

II-01

## Medical imaging

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There are a number of medically related imaging programs at synchrotron facilities around the world. The most advanced of these are the dual energy transvenous coronary angiography imaging programs which have progressed to human imaging for some years. The NSLS facility will be discussed and patient images from recent sessions from the NSLS and HASYLAB will be presented. The effort at the Photon Factory and Accumulator Ring will also be briefly covered as well as future plans for the new facilities. Emphasis will be on the new aspects of these imaging programs; this includes imaging with a peripheral venous injection of the iodine contrast agent, imaging at three photon energies, and the potential of a hospital based compact source.

Other medical programs to be discussed are the Multiple Energy Computed Tomography (MECT) project at the NSLS and plans for a MECT program at the ESRF. Recently, experiments performed at the NSLS to image mammography phantoms using monochromatic beam have produced very promising results. This program will be discussed as well as some new results from imaging a phantom using a thin Laue crystal analyzer after the object to eliminate scatter onto the detector.