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Supplementary Material

Effective adsorptive removal of 2, 4, 6-trinitrotoluene and hexahydro-1, 3, 5-trinitro-1, 3, 5-triazine by pseudo graphitic carbon: kinetics, equilibrium and thermodynamics

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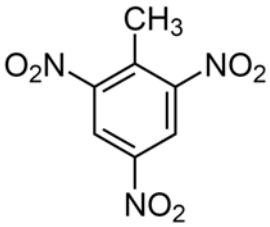
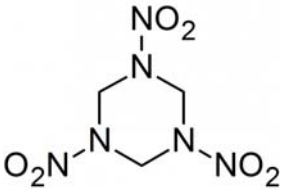
Table S1. Physical properties and molecular structures of TNT and RDX

Parameter	TNT	RDX
Molecular weight (g mol^{-1})	227.13	222.26
Density (g cm^{-3})	1.654	1.82
Solubility in water (mg L^{-1} in 20 °C)	130	39
Octanol-water partition coefficient ($logK_{ow}$)	1.6	0.87
Molecular structure		

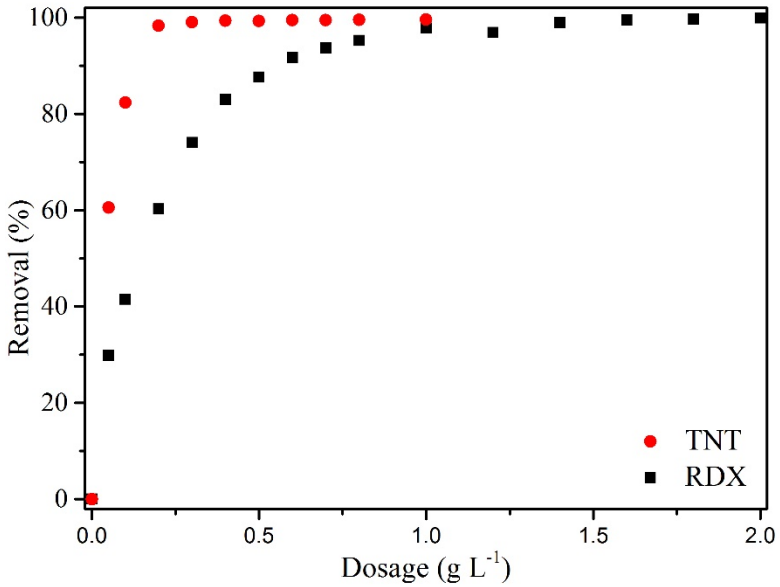


Fig. S1. The effect of dosage on adsorptive removal of TNT and RDX (10 mg L^{-1}) onto PGC at pH 6.0, 24 h equilibrium time at room temperature (293 K).

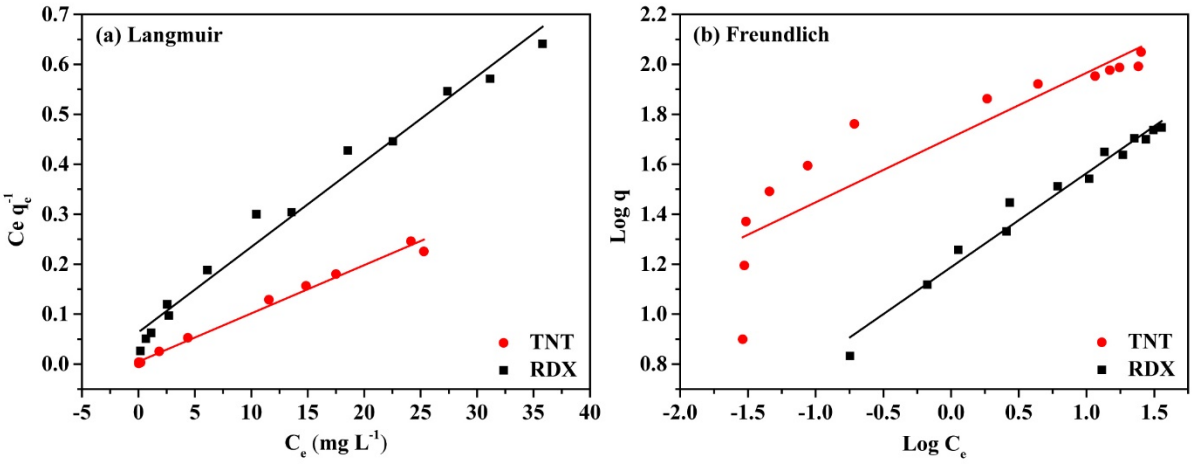


Fig. S2. Adsorption isotherm Langmuir (a) and Freundlich (b) plots in linear regression analysis for TNT and RDX (initial concentration: 10 mg L^{-1}) onto PGC (0.3 g L^{-1}) at pH 6.0, 24 h equilibrium time and room temperature (293 K).

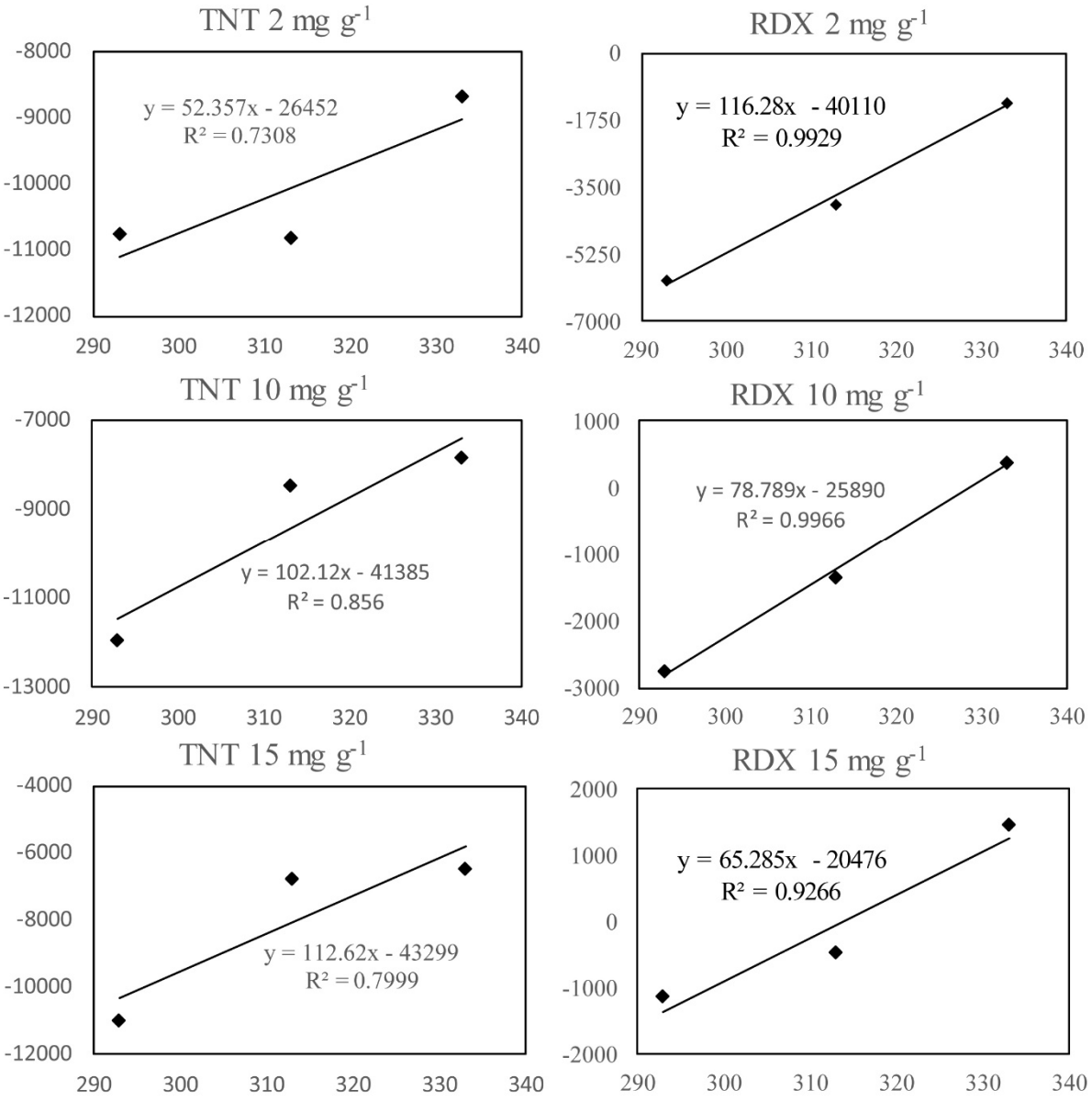


Fig. S3. ΔG vs T plots for TNT and RDX (initial concentration: 2, 10 and 15 mg L^{-1}) removal by using PGC (0.3 g L^{-1}) at pH 6.0, 24 h equilibrium time and room temperature (293 K).