Figure 1. FTIR spectrum of LPLPB

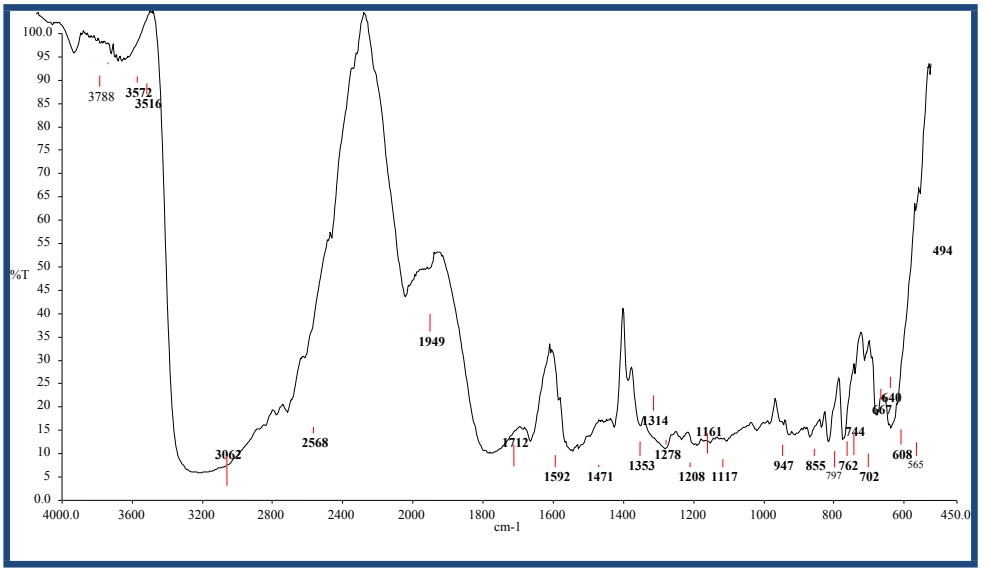

Table 1. FT-IR functional group assignments of LPLPB

Wavenumber(cm^{-1})	Assignments
494	N-C-N Asymmetric bending
608	Bending O-C-O
640	vibration of P-O-P in chain
667	C-C in plane deformation band
702	phenyl ring out of plane ring deformation
740	phenyl ring out of plane CH deformation
855	C-C stretching
947	NH_3^+ rocking vibration
1117	NH_3^+ symmetric deformation
1161	NH_3^+ rocking
1208	phenyl ring - carbon stretching
1314	C-N stretching vibration
1353	C – H deformation (chain)
1471	asymmetric CH_3+ bending
1592	NH_3^+ Bending
1712	C = O stretching
1949	C=C stretching
2568	NH_3+ absorption bands at 2844 cm^{-1}
3062	NH_3^+ symmetric stretching
3572	Sharp OH Stretching band