

Abstract Submitted  
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**High Temperature Adsorption Isotherms on Equilateral Triangular Terraces**<sup>1</sup> ALAIN PHARES, Villanova University, DAVID GRUMBINE, JR., St. Vincent College, FRANCIS WUNDERLICH, Villanova University — The adsorption isotherms on infinitely long equilateral triangular terraces are obtained at high temperature. Within the context of a lattice-gas model, the computations are conducted for terraces with an increasing number  $M$  of atomic sites in width using long double precision arithmetic. The entropy per site divided by Boltzmann's constant reaches a maximum of  $\ln 2$  at half coverage for all values of  $M$ , and there are  $(3M-4)/4M$  first-neighbors per site and  $(3M-6)/4M$  second-neighbors per site. All possible occupational configurations of the terraces are obtained for arbitrary width  $M$  at half coverage.

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