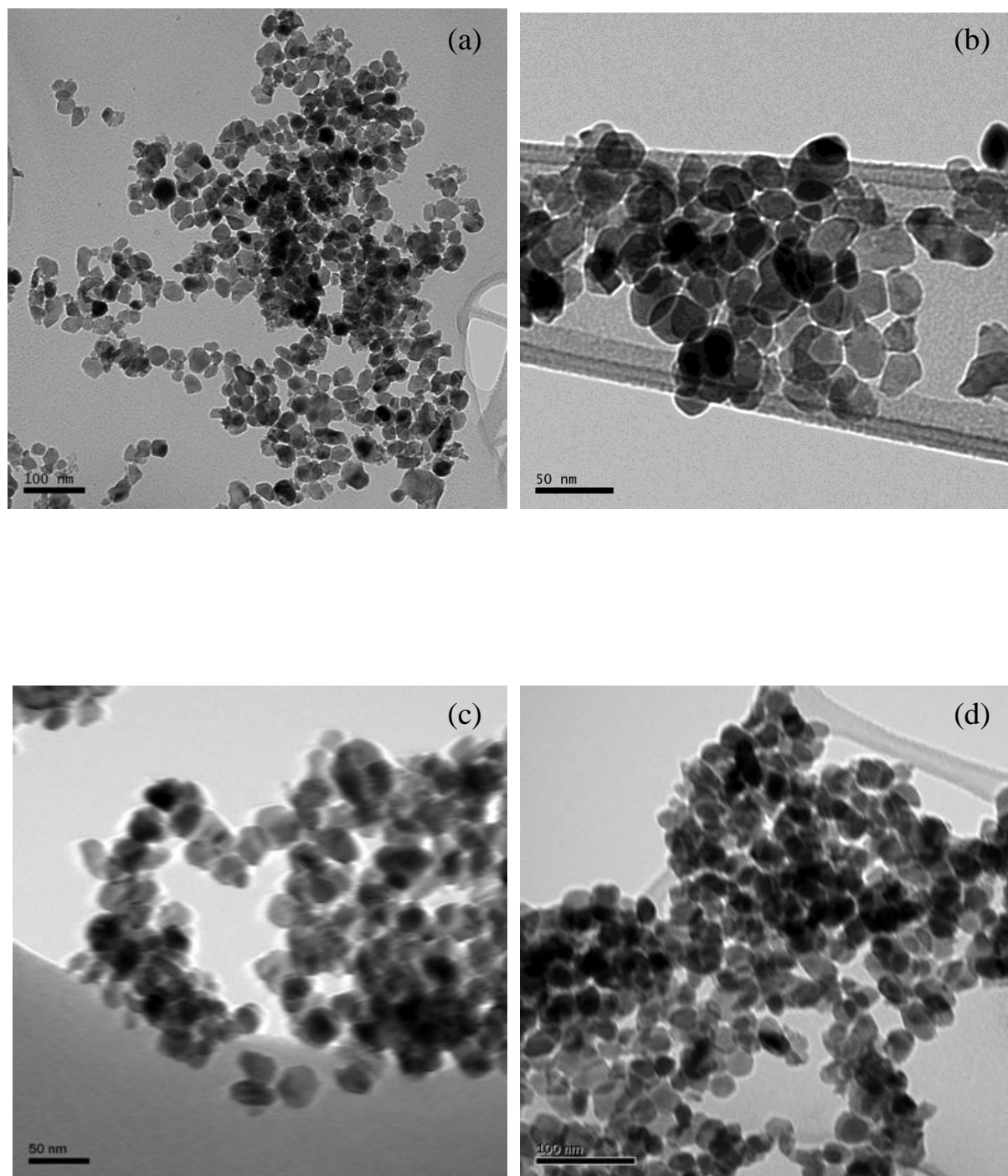
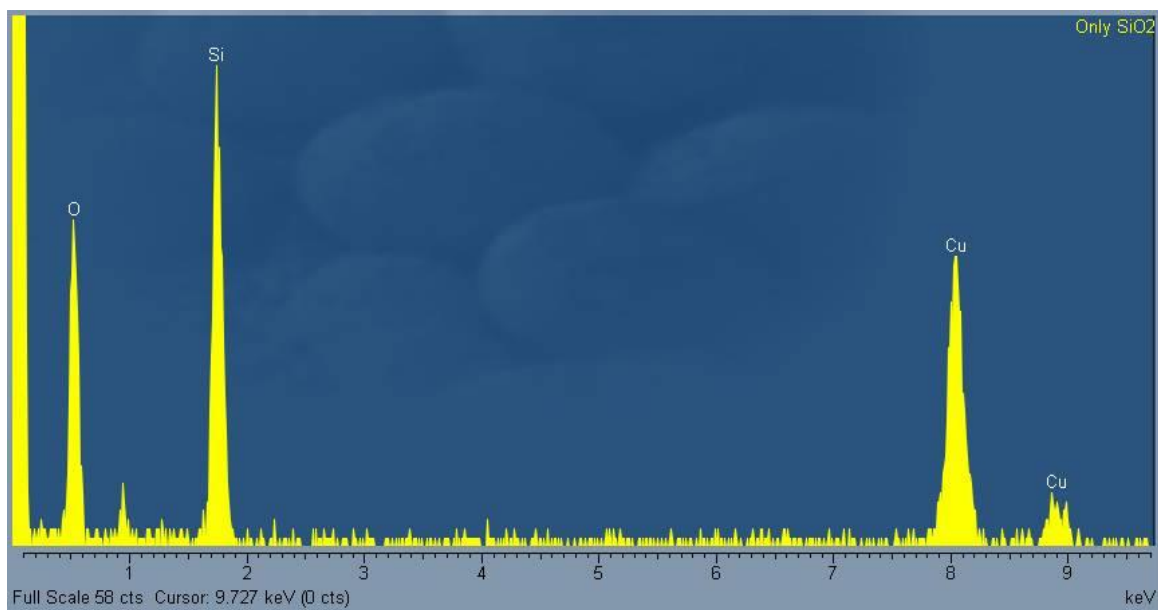


## Appendix A – TEM images of catalysts



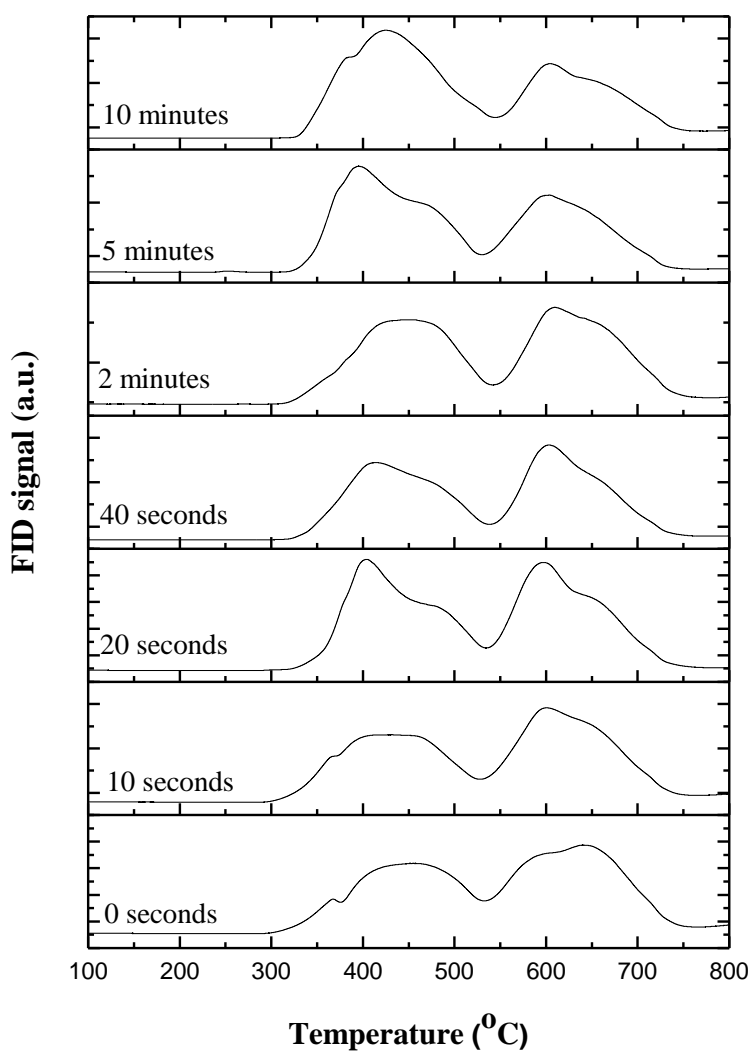
**Figure A1** TEM images of (a) 0K/Fe, (b) 0.2K/Fe, (c) 1.0K/Fe and (d) 1.5K/Fe catalysts. These catalysts were not pre-treated using microwave radiation.

## Appendix B – EDS spectrum



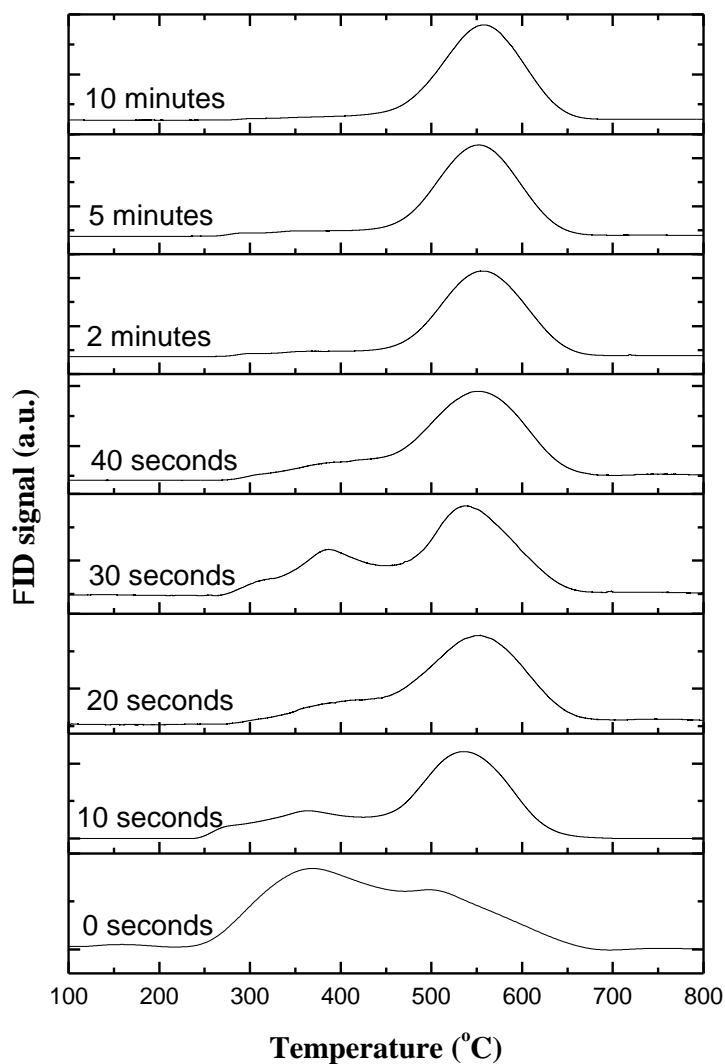
**Figure B1** An EDS spectrum of the silica support

## Appendix C – TPSR profiles



**Figure C1** The effect of the microwave pre-treatment time on unsupported catalysts as studied using the TPSR. The 0.7K/Fe catalyst was used for these studies. The pre-treatment times are indicated on each graph.

## Appendix C – TPSR profiles



**Figure C2** The effect of the microwave pre-treatment time on silica supported catalysts as studied using the TPSR. The 1.0K/10Fe/SiO<sub>2</sub> catalyst was used for these studies. The pre-treatment times are indicated on each graph.