

Magnetic Measurement of the VSX Prototype Magnets, Y. KAMIYA, T. KOSEKI, H. KUDO, N. NAKAMURA, K. SHINOE, H. TAKAKI, Y. TAKIYAMA, Institute for Solid State Physics, The University of Tokyo; Y. KOBAYASHI, Photon Factory, High Energy Accelerator Research Organization (KEK); K. KUNO, Energy & Industrial Systems Center, Mitsubishi Electric Corporation - The VSX light source, being planned to construct at the University of Tokyo, is a third generation VUV and soft X-ray synchrotron radiation source. The storage ring has a lattice type of DBA and includes 32 identical dipole magnets (1.3 m long), 144 quadrupole magnets (0.4 m and 0.6 m), and 128 sextupole magnets (0.15 m and 0.2 m). The prototypes of dipole, quadrupole (0.4 m) and sextupole (0.15 m) have been fabricated and their magnetic field measurements are now in progress. The measurements are carried out using the automated three-axis measuring bench with a Hall probe for the dipole, and two rotating coils (long and short coils) for the quadrupole and sextupole. This paper will report the results of these field measurements.