

Figure 1 The XRD pattern for alumina powder.

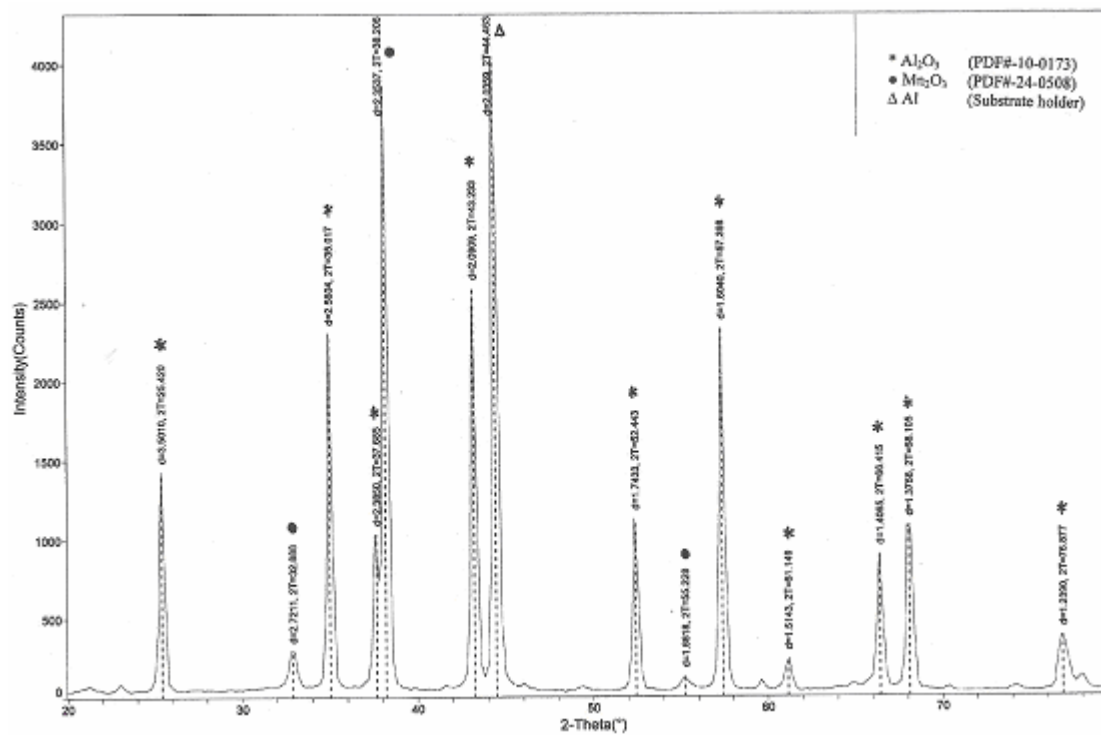


Figure 2. The XRD pattern for the fresh 2% Ru/(Al_2O_3 +MnOx) catalyst

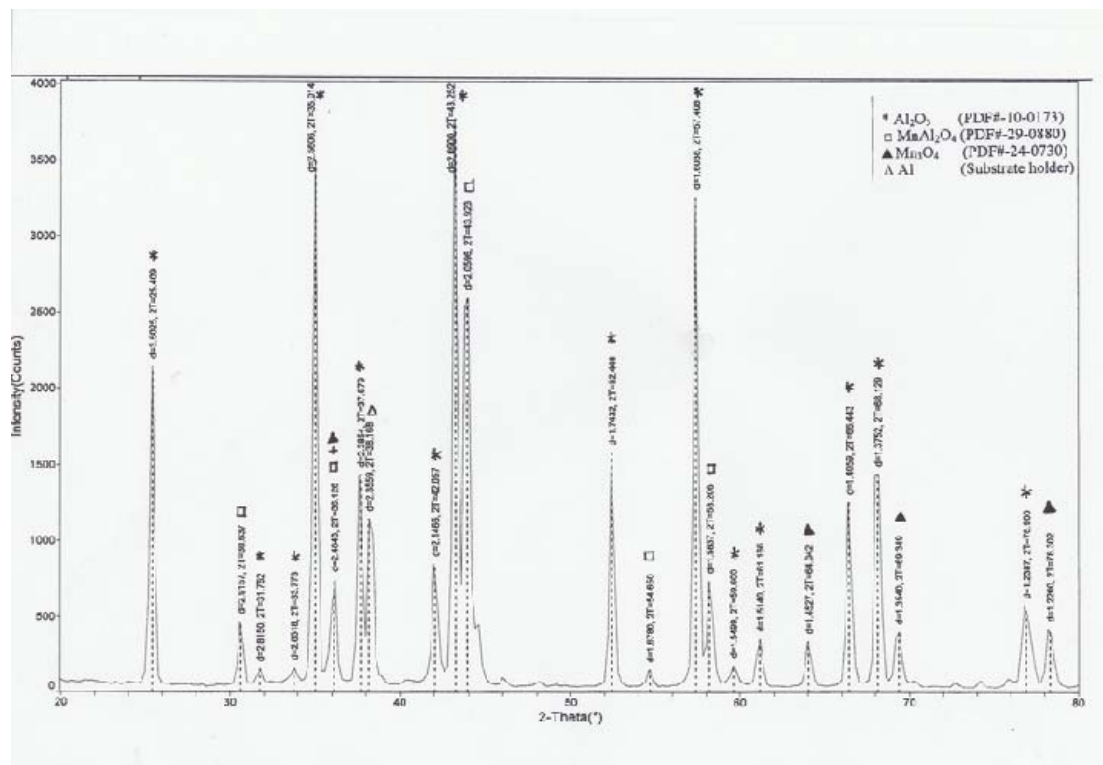


Figure 3. The XRD pattern for the 2% Ru/(Al₂O₃+MnO_x) catalyst after reaction,