1077-VG-650 **Dr. Sushil Kumar*** (`sushilk@ashd.svnit.ac.in`), Applied Mathematics and Humanities Department, S.V.N. I. T Suart, Surat, 395007, India. *Study on freezing in cylindrical domain with convective cooling and energy generation.* Preliminary report.

In the present study, a heat transfer study is carried out to study the effect of volumetric heat generation on the freezing in a cylindrical domain. Finite difference method is used to solve the enthalpy formulation of the freezing process. It is found that an increase in heat generation slows down the freezing process for the given convective cooling. (Received September 09, 2011)