

Status of the ESRF Vacuum System,
R. KERSEVAN, ESRF* - An overview of the present status and an outline of future developments for the vacuum system of the 6 GeV storage ring of the European Synchrotron Radiation Facility is given. Lifetimes of the order of 50 hours in 2/3 filling mode are routinely obtained with a total electron beam current of 200 mA presently limited by the synchrotron radiation power density on the photon beam absorbers located downstream of each bending magnet. On the other hand, in the 16-bunch mode the total current is limited to a total of 90 mA, with a lifetime of 12 hours. The effects of the related high-order mode losses on different parts of the vacuum system are reviewed, and the required changes of the bake-out procedure and alignment of the insertion device vacuum chambers are discussed. Other problems affecting the vacuum instrumentation, some vacuum vessels and the pumping system of the machine are also reviewed, and their future development outlined. The status report of the fabrication and testing of a new in-vacuum undulator vacuum chamber is given.

* Reporting for the ESRF Vacuum Group