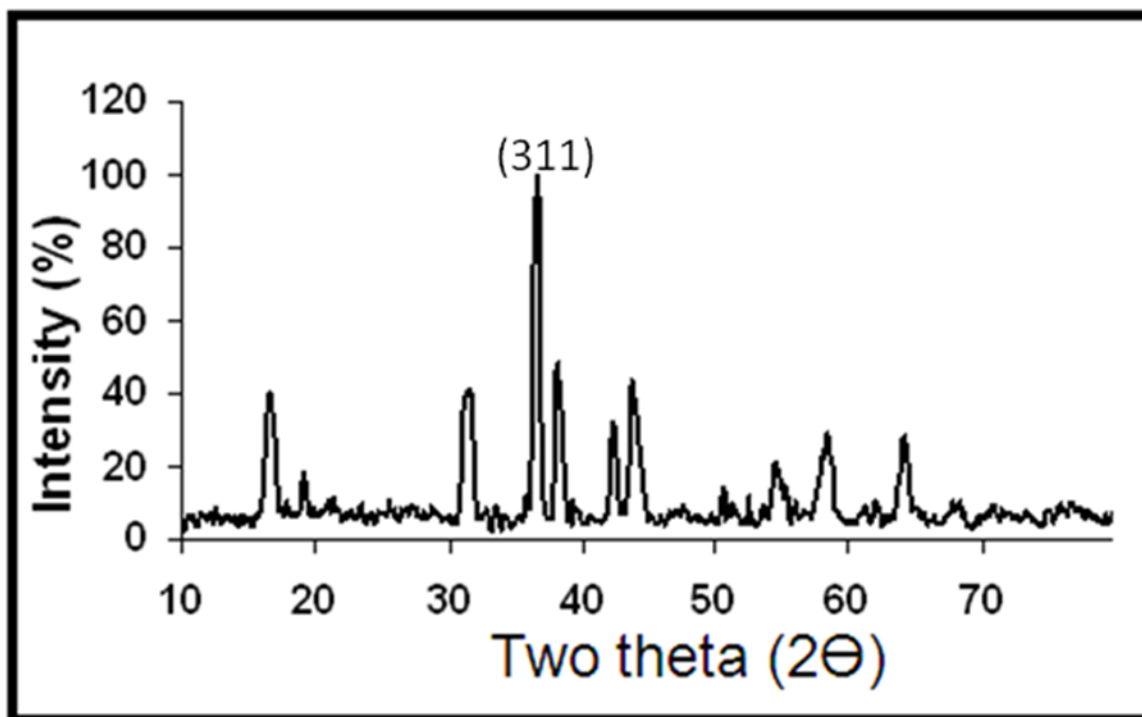


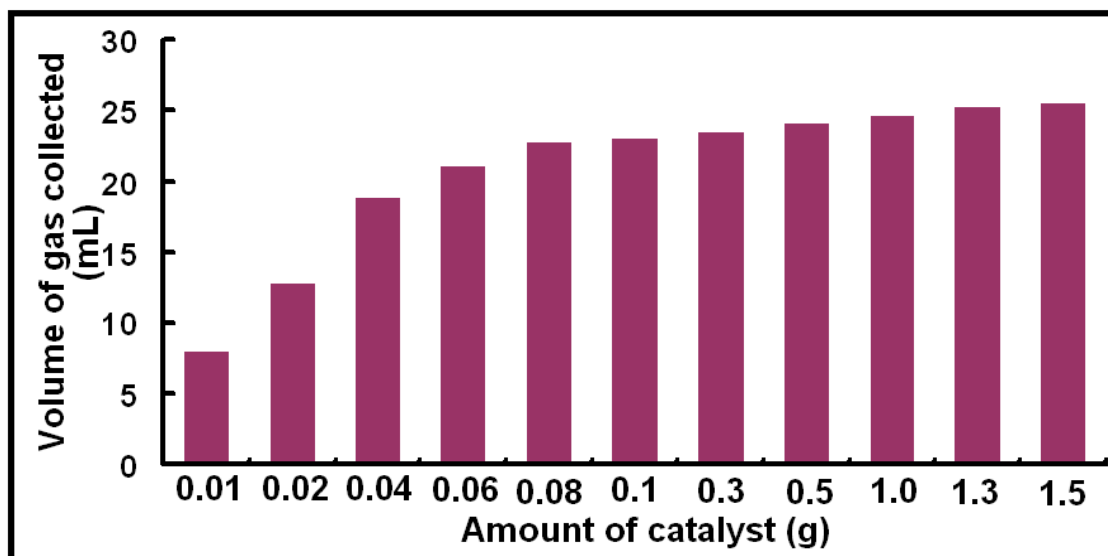
## Supporting information

### Exploration of octahedrally shaped $\text{MnCo}_2\text{O}_4$ catalyst particles for visible light driven photo catalytic water splitting reaction

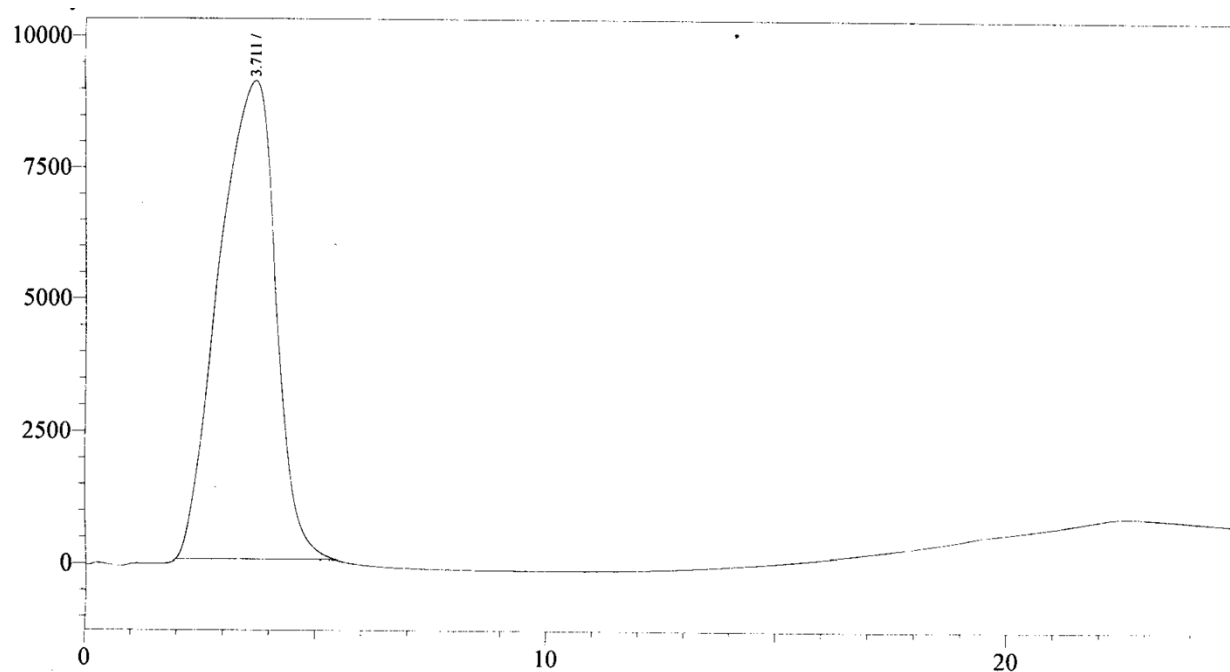
S. M. A. Shibli,<sup>\*a</sup> P. S. Arun<sup>a</sup>, Anupama V. Raj<sup>a</sup>



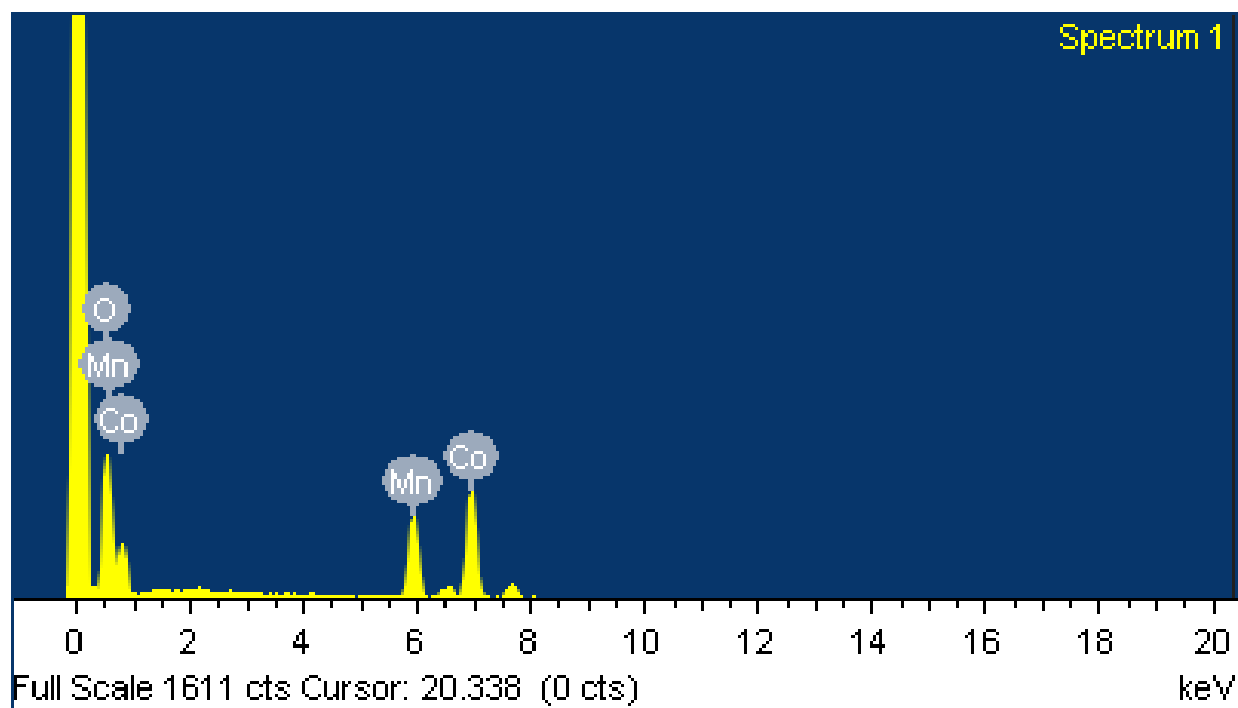
**Fig.1** XRD pattern of unsupported  $\text{MnCo}_2\text{O}_4$  catalyst evidenced the formation of  $\text{MnCo}_2\text{O}_4$  catalyst



**Fig. 2** The variation of photo catalytic water splitting efficiency with respect to amount of  $\text{MnCo}_2\text{O}_4$  catalyst



**Fig. 3** GC spectra(injection method) evidenced the extra purity of hydrogen evolved during visible light driven water splitting process in presence of methanol



**Fig. 4** EDAX spectral pattern of  $\text{MnCo}_2\text{O}_4$  crystals