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**List of Abbreviations**

BCNC	Bacterial Cellulose Nanocrystals
BHKP	Bleached Hard Kraft Pulp
BPF	Banana Pseudo Stem Fiber
CA	Citric acid
CMMT	Citric acid modified montmorillonite
CPCB	Central Pollution Control Board
CS	Chitosan
DLS	Dynamic Light Scattering
EB	Elongation at Break
FTIR	Fourier Transform Infrared Spectroscopy
HDPE	High-Density Polyethylene
HNTs	Halloysite Nanotubes
LCNF	Lignocellulosic Nanofibers
LCNWs	Lignocellulosic Nanowhiskers
LDPE	Low-Density Polyethylene
MA	Maleic Anhydride
MA	Maleic Acid
MAPP	Maleic Anhydride Grafted Poly Propylene
MCC	Micro Crystalline Cellulose
MMT	Montmorillonite
MPa	Mega Pascals
NCFs CNF	Nanocellulose Fibrils
NFC	Nanofibrillated Cellulose
PBS	Poly Butylenes Succinate
PCL	Poly Caprolactone
PET or PETE	Polyethylene Terephthalate
PHA	Poly Hydroxyl Alkanoate
PHB	Poly Hydroxyl Butyrate
PHBV	Poly Hydroxyl Butyrate Co-Valerate
PLA	Poly Lactic Acid
PP	Polypropylene

PS	Polystyrene
PVA	Poly Vinyl Alcohol
PVC	Polyvinyl Chloride
RH	Relative Humidity
RSM	Response Surface Methodology
SEM	Scanning Electron Microscopy
TEMPO	[(2,2,6,6-Tetramethylpiperidin-1-Yl) Oxidanyl]
TONC	TEMPO-Oxidized Nanocellulose
TS	Tensile Strength
WST	Water Swelling Test
WVP	Water Vapour Permeability
WVTR	Water Vapour Transmission Rate
XRD	X-Ray Diffraction