

Issues for the Next Phase Operation in PLS*,
J.Y. HUANG, I.S. KO, M. KWON, T.Y. LEE,
S.H. NAM, PAL/POSTECH Pohang, Korea - Since
September 1995, the Pohang Light Source (PLS) has been
operated with 2-GeV electron beams in the range of 100 to
130 mA of the beam current. Beam lifetime is about
15 hours at 100 mA in normal cases. Next phase
operation of PLS is aiming at the stable 2-GeV operation
with higher beam current and at the higher beam energy
operations. One of the major factors to limit the higher
current operation is the coupled-bunch instabilities driven
by the HOMS of RF cavities. Optimization of the cavity
temperature and application of the feedback system have
been actively pursued for curing instabilities. Increasing
demand of the X-ray users forces operators to increase the
beam energy to 2.5 GeV. The issues for the energy
ramping from the 2-GeV electron beam and the direct
injection from the full energy linac will be discussed.

* Work supported by MOST and POSCO.