## Abstract Submitted for the MAR06 Meeting of The American Physical Society

Adsorption on an Equilateral Triangular Terrace Three Atomic Sites in Width: Application to Chemisorption of CO on Pt(112). ALAIN PHARES, Villanova University, DAVID GRUMBINE, JR., St. Vincent College, FRANCIS WUNDERLICH, Villanova University — The study of monomer adsorption on equilateral triangular terraces three atomic sites in width is presented. Adsorbate-substrate interactions at the terrace edges differ from those at bulk sites. Adsorbate-adsorbate interactions up to second neighbors are included. Phase diagrams for all possible interactions whether attractive or repulsive are obtained at low temperature. The effect of increasing temperature is also investigated. Results of the model are applied to chemisorption of CO on Pt(112).

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