Antimony speciation analysis by hydride trapping on hybrid nanoparticles packed in a needle trap device with electro-thermal atomic absorption spectrometry determination.

Ariel Maratta\textsuperscript{a}, Brian Carrizo\textsuperscript{b}, Vanesa L. Bazán\textsuperscript{c}, Gastón Villafañe\textsuperscript{c}, Luis Dante Martínez\textsuperscript{a}, Pablo Pacheco\textsuperscript{a}

Electronic Supplementary Information.

Instrumentation and procedures used in the characterization of the HNPs

To obtain the diffractogram of HNPs, a team of X-Ray Diffraction Shimadzu model 6100, Cu K\textalpha{} radiation ($\lambda{} = 1.5406$ Å) was used and Monochromator CM-3121, operated at 30 mA and 20 kV at the high voltage source and with a sweep angle (2\Theta{}) between 10° and 80°. For the interpretation of mineral facies, the Match! 3 software was used. Comparing the experimental diffractogram with the different mineral species loaded in the database COD (Cristalography Open Database).

For the study of the morphology of the nanoparticles was analyzed by Scanning Electron Microscopy (SEM) model EVO MA10W, original Carl Zeiss, at an accelerating voltage of 20 kV.