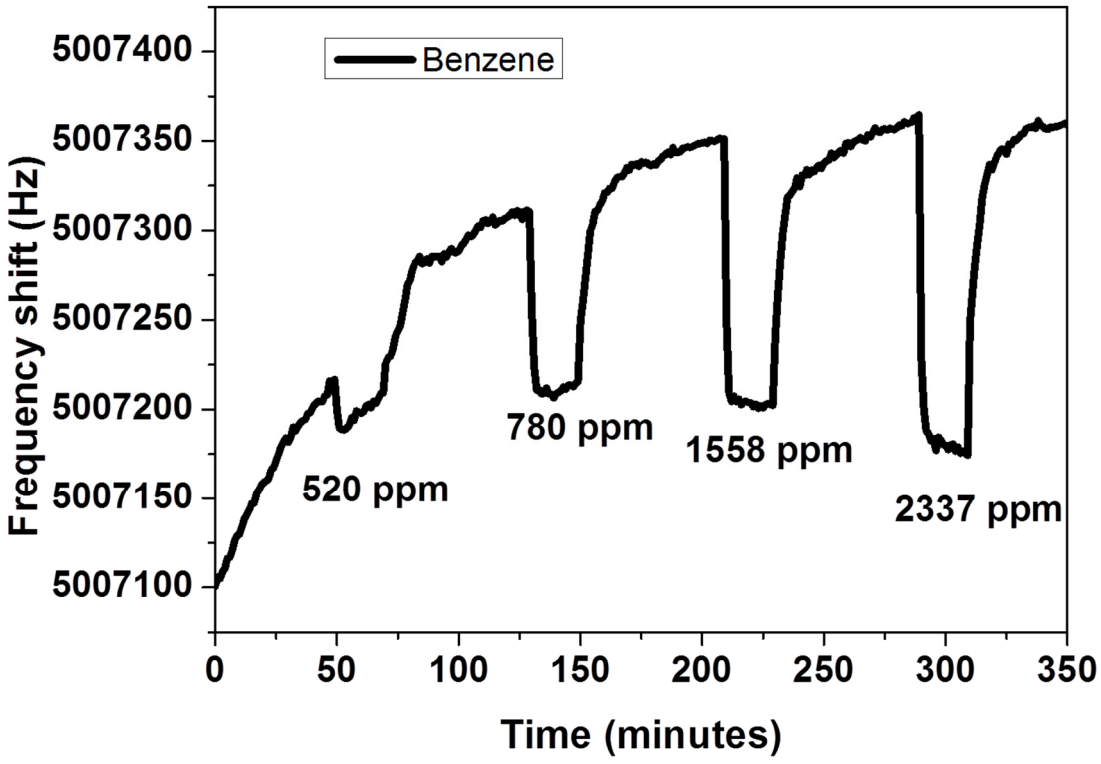

Figure S3. QCM sensor response RGO/PcH2tBu exposed to Benzene at a higher concentration.

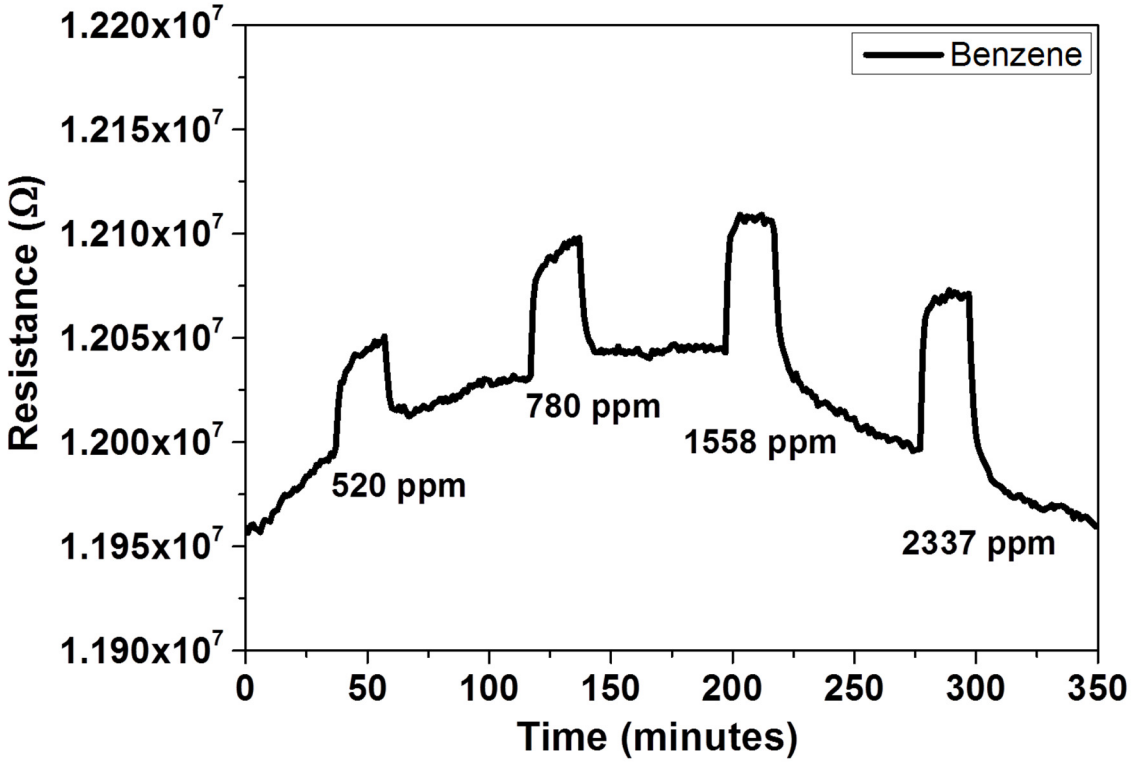

Figure S4. Resistive sensor response RGO/PcH2tBu exposed to Benzene at a higher concentration.

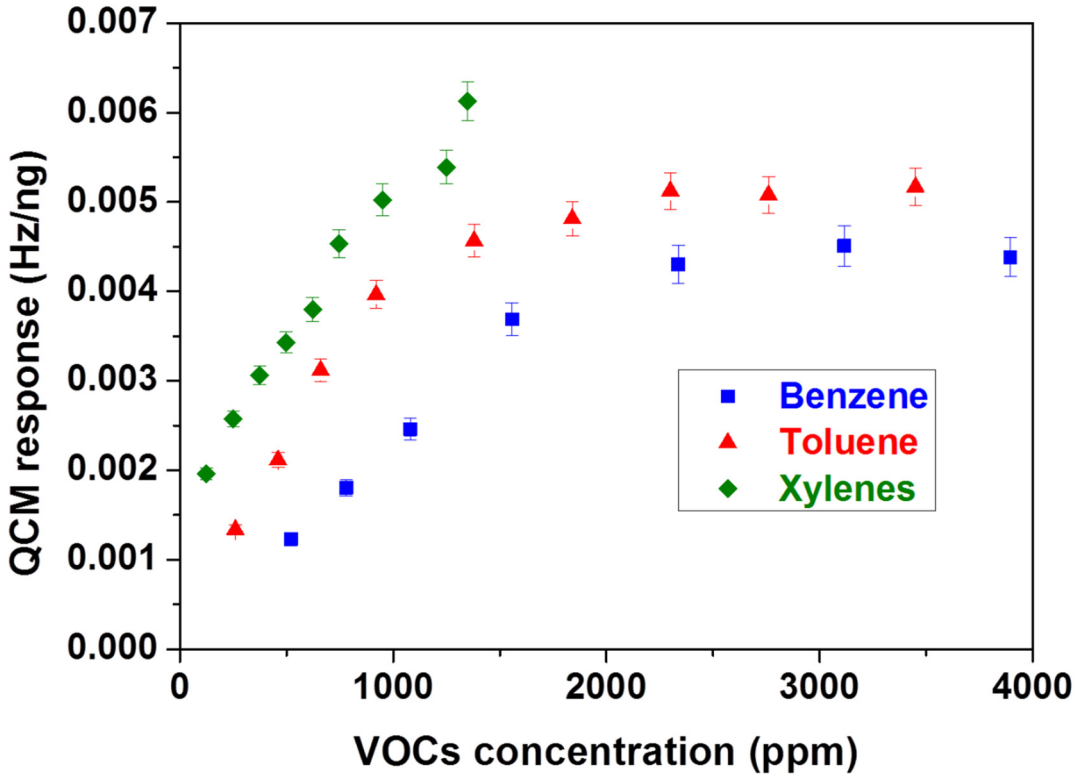

Figure S5. calibration curves corresponding to QCM sensor response of RGO/PcH2tBu exposed to benzene, toluene and xylenes in the higher concentrations regimes.