## **ABSTRACT**

Cyclohexanone and cyclohexanol has great demand in todays world. It can be produced by various methods now days. It can be used to further production of nylon-6 and nylon-66 by its intermediate production. So the whole root for oxidation of cyclohexane is quite dynamic and complex. So in todays world to make this whole process of planning and establishing new plant for the oxidation of cyclohexane and also for modification of conventional process it is very necessary to simulate and optimize such processes. In present there are number of simulation softwares are frequently used by different industries, but such softwares are costly for small scale companies and learners or students so it is required to simulate the flowsheet of this type of processes by an open source softwares. In this direction DWsim has stepped up to facilitate open source software for simulation. It has the same capacities and abilities for simulation of processes as it has in paid simulation softwares.