

**Report on Industrial Visit to Enal Drugs Pvt., Ltd., Hyderabad.
SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA**

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| Date of visit | April 24,2022 |
| Place of visit | Enal Drugs Pvt., Ltd., Hyderabad |
| Coordinators from College | Dr. T.Mamatha, Dr. S.Anuradha Bai |
| Approved by | Dr. N.Srinivas (Director), Dr. T.Sarita Jyostna (Principal), Dr. T.Mamatha (Vice-Principal) |
| Participating students | Twenty students (20) of B.Pharmacy VIII-Sem |

The Industrial visit to Enal Drugs Pvt Ltd., Hyderabad was organized by Sarojini Naidu Vanita Pharmacy Maha Vidyalaya on 24th April 2022 in Coordination with TASK (Telangana Academy for Skill and Development) with the support of Mrs. Sravanthi and Mr.K. Shalivahana. Enal Drugs Private Limited is an ISO 9001: 2015 certified company, involved in developing and producing anti ulcerative drugs, their intermediates, and also other active pharmaceutical ingredients (APIs) and intermediates.

The objective of this visit was to provide exposure on bulk drug industry to understand the technology and the equipments used for the production of active pharmaceutical ingredients (APIs) and intermediates. Different departments were found which include Production, Quality Control, Quality Assurance and Research & Development. B. Pharm VIII Semester, 20 students participated in the visit which was successfully coordinated by Dr.T.Mamatha and Dr S. Anuradha Bai. We started from our college at 10:30 am and reached our destination at 11:30 am. A brief introduction about industry was given by Manager of company.

Enal Drugs Pvt Ltd., manufacturing API's, those are Lansoprazole, Rabeprazole, Dexlansoprazole Sodium, Betahistine Dihydrochloride, Betahistine Mesylate, Paroxetine Hydrochloride, Paroxetine Mesylate, Esomeprazole magnesium Trihydrate, Esomeprazole magnesium Dihydrate, Levosulpiride.

Firstly, we went to Warehouse where we got to learn how the raw material entry, sampling, quarantine area, approved material storage area, and packaging materials are stored.

Then we were taken to production area where we got to know about reactors. In that area total 6 reactors are there next two reactors are in crystalline 1 and crystalline 2 rooms then we entered into wet area and dry area where betahistidine dihydrochloride was drying in trays and passed through mesh. After that product can be shifted to quarantine area then to packing room. The next area we visited was washing area where different equipment was washed according to developed cleaning procedure, we were informed about cleaning and validation procedures. Final product processing and packing areas and final product holding rooms are provided with positive filtered air supply. Each room in final product handling areas is supplied with 0.3 filters.



Next we entered in to Pharma block. The pharma block is designed for production and handling of APIs, consists of change rooms, corridors, centrifuge room, drying room, milling & packing

room, quarantine room, pharma storage rooms, etc. Two types of reactors are under utilization, namely stainless-steel reactors and glass lined reactors. Centrifuges for isolation, treating with charcoal to remove impurities, crystallization and precipitation of solids from liquid phase was observed. Based on the nature of wet products to be dried, different types of driers available are rotary cone vacuum driers (RCVD) and tray driers (TD). The RCVD, which is used to dry the product, can be also used for blending of the individual lots. For uniform particle size of the product, sifters and pulverizes are used to pulverize large size particles to have uniform particle size. All were made of stainless steel. All the equipments are were well maintained and preventive maintenance status was mentioned by equipment name, equipment ID No, done date, done by, checked by product name, batch no, status, Sign and Date.

Then we moved to Quality control department which is independently responsible to approve or reject the raw materials, in-process, intermediates and finished products. To meet the current global quality standards, the department is well equipped with the modern quality control instruments. In QC we have seen various analytical instruments like HPLC, GC, furnace, polarimeter, intermediate analysis, API analysis and also observed various sampling procedures. In this visit students were very eagerly waiting for listening to industrial higher authorities.

Quality Assurance (QA) is responsible to monitor overall quality operations and facilities as per CGMP. Which is also responsible for the documentation and information flow to the regulatory authorities.

Finally we entered into R & D facility which was well equipped with various equipments to perform variety of chemical reactions and continuously evolving processes of new drug molecules and process development for existing molecules by employing latest and most appropriate technologies. The R&D is responsible for scale-up & implementation of new drugs at plant level and proposed remedies to resolve the trouble shooting in the manufacturing area. Thanks to Mr.Shankar, Asst.Manager who explained each and every equipment operation and also answered many questions raised by us.

We thank our management for providing this opportunity to visit industry.







