## A Tribute to Professor Emeritus Haruo Kuroda



Professor H. Kuroda will be remembered by the free-electron laser (FEL) community for his enthusiastic building of the mid-infrared (MIR) wavelength region FEL users facility as one of the most advanced and leading in the world at Noda campus, Science University of Tokyo in 1999 - 2003. He designed and prepared many users experimental laboratories dedicated to FEL applications in chemistry, physics, material and medical science and so on, and he started the experimental programs and proposals. After he started routine operation of the mid-infrared region free-electron laser, another FEL in the far-infrared (FIR) wavelength region was just ready to start up, and many experiments were planned using both of the MIR and FIR free-electron lasers.

It has been extremely regrettable that Professor H. Kuroda and his followers did not have the possibility to add their new and fruitful findings using the FELs to his famous, pioneering work in the early history of synchrotron radiation sciences because he passed away so suddenly, after contracting interstitial pneumonia, on the 4<sup>th</sup> May, 2004. On behalf of the FEL community in Japan, I would like to ask you, all of his friends and his acquaintances in the world, that now we would share the deep sense of loss and pray for the soul of the late Professor H.Kuroda.

After his Buddhist funeral ceremony in the 7<sup>th</sup> May 2004, the Japanese Government decided to confer a decoration from His Majesty the Japanese Emperor for his great academic contributions. His conferment is named The Order of the Sacred Treasure, Gold Rays with Neck Ribbon.

Professor H.Kuroda's biographical outline is briefly described below. As one of the heartful tributes given by his old friends in the synchrotron radiation community records (The Independent, England, 27th May 2004) "Haruo Kuroda was one of the world's foremost experts on the design and application of synchrotron radiation to the elucidation of a wide range of scientific problems. Haruo Kuorda was a humble, almost self-effacing individual, short in physical stature, but towering in his intellectual energy and authority". He will be sadly missed by all who knew him.

Eisuke John Minehara

## Haruo Kuroda, Chemist, biographical outline

- Born in Tokyo, 28 June1931;
- Research Associate, Department of Chemistry, University of Tokyo 1960-1968,
- Associate Professor, University of Tokyo 1968-1971,
- Professor, University of Tokyo 1971-1977,
- Department Chairman, University of Tokyo 1977-1979,
- Chairman of the Library Council, University of Tokyo 1988-1991;
- Chairman of the Advisory Council, Photon Factory, KEK, Japan 1980-2003;
- Chairman of the Library Council, National University of Japan 1988-1991;
- Professor, Science University of Tokyo 1992-2003,
- And Director of Infrared Free-Electron Laser Center 1999-2003;
- Married 1958 to Hiroko Fujimoto (two sons);
- Died in Tokyo, 4 May 2004.