Electronic Supplementary Material (ESI) for RSC Advances.

The raw pine sawdust

Summary Report

Surface Area

Single point surface area at P/Po = 0.200312783: 0.1406 m²/g

BET Surface Area: 0.1224 m²/g

Langmuir Surface Area: 0.1500 m²/g

t-Plot Micropore Area: 0.9102 m²/g

t-Plot External Surface Area: -0.7878 m²/g

Pore Volume

t-Plot micropore volume: 0.000397 cm³/g

MSD

Summary Report

Surface Area

Single point surface area at P/Po = 0.200504571: 0.1449 m²/g

BET Surface Area: 0.1564 m²/g

Langmuir Surface Area: 0.2213 m²/g

t-Plot Micropore Area: 0.0248 m²/g

t-Plot External Surface Area: 0.1317 m²/g

BJH Adsorption cumulative surface area of pores between 17.000 Å and 3000.000 Å diameter: 0.068 m²/g

BJH Desorption cumulative surface area of pores between 17.000 Å and 3000.000 Å diameter: 0.1503 m²/g

Fig. S1. The summary reports of surface areas of the raw sawdust and MSD.

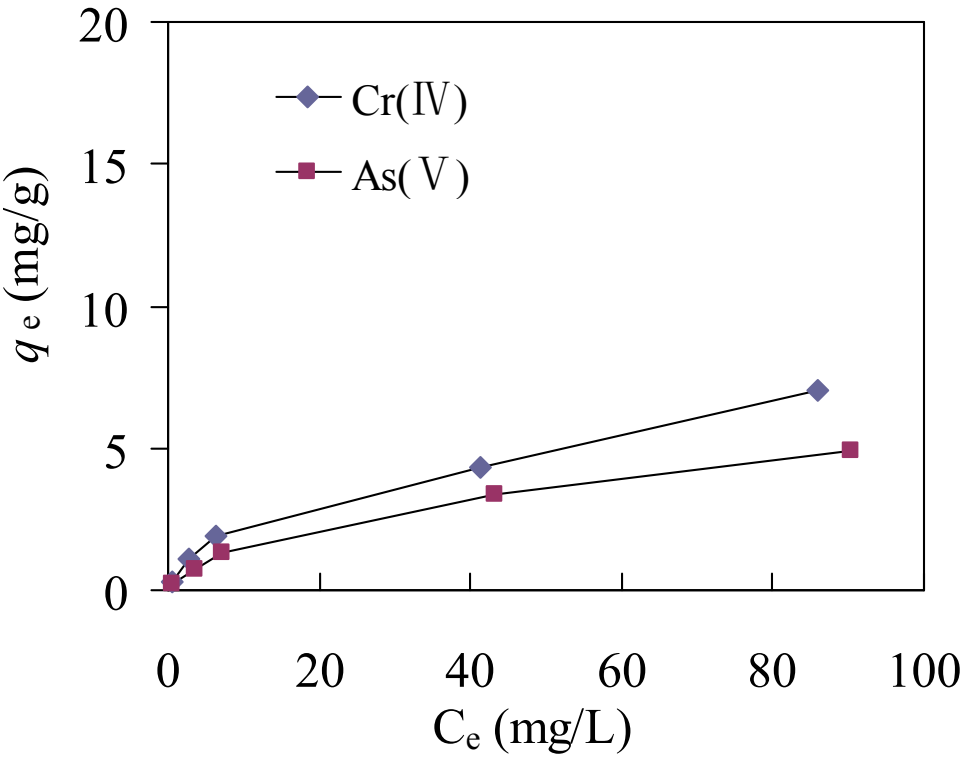

Fig. S2. Adsorption isotherms for Cr(VI) and As(V) by the raw sawdust. (raw sawdust dosage 0.2g, pH 7.0±0.2, temperature 25±2 °C)

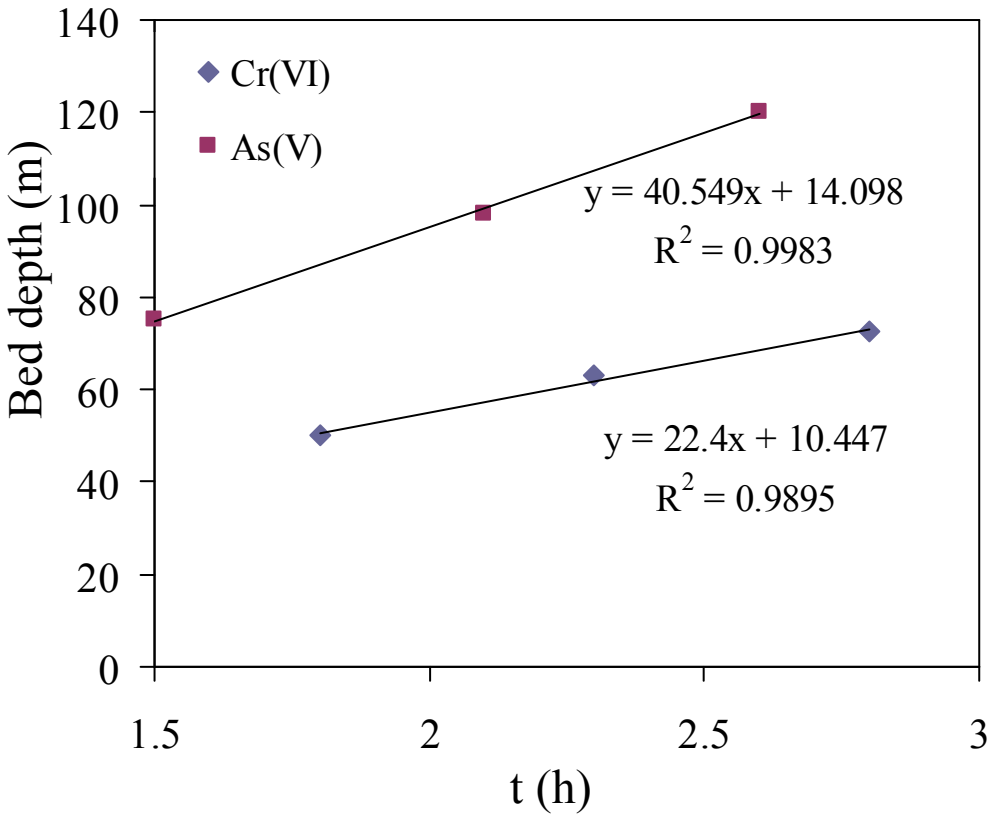

Fig. S3. The linearized BDST model for Cr(VI) and As(V) adsorption by MSD.