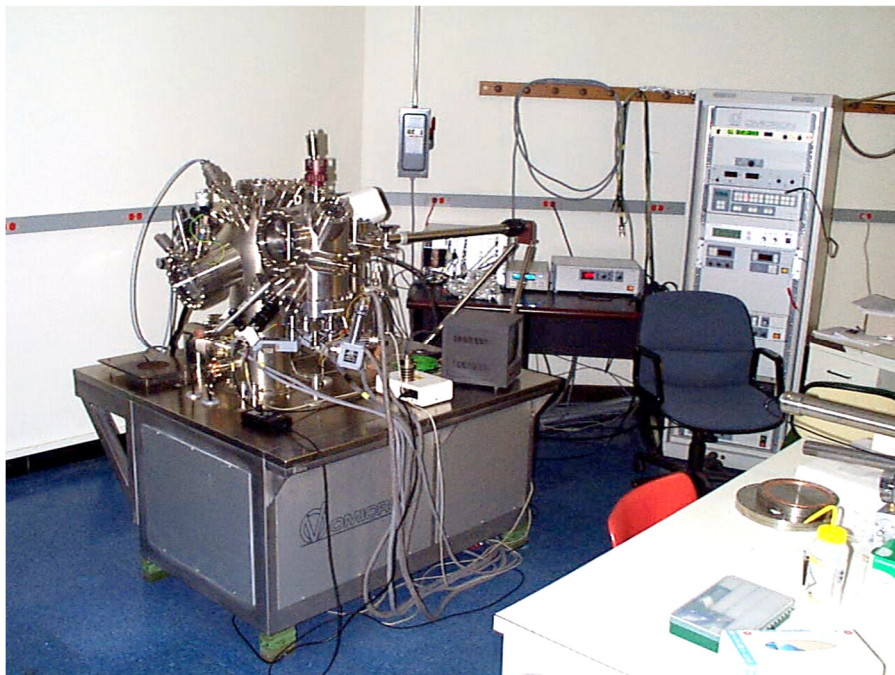


Omicron VT-SPM

Ultra-High Vacuum Scanning Probe Microscope

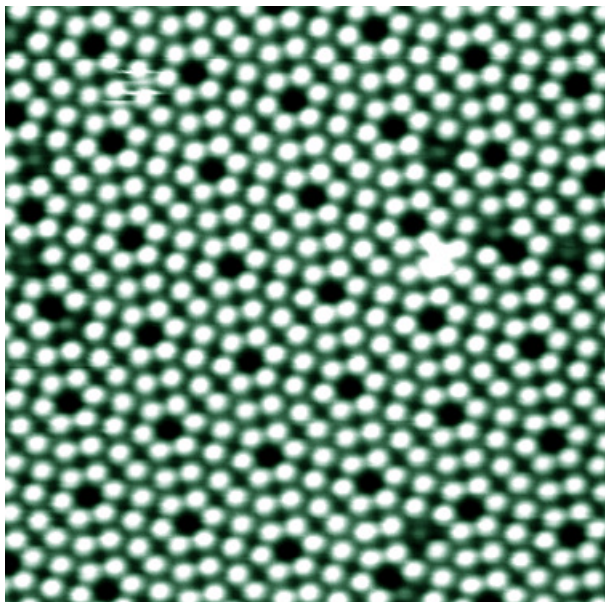
Location: Science and Engineering South, 109B



Description

The Omicron VT-SPM is a UHV Scanning Probe Microscope and is equipped with a combined Scanning Tunneling Microscopy/Atomic Force Microscopy unit with a sample stage that permits images to be obtained over a temperature range of 25 to 1500 K. The system is also equipped with a reverse view LEED instrument and with a metal evaporator. The STM uses a standard tube scanner with an electrochemically sharpened metal tip whereas AFM images are obtained with a needle-sensor based on a miniature quartz resonator. Sample introduction and tip exchange are achieved without breaking vacuum using a load lock system. The STM tip and AFM needle-sensor are readily

interchangeable. It was acquired as a complete system, used, in 2006 and is operated by Prof Mike Trenery's Surface Science Group.



(7x7) reconstruction of the Si (111) surface