

b)

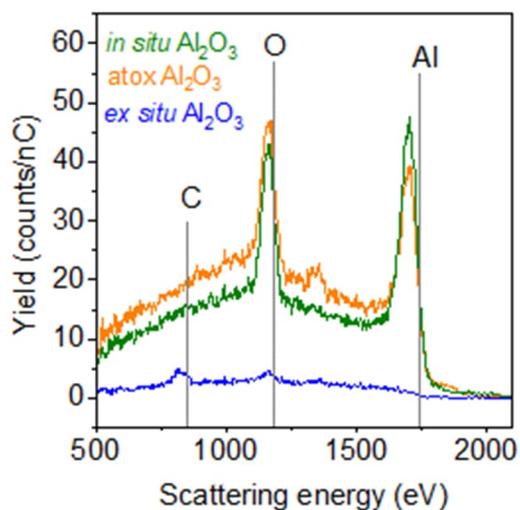


Figure 1. a) The ALD-UHV cluster tool. b) TOF-LEIS measurement on *in situ* deposited Al₂O₃ (green), atomic oxygen cleaned Al₂O₃ (orange) and air exposed *ex situ* Al₂O₃ (blue). On the *ex situ* surface the presence of hydrocarbon adsorbates is observed from the lack of Al surface peak, clear carbon peak and the low level of reionization background. Atomic oxygen removes the hydrocarbons and makes the surface comparable to the *in situ* deposited Al₂O₃.