Supporting Information

Factors Affecting the Selectivity of the Photocatalytic Conversion of Nitroaromatic Compounds over TiO$_2$ to Valuable Nitrogen-Containing Organic Compounds

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**Figure S1:** ATR-FTIR spectra of pyridine adsorption on P25 in the dark (a), after 5 min UV(A) irradiation (b), after 15 min UV(A) irradiation (c), and on (0.5 wt.%) Pt/P25 in the dark (d).

**In situ ATR-FTIR investigation**

In-situ ATR-FTIR spectra of 1 ml pyridine dissolved in acetonitrile (100 mM) were recorded with a Bruker IFS 66 instrument equipped horizontal ATR unit with a ZnSe crystal. A TiO$_2$ layer was firstly prepared by placing 400 μL of a TiO$_2$ suspended in acetonitrile (4g L$^{-1}$ TiO$_2$) on the crystal surface and evaporation of the solvent at room temperature by the mean of a N$_2$ flow. For each measurement 64 scans were recorded. Irradiation was applied from the top with UV(A) light by a Philips CLEO lamp (2 mW/cm$^2$).