

Appendix A

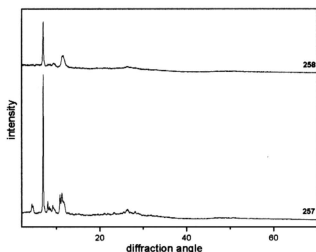


Fig A1. XRD pattern of 2 samples prepared at the same concentration of AHM (1.0M) and temperature at 30°C but varying in HNO₃ concentration; sample 257: 1.0M, and sample 258: 5.0M. The XRD patterns are vertically shifted for better visualisation.

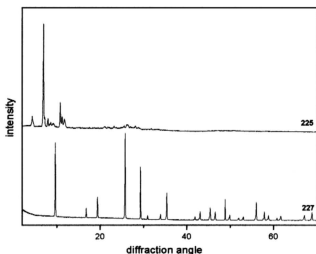


Fig A2. XRD pattern of 2 samples prepared at the same concentration of AHM (0.7M) and temperature at 50°C but varying in HNO₃ concentration; 227: 1.0 M and 225: 2.0 M.

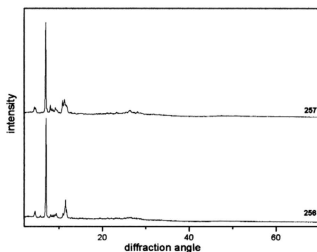


Fig A3. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (1.0M) and temperature at 30°C but varying in molybdenum concentration; 0.7M (256) and 1.0M (257).

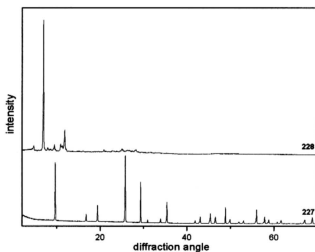


Fig A4. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (1.0M) and temperature at 50°C but varying in AHM concentration; sample 227: 0.7 M and 228: 1.0 M

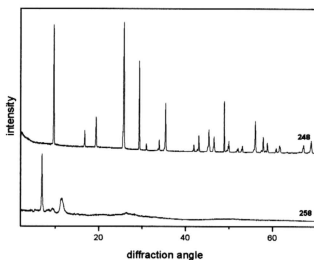


Fig A5. XRD pattern of 2 samples prepared at the same concentration of AHM (1.0 M) and HNO₃ concentration (5.0 M) but varying in temperature; sample 258: 30°C, 248: 50°C).

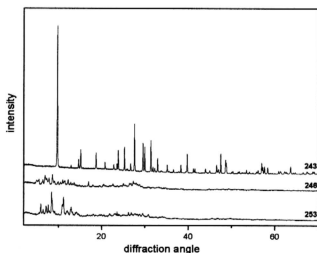


Fig A6. XRD pattern of 3 samples prepared at the same concentration of K₂MoO₄ (1.0 M) and HNO₃ concentration (5.0 M) but varying in temperature; sample 253: 30°C, 246: 50°C and 243: 70°C).

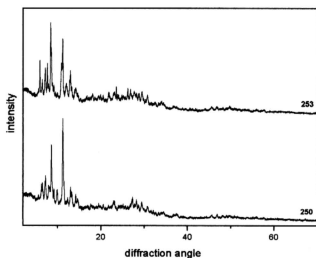


Fig A7. XRD pattern of 2 samples prepared at the same concentration of K_2MoO_4 (1.0M) and temperature at 30°C but varying in HNO_3 concentration; sample 250: 2.0M, and sample 253: 5.0M.

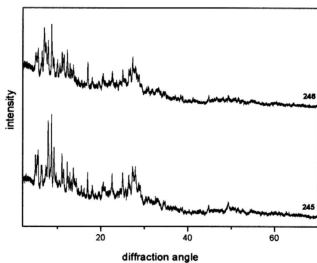


Fig A8. XRD pattern of 2 samples prepared at the same concentration of K_2MoO_4 (2.0 M) and temperature, 50°C but varying in HNO_3 concentration; 245: 2.0 M and 246: 5.0 M.

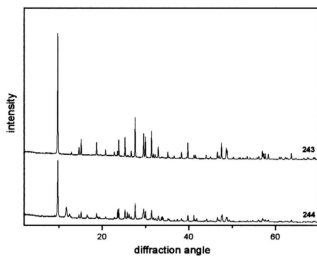


Fig A9. XRD pattern of 2 samples prepared at the same concentration of K_2MoO_4 (2.0 M) and temperature, 70°C but varying in HNO_3 concentration; 244: 2.0 M and 243: 5.0 M.

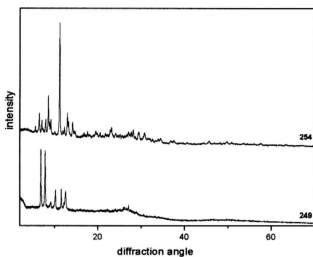


Fig A10. XRD pattern of 2 samples prepared at the same concentration of K_2MoO_4 (0.28 M) and temperature, 30°C but varying in HNO_3 concentration; 249: 2.0 M and 254: 5.0 M.

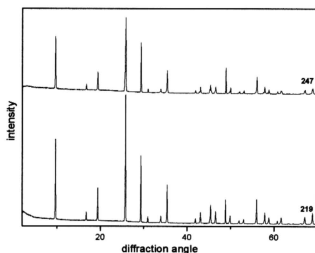


Fig A11. XRD pattern of 2 samples prepared at the same concentration of K_2MoO_4 (0.28 M) and temperature, 50°C but varying in HNO_3 concentration; 219: 2.0 M and 247: 5.0 M.

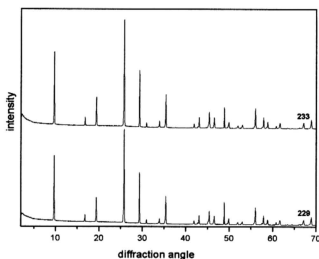


Fig A12. XRD pattern of 2 samples prepared at the same concentration of K_2MoO_4 (0.28 M) and temperature, 70°C but varying in HNO_3 concentration; 229: 2.0 M and 233: 5.0 M.

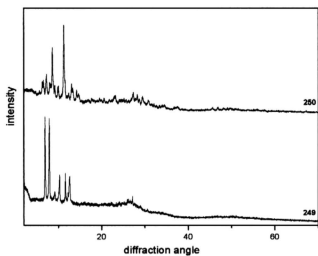


Fig A13. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (2.0 M) and temperature, 30°C but varying in K_2MoO_4 concentration; 249: 0.28 M and 250: 2.0 M.

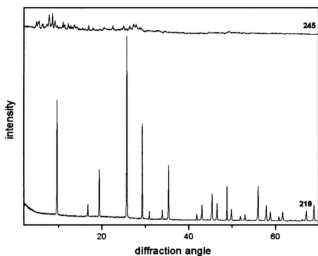


Fig A14. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (2.0 M) and temperature, 50°C but varying in K_2MoO_4 concentration; 219: 0.28 M and 245: 2.0 M.

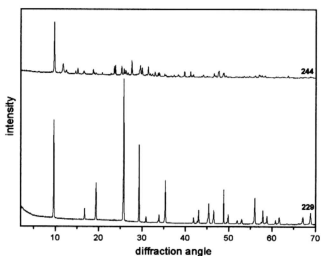


Fig A15. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (2.0 M) and temperature, 70°C but varying in K_2MoO_4 concentration; 229: 0.28 M and 244: 2.0 M.

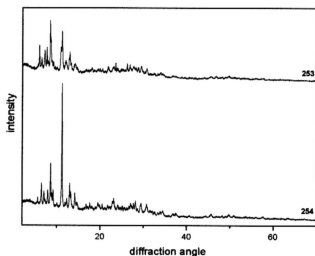


Fig A16. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (5.0 M) and temperature, 30°C but varying in K_2MoO_4 concentration; 254: 0.28 M and 253: 2.0 M.

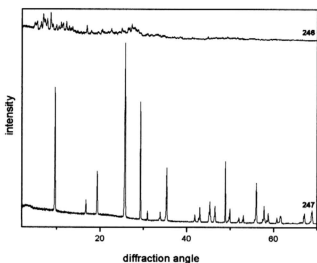


Fig A17. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (5.0 M) and temperature, 50°C but varying in K_2MoO_4 concentration; 247: 0.28 M and 246: 2.0 M.

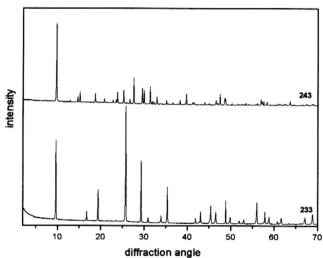


Fig A18. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (5.0 M) and temperature, 70°C but varying in K_2MoO_4 concentration; 233: 0.28 M and 243: 2.0 M.

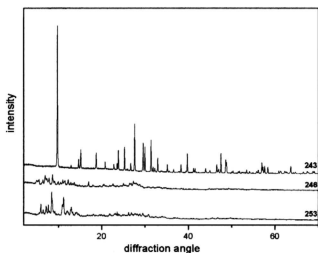


Fig A19. XRD pattern of 3 samples prepared at the same concentration of HNO_3 (5.0 M) and K_2MoO_4 concentration (2.0 M) but varying in temperature; 253: 30°C, 246: 50°C, 243: 70°C.

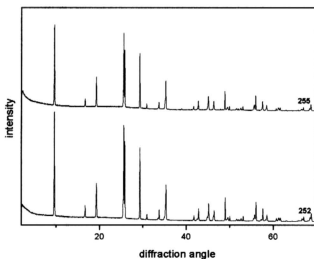


Fig A20. XRD pattern of 2 samples prepared at the same concentration of Na_2MoO_4 (2.0 M) and temperature (30°C) but varying in HNO_3 concentration; 252: 2.0 M and 255: 5.0 M.

Appendix B

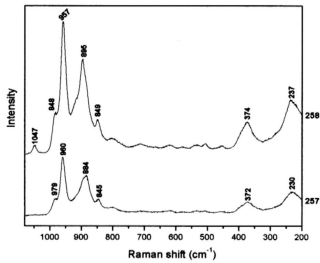


Fig B1. Raman spectrum of 2 samples prepared at the same concentration of AHM (1.0M) and temperature at 30°C but varying in HNO₃ concentration ; sample 257: 1.0M, and sample 258: 5.0M.

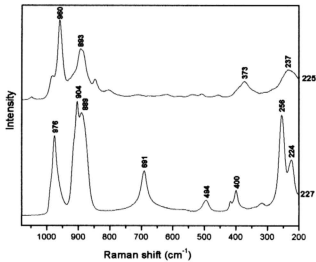


Fig B2. Raman spectrum of 2 samples prepared at the same concentration of AHM (0.7M) and temperature at 50°C but varying in HNO₃ concentration; 227: 1.0 M and 225: 2.0 M.

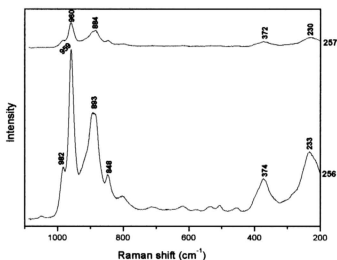


Fig B3. Raman spectrum of 2 samples prepared at the same concentration of HNO_3 (1.0M) and temperature at 30°C but varying in molybdenum concentration; 0.7M (256) and 1.0M (257).

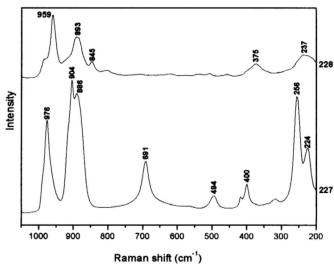


Fig B4. Raman spectrum of 2 samples prepared at the same concentration of HNO_3 (1.0M) and temperature at 50°C but varying in AHM concentration; sample 227: 0.7 M and 228: 1.0 M

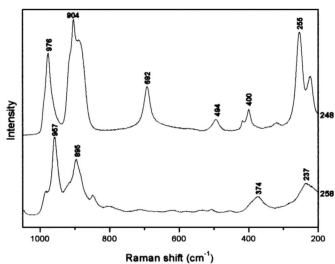


Fig B5. Raman spectrum of 2 samples prepared at the same concentration of AHM (1.0 M) and HNO₃ concentration (5.0 M) but varying in temperature; sample 258: 30°C, 248: 50°C).

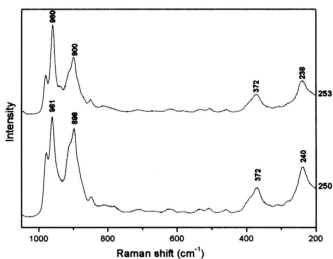


Fig B6. Raman spectrum of 2 samples prepared at the same concentration of K₃MoO₄ (1.0M) and temperature at 30°C but varying in HNO₃ concentration; sample 250: 2.0M, and sample 253: 5.0M.

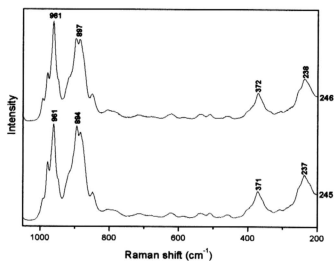


Fig B7. Raman spectrum of 2 samples prepared at the same concentration of K_2MoO_4 (2.0 M) and temperature, 50°C but varying in HNO_3 concentration; 245: 2.0 M and 246: 5.0 M.

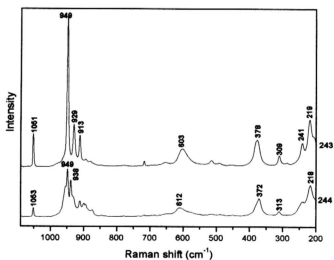


Fig B8. Raman spectrum of 2 samples prepared at the same concentration of K_2MoO_4 (2.0 M) and temperature, 70°C but varying in HNO_3 concentration; 244: 2.0 M and 243: 5.0 M.

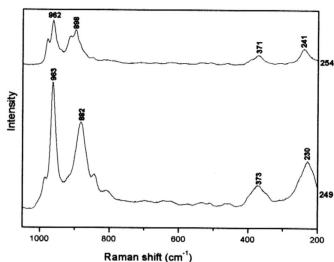


Fig B9. Raman spectrum of 2 samples prepared at the same concentration of K_2MoO_4 (0.28 M) and temperature, 30°C but varying in HNO_3 concentration; 249: 2.0 M and 254: 5.0 M.

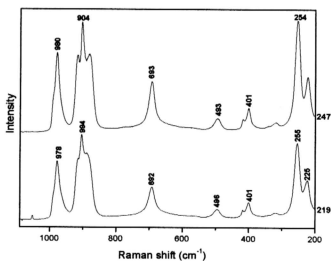


Fig B10. Raman spectrum of 2 samples prepared at the same concentration of K_2MoO_4 (0.28 M) and temperature, 50°C but varying in HNO_3 concentration; 219: 2.0 M and 247: 5.0 M.

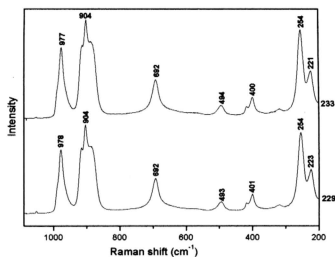


Fig B11. Raman spectrum of 2 samples prepared at the same concentration of K_2MoO_4 (0.28 M) and temperature, 70°C but varying in HNO_3 concentration; 229: 2.0 M and 233: 5.0 M.

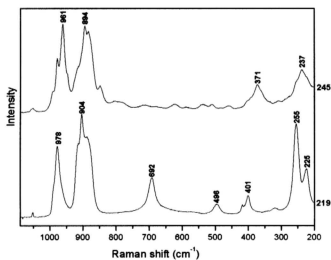


Fig B12. Raman spectrum of 2 samples prepared at the same concentration of HNO_3 (2.0 M) and temperature, 50°C but varying in K_2MoO_4 concentration; 219: 0.28 M and 245: 2.0 M.

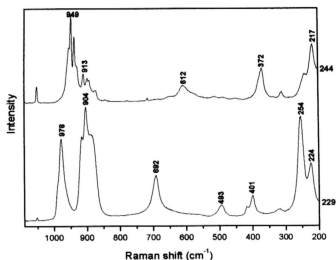


Fig B13. Raman spectrum of 2 samples prepared at the same concentration of HNO_3 (2.0 M) and temperature, 70°C but varying in K_2MoO_4 concentration; 229: 0.28 M and 244: 2.0 M.

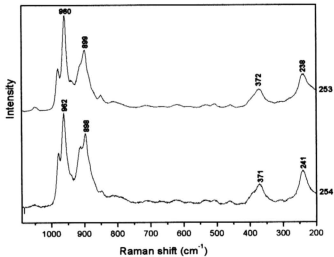


Fig B14. XRD pattern of 2 samples prepared at the same concentration of HNO_3 (5.0 M) and temperature, 30°C but varying in K_2MoO_4 concentration; 254: 0.28 M and 253: 2.0 M.

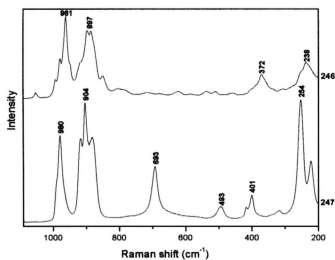


Fig B15. Raman spectrum of 2 samples prepared at the same concentration of HNO_3 (5.0 M) and temperature, 50°C but varying in K_2MoO_4 concentration; 247: 0.28 M and 246: 2.0 M.

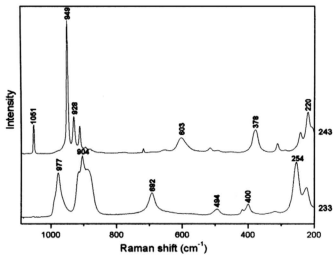


Fig B16. Raman spectrum of 2 samples prepared at the same concentration of HNO_3 (5.0 M) and temperature, 70°C but varying in K_2MoO_4 concentration; 233: 0.28 M and 243: 2.0 M

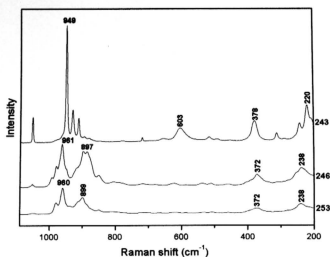


Fig B17. Raman spectrum of 3 samples prepared at the same concentration of HNO_3 (5.0 M) and K_2MoO_4 concentration (2.0 M) but varying in temperature; 253: 30°C, 246: 50°C, 243: 70°C.

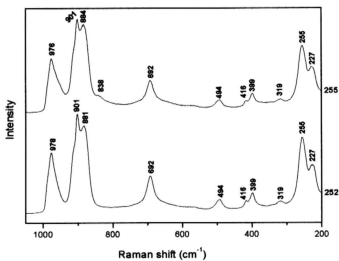


Fig B18. Raman spectrum of 2 samples prepared at the same concentration of Na_2MoO_4 (2.0 M) and temperature (30°C) but varying in HNO_3 concentration; 252: 2.0 M and 255: 5.0 M.