

Report on Industrial Visit to Mars therapeutics Ltd.,Hyd.

SAROJINI NAIDU VANITA PHARMACY MAHA VIDYALAYA

Date of visit	APRIL 6, 2022
Place of visit	Mars therapeutics Ltd., Hyd.
Coordinators from college	Dr.K.Shantakumari, Dr. T.Lavanya, Mrs. G.Sri Lalitha
Approved by	Dr.N.Srinivas (Director), Dr.T.Sarita Jyostna (Principal), Dr.T.Mamatha (Vice Principal)
Participating students	Forty six students (46) of B.Pharm VIII Sem

The Educational visit to Mars therapeutics Limited, Hyderabad was organized by Sarojini Naidu Vanita Pharmacy Maha Vidyalaya on 6th April 2022. 46 B.Pharm VIII Sem students actively participated in the visit which was successfully coordinated by Dr.K.Shanta Kumari, Dr.T.Lavanya & Mrs.G.Sri Lalitha. We started our journey at 9:00 AM from college and reached our destination at 11:30 AM. We divided our students in the batch of 23 students per batch for the visit and the interaction with the industry person. A brief introduction about industry was given by Manager of company. Firstly we were taken to gowning room and provided with gowns and caps, several posters were there instructing proper gowning procedure. The first department that we visited was raw material and packaging material warehousing area where we got to learn how the raw and packaging materials are stored and labeled and we have seen different types of labels with different colors fixed on containers indicating its batch number, lot number, issue date, expiration date, retest date, and storage conditions. They were using in-house software for digital data maintenance. We were also informed about SAB system which they are going to use in future for warehousing data maintenance. Then we were taken to dispensing area where we got to know about the procedure for dispensing of raw and packaging material according to given MRO (material request order) provided by production area. The next area we visited was washing area where different equipment were washed according to developed cleaning procedure, we were informed about cleaning and validation procedures. After that we

visited granulation area where we saw different granulation equipment such as rapid mixer granulator, fluidized bed drier. Furthermore, we were also informed about different steps used during granulation such as shifting, sizing, drying etc. Different types of granulation process were used like wet granulation and dry granulation. Meanwhile we got to know about how the sampling have been carried out for dissolution test and what different kind of analysis techniques they were using. After visiting granulation area we moved towards compression area, where we saw compression machine where he explained about different parts of compression machine like stations, tooling, hoppers, and feeders. He also explained about different defects of tablets due to compression variation and its remedies and whole procedure for compression was explained in detail. The next area was capsule filling area where we got to know about different types of fillings like powder, granules, pellets, and mini tablets that are being filled in capsule shell, then next step explained after filling was polishing. After filling area we have seen the coating area where he explained that coating is the most crucial step in tablet manufacturing two coating equipment. He gave us details about fluid bed equipment used for the coating of pellets and granules. The whole coating principle was described in detail. Then we head towards packaging area, the whole packaging area was divided into two parts like primary packaging area and secondary packaging area in primary packaging area different packaging systems were there like blister packaging and bottle packaging, the bottle packaging was in process so we informed about the procedure in detail, we learnt about how the packaging material is selected and tested for its appropriateness and in accordance with the foreign market requirement for the packaging and labeling. In blister packaging area the process used for blistering was semi-automated. Brief information was given about the secondary packaging of the tablets and capsules. Then we moved to QC Department and we have seen various analytical instruments like WATERS-HPLC, TOC, Atomic absorption spectrophotometer, furnace, stability testing chambers for long term, real time and intermediate analysis and also observed various sampling procedures. In this visit students were very eagerly waiting for listening to industrial higher authorities. The technical head of Mars therapeutics.Ltd. conducted very informative session for the students and also be motivated to the students to select their domain and area of interest. He also guided the students to select the areas like QC and production and software for testing etc. and its importance in the current market.

Lastly, we thank the industrial authorities for giving this opportunity ended the visit by clicking a group photograph at 2:15 PM and we moved out of the plant.

