



Figure 1. Schematic of thermal Ni and Co ALE surface chemistry based on sequential exposures to  $\text{SO}_2\text{Cl}_2$  and  $\text{PMe}_3$ .

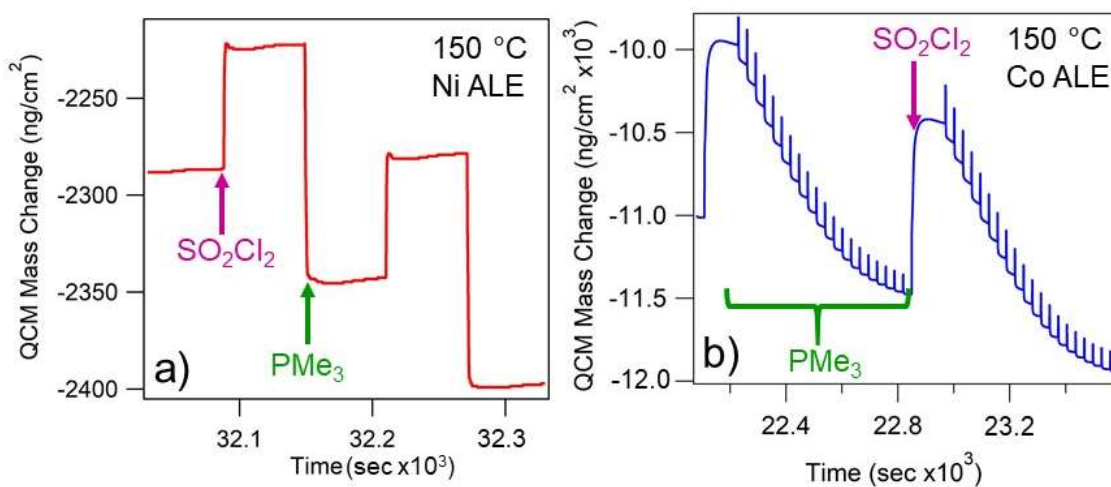


Figure 2. QCM mass change over a) two cycles of nickel ALE and b) two cycles Co ALE using  $\text{SO}_2\text{Cl}_2$  and  $\text{PMe}_3$  at 150 °C.