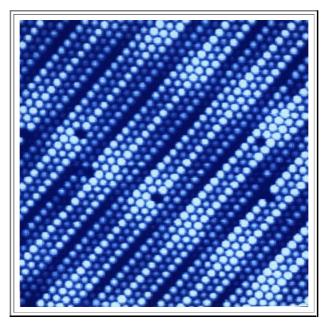
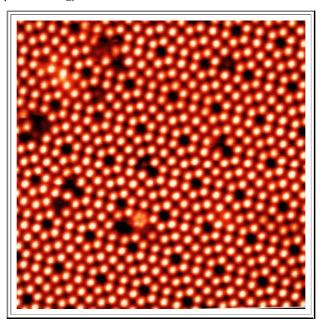
## **STM Images of Point Defects**

This is a **STM** image of a **Pt** surface. Vacancies are clearly visible



Next we see the clean {111} Si surface in ultra high vacuum conditions (otherwise the surface would immediately oxidize and we would see amorphous SiO<sub>2</sub>).



- The {111} surface looks not as one would expect from a straight model it has "reconstructed". This means that the surface layer formed a two-dimensional crystal that is totally different from the fcc Si lattice (it has a so-called 7 x 7 symmetry). Still, point defects are clearly visible.
- These fantastic pictures are all over the world. I do not know whom I should acknowledge, sorry.