Abstract Submitted
for the APR12 Meeting of
The American Physical Society

SESAME – A third generation synchrotron light source for the Middle East HERMAN WINICK, SLAC National Accelerator Laboratory, SESAME COLLABORATION — Developed under the auspices of UNESCO and modeled on CERN, SESAME (Synchrotron-light for Experimental Science and Applications in the Middle East) is an international research centre in construction in Jordan, enabling world-class research while promoting peace through scientific cooperation. Its centerpiece, a new 2.5 GeV 3rd Generation Electron Storage Ring (133m circumference, 26nm-rad emittance, 12 places for insertion devices), will provide intense light from infra-red to hard X-rays. Members of the Council (Bahrain, Cyprus, Egypt, Iran, Israel, Jordan, Pakistan, Palestinian Authority,Turkey) provide the operations budget. Voluntary contributions by several Council Members that could amount to over $20 million over 5 years are now being finalized. This, plus funds from other sources, will enable acquisition of the technical components of the new ring and the upgrading of beamline equipment donated by several European and US labs. All concrete shielding is complete. The 0.8 GeV BESSY I injector system, a gift from Germany, is now being installed. A training program has been underway since 2000. SESAME is on track to start operation with four day-one beam lines in 2015.

Herman Winick
SLAC National Accelerator Laboratory

Date submitted: 05 Jan 2012 Electronic form version 1.4