

Abbreviations and Notations

AN	Acrylonitrile
ABS	Acrylonitrile-butadiene-styrene
AIBN	Azobis isobutyronitrile
BPO	Benzoylperoxide
CMC	Critical micelle concentration
DCPO	Dicumylperoxide
DSC	Differential scanning calorimetry
DVB	Divinylbenzene
DMA	Dynamic mechanical analysis
EMA	Ethylmethacrylate
FTIR	Fourier transform infrared spectroscopy
GPC	Gel permeation chromatography
T _g	Glass transition temperature
HDT	Heat distortion temperature
HIPS	High impact polystyrene
χ	Interaction parameter
LCP	Liquid crystal polymer
LCST	Lower critical solution temperature
MAH	Maleicanhydride
$\phi_{\max}$	Maximum packing volume
MABS	Methacrylonitrile – butadiene- styrene
MEK	Methyl ethyl ketone
MMBS	Methylmethacrylate – butadiene- styrene
MWD	Molecular weight distribution
NMR	Nuclear magnetic resonance
M _n	Number average molecular weight
PC	Polycarbonate

PABs	Polymer alloys and blends
PMMA	Polymethylmethacrylate
PP	Polypropylene
iPP	Isotactic PP
sPP	Syndiotactic PP
PVC	Polyvinylchloride
SEM	Scanning electron microscopy
1Ø	Single phase
SANS	Small angle neutron scattering
St	Styrene
SAN	Styrene-acrylonitrile
TGA	Thermogravimetric analysis
TEM	Transmission electron microscopy
2Ø	Two phase
UCST	Upper critical solution temperature
$\bar{M}_w$	Weight average molecular weight
ν	Poissons' ratio
W %	Weight percentage