The cane sugar industry has several by-products of immense potential value. The scientific exploitation of which not only will stabilize the industry by reducing the cost of production but also will increase national wealth by creation of new products and prevention of import. Of these by-products sugarcane wax is of considerable importance. This wax which appears on the rind of the cane, gets partially extracted into the juice and is mostly eliminated in the filter mud during the clarification process. The percentage of wax in the sulphitation press mud is much higher than in carbonation mud and makes recovery a possibility. Wax is an imported commodity and costs Rs. 8-10 crores p.a. of foreign exchanges. This indicates that the wax if extracted from press mud will save foreign exchange to a considerable extent. The refining of the crude wax, as has been developed so far, consist of first deashing with concentrated hydrochloric acid then defatting it using suitable solvents such as alcohol, acetone, etc., and subsequently bleaching it by chromic or chloric acids according to requirements. The waxes so produced have high resinous matter and of low solvent retention and jellying properties and so have less industrial application. Under these circumstances, a study has been proposed herein for the development of such a process which will eliminate the use of drastic chemicals Viz., Chloric acid, chromic acid, hydrochloric acid and heat treatment etc. Secondly
to study and evolve the modification of wax in such a simple way that may result into a simple and less complicated process, which will cut down the cost of production.

It was conceived that instead of the drastic chemicals treatment if double solvent extraction method is utilized, the destruction of many matter resulting into production of resinous substance could be avoided as well as the cumbersome process and many unit operation, utilized in drastic and hazardous chemical treatment, can be eliminated or substituted in a simple way.

The wax so prepared will replace the imported wax and save the foreign exchange. Cane wax was being manufactured in South Africa, Cuba, Queensland, Taiwan by chemical means in thirtees and fourtees and the refining of cane wax was being carried out in Germany and U.S.A. But now they all have stopped doing so.

It indicates that wax so produced by chemical means has not been acceptable to its users. Therefore, the study has been undertaken for development of useful process and the same is being communicated in this dissertation in the chapters hereunder and is supposed to find immense industrial application for furthering the cause of National Economy.

Waxes have its own important role in the manufacture of cosmetic and in some form or the other, it is used in every type of polishes. It is used for preservation and lustre in food
industry i.e. for wrapping or packaging foods. In baking industry, waxes are used as emulsifiers, whipping agents etc. Fruits for export purposes are dipped in wax emulsion for giving it a protective coatings. In leather industry, wax is used in stuffing grease and in rubber industry, as softening agents. There are a number of ways in which waxes are used as lubricants. The waxes are used in pharmaceutical i.e. ointments for increasing the contact with the skin and as coating on the drug pills for protection. It is used on records and tape. It helps in toning up the tobacco. It also finds extensive use in stencils, brewing, candles, matches, ceramics, paints, textiles, explosives and many other industries etc.