



**Louis J. Todaro, Ph.D., Facility Director**Hunter College of the City University of New YorkDepart

Email: [Louis.Todaro@hunter.cuny.edu](mailto:Louis.Todaro@hunter.cuny.edu) .

Phone: (212) 772-4992

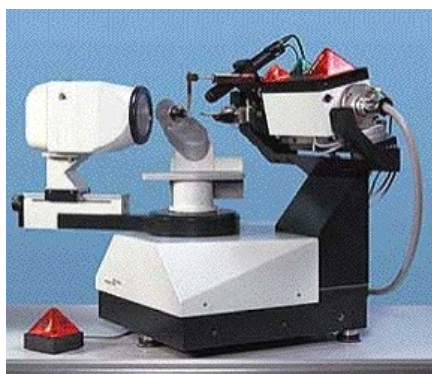
Fax: (212) 772-5332

### Description of the Facility

#### Mission

The mission of the CUNY X-ray Facility is to perform single-crystal analyses for the structure determination of molecules, which make up a crystal. This technique is called single-crystal X-ray crystallography. It is the ultimate method for definitive determination of molecular structures at the atomic level for both organic and inorganic compounds. Its uses range from simple identification of compounds to various exotic configuration and conformational studies.

### Instruments

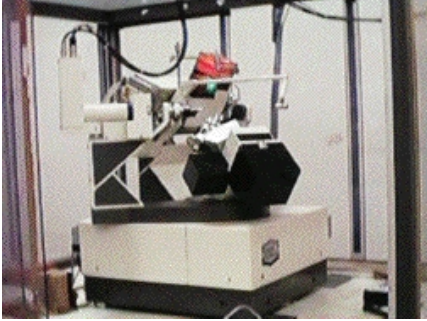


**B**

**ruker-Nonius KappaCCD System**

Instrument: Bruker-Nonius KappaCCD, equipped with a CCD detector and a liquid-nitrogen low-temperature stage.

Capabilities: The KappaCCD, acquired in 2001, embodies the state-of-the-art technologies for rapid, precise data collection.



**Enraf-Nonius CAD4**

Nonius CAD4 serial diffractometer, equipped with a scintillation detector and a liquid-nitrogen low-temperature stage.

Capabilities: A serial diffractometer collects one diffraction spot at a time. This CAD4 is an excellent instrument for high-resolution data collection.

Instrument: Nonius CAD4 serial diffractometer, equipped with a scintillation detector, liquid-nitrogen low-temperature stage.

Capabilities: The long 2theta-detector arm allows better resolution of diffraction spots for crystals with low mosaicity.

The low-temperature options immensely improve the flexibility of a diffractometer. When a crystal is cooled to cryogenic temperatures, the thermal motion of atoms is reduced, leading to sharper diffraction spots and higher resolution data.

[Joomla SEO powered by JoomSEF](#)