

Report on Industrial Visit Held on 11.04.2022-18.04.2022

Date of Event	11 th April 2022 to 18 th April 2022
Name and Type of Event	Industrial Visit 2022 to Aurobindo Pharma Ltd. and AMTZ
Conducted by	SCHOOL OF PHARMACY, ARKA JAIN University
No. Of Participant	85

Industry visit is a part of curriculum, both for B. Phar and D. Pharm students as per B. Pharm Course Regulation 2014 by Pharmacy Council of India and Education Regulation Act 2020. The students shall be taken for an industrial visit to pharmaceutical industries to witness and understand the various processes of manufacturing.

In this regard School of Pharmacy has given a proposal to honorable Vice Chancellor. Proposal was granted and proceed forward. Various Industries was communicated to avail the permission. Finally Aurobindo Pharma Ltd. and AMTZ of Visakapatnam, Andhrapradesh granted the permission. 76 students and 9 faculty members joined the tour. On 11th April 2022 the journey started from TATANAGAR railway station to Visakhapatnam by TATA VSKP SF Express at 1:00 pm. On 13th on the first half they visited Aurobindo Pharma Ltd. and in second half they visited AMTZ. Aurobindo Pharma Ltd. a fully integrated pharma company, Aurobindo Pharma features among the top 2 companies in India in terms of consolidated revenues. Aurobindo exports to over 155 countries across the globe with more than 90% of its revenues derived from international operations. Founded in 1986 by Mr. P. V. Ramprasad Reddy, Mr. K. Nityananda Reddy and a small group of highly committed professionals, Aurobindo Pharma was born of a vision. The company commenced operations in 1988-89 with a single unit manufacturing Semi-Synthetic Penicillin (SSP) at Pondicherry. Aurobindo Pharma became a public company in 1992 and listed its shares on the Indian stock exchanges in 1995. In addition to being the market leader in Semi-Synthetic Penicillins, it has a presence in key therapeutic segments such as neurosciences, cardiovascular, anti-retrovirals, anti-diabetics, gastroenterology and anti-biotics, among others. The Company's R&D strengths are in developing intellectual property in non-infringing processes and resolving complex chemistry challenges. Aurobindo Pharma is in the process of developing new drug delivery systems, new dosage formulations, and applying new technology for better processes. The R&D Center, in Hyderabad covers over 13,000 sq.m, and provides a nurturing environment to a multi-disciplinary team of over 700 scientists striving for excellence. The Centre meets cGLP requirements, and is focused on the areas of organic synthesis, analytical research, dosage form development, pharmacology, bio-equivalence studies and drug delivery systems. The instrumentation and

analytical knowledge base at the Centre facilitate: Complete impurity profiling in all products developed. Development of analytical methods and specifications from raw materials, to non-compendial finished products. In-house synthesis of reagents for analysing organolithiums and noble metals. Accelerated and real-time stability studies.

This reflects the Company's commitment towards developing innovative technologies and creating a knowledge base in chemical synthesis, high quality generic formulations and development of drug delivery systems. The Centre is well equipped to handle various developmental challenges in the areas of oral and parenteral medications. Specifically, the available infrastructure includes: Dedicated area and labs to handle potent substances like hormones. Process Development and Scale-up Labs attached to the manufacturing unit. An NDDS laboratory with specialized capabilities like nano-technology, hot melt extrusion, etc. A unit to develop parenteral dosage forms ranging from vials to ampoules to pre-filled syringes to large volume parenterals. A unit to develop ophthalmic and nasal products using the BFS technology. Supporting dedicated packaging development labs with multifeeder BQS machinery capable of various packs including multi-product-in-a-blister. Dedicated analytical laboratories with UPLC's, ion chromatography, an amino acid analyser, particle size and particle surface area analyser, hot stage microscopy, USP Type III and Type IV apparatus etc. A bio-equivalence laboratory approved by various regulatory bodies like USFDA, MHRA and WHO etc. A team of over 500 scientists dedicated to development of generic formulations, many of which are first-to-file. More than 180 patent applications have been filed by a dedicated IP team. The scientific team is supported by two separate project management teams dedicated to oral solids and parenteral portfolios. A group of more than 150 supports all regulatory filings across various geographies. The Centre is capable of developing, scaling up and commercializing various dosage forms spread across tablets, capsules, soft gels, oral liquids, injectables (solutions, suspensions, lyophilized, etc.), and ophthalmic (three piece and BFS) and nasal delivery systems. The focus is to develop products for the US and EU followed by other international markets, including specialized markets like Japan. We can develop complex in-vitro analytical as well as bio-analytical methods for various molecules including extremely potent drug combinations to support the formulation development team. The R&D Centre has developed products and filed more than 200 ANDA's, around 124 EU Dossiers for products and hundreds of Dossiers in other countries including Brazil, South Africa, Australia and China. The product range covers various pharmacological categories with special focus on anti-retroviral, anti-biotic, CNS and CVS drugs. Students enjoyed the medical technology park *i.e.* Andhra Pradesh MedTech Zone (AMTZ) is a Common Manufacturing Facilities & Common Scientific Facilities that include specialized laboratories, warehousing and testing centers such as the Center for Electromagnetic compatibility and safety testing, Center for Biomaterial Testing, Center for 3-D printing, Centers for Lasers, MRI Magnets, Gamma Irradiation, Molds, and many other industrial service centers.

Industrial pharmacy is a complex, multi-factorial environment, with the overall aim of manufacturing, developing and marketing safe and efficacious medicines including quality assurance of these activities. Industrial visit is to provide students an insight regarding internal working of companies. With an aim to go beyond

academics, industrial visit provides student a practical perspective on the world of work over theoretical knowledge.

Students also visited RK beach, Rishikonda beach, Kailashgiri, Simachalam temple and other local sights and arrived at Jamshedpur on 18th April 2022 at 11:30 am. Students shared their experience and submitted a write-up.

Agenda 1: Welcome by Dr. Jyotirmaya Sahoo, Dean of School of Pharmacy

Discussion: Dr. Jyotirmaya Sahoo, Dean of School of Pharmacy welcome all the members present with the meeting.

Agenda 2: Title of the Academic Tour.

Discussion: The title of the Academic Tour was decided to be kept as **INDUSTRIAL VISIT 2022.**

Agenda 3: objective of the industrial visit.

Discussion: To upgrade the students with current updates about the industrial profession and to provide the knowledge of new modern techniques employed in the industries. Students have visited the reputed Pharmacy industry, which helps to develop innovative ideas among the students for the research.

Agenda 4: Scheduling and Permission from Vice Chancellor

Discussion: It is decided to schedule the visit from 11th April-18th April 2022. Notice need to be circulated among the students and faculty members after the approval of Vice Chancellor of the University. An information in this regard to COE of University and Member Secretary of BOS of SOHAS need to be mailed.

Agenda 5: Consent requested from different Pharma Industries

Discussion: Proposal to various Pharma Industries need to be applied, and on the basis of positive response process may be implemented. This will be handle by the Dean of School of Pharmacy and other senior faculties of the department. However Dr. Sahoo confirmed that there was a verbal confirmation from Aurobindo Pharma Ltd. And AMTZ of Visakhapatnam.

Agenda 6: Budget planning

Discussion: A budget to be planned with the supervision of Honourable CFO of ARKA JAIN University, Mrs Richa Garg and submitted to higher management for its approval. However as previous year 2019 industrial visit, it is planned to register the students by paying an amount of 9000.00 rupees. The details will be available with Tour Registration and Parent Declaration Form.

Agenda 7: Information to students and tour registration and other documentation processing

Discussion: Students of B. Pharm 2020, B. Pharm 2021, D. Pharm 2020 and D. Pharm 2021 to be informed through their whatsapp group, website notice board to participate the Industrial Visit 2022. All participants need to register themselves to confirm their participation. Miss Yogita Kumari, Asst. Professor will look after this process. Security protocol regarding COVID guide line need to be declared by the students individually and a letter to RPF need to be submitted on University letterhead from the Registrar

Agenda 8: Promotion

Discussion: Posters and brochure need to be designed by University designer Mr. Gourango and circulated as well as need to be uploaded with the website. Photographs will be with geo tag.

Agenda 9: Event report preparation and submission to In-charge Website and official documentation and Press Release

Discussion: Event report to be prepared and submitted to In-charge Website immediate after completion of the event and also need to be submitted with key highlights and monthly NAAC report to IQAC. Press release will be prepared both in Hindi and English. Hindi part will be sent to local newspaper and English part will be published with The Pulse (Departmental News Letter).

Agenda 10: Record the event by the Website update & Press and Media Committee of School of Pharmacy

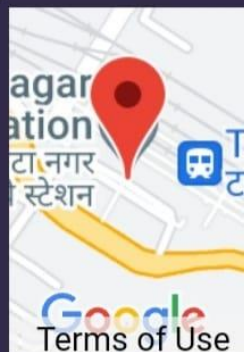
Discussion: The event report need to be recorded with the School of Pharmacy along with feedback and write-ups from the participated students and the published news.

The Meeting for the **Industrial Visit 2022** was ended with vote of thanks to the present members.

Poster of the Event:



Glimpse of the Event:



Q692+72 Jamshedpur, Jharkhand, India

lat: 22.7682308 long: 86.2001184

11/04/2022 11:17:11

Tatanagar Junction, Tata Nagar, Khasmahal, Jugsalai,
Jamshedpur, Jharkhand 831007, India



ARKA JAIN
University
Jharkhand



Unnamed Road, Lankelapalem, Andhra Pradesh 531021, India

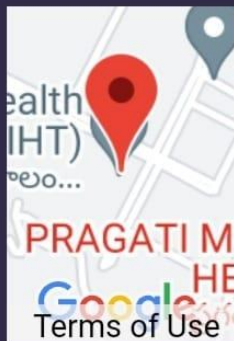
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13/04/2022 10:15:05

M37Q+5J Visakhapatnam, Andhra Pradesh, India



ARKA JAIN
University
Jharkhand



**Unnamed Road, Siddeswaram, Nadupuru
Reserve Forest, Gajuwaka part, Andhra
Pradesh 530032, India**

lat: 17.6259945 long: 83.1599367

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J5G5+9X Visakhapatnam, Andhra Pradesh, India



