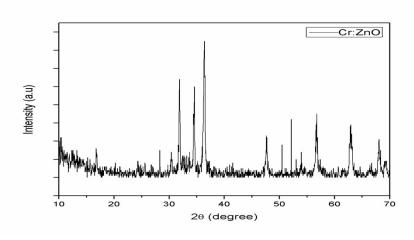
Electronic Supplementary Material (ESI) for RSC Advances. This journal is © The Royal Society of Chemistry 2015

## Reproducibility data for synthesis of Cr:ZnO

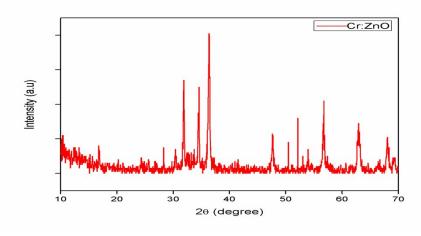
Normally, to check the constant yield of the synthesized product by microwave processing (Model LG-MC8088NRH), we repeat the synthesize.

When we synthesized Cr:ZnO nanopowders with the microwave technique, several experimental trails were made to achieve the constant yield. We confirmed the formation of Cr:ZnO for the samples with XRD analysis, assuring that the product show prominent Cr:ZnO peak without any impurity phase. With the optimized Cr:ZnO from XRD results, we also confirmed that the product yielded nano rod structure by taking SEM and EDX for two times. We were satisfied with the repeatability of the synthesized product, and then we proceeded with other characterization studies. I attach herewith the XRD and SEM characterization results repeated for Cr:ZnO

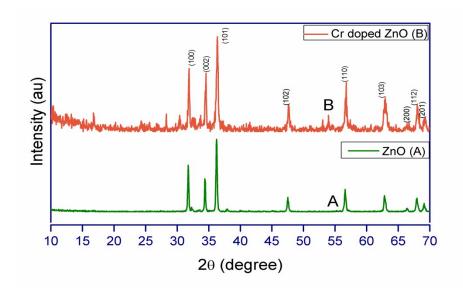
**Trial 1 XRD** 



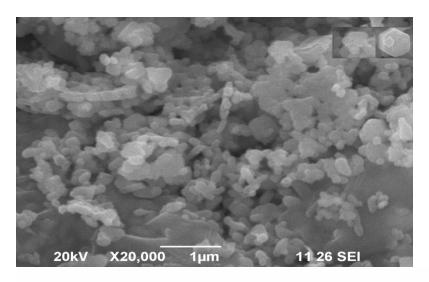
**Trial 2 XRD** 

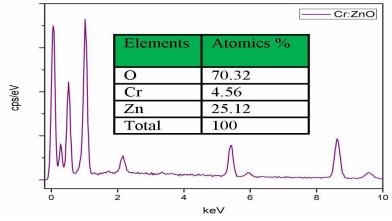


## Final Trial: XRD reported in the work



Trial 1





Final Trial: FESEM reported in the work

