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Comparative VOCs sensing performance for conducting polymer and porphyrin functionalized carbon nanotubes based sensors

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We report sensors for detection of ethyl alcohol, a prominent volatile organic compound (VOC). Single walled carbon nanotubes were selected as main sensing backbone. As efficiency of sensor is dependent upon the choice of sensing materials, the performances of conducting polymer and porphyrin based sensors were compared. Chemiresistive sensing modality was adopted to observe the performance of sensors. It has been found that porphyrin based sensor shows higher affinity towards ethyl alcohol.

Topics
Nanotubes, **Porphyrin**, **Conducting polymers**

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