

INDUSTRIAL VISIT REPORT

On 09th of March 2022, 42 students of Second and Third Year B.Sc. Chemistry along with 2 faculty members of School of Arts and Science, VMRF, AV Campus, Chengalpattu, visited Lessac Research Laboratories Pvt Ltd, A-87, Pipdic Industrial estate, Mettupalayam, Puducherry – 605 009. We left our college at 7:30 am and reached Lessac Research Laboratories Pvt Ltd by 10:30 am. We travelled in a comfortable bus with 42 students and two teachers.



All in all there were 42 students of second and final year B.Sc Chemistry, who actively participated in the visit which was successfully coordinated by Dr. S. Rathakrishnan and Dr. A. Harikrishnan. A brief introduction about industry was given by Mr. Prasath. Firstly we were taken to gowning room separate for male and female 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.

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 IPQC 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, the 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.

He shared an incident regarding the tablet coating defect that leads to a great loss. 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 labelling(BP and IP). 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. After that the plant head Mr. Prabhu was felicitated. Lastly, we ended the visit by clicking a group photograph at 2:15 PM and we moved out of the plant.



