

## Supporting Information:

### Efficient and stable ZrO<sub>2</sub>/Fe modified hollow-C<sub>3</sub>N<sub>4</sub> for Photodegradation of herbicide (MTSM)

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**S1:** MTSM maximum absorbance UV-vis spectrum

**S2:** ZR and FZR XRD data.

**S3:** Photoreactor

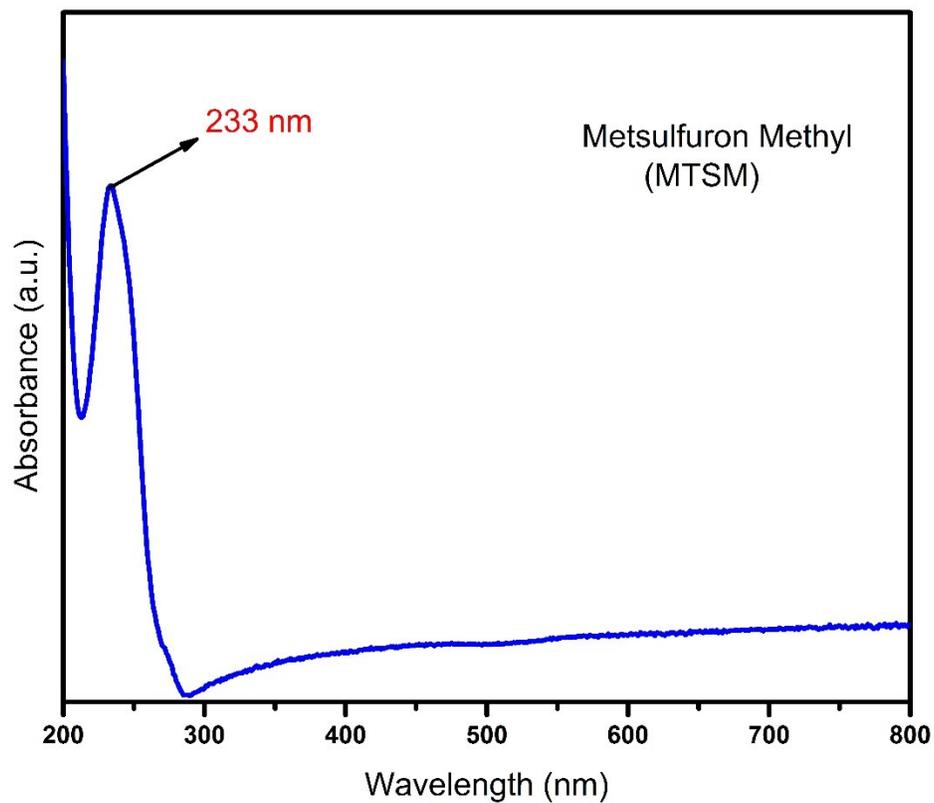
**S4:** EDX spectrum (HCN, HCN-FZR, HCN-ZR)

**S5:** Mass spectrum of MTSM photodegradation

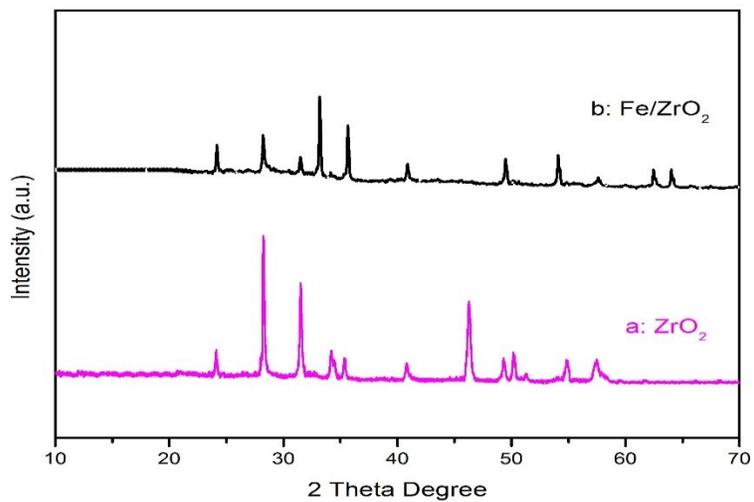
**S6.** Xenon Arc Lamp Spectrum

**S7.** Nitrogen sorption isotherm

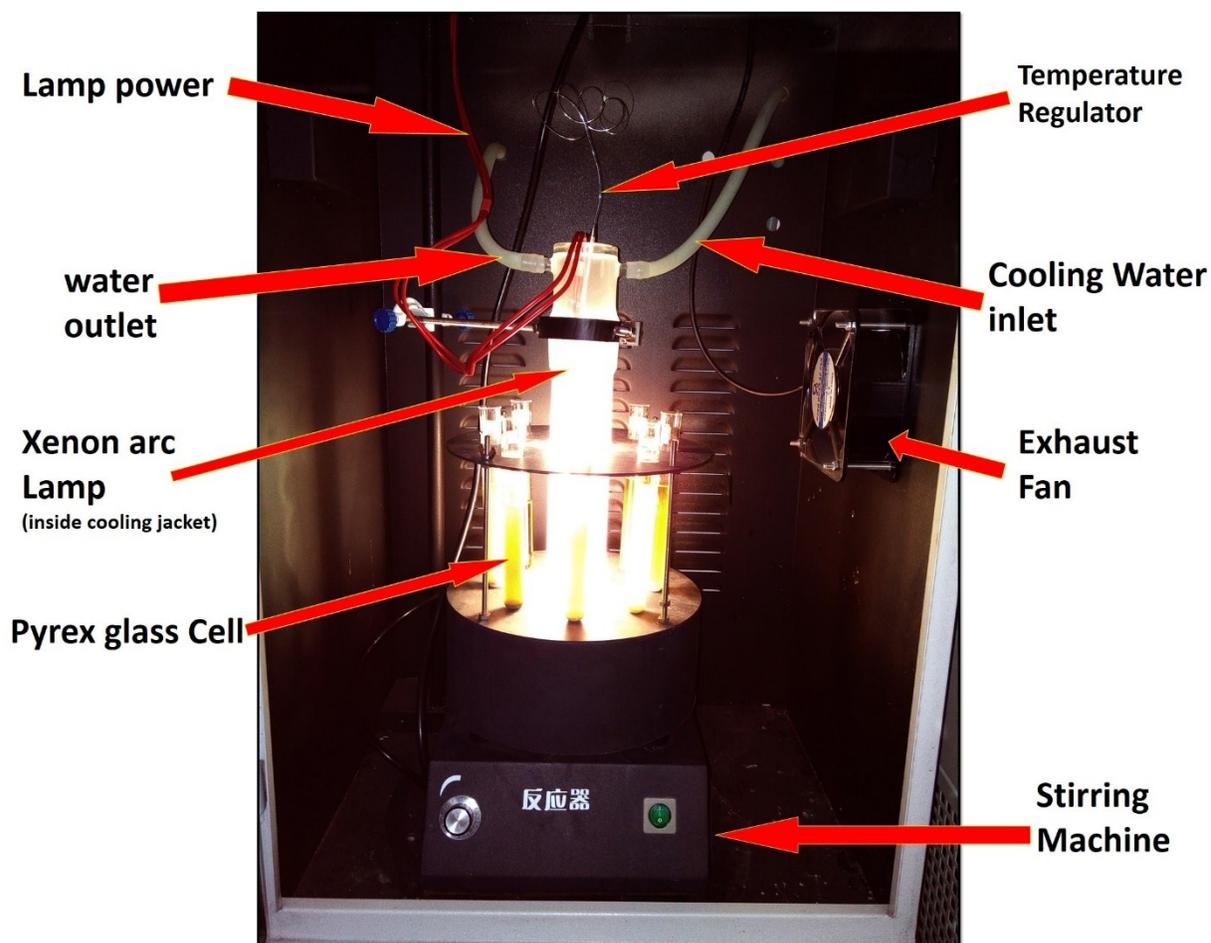
**Supporting Information:**



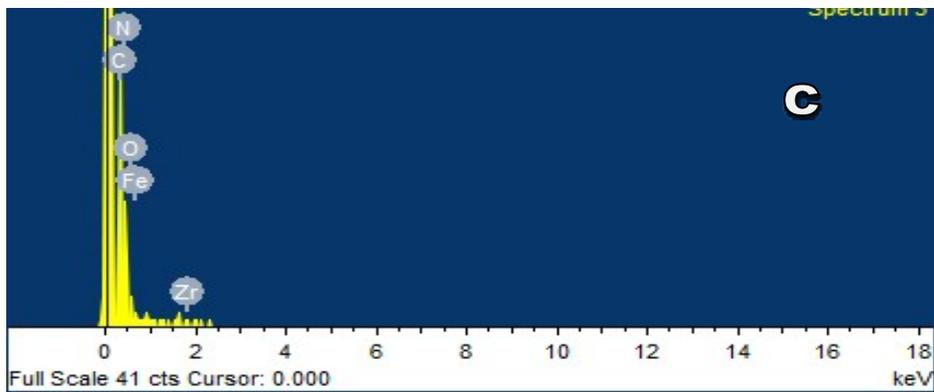
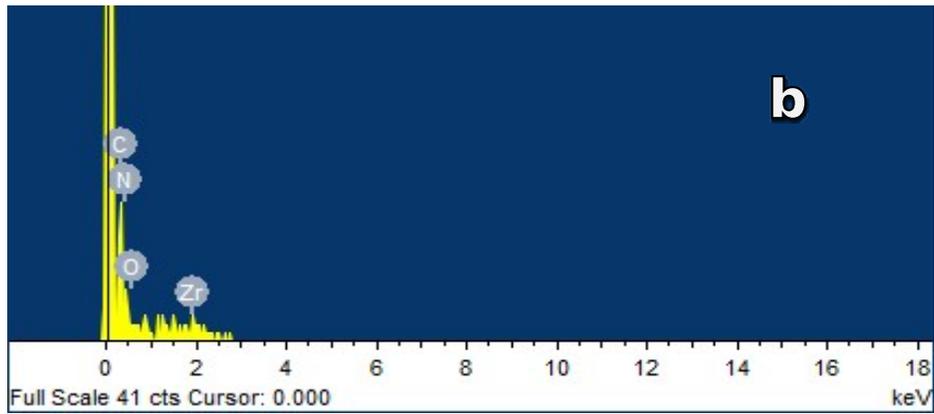
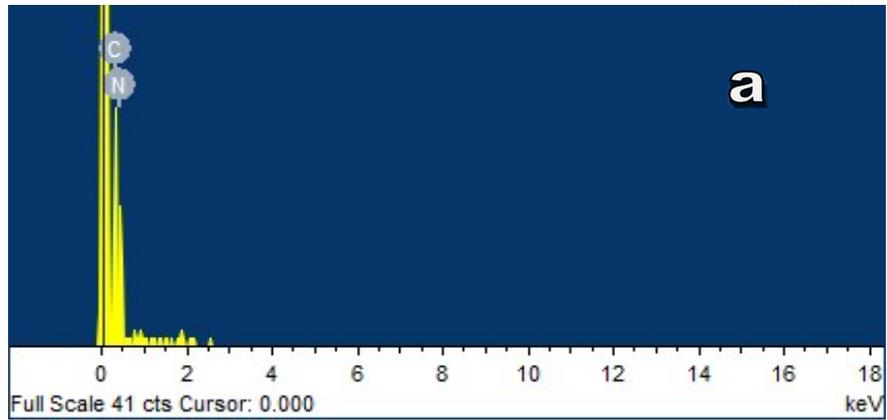
**S1:** MTSM maximum absorbance UV-vis spectrum



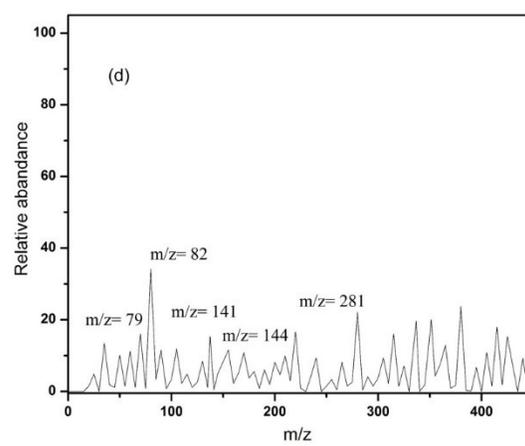
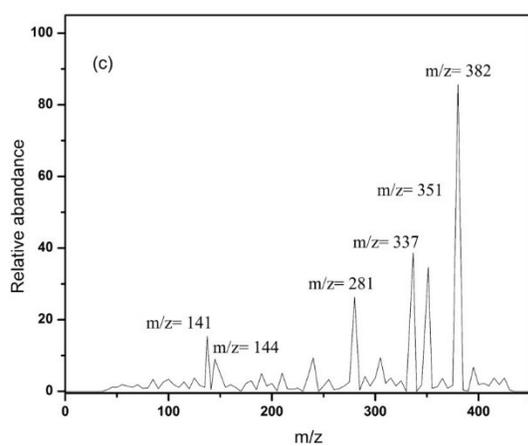
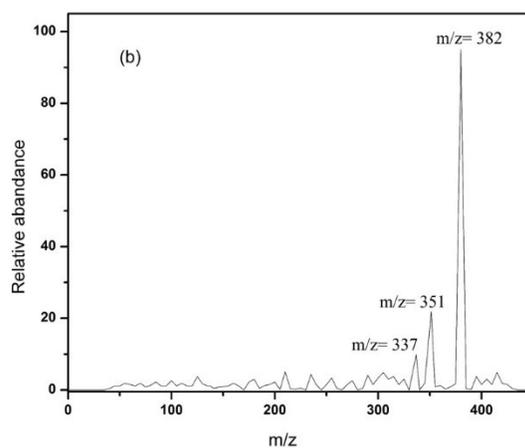
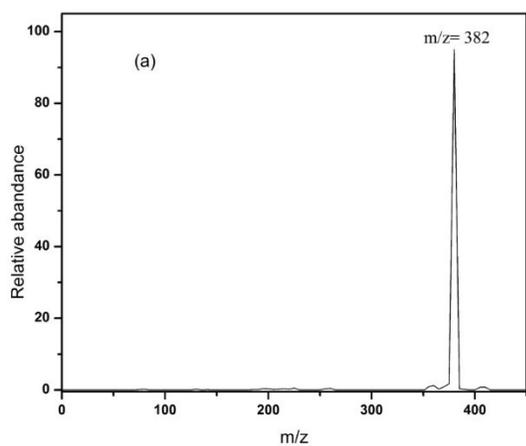
**S2 :** XRD data ; a: ZR, b: FZR



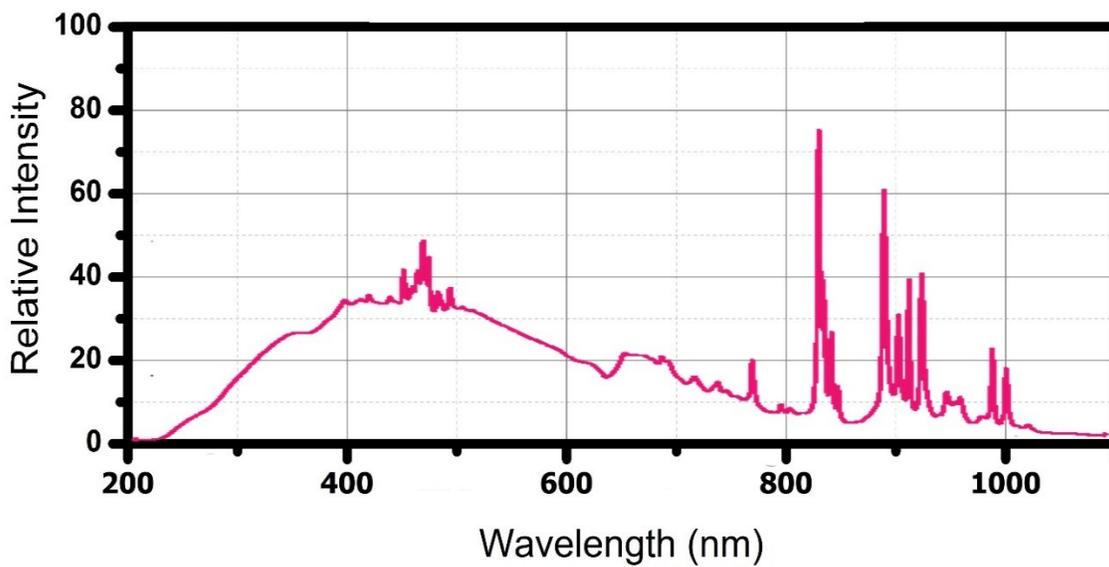
**S3: Photoreactor**



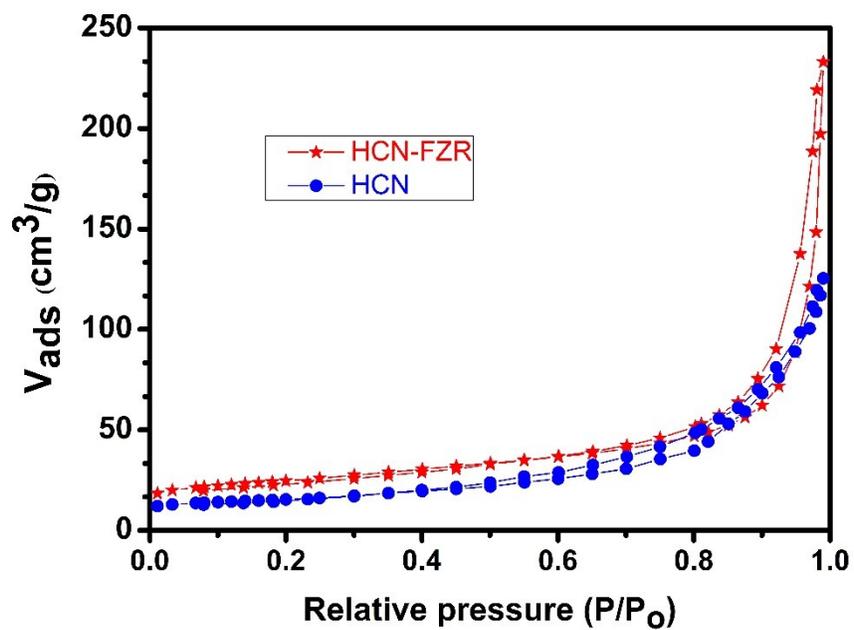
**S4: EDX spectrum ; a (HCN), b(ZR), c(FZR).**



**Fig. S5.** Mass spectra of MTSM photodegradation



**Fig. S6. Xenon Arc Lamp Spectrum**



**Fig. S7. Nitrogen sorption isotherm**