Supporting information for

"Operando QEXAFS studies on the Ni₂P during the hydrodesulfurization reactions. The direct observation of Ni-S bond formation under the reaction conditions"

Takahiro Wada, Kyoko K Bando^c, Takeshi Miyamoto^{a,b}, Satoru Takakusagi^{a,b}, Travis Gott^d, S. Ted Oyama^{d,e} and Kiyotaka Asakura^{a,b}

We have concluded that the changes of XANES and EXAFS arise from the same origin, Ni-S formation, based on Fig.3 which shows the changes of XANES and EXAFS occur coincidently. We checked the coincidency of two spectra in different temperatures as shown bellow(Fig.1S).

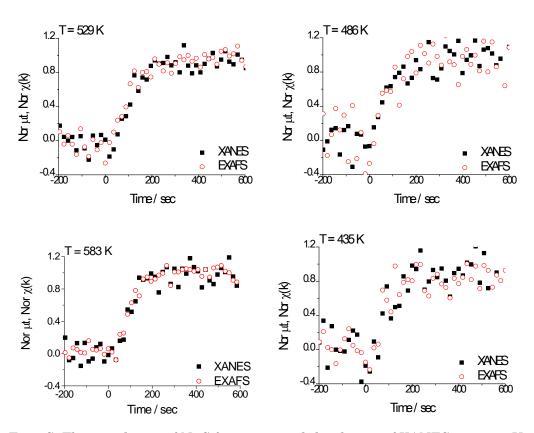


Fig. 1S. The correlation of Ni-S formation and the change of XANES at 8333 eV. (closed circles are Nor χ (k) (Δ χ (k) / c_2), square are μ t (- Δ μ t (t) / Δ μ t).)