

### Electronic Supplementary Information

#### Palladium Supported Ionic Liquid Catalyst (Pd-SH-SILC) Immobilized on Mercaptopropyl Silica gel as Chemoselective, Reusable and Heterogeneous Catalyst for Catalytic Hydrogenation

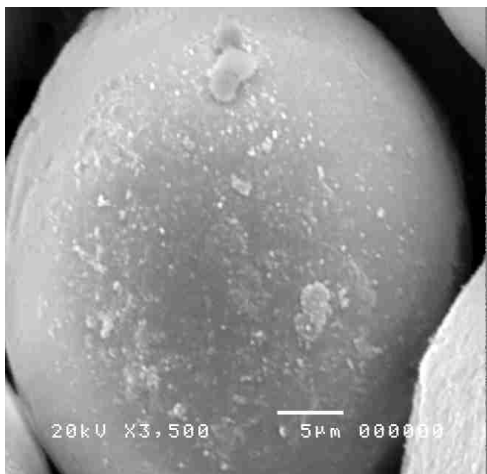
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Before hydrogenation



After hydrogenation

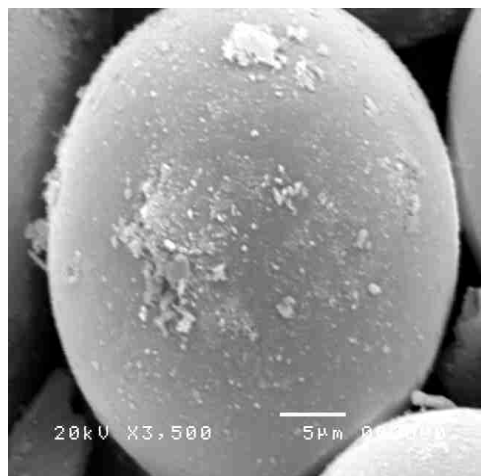
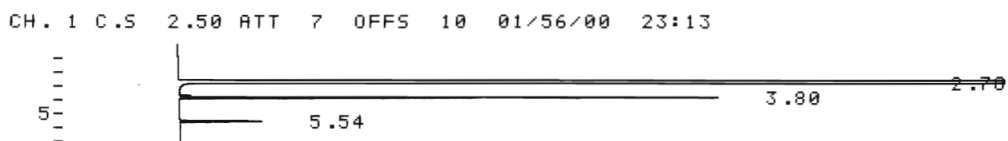


Fig S1. SEM images of Pd-SH-SILC before and after the hydrogenations

Before hydrogenation



D-2500 01/56/00 23:13

METHOD: TAG: 71 CH: 1

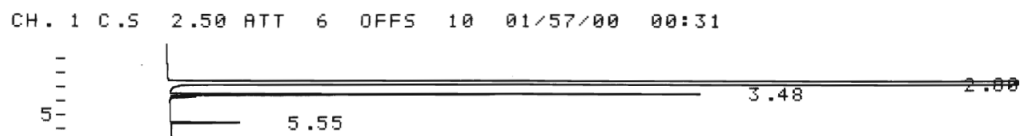
FILE: 2 CALC-METHOD: AREA% TABLE: 0 CONC: AREA

| NO.   | RT   | AREA     | CONC    | BC |
|-------|------|----------|---------|----|
| 1     | 2.78 | 10609683 | 97.157  | BB |
| 2     | 3.80 | 268734   | 2.461   | BB |
| 3     | 5.54 | 41700    | 0.382   | BB |
| TOTAL |      | 10920117 | 100.000 |    |

PEAK REJ : 0

RT: 2.78, EtOH, RT 3.80: cyclohexene, RT 5.54: toluene

After hydrogenation



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METHOD: TAG: 74 CH: 1

FILE: 2 CALC-METHOD: AREA% TABLE: 0 CONC: AREA

| NO.   | RT   | AREA     | CONC    | BC |
|-------|------|----------|---------|----|
| 1     | 2.80 | 12140676 | 98.829  | BB |
| 2     | 3.48 | 125922   | 1.025   | BB |
| 3     | 5.55 | 17988    | 0.146   | BB |
| TOTAL |      | 12284586 | 100.000 |    |

PEAK REJ : 0

RT: 2.80, EtOH, RT 3.48: cyclohexane, RT 5.55: toluene

Fig S2. GC spectra and % area value of the reaction mixture before and after the hydrogenations