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Supplementary data

## Design of novolac resin-based network polymers for adsorptive removal of azo dye molecules

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Figure 1s FTIR spectrum of 2



Figure 2s FTIR spectrum of 3

Network Polymers	TG/DTG*					
	T <sub>d</sub> <sup>5-8</sup> (°C)	Stage	Temp. range (°C)	T <sub>max</sub> (°C)	Weight loss%	Y <sub>c</sub> at 600°C (wt%)
2	267	1	267-369	338	47.69	21
	287	2	369-455	406	43.51	
		1	245-384	346	43.59	
3	245	2	384-482	420	40.61	11

Table 1s: Thermal properties (TG/DTG) of 2 and 3.

\*TGA analysis was performed at a heating rate of 10°C/min under nitrogen flow (100 ml/min);  $T_d^{5-8}$ = Temperature at which 5-8 % weight loss occurred;  $T_{max}$ = maximum rate of weight loss;  $Y_c$  = char yield.



Figure 3s Freundlich isotherms for the adsorption of MO onto 3 at (a) pH 2.30 and (b) pH 7.0 at 25°C



Figure 4s Freundlich isotherms for the adsorption of OG onto 2 at (a) pH 2.30 and (b) pH 7.0 at 25°C



Figure 5s Freundlich isotherms for the adsorption of OG onto 3 at (a) pH 2.30 and (b) pH 7.0 at 25°C