A Grand Canonical Monte Carlo simulation for the evaluation of pore size distribution of nuclear-grade graphite from Kr adsorption isotherms.
Supplementary information.

Giuliano M. Laudone* and Katie L. Jones

Faculty of Science and Engineering, University of Plymouth, Plymouth, UK

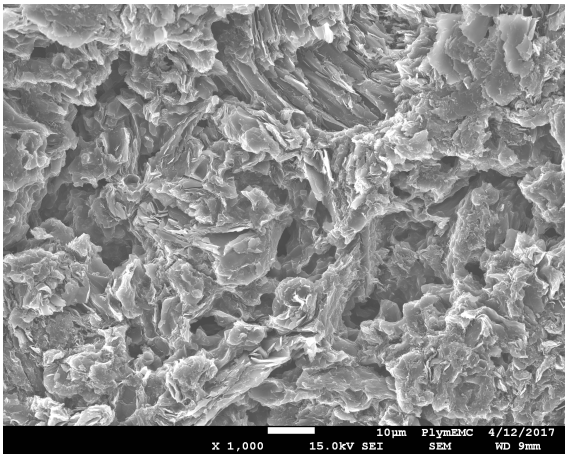
E-mail: glaudone@plymouth.ac.uk

Materials

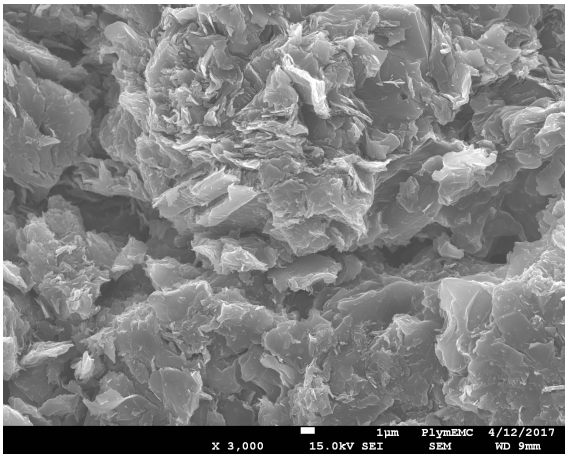
Table SI1: Density and porosity data for IG110 and IG430 graphites.

Grade	Coke	Coke particle size μm	Bulk density g cm^{-3}	Apparent skeletal density g cm^{-3}	Accessible porosity %	Total porosity %
IG110	Petrol	10	1.77	2.06	12.61	20.36
IG430	Pitch	10	1.82	2.10	13.31	19.62

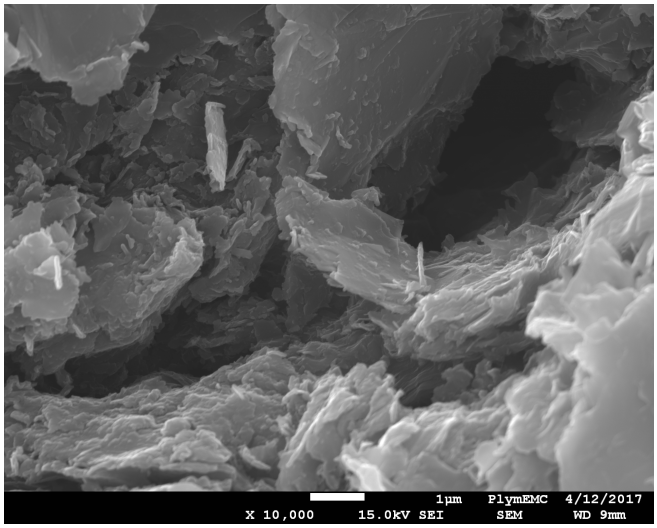
Scanning Electron Micrographs



(a)

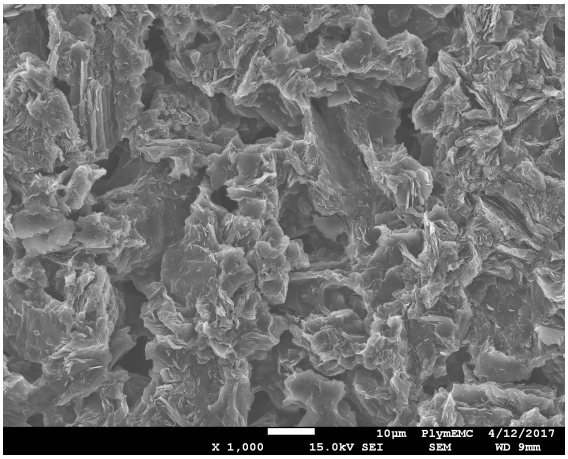


(b)

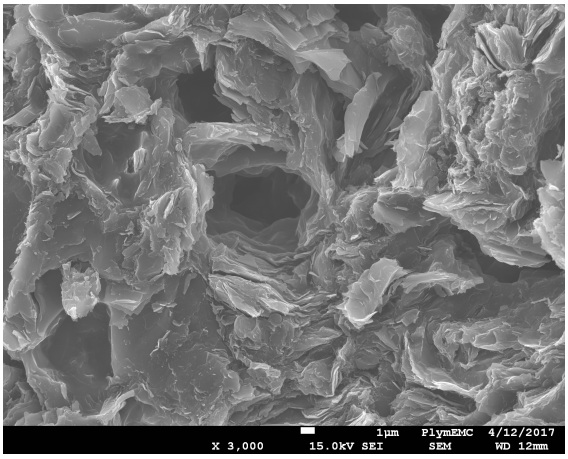


(c)

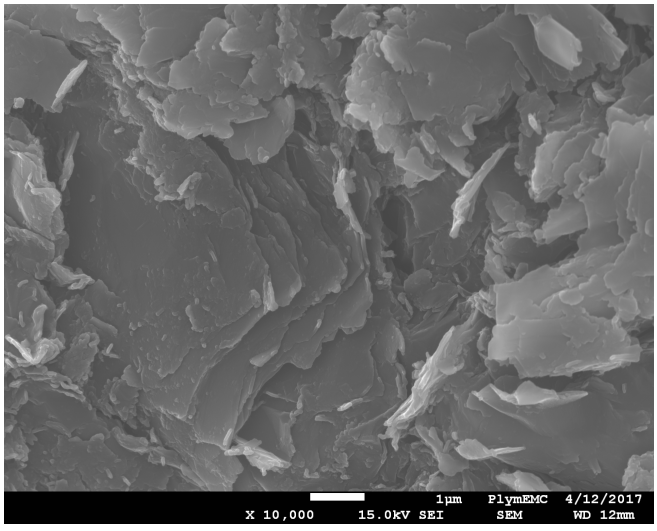
Figure SI1: Scanning electrong micrographs of IG110 at different magnifications.



(a)



(b)



(c)

Figure SI2: Scanning electrong micrographs of IG430 at different magnifications.

Adsorption isotherms

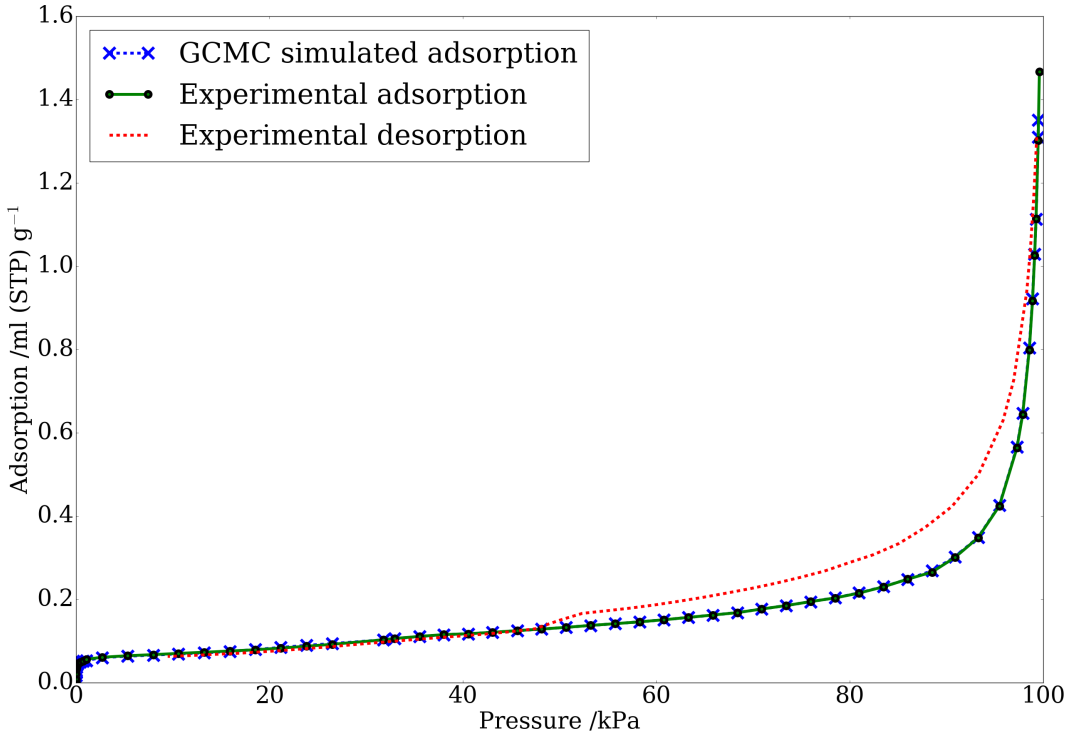


Figure SI3: Experimental and simulated N_2 adsorption/desorption isotherms for IG110 graphite.

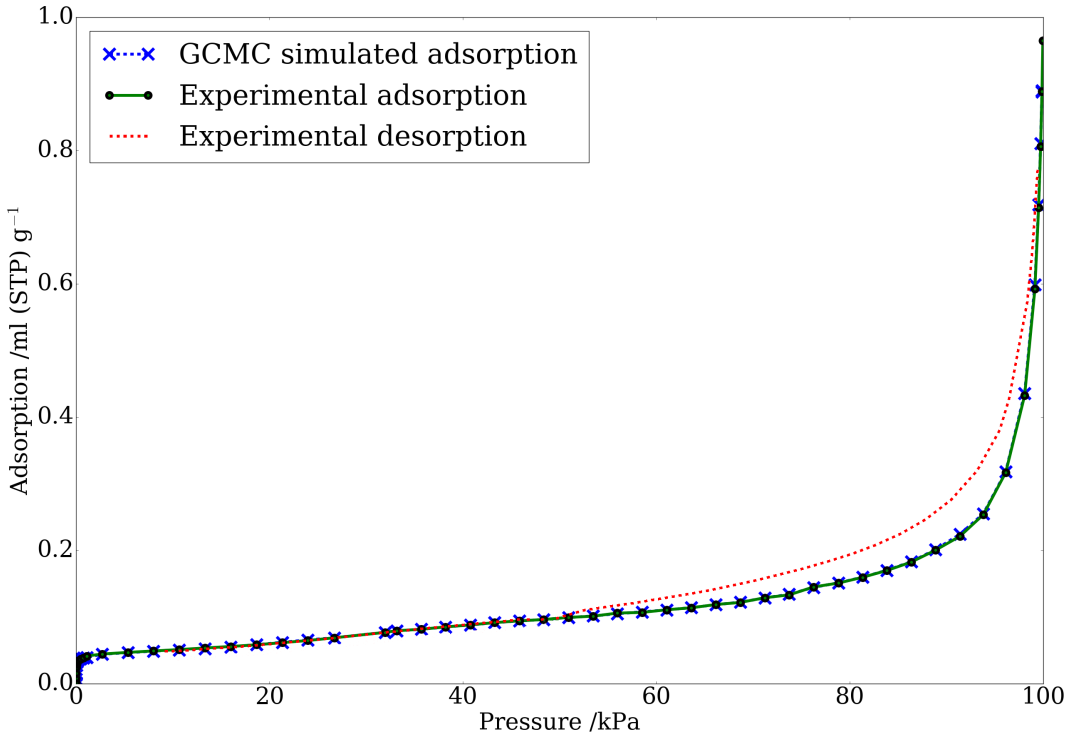


Figure SI4: Experimental and simulated N_2 adsorption/desorption isotherms for IG430 graphite.

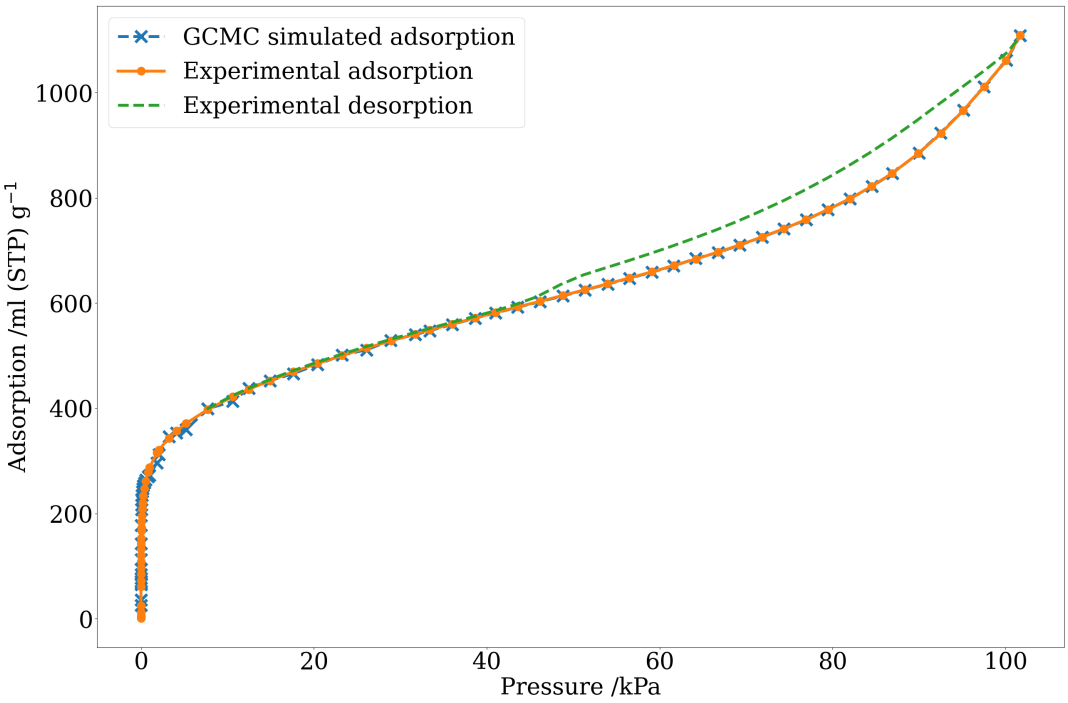


Figure SI5: Experimental and simulated N_2 adsorption/desorption isotherms for activated carbon.