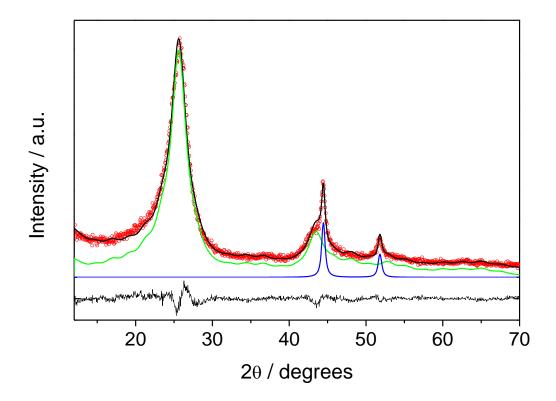
## **Supporting Information**



**Figure S1.** Observed (circles), calculated (continuous lines) and difference diffractograms obtained with TOPAS software for the sample  $Ni_3Al_{0.8}Fe_{0.2}$ -U with Ni and a model for non-crystalline carbon used in the quantitative PONCKS method (Ni 3.14 wt.%, non-crystalline carbon 96.86 wt.%). Conventional Rietveld agreement factor,  $R_{wp}$  8.13.