# SUPPLEMENTARY MATERIALS FOR THE COMPOUNDS

#

**Figure 1: Mid-infrared spectra for ligand L1 and Cu(L1)2Cl2.**

**Figure 2: Mid-infrared spectra for ligand L2 and Cu(L2)2Cl2. ⅟2H2O**

**Figure 3: Mid-infrared spectra for ligand L3 and Cu(L3)2Cl2. ⅟2H2O**

**Figure 4: Mid-infrared spectra for ligand L4 and Cu(L4)Cl2.H2O**

**Figure 5: Mid-infrared spectra for Liagnd L5 and Cu(L5)2Cl2.H2O**

**Figure 6: Mid-infrared spectra for ligand L6 and [Cu(L6Cl)]**

**Figure 7: Far-infrared spectra for ligand L2 and Cu(L2)2Cl2. ⅟2H2O**

**Figure 8: Far-infrared spectra for ligand L3 and Cu(L3)2Cl2. ⅟2H2O**

**Figure 9: Far-infrared spectra for ligand L4 and Cu(L4)Cl2.H2O**

**Figure 10: Far-infrared spectra for ligand L5 and Cu(L5)2Cl2.H2O**

**Figure 11: Far infrared spectra for ligand L6 and [Cu(L6Cl)]**

**Table 1: Antimicrobial activity of the Schiff base ligands and their Cu(II) complexes.**

|  |  |
| --- | --- |
| Compound | Diameter of zone of inhibition (mm) |
|  | E. coli | B. substilis | S. aureus | C. albicans |
|  |  |  |  |  |
| L1 | -\* | - | - | - |
| CuL1Cl | - | 12 | - | - |
| L2 | - | - | - | - |
| Cu(L2)2Cl2.H2O | - | 11 | - | - |
| L3 | 11 | 09 | 09 | - |
| Cu(L3)2Cl2.H2O | - | 14 | - | 12 |
| L4 | 13 | 14 | 16 | 36 |
| CuL4Cl(H2O)Cl | 08 | 15 | 14 | 09 |
| L5 | 16 | 12 | 17 | 36 |
| Cu(L5)2Cl2.H2O | 13 | 16 | 15 | 31 |
| L6 | 16 | 12 | 17 | 36 |
| [CuL6Cl] | 13 | 16 | 15 | 31 |
| Ampicillin10 ɥg/ml | 52 | 38 | 28 |  |
| Ketoconazole |  |  |  | 20 |
| DMF (Control) | - | - | - | - |

-\*: No inhibition