LIST OF FIGURES

Figure 6.6. Crystal structure of the Schiff base L₉. 113

Figure 6.7.1. Differential scanning calorimetry profile of Schiff base ligand (L₃) derived from C₁₂O(OH)CHO and 2-aminophenol. 116

Figure 6.7.2. Differential scanning calorimetry profile of Schiff base ligand (L₄) derived from C₁₄O(OH)CHO and 2-aminophenol. 116

Figure 6.7.3. Polarizing optical micrograph of the compound L₁ and L₂. 117

Figure 6.12.a. B₃-LYP/6-31G* optimized geometry of the Schiff base L₃. 140

Figure 6.12.b. B₃-LYP/6-31G* optimized geometry of the Schiff base L₄. 140

Figure 6.12.c. B₃-LYP/6-31G* optimized geometry of the Schiff base L₃. 140

Figure 6.12.d. B₃-LYP/6-31G* optimized geometry of the complex 19. 141

Figure 6.12.e. B₃-LYP/6-31G* optimized geometry of the complex 24. 141

Figure 6.12.f. B₃-LYP/6-31G* optimized geometry of the complex 25. 142

Figure 6.12.g. B₃-LYP/6-31G* optimized geometry of the complex 26. 142

Figure 6.12.h. B₃-LYP/6-31G* optimized geometry of the complex 6. 143

Figure 6.12.i. B₃-LYP/6-31G* optimized geometry of the complex 7. 143

Figure 6.12.j. B₃-LYP/6-31G* optimized geometry of the complex 17. 144