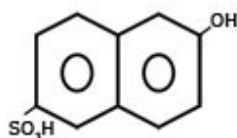




An Industrial Visit was organized by Chemical Engineering Department to MACSON PRODUCTS, Sachin (Surat) for II<sup>nd</sup> year students. The visit was aimed at enhancing the practical knowledge of the students and to show them the real application of theoretically studied Unit operations and processes. 60 students took this opportunity as a stepping stone towards their successful career. The students of BE-II were also accompanied by 4 faculties from the department – Dr. Rakhi Mehta (HOD, Chemical Department), Prof. Anshul Sharma, Prof. Dimple Master and Prof. Mazhar Multani.

MACSON PRODUCTS is situated in Sachin and is a manufacturer of dyes and dye intermediates. We were shown two units preparing Schaffer's acid and Bronner's acid.

Schaffer's acid ( $C_{10}H_7O_4SNa$ ) is a dye intermediate. It is chemically known as 2-naphthol-6-sulphonic acid. It is available as its mono sodium salt and is represented by the following structural formula:-



Schaeffer's acid (6-hydroxy-2-Naphthalenesulfonic acid), an important dye intermediate, is produced from naphthalene by a combination of the unit processes of sulfonation, nitration, reduction, and hydrolysis. Schaeffer's acid is used in the manufacture of a large number of azo dyes and pigments.

Bronner's acid ( $C_{10}H_9NO_3S$ ) is also a dye intermediate. It is chemically known as 2-Naphthylamine-5-Sulphonic acid.

Students got opportunity to view unit operations like Absorption, Filtration, Evaporation, Drying etc. and valves apart from unit processes etc.

The entire plant which included different units was controlled by SCADA (Supervisory Control and Data Acquisition) system.

Some glimpses captured during visit:



## INDUSTRIAL VISIT – MACSON PRODUCTS

The visit ended on a high note with students being briefed regarding qualitative analysis (Laboratory) of their product.

**ACKNOWLEDGEMENT**

We would like to thank Dr. Vaishali Mungurwadi (Principal, SCET) and the management of SCET for permitting us for industrial visit at MASCON PRODUCTS.

We would also like to acknowledge Mr. Keyur Patel for allowing a visit in his industry and personally giving his valuable inputs to the students.