Table 1.1. Chemical structure of commonly used 2:1 phyllosilicates.

Table 3.1.1. Flexural, tensile and hardness properties of polymer blend and WPC loaded with unmodified and modified MMT.

Table 3.1.2. Thermal analytical data of wood and wood-polymer nanocomposites.

Table 3.1.3. Limiting oxygen index (LOI) values and flaming characteristics of polymer blend and wood/polymer/clay nanocomposites.

Table 3.2.1. Mechanical properties of wood polymer composite with various compatibilizers and nanoclay.

Table 3.2.2. Thermal analysis of wood polymer composite with different compatibilizer and nanoclay.

Table 3.2.3. Limiting oxygen index (LOI) values and flaming characteristics of polymer blend and wood polymer composite.

Table 3.3.1. Flexural, tensile and hardness properties of polymer blend, wood/polymer and wood/polymer/clay nanocomposites.

Table 3.3.2. Thermal analysis of wood, polymer blend and wood polymer nanocomposite.

Table 3.3.3. Limiting oxygen index (LOI) values and flaming characteristics of polymer blend and wood/polymer/clay nanocomposites.

Table 3.3.4. Flexural properties of WPC loaded with different percentage of nanoclay after microbial degradation.

Table 3.3.5. Tensile properties of WPC loaded with different percentage of nanoclay after microbial degradation.

Table 3.4.1. Flexural, tensile, hardness and limiting oxygen index (LOI) values of polymer blend and WPC loaded with different percentage of nanoclay.

Table 3.4.2. Thermal analysis of polymer blend and wood polymer nanocomposite.

Table 3.4.3. Flexural and tensile properties of polymer blend and WPC loaded with different percentage of nanoclay after the irradiation to UV light.

Table 3.4.4. Flexural, tensile and hardness properties of WPC loaded with different percentage of nanoclay after microbial degradation.

Table 3.4.5. Weight loss of the wood polymer composite samples after soil burial test.

Table 3.4.6. Flexural, tensile and hardness properties of WPC loaded with different percentage of nanoclay after soil burial test.

Table 4.1.1. Flexural, tensile and hardness properties of polymer blend and WPC loaded with different percentage of SiO₂.
Table 4.1.2. Thermal analysis and limiting oxygen index (LOI) values of polymer blend and wood polymer nanocomposite.

Table 4.2.1. Flexural, tensile and hardness properties of polymer blend and WPC loaded with different percentage of nano clay and SiO$_2$.

Table 4.2.2. Thermal analysis and limiting oxygen index (LOI) values of polymer blend and wood polymer nanocomposite.

Table 4.3.1. Flexural, tensile and hardness properties of polymer blend and WPC loaded with different percentage of nano clay and TiO$_2$.

Table 4.3.2. Thermal analysis and limiting oxygen index (LOI) values of polymer blend and wood polymer nanocomposite.

Table 4.4.1. Flexural, tensile and hardness properties of polymer blend and WPC loaded with nano clay and different percentage of ZnO.

Table 4.4.2. Thermal analysis and limiting oxygen index (LOI) values of polymer blend and WPC loaded with nano clay and different percentage of ZnO.

Table 4.5.1. Flexural, tensile and hardness properties of polymer blend and WPC loaded with nano clay and different percentage of SiO$_2$ and ZnO.

Table 4.5.2. Thermal analysis and limiting oxygen index (LOI) values of polymer blend and WPC loaded with nano clay, SiO$_2$ and ZnO.

Table 4.5.3. Hardness properties of WPC loaded with nano clay and different percentage of SiO$_2$ and ZnO after UV radiation, microbial attack and soil burial test.

Table 4.5.4. Flexural and tensile properties of WPC loaded with nano clay and different percentage of SiO$_2$ and ZnO before and after UV treatment.

Table 4.5.5. Flexural and tensile properties of WPC loaded with nano clay and different percentage of SiO$_2$ and ZnO after microbial test.

Table 4.5.6. Weight loss of the wood polymer composite samples after soil burial test.

Table 4.5.7. Flexural and tensile properties of WPC loaded with nano clay and different percentage of SiO$_2$ and ZnO after soil burial test.