Electronic Supplementary Material (ESI) for Dalton Transactions

Haloaurate and Halopalladate Imidazolium Salts: Structures, Properties, and Use as Precursors for Catalytic Metal Nanoparticles

Christopher J. Serpell,[a,b] James Cookson,[c] Amber L. Thompson,[a] Christopher M. Brown,[c] and Paul D. Beer[a]*

Supplementary TEM data

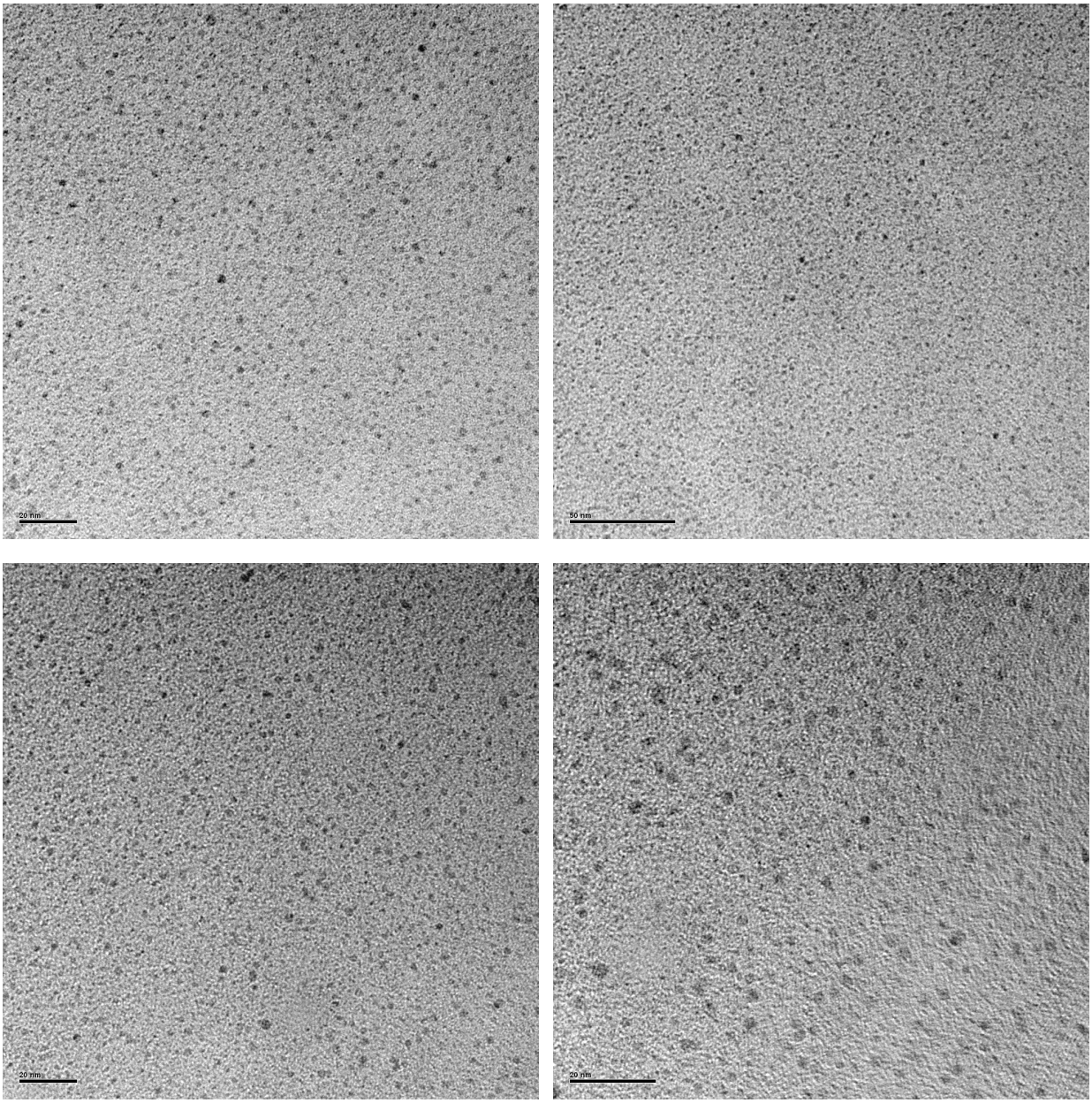
Christopher J. Serpell, Amber L. Thompson, and Paul D. Beer
Chemistry Research Laboratory, Department of Chemistry, University of Oxford,
Mansfield Road, Oxford, OX1 3TA, UK
E-mail: paul.beer@chem.ox.ac.uk

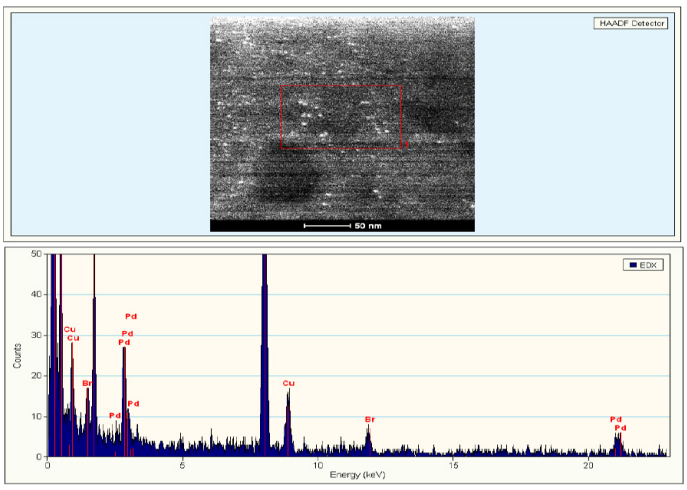
Christopher J. Serpell, current address:
Department of Chemistry, McGill University, Room 400,
801 Sherbrooke St. West, Montreal, Quebec, H3A 2K6, Canada
E-mail: christopher.serpell@mcgill.ca

James Cookson, Christopher M. Brown
Johnson Matthey Technology Centre, Blount's Court,
Sonning Common, Reading, RG4 9NH, UK
Email: cooksj@matthey.com

5b (unsupported)

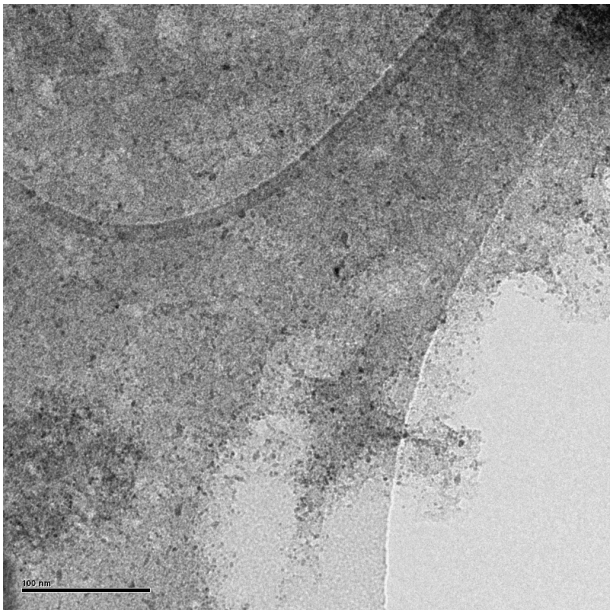
In this sample the mean particle size was 1.8nm (± 0.4, n=261). EDX analysis confirmed that the particles consisted of Pd.

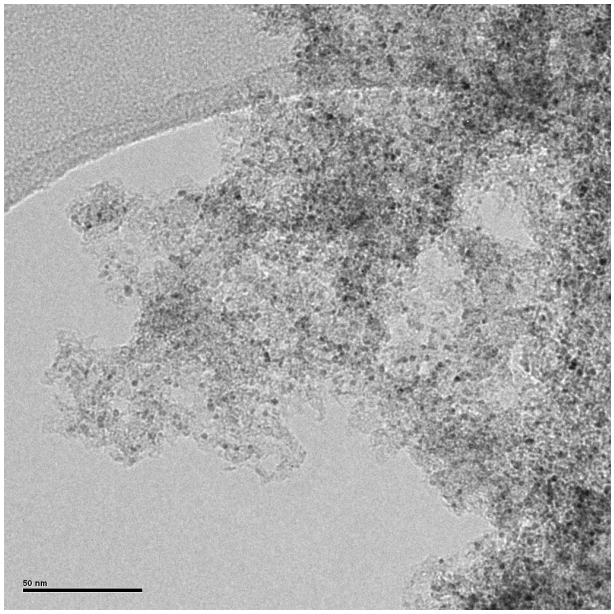


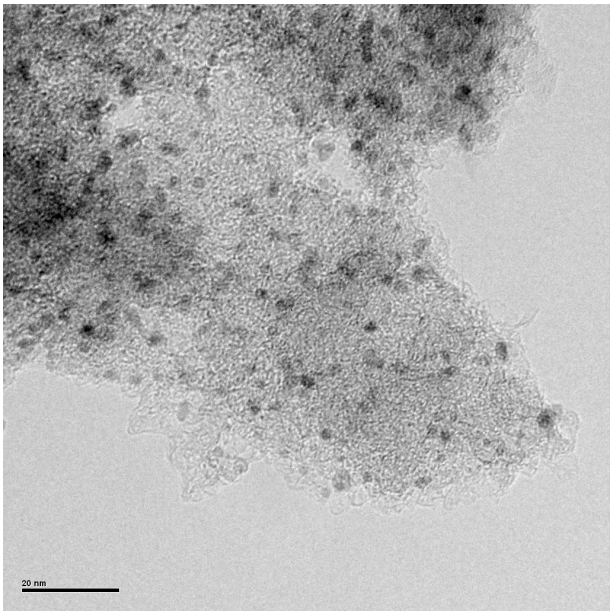


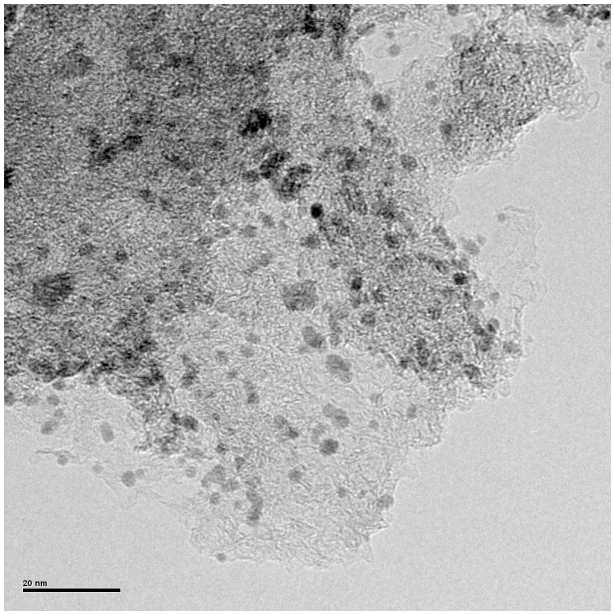
5b (on carbon support)

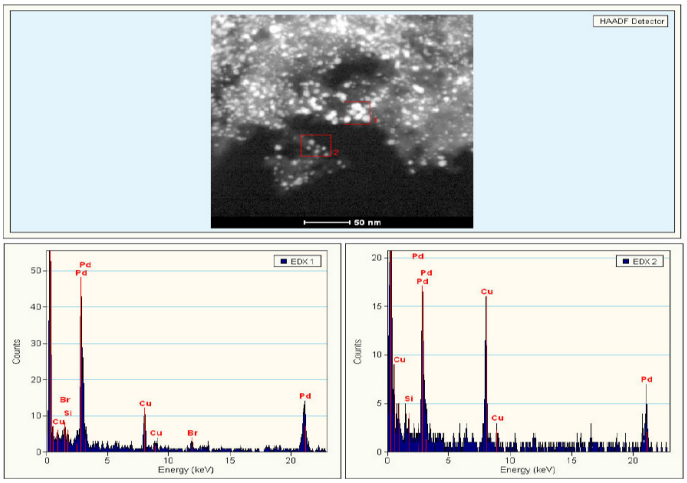
The mean size of the Pd particles was 2.6nm (± 1.2, n=99). EDX analysis confirmed that the particles consisted of Pd.





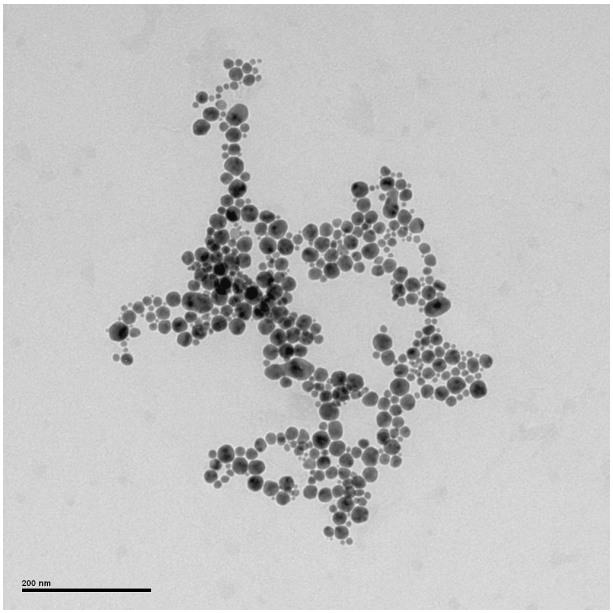


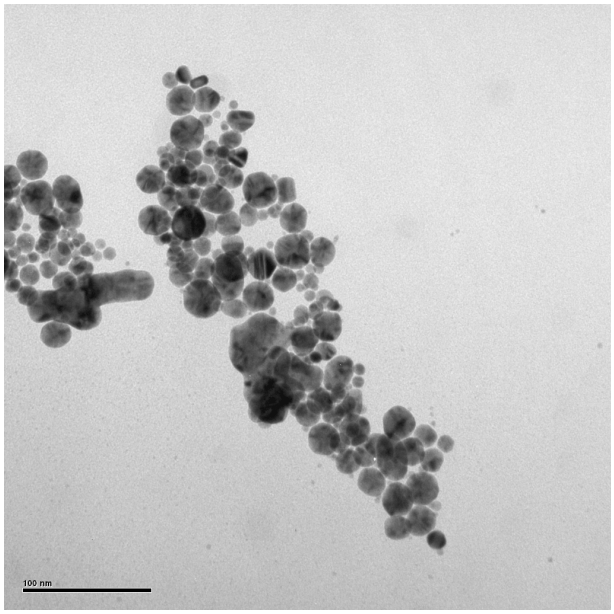


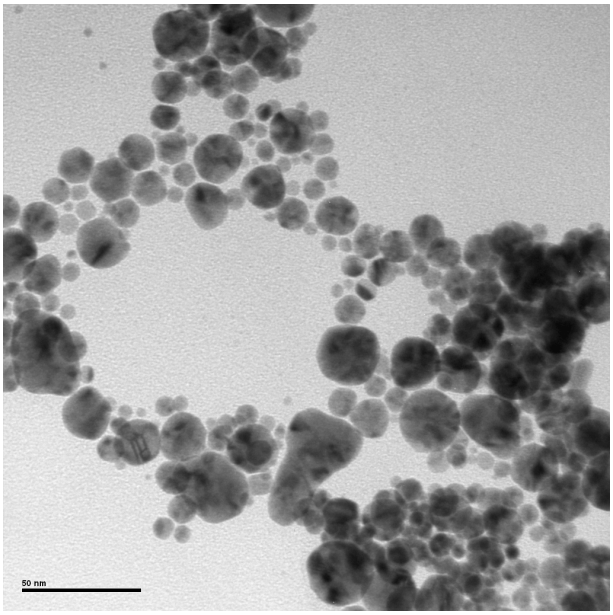


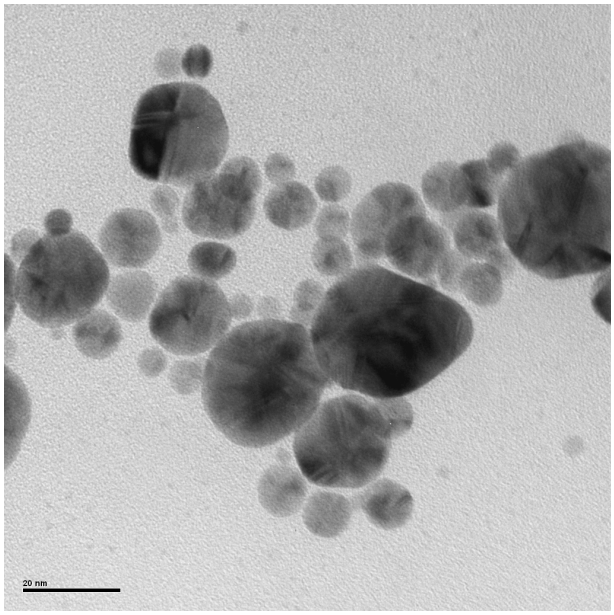
6a

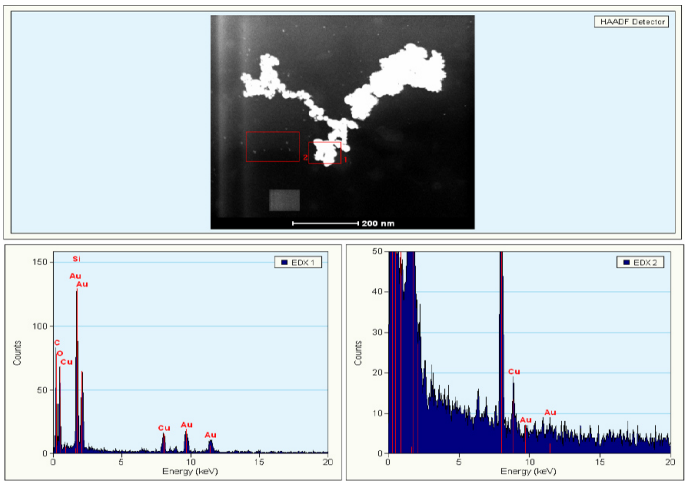
In this sample the mean particle size was 16.6nm (± 6.5, n=133). EDX analysis confirmed that the particles consisted of Au





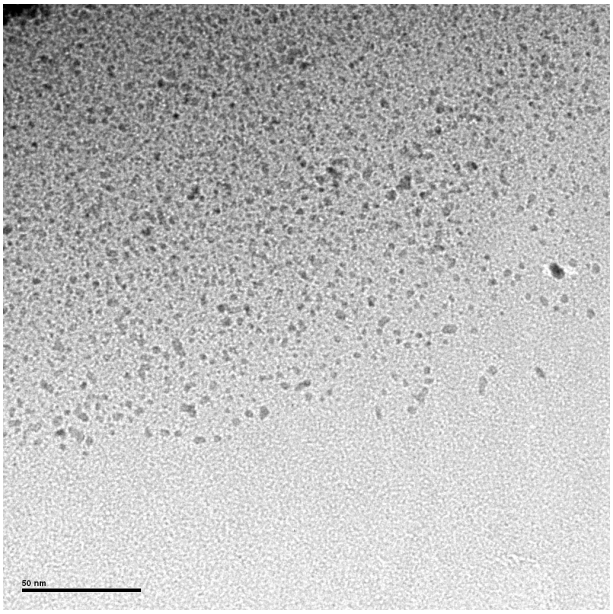


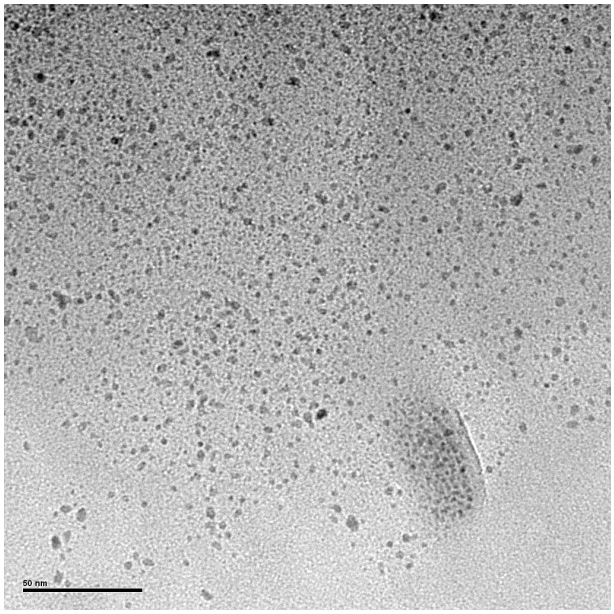


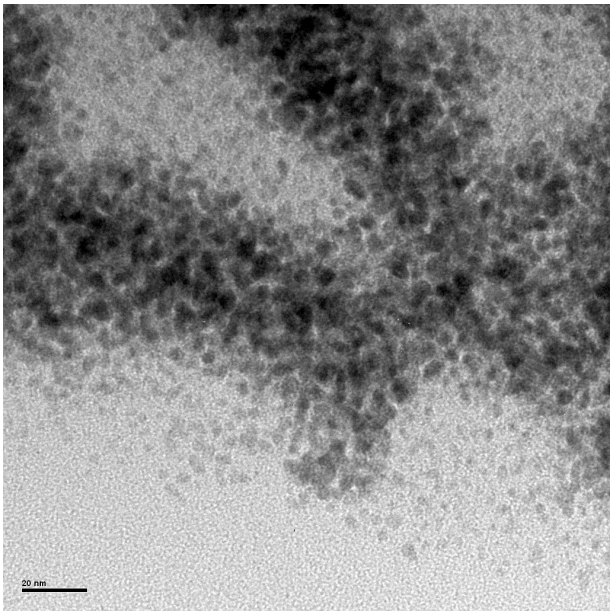


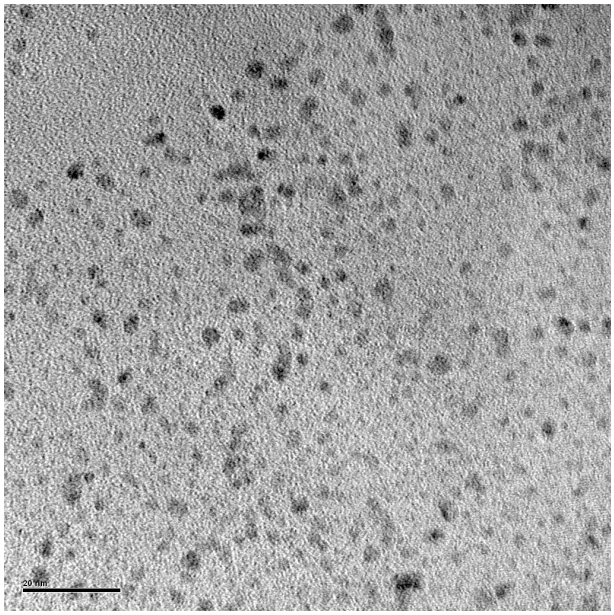
6b (unsupported)

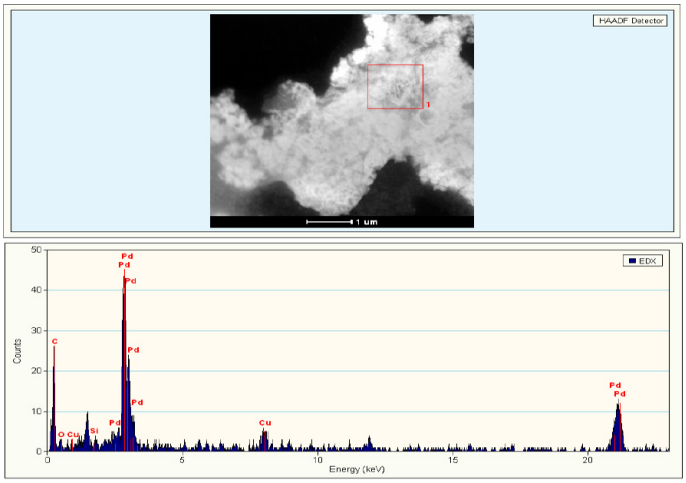
In this sample the mean particle size was 2.7nm (± 0.9, n=191). EDX analysis confirmed that the particles consisted of Pd











6b (on carbon support)

The mean size of the Pd particles was 3.5nm (± 1.4, n=110). EDX analysis confirmed that the particles consisted of Pd