

## Supplementary Material

### HYDROPHOBIC DEEP EUTECTIC SOLVENTS FOR THE SONO-DEGRADATION OF ORGANIC POLLUTANTS IN WASTEWATER

### SOLVANTS EUTECTIQUES PROFONDES HYDROPHOBES POUR LA SONO-DÉGRADATION DES POLLUANTS ORGANIQUES DANS LES EAUX USÉES

Deborah Oluwatomilola Adeoye <sup>1,2\*</sup>, Zaharaddeen Sani Gano<sup>3</sup>, Omar Umar Ahmed<sup>4</sup>, Suleiman Mohammed Shuwa<sup>2</sup>, Abdulazeez Yusuf Atta<sup>2</sup>, Baba Yakubu Jibril<sup>2</sup>

A complementary FTIR analysis was carried out after the moisture absorption test on the HDESs to investigate the effect of absorbed moisture on them. Figures 1 and 2 show the FTIR spectra of MC<sub>10</sub> and MC<sub>12</sub> HDES respectively before and after mixing them with water.

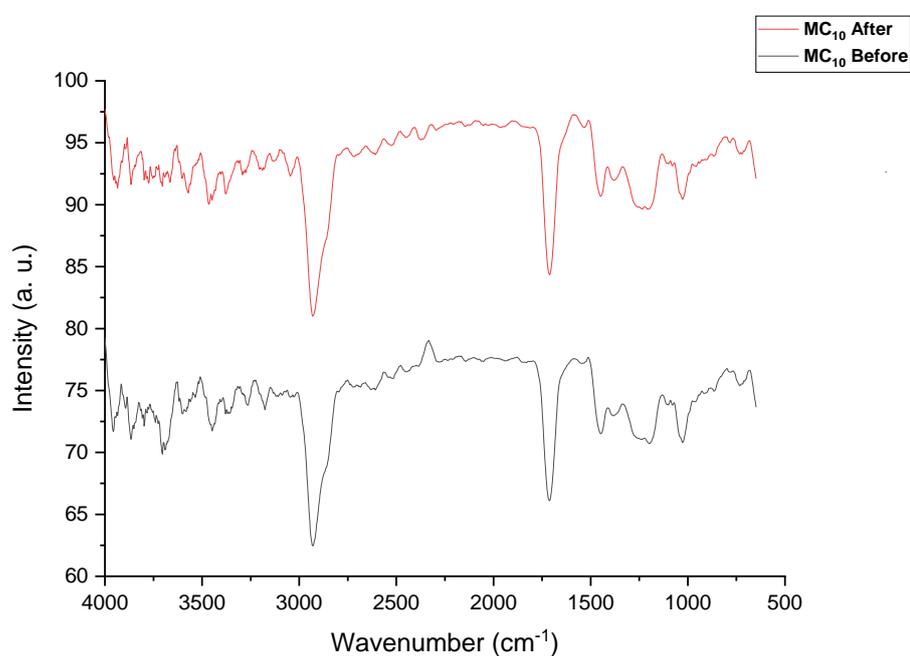


Figure 1: Cascaded FTIR Spectra of MC<sub>10</sub> HDES before and after mixing with water

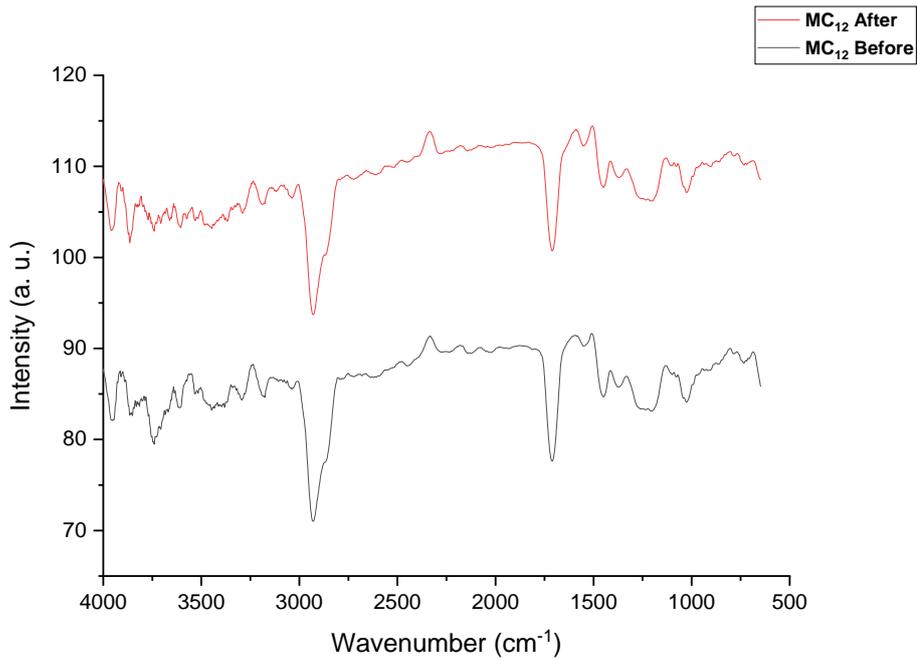


Figure 2: Cascaded FTIR Spectra of MC<sub>12</sub> HDES before and after mixing with water

FTIR analysis for the reused HDESs was carried out and it is as shown in Figures 3 and 4. The new peaks (identified by black arrowheads) observed on the reused MC<sub>10</sub> and MC<sub>12</sub> indicate the contaminant(s) absorbed by these HDESs which could be responsible for the decline in their degradation capacity.

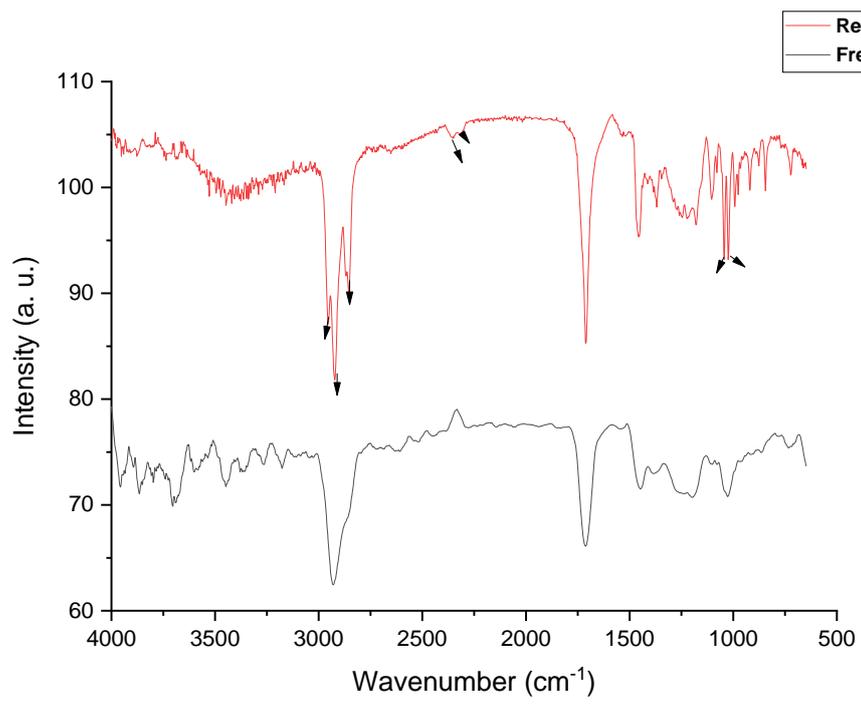


Figure 3: Cascaded FTIR Spectra of fresh and reused MC<sub>10</sub> HDES

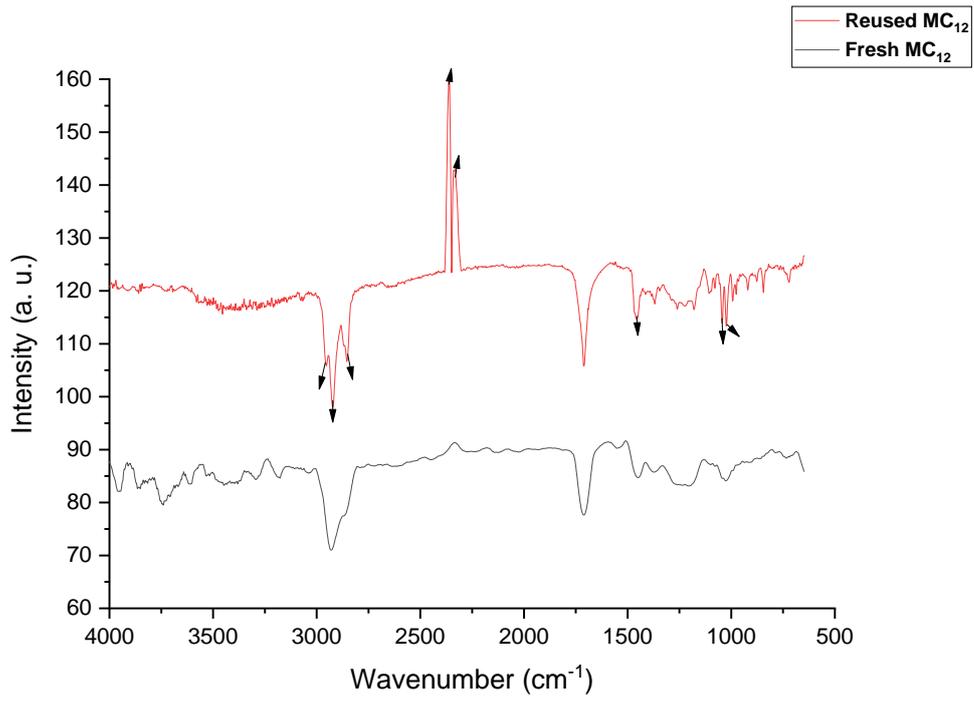


Figure 4: Cascaded FTIR Spectra of fresh and reused  $\text{MC}_{12}$  HDES