

Faculty Development Program & Guest Lecture for M.Pharm. Students on ‘Continuous Manufacturing in Pharmaceutical Industry & Process Analytical Technology’

SVKM’s NMIMS School of Pharmacy & Technology Management (SPTM), Shirpur campus, organized a one-day Faculty Development Program (FDP) & Guest Lecture for M.Pharm. Students on ‘Continuous Manufacturing in Pharmaceutical Industry & Process Analytical Technology’ on November 19, 2022, via hybrid mode. Faculty from SVKM’s NMIMS– SPTM-Shirpur, SPPSPTM-Mumbai & SPTM Hyderabad, SVKM’s Dr. Bhanuben Nanavati College of Pharmacy, Mumbai,



and SVKM’s Institute of Pharmacy, Dhule, attended the FDP. The program started with the opening remarks by Dr. Bala Prabhakar, Dean, SPPSPTM, Mumbai. She introduced the five Pharmacy institutions under SVKM’s umbrella and shared that Dr. R. S. Gaud, Director of SVKM’s Pharma Institutions, the guiding force for all institutions under SVKM umbrella. She also shared about the expertise of the speaker Dr. Ranjit Barshikar with the participants. Dr. Sunil Kanvinde, Associate Dean, SPTM Shirpur campus, introduced the speaker to the participants and briefed the topic of the FDP.

Dr. Ranjit Barshikar in his talk “Continuous Manufacturing (CM) in Pharmaceutical Industry and Process Analytical Technology (PAT)” highlighted Pharma 4.0 technology, and artificial intelligence (AI). In Pharma 4.0 technology, the manufacturer/industry and regulatory authorities work together to minimize human intervention in CM and PAT. CM is a real-time monitoring to control process and product quality parameters and assure quality, efficacy and safety to patient.



Dr. Ranjit Barshikar explained the role of robotics, cloud computing, and AI-block chain in CM and PAT. ICH Q13 deals with the continuous manufacturing of drug substances and drug products and defines complete integration between automation, machine learning, and human knowledge. He systematically

differentiated batch manufacturing concept and key aspects of CM (input/ process monitoring and controls, PAT tools, risk management).

Dr. Ranjit Barshikar explained the present scenario of 21st Century GMP, PAT tools and support from FDA. The program ended with questions and interaction with the speaker. Faculty members and students actively interacted with the speaker. The program ended with a vote of thanks proposed by Dr. G. L. Gupta, SPTM Shirpur campus. Dr. G. L. Gupta, Dr. Mahesh Palkar, Dr. Smita Bonde, and Mr. Saurabh Maru managed the overall conduction of the event.