

LIST OF SYMBOLS

SYMBOL		UNIT
a_m	Projection area per molecule (0.162 nm ² /molecule)	
C	Constant specified by each gas	[-]
D	Average pore diameter	[Å]
d	Spacing between atomic layers in crystal	[Å]
d_{XRD}	The crystallite size of sample powder	[Å]
k	Scherrer's constant ranging from 0.7 to 1.71.	[-]
N_{AV}	Avogadro number (6.02 x 10 ²³)	[-]
P	Vapor pressure	[mmHg]
P_0	Saturated pressure	[mmHg]
S	Surface area	[m ² /g]
S_{BET}	BET surface area	[m ² /g]
S_{me}	Mesopore surface area	[m ² /g]
S_{mi}	Micropore surface area	[m ² /g]
t	Statistical adsorbed film thickness	[Å]
V	Volume	[cm ³]
V_m	Volume of N ₂ adsorbed when the entire adsorbent surface is covered with a complete unimolecular layer	[cm ³]
V_{me}	Mesopore volume	[cc/g]
V_{mi}	Micropore volume	[cc/g]
ΔH_A	Heat of adsorption	[kJ/mol]
ΔH_L	Heat of liquefaction	[kJ/mol]
λ	Incident X-ray wavelength	[Å]

θ	The angle between the incidence ray and the scattering plane	[°]
	The diffraction angle for the (111) plane	[°]
β	half height width of the characteristic peak	[°]