

**Table 1.** Properties of the catalysts

| <b>Properties</b>                  | <b>Values</b>                           |  |
|------------------------------------|---|--|
|                                    | <b>5-Pd/Al<sub>2</sub>O<sub>3</sub></b> | <b>5-Pd 20-CeO<sub>x</sub>/Al<sub>2</sub>O<sub>3</sub></b> |
| Targeted Wt% Pd                    | 5.0%                                    | 5.0%   |
| Surface Area*                      | 132 m <sup>2</sup> /g                   | 114 m <sup>2</sup> /g                                      |
| CO uptake in chemisorption         | 86.0 μmol/g                             | 87.7 μmol/g  |
| Dispersion                         | 18.3%                                   | 18.7%  |
| Metal Surface Area                 | 4.1 m <sup>2</sup> /g                   | 4.2 m <sup>2</sup> /g                                      |
| Nanoparticle diameter (hemisphere) | 6.1 nm                                  | 6.0 nm   |

\*From BET (Brunauer-Emmett-Teller) method