Sequential abatement of Fe^{II} and Cr^{VI} water pollution by use of walnut shell-based adsorbents

Marius Gheju, Ionel Balcu

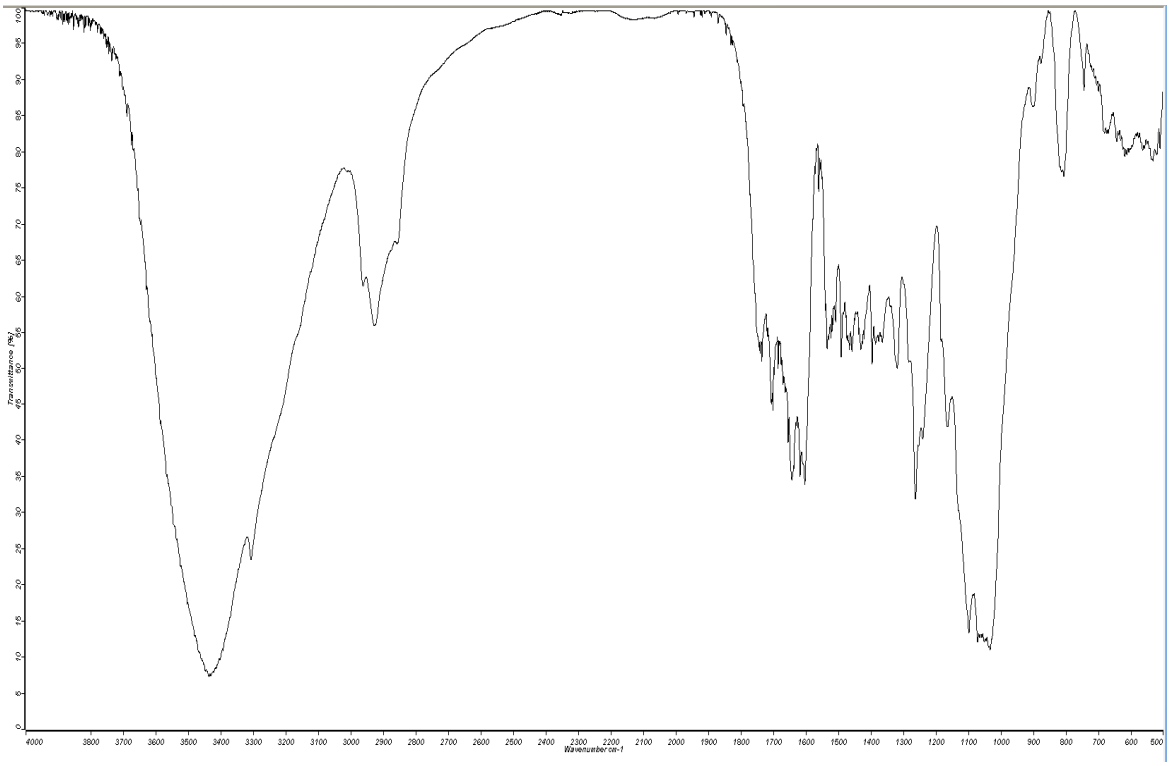

Figure S1. FTIR spectra of fresh WSP

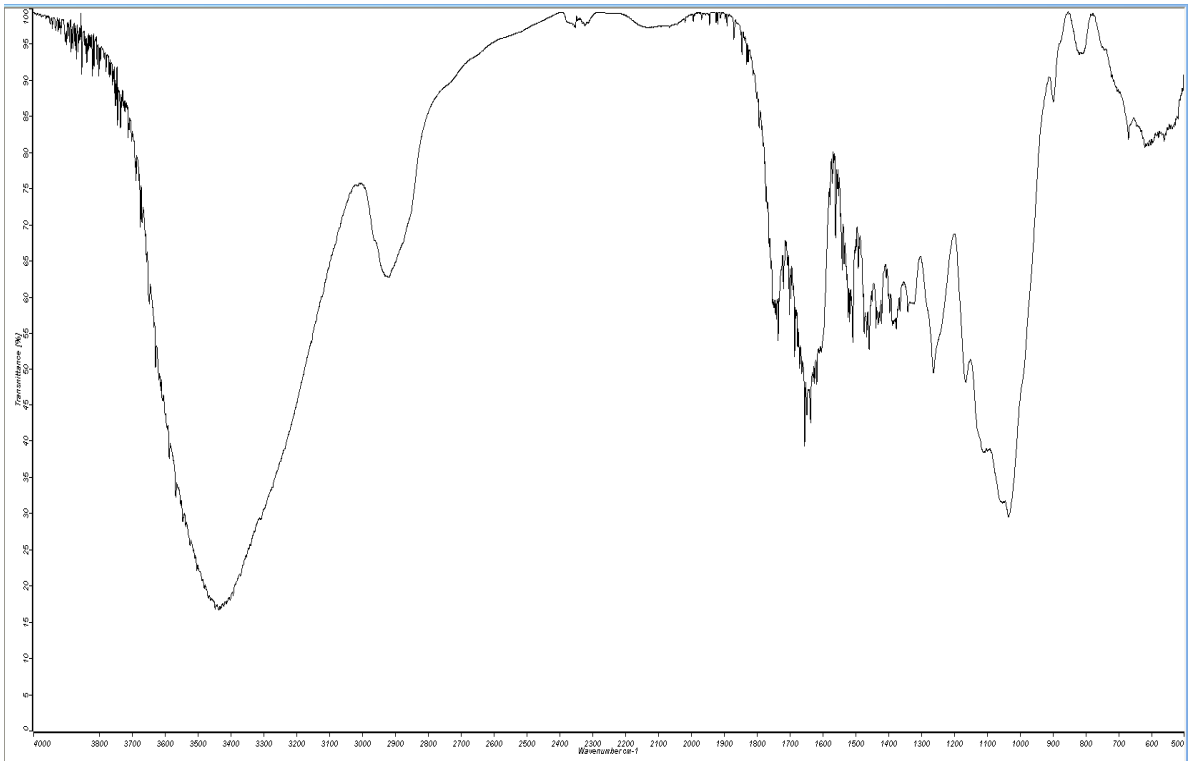

Figure S2. FTIR spectra of WSP-Fe^{II}

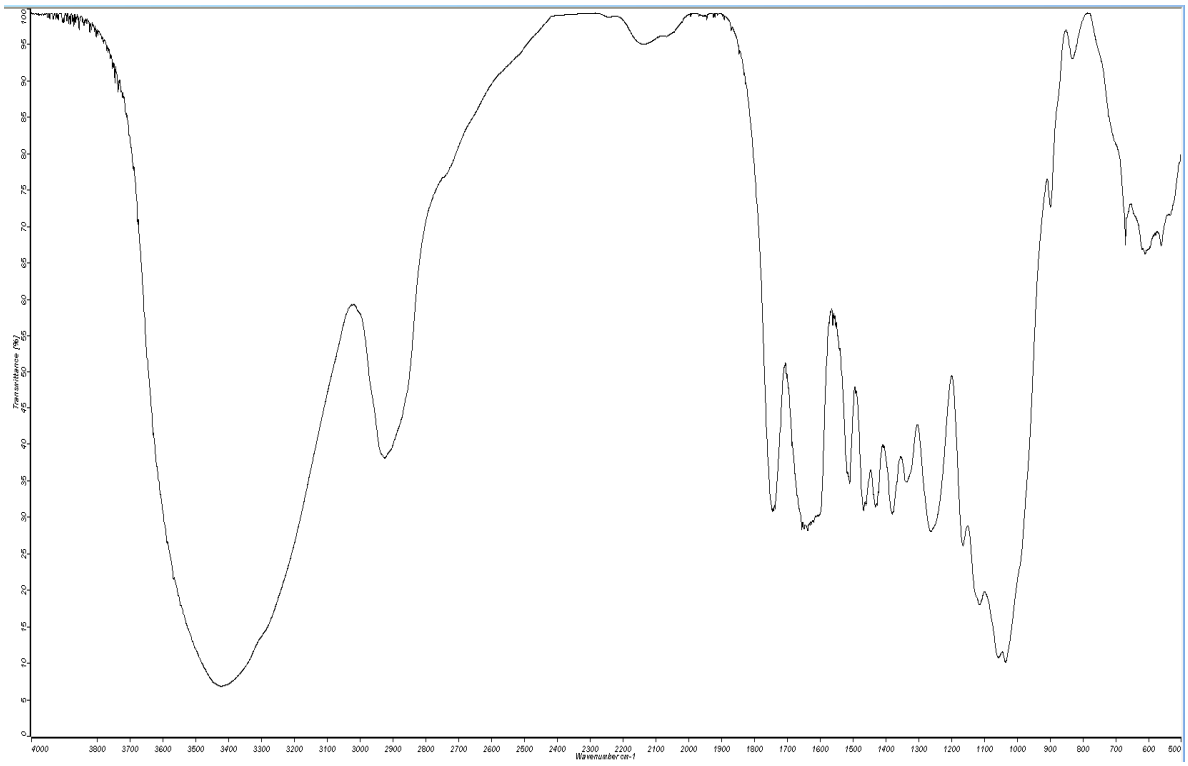

Figure S3. FTIR spectra of fresh WSP-Fe(0)

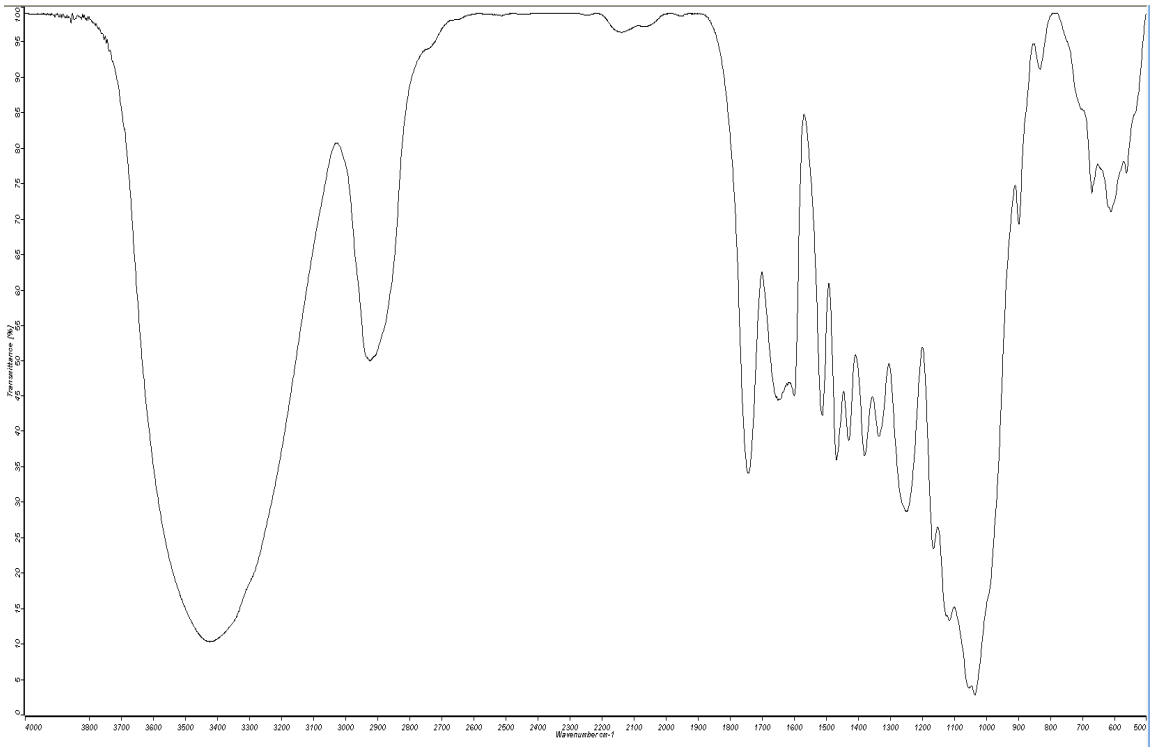

Figure S4. FTIR spectra of Cr(VI)-loaded WSP-Fe(0)

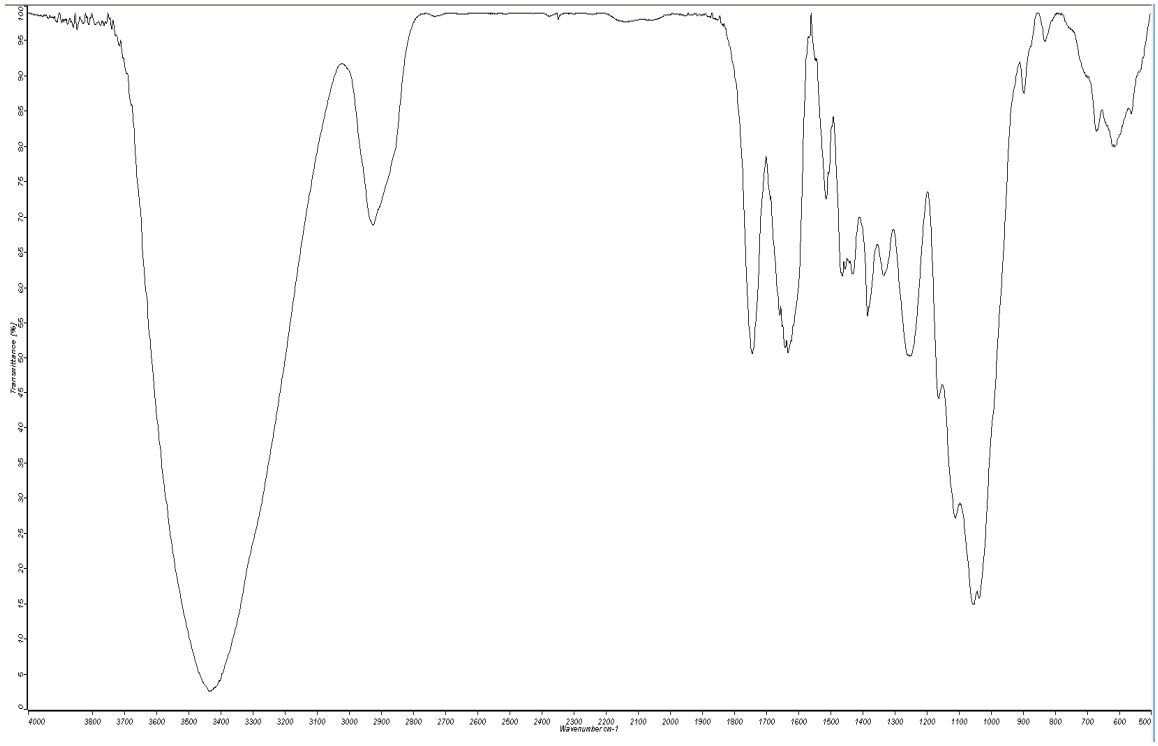

Figure S5. FTIR spectra of Cr(VI)-loaded WSP

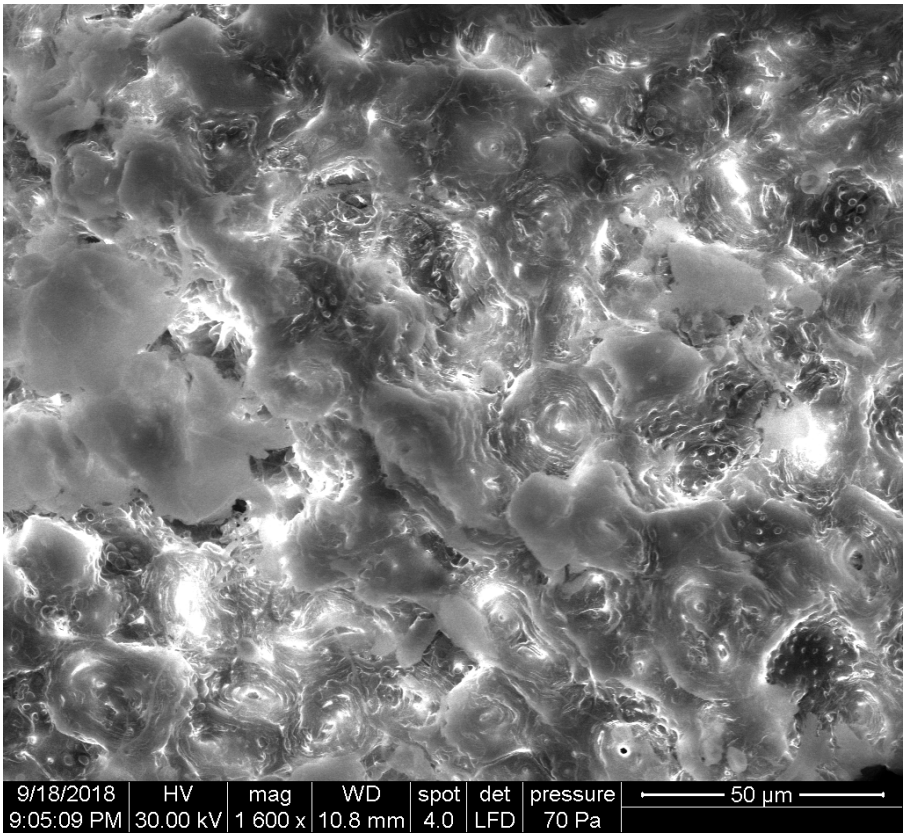

Figure S6. SEM micrograph of fresh WSP

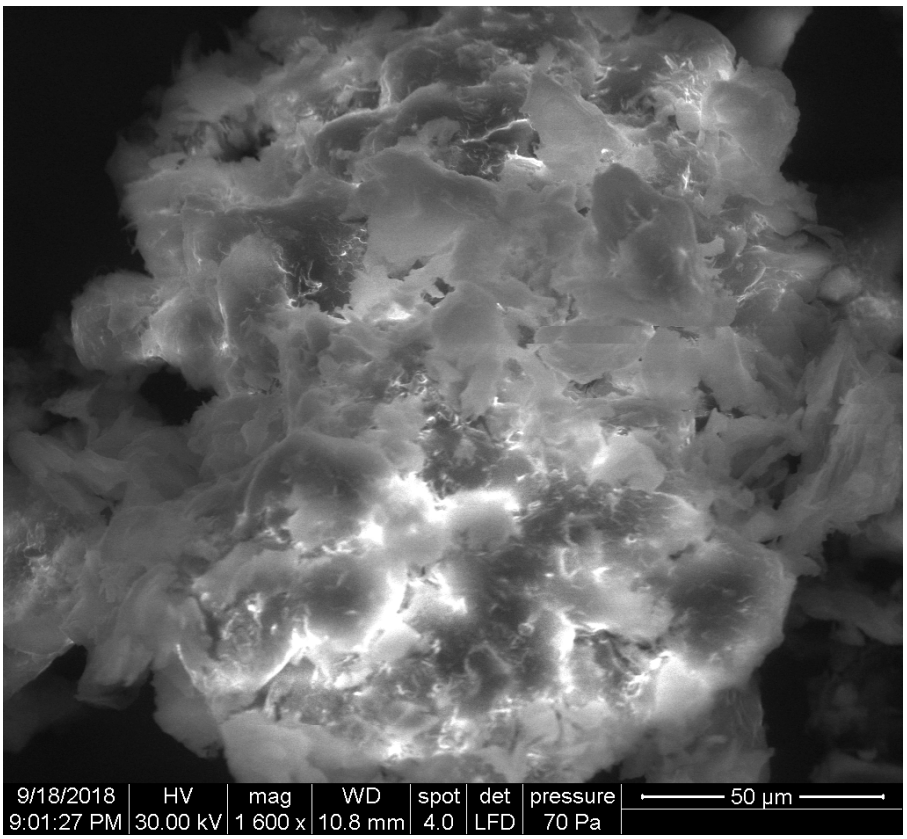

Figure S7. SEM micrograph of Fe(II)-loaded WSP

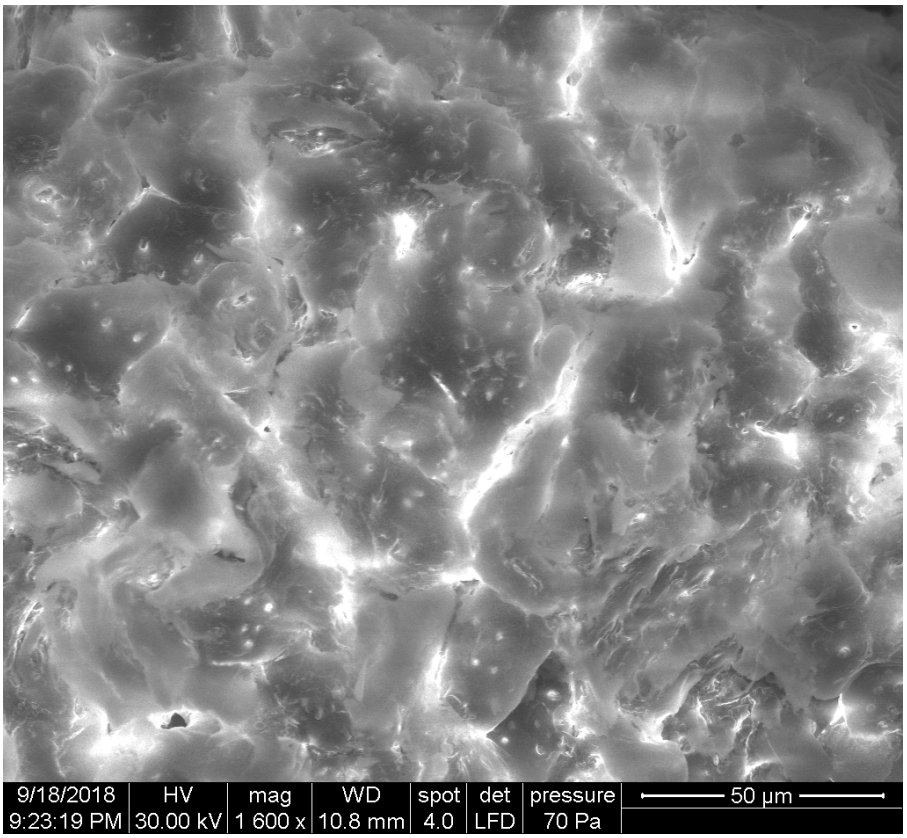

Figure S8. SEM micrograph of fresh WSP-Fe(0)

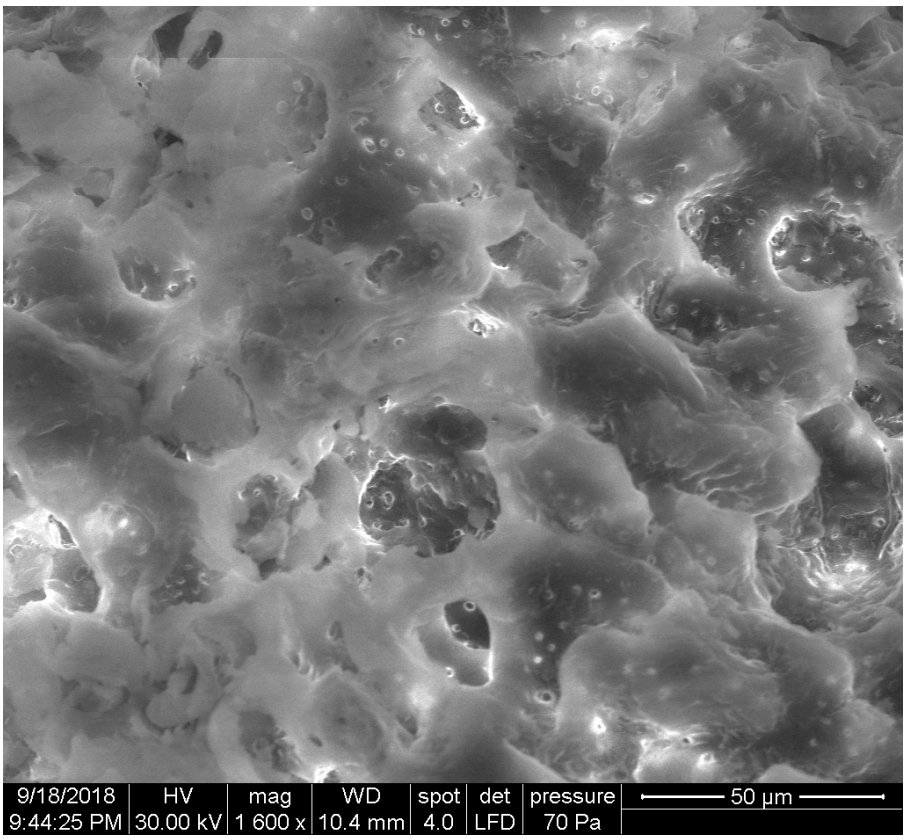

Figure S9. SEM micrograph of Cr(VI)-loaded WSP-Fe(0)

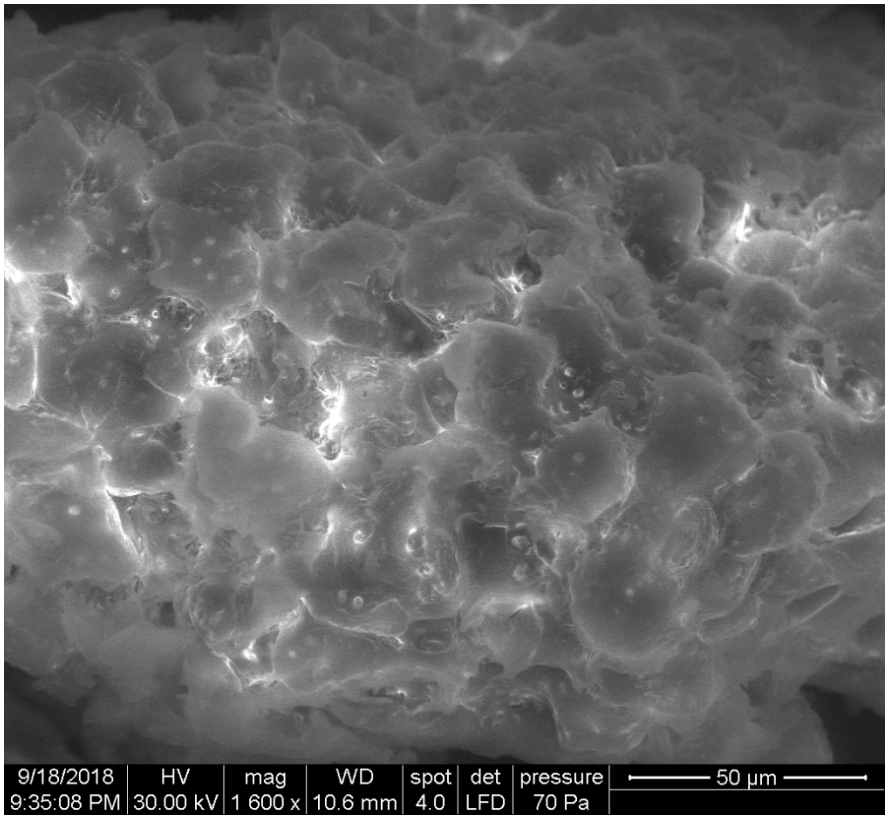

Figure S10. SEM micrograph of Cr(VI)-loaded WSP

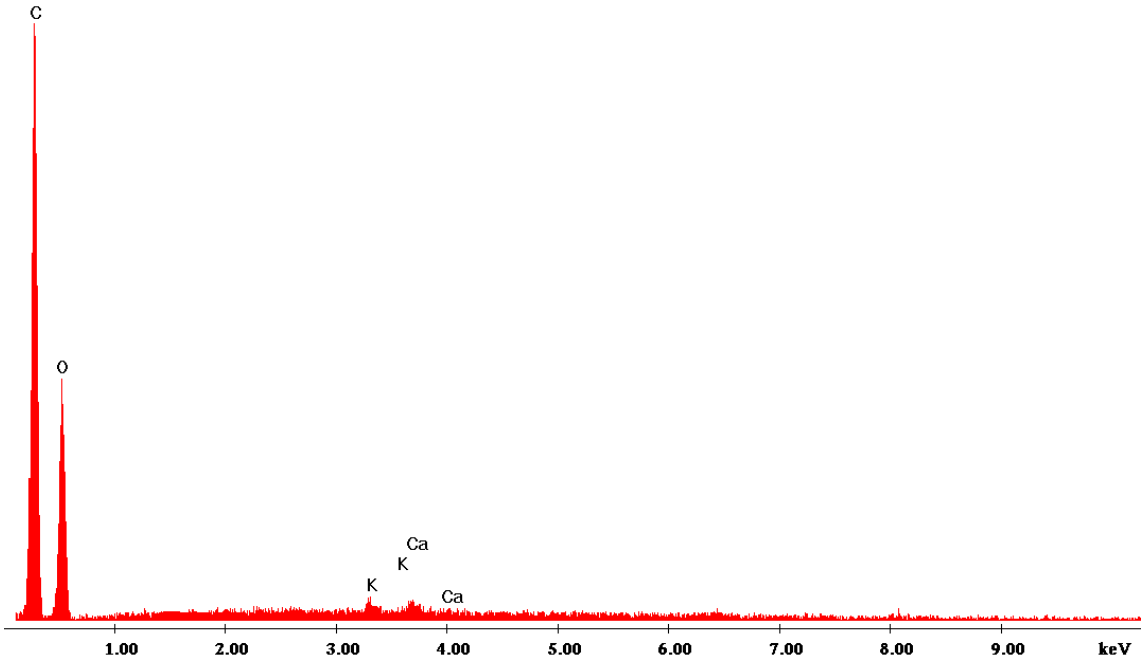

Figure S11. EDX pattern of fresh WSP

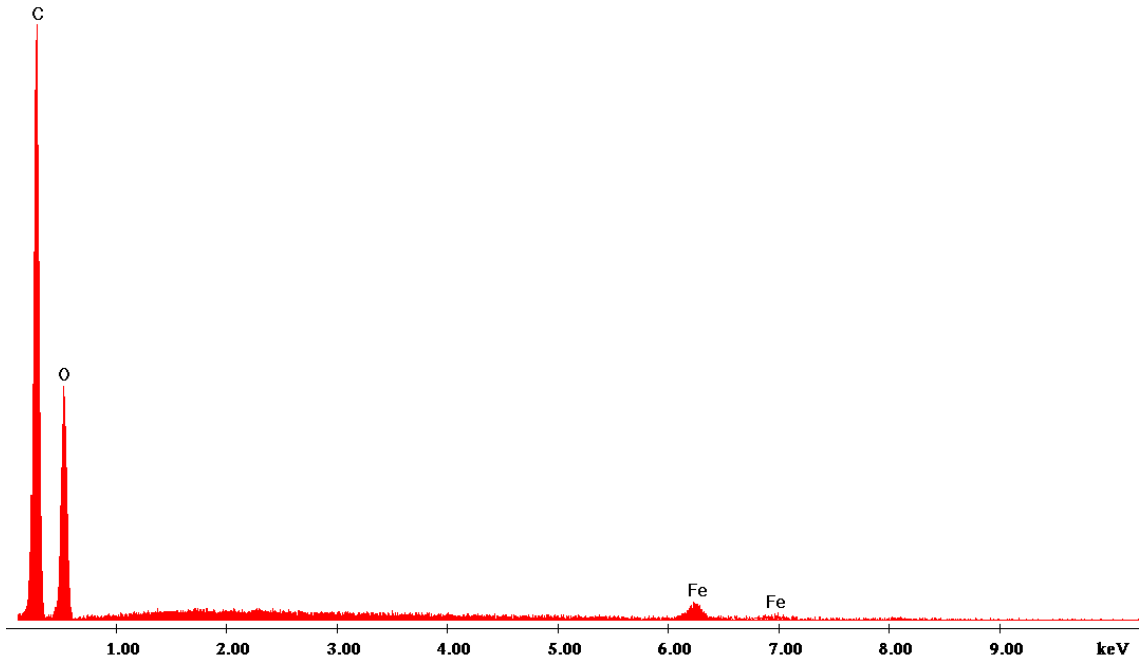

Figure S12. EDX pattern of Fe(II)-loaded WSP

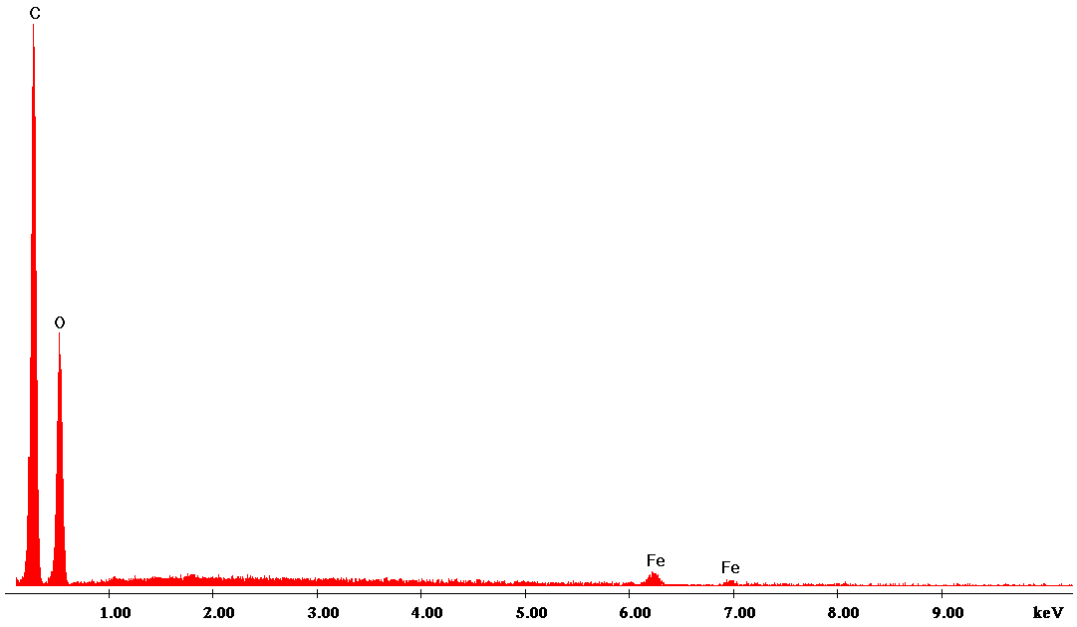

Figure S13. EDX pattern of fresh WSP-Fe(0)

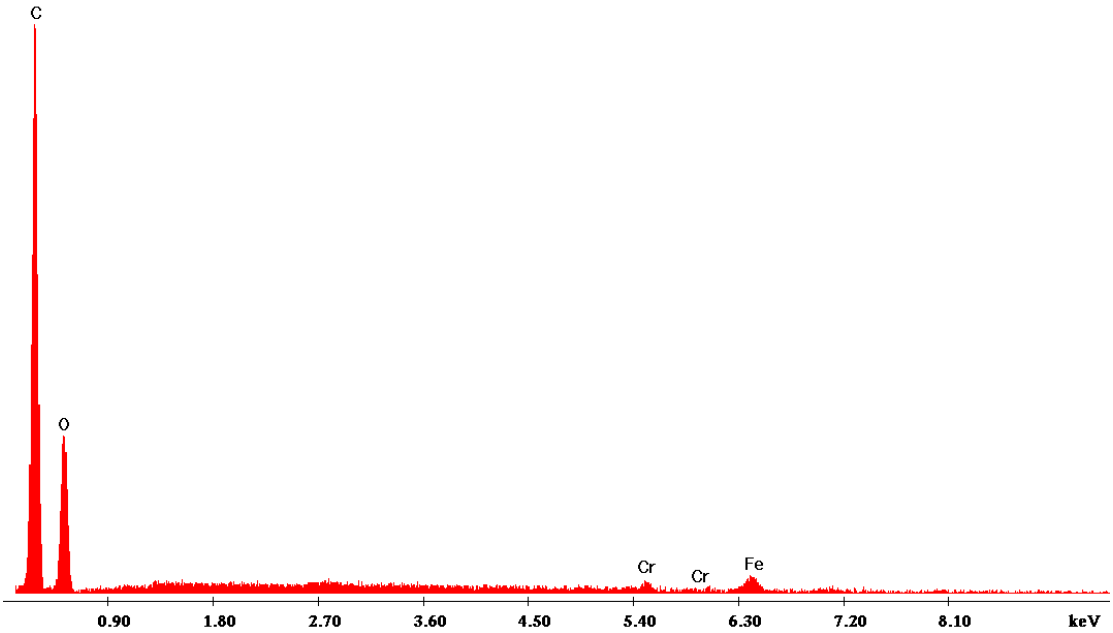

Figure S14. EDX pattern of Cr(VI)-loaded WSP-Fe(0)

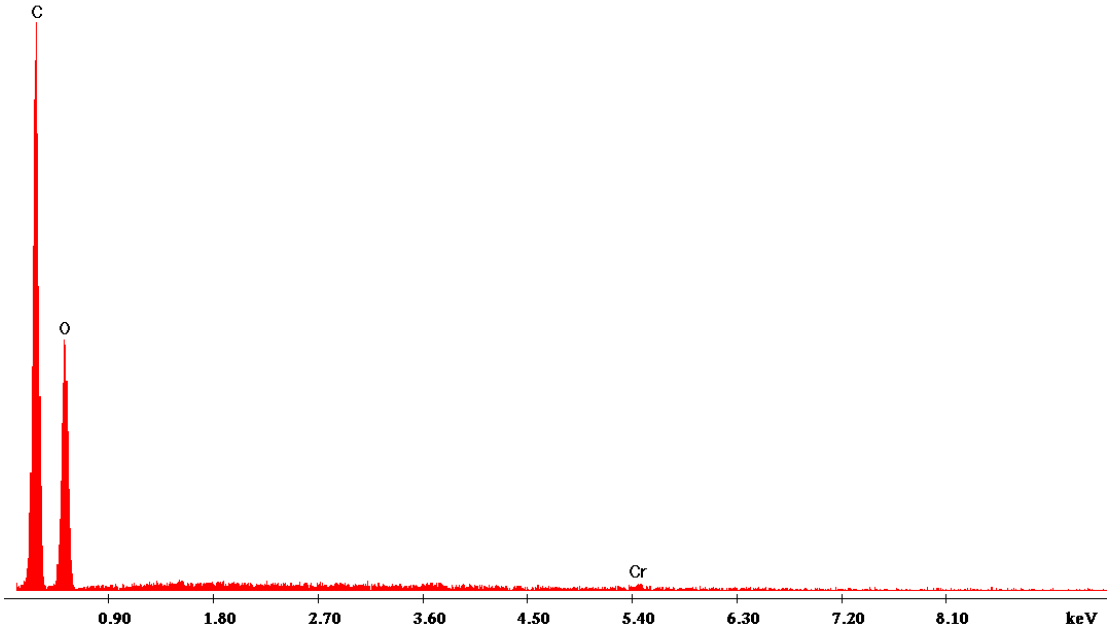

Figure S15. EDX pattern of Cr(VI)-loaded WSP

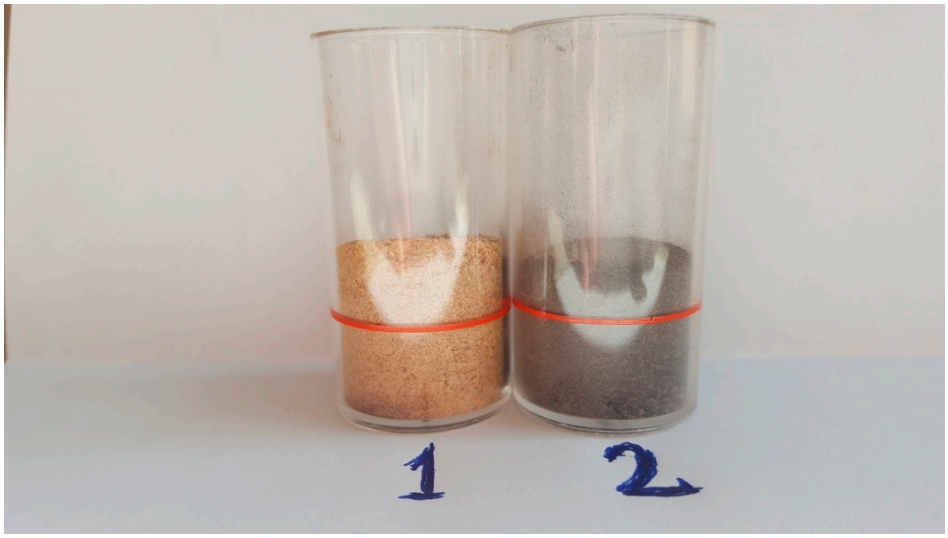

Figure S16. Image of WSP (1) and WSP-Fe^0 (2).

Table S1. Word Health Organization maximum permissible limits of some heavy metals in drinking water [1].

	Guideline value
Cu	2 mg/L
Total Cr	50 μg/L
Cd	3 μg/L
Ni	70 μg/L
Pb	10 μg/L
Hg	6 μg/L

References

1. World Health Organization. Guidelines for drinking-water quality: fourth edition incorporating the first addendum. Geneva, 2017. Licence: CC BY-NC-SA 3.0 IGO.