

**Present Status and Future Plans for Synchrotron
Light Source ISI-800, I. KARNAUKHOV,**

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Kharkov, Ukraine - The Synchrotron Light Source ISI-800 at the Ukrainian National Synchrotron Center (Kiev) will be used a 200 mA, 1 GeV electron storage ring to produce high brilliance bending magnet (conventional and superconducting - a combined magnet lattice with TBA cells) and insertion device VUV and X-rays for up 24 ray beamlines. It is 46.73 meters in circumference, including four 3.3 m-long dispersion-free straight sections, and has a beam lifetime designed to exceed more than 3 hours with 5 nTorr average ring vacuum at 200 mA. The harmonic number will be 109 and the corresponding RF frequency will be 699.3 MHz. The critical X-ray wavelength from eight conventional 1.05-m long bending magnets will be λ_c and from four superconducting 0.14-m long magnets will be λ_c . The radiation characteristics of the storage ring are also discussed. Further optimization of the storage ring lattice in progress. The major features of the light source ISI-800 are described.