

**The SRS Multipole Wiggler Vacuum Vessel Protection System**, J.A. BALMER, M.J. DUFAU, D.M. DYKES, B.D. FELL, M.T. HERON, B.G. MARTLEW, M.J. PUGH, W.R. RAWLINSON, R.J. SMITH, S.L. SMITH, B. TODD, CLRC Daresbury Laboratory - The UK Light Source, the SRS, is being upgraded by the addition of two multipole wiggler magnets. The vertical aperture of the multipole wiggler vacuum vessel, which is manufactured from a titanium alloy, is  $\pm 7.5$  mm. This paper reports the investigations into the effect of synchrotron radiation, striking uncooled surfaces, from the upstream dipole due to off orbit electrons. It also describes the measures taken to protect the vessel, including an ultra-fast interlock system for beam dumping.