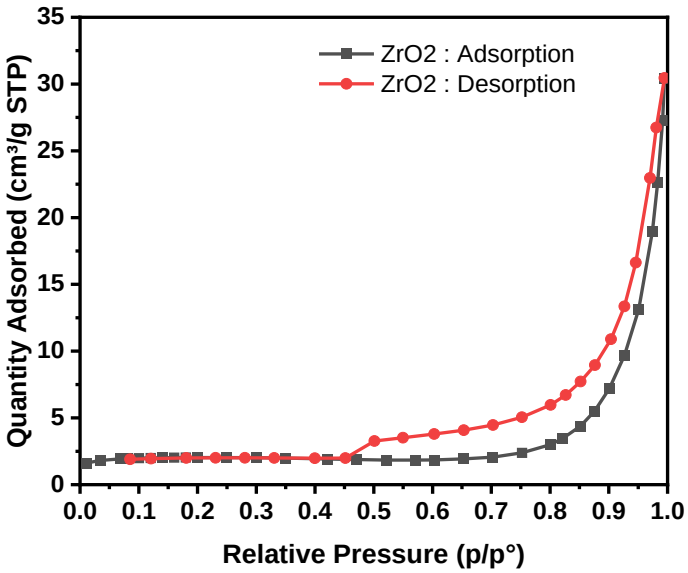

Figure S1 . N_2 adsorption/desorption isotherms for ZrO_2

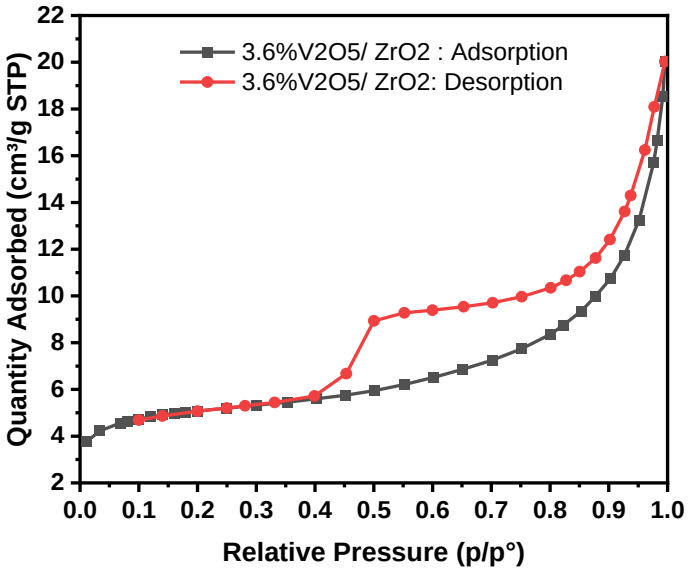

Figure S2. *N_2 adsorption/desorption isotherms for* 3.6 wt%V_2O_5/ZrO_2 powder

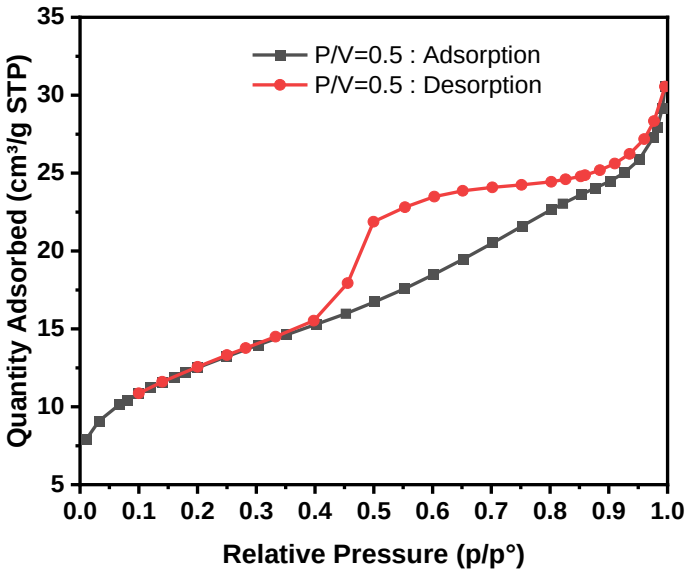

Figure S3 . N_2 adsorption/desorption isotherms for P loaded 3.6 wt%V_2O_5/ZrO_2 at P/V = 0.5

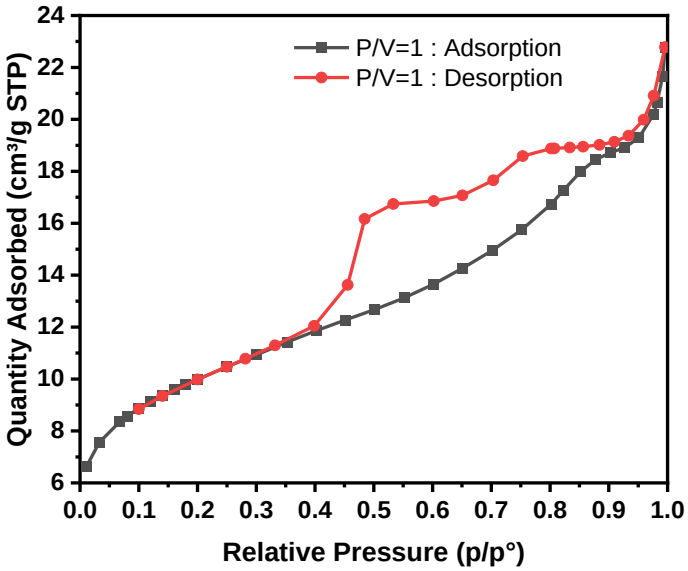

Figure S4. N_2 adsorption/desorption isotherms for P loaded 3.6 wt%V_2O_5/ZrO_2 at P/V = 1.0

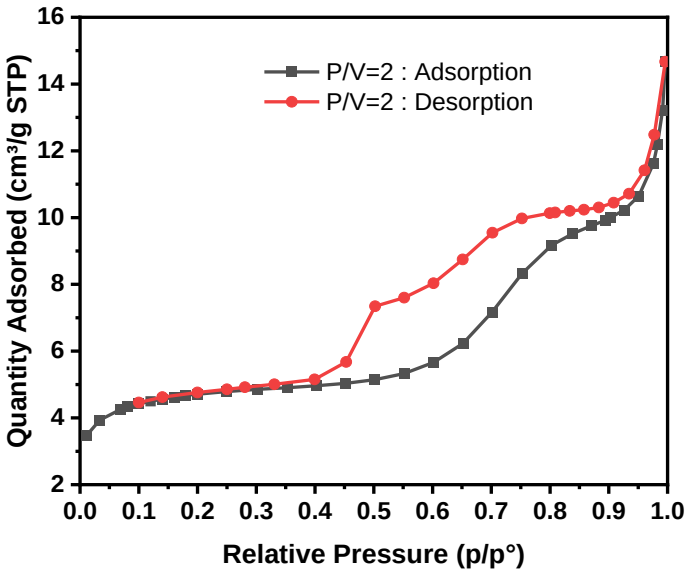

Figure S5. N_2 adsorption/desorption isotherms for P loaded 3.6 wt%V_2O_5/ZrO_2 at P/V = 2.0

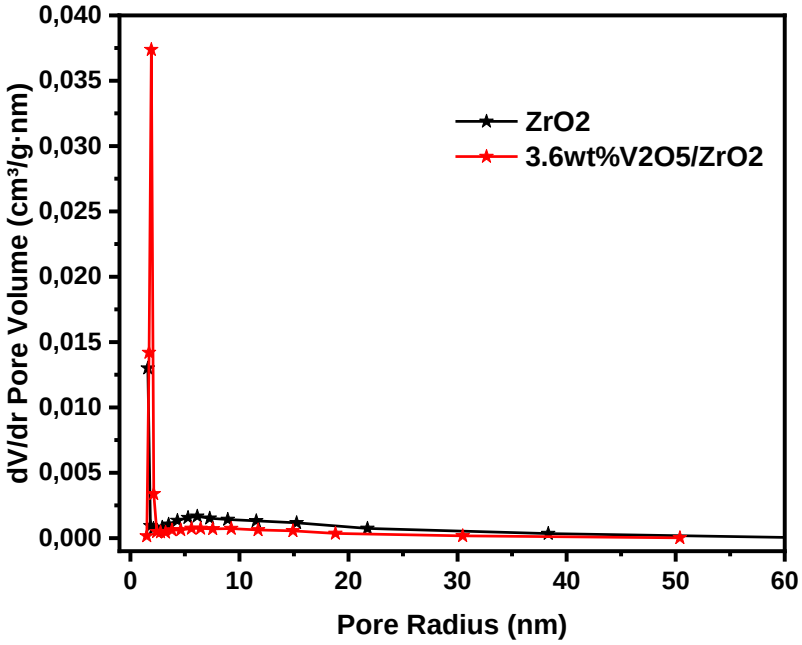

Figure S6. BJH Desorption dV/dw Pore volume (cm³/g·nm) versus Pore width (nm) for ZrO_2 and 3.6 wt%V_2O_5/ZrO_2

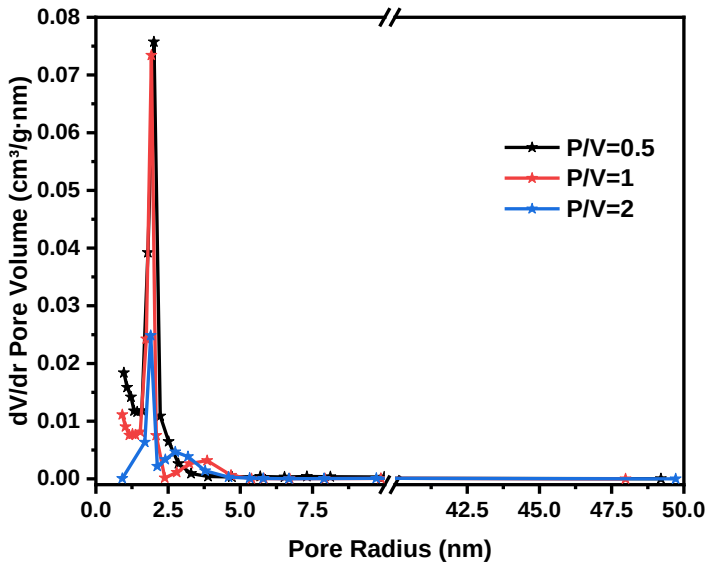

Figure S7. BJH Desorption dV/dw Pore volume ($cm^3/g{\cdot}nm$) versus Pore width (nm) for P loaded 3.6 wt%V_2O_5/ZrO_2 at different P/V ratio (0.5; 1.0 and 2.0).