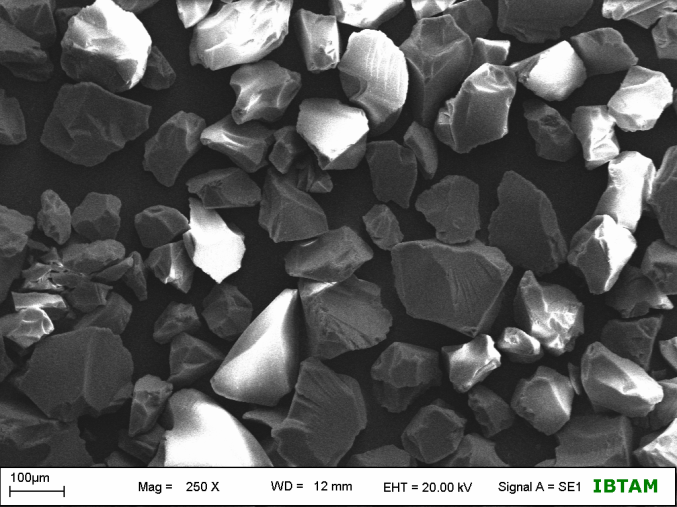
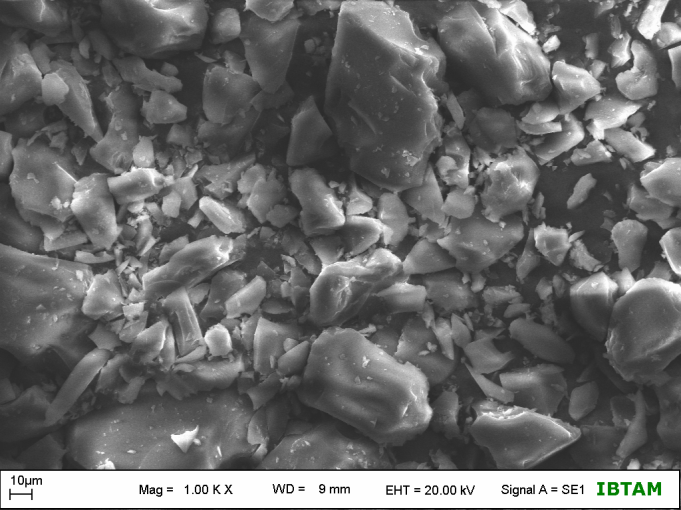
SYNTHESIS AND CHARACTERIZATION OF SILICA SUPPORTED SCHIFF BASE LIGANDS AND THEIR METAL COMPLEXES: APPLICATIONS AS CATALYSTS FOR THE OXIDATION OF ALKANES

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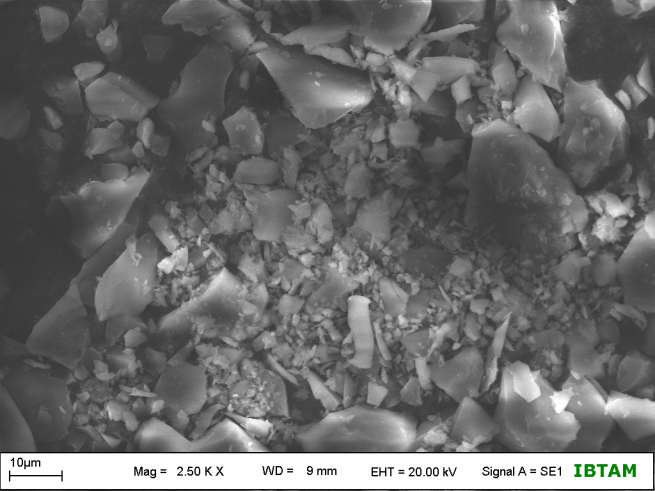
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**Supplemental Materials**

1. (b)

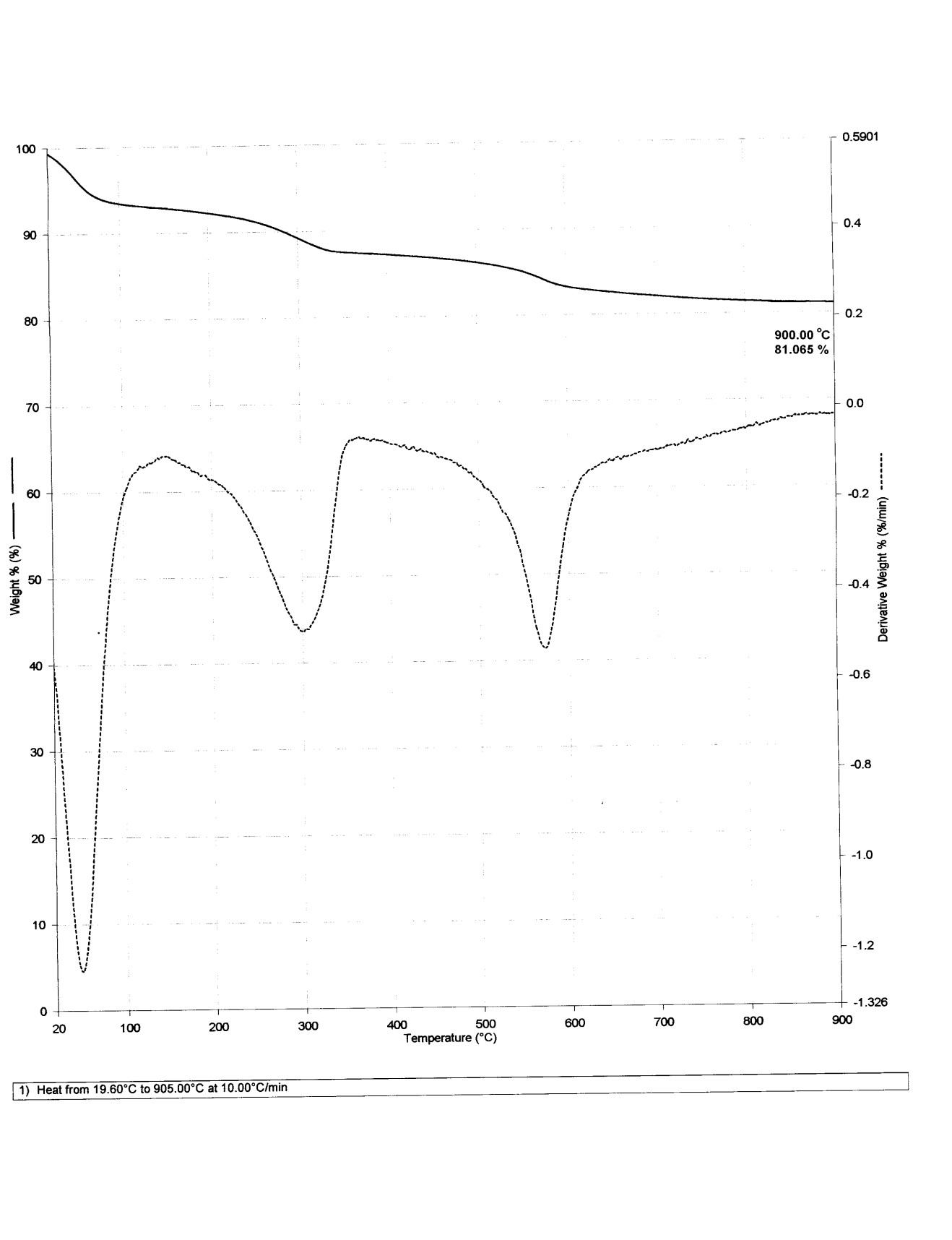


(c)

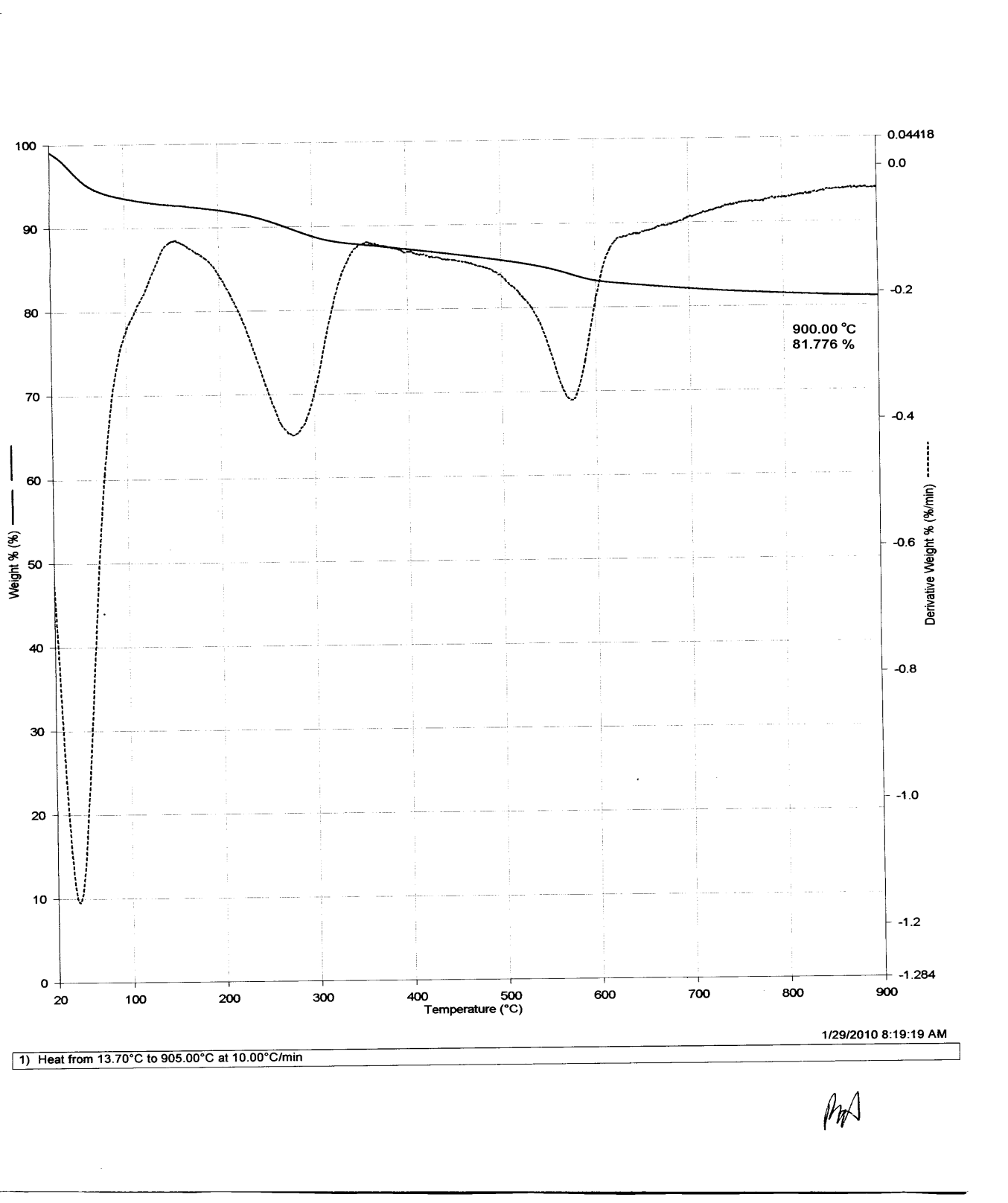
**Figure S 1**: SEM images of silica gel (a), APS (b) and L1H (c)

**Table S 1**: Thermogravimetric Data of Ligand and Complexes

|  |  |  |  |
| --- | --- | --- | --- |
| Compound | TG Range/oC | Mass loss/%  Teorical (Calculated) | Assignment |
| L1H | 20-150 | **(5.74)** | **Loss of water** |
|  | 150-900 | **14.15 (13.20)** | **Ligand decomposition** |
|  | 900- | **85.85 (81.06)** | **SiO2** |
| L2H | 20-150 | **(3.25)** | **Loss of water** |
|  | 150-900 | **16.11 (15.20)** | **Ligand decomposition** |
|  | 900- | **83.89 (81.55)** | **SiO2** |
| L3H | 20-150 | **(1.72)** | **Loss of water** |
|  | 150-900 | **15.14 (14.50)** | **Ligand decomposition** |
|  | 900- | **84.86 (83.79)** | **SiO2** |
| **Cu(L1)(AcO).H2O** | 20-900 | **(2.71)** | **Loss of water** |
| **16.70 (15.52)** | Complex decomposition |
| 900- | **83.30 (81.77)** | **SiO2 +CuO** |
| **Co(L1)(AcO).H2O** | 20-900 | **(1.68)** | **Loss of water** |
| **15.28 (14.93)** | Complex decomposition |
| 900- | **84.72 (83.39)** | **SiO2 +Co3O4** |
| **Cu(L2)(AcO).H2O** | 20-900 | **(2.03)** | **Loss of water** |
| **16.35 (15.80)** | Complex decomposition |
| 900- | **83.65 (82.17)** | SiO2 +CuO |
| **Co(L2)(AcO).H2O** | 20-900 | **(2.77)** | **Loss of water** |
| **14.80 (14.13)** | Complex decomposition |
| 900- | **85.20 (83.10)** | SiO2 +Co3O4 |
| **Cu(L3)(AcO).H2O** | 20-900 | **(1.62)** | **Loss of water** |
| **15.05 (14.19)** | Complex decomposition |
| 900- | **84.95 (84.55)** | SiO2 +CuO |
| **Co(L3)(AcO).H2O** | 20-900 | **(1.20)** | **Loss of water** |
| **14.00 (12.83)** | Complex decomposition |
| 900- | **86.00 (85.97)** | SiO2 +Co3O4 |

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**Figure S 2**: TG-DTA of the silica supported ligand (L1H)

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**Figure S 3**: TG-DTA of Cu(L1)(AcO).H2O