

Long-range Effects in The First Stages of Metal Electrodeposition

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Stable metal adlayers electrodeposited on well-defined substrate electrodes can be used to point out particular adsorption effects. Careful electrodeposition conditions are required to point out these effects [1]. Specially important are the differences between the first and the following layers. In some cases characteristic adsorption states are only observed when the electrodeposited metal coverage reaches the monolayer level. It has been found that these effects are extremely sensitive to the electrodeposited metal coverage, substrate order, anion or molecular adsorption [2,3] and temperature (figure 1).

References:

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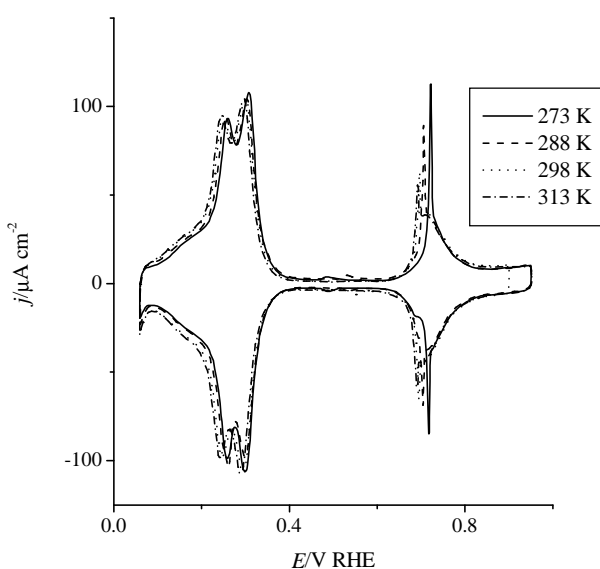


Figure 1. Electrodeposited monolayer of Pd on Pt(111) in 0.1 M perchloric acid at different temperatures.