



## Supporting Information

for

### **Wet chemistry route for the decoration of carbon nanotubes with iron oxide nanoparticles for gas sensing**

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### **Effect of first decoration step on carbon nanotube morphology**

As mentioned in experimental part of the work, two approaches were used for decoration of CNTs. The first approach resulted in agglomerates with large size and rock-like appearance, shown in Figure S4. Which couldn't be used because of the size which can't help in the deposition of CNTs layer even after sonication.



**Figure S4:** Agglomerates of decorated carbon nanotubes resulting from using the first decoration approach.