

Supplementary information

Table S1- comparison of total adsorption capacity of pristine CNT and FeCNT at selected temperatures

P(Mpa)	175K		250K		298	
	CNT	FeCNT	CNT	FeCNT	CNT	FeCNT
0.1	0.2597	0.2587	0.1560	0.1554	0.1560	0.1554
0.5	1.2898	1.2801	0.9287	0.9250	0.7751	0.7720
1	2.6212	2.6040	1.8543	1.8417	1.5395	1.5323
1.2	3.1765	3.1635	2.2138	2.1962	1.8471	1.8412
1.4	3.6767	3.6659	2.5701	2.5506	2.1523	2.1427
1.6	4.1711	4.1460	2.9219	2.9075	2.4576	2.4402
1.8	4.7111	4.6026	3.3240	3.2929	2.7627	2.7474
2	5.1955	5.0890	3.6738	3.6632	3.0640	3.0504
2.5	6.4015	6.3638	4.5530	4.5245	3.8142	3.8036
3	7.2106	7.4090	5.4140	5.3457	4.5506	4.4907
3.5	7.7991	8.2632	6.1719	6.1205	5.2704	5.1889
4	7.5449	8.7350	6.6404	6.8879	5.9445	5.8890
4.5	8.0780	9.2211	7.0093	7.6277	6.4111	6.4612
5	9.0898	9.1235	7.1885	7.9834	7.0084	7.0238
10	9.2009	10.0861	8.0688	9.4369	8.8401	9.1130