

# **DISTRIBUTED CONTROL SYSTEM IN VEC & SCC - AN EXPERIENCE WITH EPICS**

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## **Abstract**

The K-500 Superconducting Cyclotron (SCC) is commissioned and the modernization of Variable Energy Cyclotron (VEC) is being done to produce the beam for the RIB (Radioactive Ion Beam) project. The paper describes the implementation details and experiences with EPICS architecture in VEC and SCC, keeping the old heterogeneous architecture intact until the final upgradation with EPICS. The hardware for Touch panel with soft knobs is integrated in the EPICS architecture to control the magnet power supplies (MPSs), plugged on the distributed control network. The modified EPICS archiver incorporates oracle connectivity for the centralized storage of the tuning parameters. The OPI, running in x86-win32, displays the Vacuum system control parameters from embedded controller and vacuum gauge controller module using developed activeX components for EPICS integration. The supervisory control system of cryogenic plant and deflector conditioning are also upgraded with EPICS. The developed IOC on arm-linux platform is used for electrical substation control and SCC beam diagnostic system

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