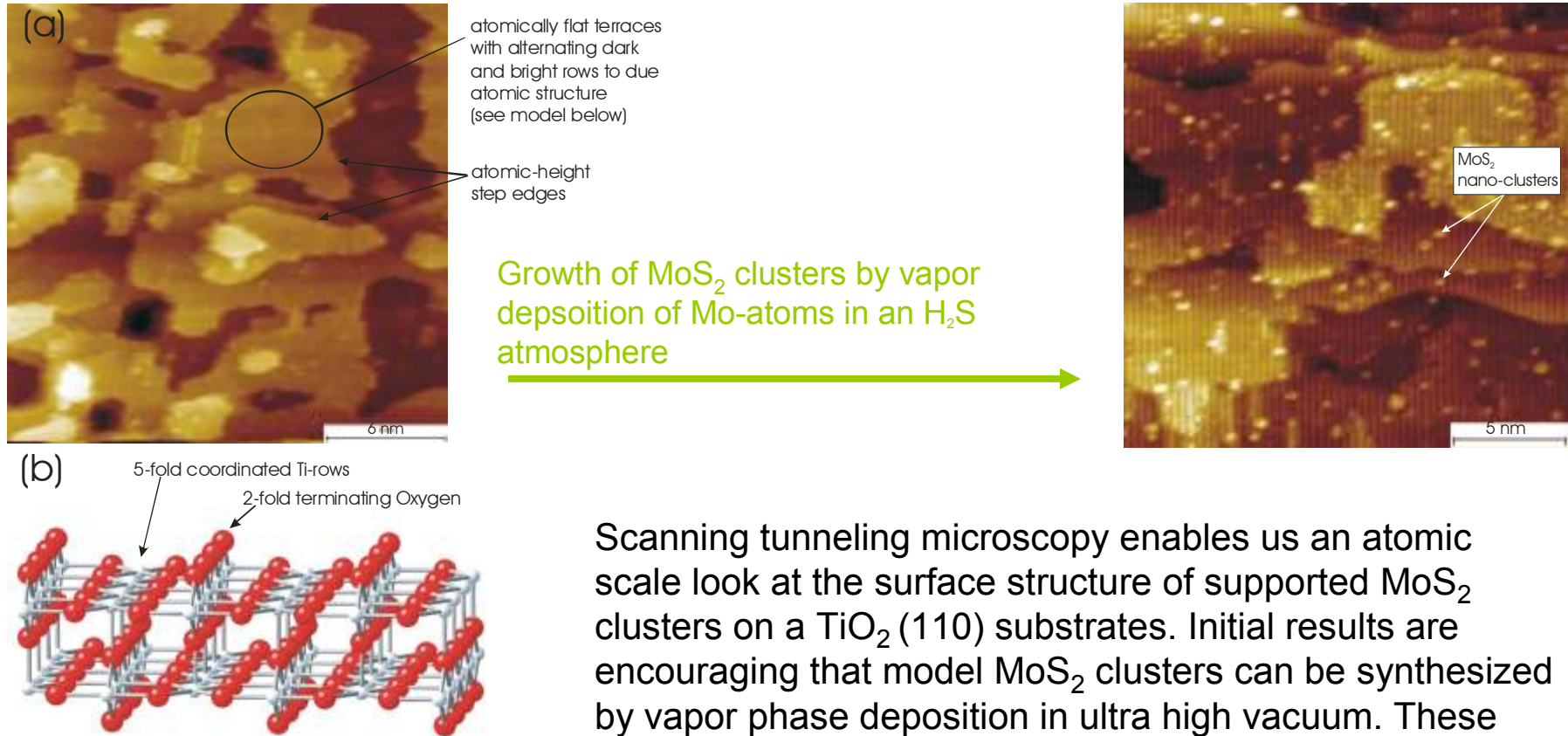


Surface Science Investigation of MoS₂ Nanoclusters Supported on TiO₂ for a Fundamental Understanding of Hydrodesulphurization Catalysts

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Scanning tunneling microscopy enables us an atomic scale look at the surface structure of supported MoS₂ clusters on a TiO₂ (110) substrates. Initial results are encouraging that model MoS₂ clusters can be synthesized by vapor phase deposition in ultra high vacuum. These TiO₂ supported MoS₂ clusters will be used in future studies for characterization of the fundamental mechanisms in the hydrodesulphurization reaction.