

A MAJOR PROJECT REPORT ON
“EXTRACTION OF PECTIN FROM ORANGE PEELS BY ACID
HYDROLYSIS AND THERMOMECHANICAL PROCESSING
METHOD”

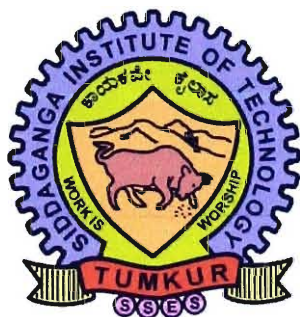
A major project report submitted in 8th semester B.E. curriculum of Chemical Engineering

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ABSTRACT

This project is primarily aiming at providing an easiest method of manufacturing of pectin on a laboratory scale.

The extensive use of pectin is found to be in food and pharmaceutical industries. To name a few of them it is used as jellying agent in jams and jellies, and in antidiarrhoea formulations. Other important uses include furnishing textiles, cosmetics etc.

Pectin is obtained from the dilute acid extraction of the inner portion of the rinds of the orange fruits. In this project orange peels were taken and the process is carried out and the effects of various parameters are studied.

The first chapter deals with the introduction, history, properties, uses, etc. the second and third chapter deals with various manufacturing processes, selection of process and experimental procedure are involved. The project experimentation by acid hydrolysis method and thermomechanical processing method were done, and finally comparisons are made based on the yield of pectin obtained by both the methods. The fourth chapter deals with the results and discussions. Specimen calculations are given in appendix.