The EDX data for MPC Composite before and after addition of arsenate and SEM mapping of MPC/As(V) displayed in Fig ( $S_1$ , $S_2$ ). From the fig. $S_1$ a shows that MPC composite contains Fe, O and C elements. Further addition of arsenate into to MPC composite, the MPC composite having higher affinity towards the arsenate ions. Which results, provide evidence for elements Fe, O, C and As(V) presence in MPC/As(V) and results was displayed in Fig. $S_1$ b. Further SEM-Elements mapping analysis of MPC/As (V) was done to confirmed the presence of C, O, Fe and As(V) shown in fig. $S_2$ .

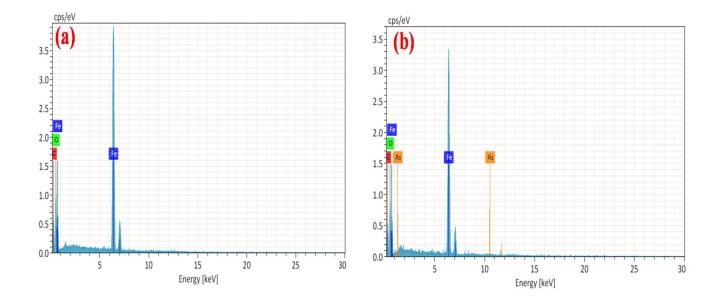


Fig.s<sub>1</sub>. EDX data of before and after addition of arsenate into the MPC Composite.

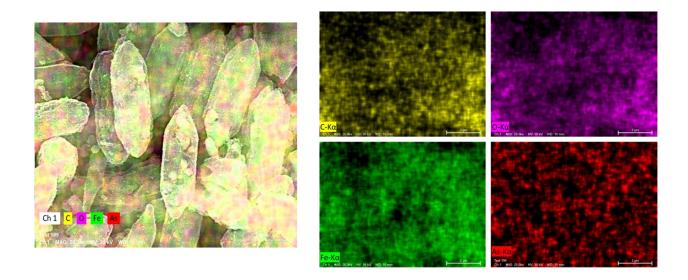


Fig.s<sub>2</sub>. The SEM mapping of each element present in MPC /As(V).