

List of Abbreviations

Al	Aluminium
BET	Brunauer Emmett Teller
CNT	Carbon Nanotube
cm	Centimetre
cPIM	Carboxylate Polymers of Intrinsic Microscopy
DCM	Dichloromethane
DMA	Dynamic Mechanical Analysis
DSC	Differential Scanning Calorimetry
FCC	Face Centre Cubic
FE-SEM	Field Emission Scanning Electron Microscopy
FFV	Fractional Free Volume
GTR	Gas Transmission Rate
Hz	Hertz
Ir	Iridium
KD	Kinetic Diameter
µm	Micrometre
MMM	Mixed Matrix Membrane
OTR	Oxygen Transmission Rate
Pa	Pascal
PBI	Poly[2,2'-(1,3- phenylene)-5,5'-bibenzimidazole]
PC	Polycarbonate
Pd	Palladium
PES	Polyethersulfone
PEO	Polyethylene oxide
PNC	Polymer Nanocomposite
PSF	Polysulfone
psi	Pound per Square Inch
Pt	Platinum
PTMSP	Poly(1-trimethylsilyl-1-propyne)
PVA	Poly (vinyl alcohol)

PVAm	Poly (vinyl amine)
SEM	Scanning Electron Microscopy
SiO ₂	Silica
SS	Stainless Steel
wt%	Weight Percentage
ZIF	Zeolite Imidazolate Framework