Hard X-rays from the 1.2 GeV SIAM Photon Source

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Abstract

The SIAM Photon source was originally the 1 GeV SORTEC storage ring optimized for Lithography in Japan. To meet the needs and requests of the Thai scientific community a modification program has been started to convert the storage ring into a X-ray source. An initial increase of the electron beam energy to 1.2 GeV allowed the immediate application of X-ray absorption spectroscopy from bending radiation up and beyond Manganese. To cover the spectral range to some 15 keV preparations are presently underway to implement a high field 6T wavelength shifter and a superconducting multipole wiggler. To manage the strong perturbation by those magnets the beam dynamics must and can be adjusted. Operation of the first full spectral beam line is expected in 2007. Plans for beam lines and experimental program will be presented.