



One-Week Training Program on “Preparation and Characterization of Oral Solid Dosage Form” (10th June – 16th June, 2022)

The Department of Science and Technology, Government of India, has given the responsibility to IIT (ISM) Dhanbad to build human resources and its knowledge capacity using open access science and technology infrastructure through the scheme "*Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI)*". Thus, under DST-STUTI programme of IIT (ISM) Dhanbad, a one-week training program on "*Preparation and Characterization of Oral Solid Dosage Form*" is organized from 10th June to 16th June, 2022 at Department of Pharmaceutical Sciences and Technology, BIT Mesra, Jharkhand.

This training program was coordinated by Dr. Animesh Ghosh, Department of Pharmaceutical Sciences and Technology, BIT Mesra. This program includes thirty participants (Faculty/Research Scholar) from various universities/colleges in India, with no more than three from the same university/college.

Highlights of the Day-1 (Dated: 10th June, 2022)

The first day of the training program began with a brief introduction to the program's purpose and significance. The introduction energized the participants' interest in science and engineering. The participants were then given a welcome kit that included a bag, a note pad, a power kit (pen, pencil, eraser, sharpener), and a program pamphlet.

Following that, two consecutive lectures were scheduled, with a relatively short tea break in between. The emphasis of these lectures was on tablet manufacturing, in-process quality control study, bioavailability and bioequivalence study. The first lecture (from 10:00 AM to 11:15 AM) was delivered by Dr. Santanu Kaity, NIPER Kolkata and the second lecture (from 11:30 AM to 12:45 PM) was delivered by Dr. Anirbandeep Bose, TAAB Biostudy Services, Kolkata.

Next, after the lunch break, a practical demonstration (from 2:00 PM to 5:00 PM) on tablet manufacturing, in-process quality control study, bioavailability and bioequivalence study was provided by Dr. Santanu Kaity and Dr. Anirbandeep Bose.

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29/06/22



Highlights of the Day-2 (Dated: 11th June, 2022)

On the second day, two lectures were given based on high-performance liquid chromatography and plasma analysis. The first lecture (from 10:00 AM to 11:15 AM) was delivered by Dr. Animesh Ghosh, Department of Pharmaceutical Sciences and Technology, BIT Mesra and the second lecture (from 11:30 AM to 12:45 PM) was delivered by Dr. Bapi Gorain, Department of Pharmaceutical Sciences and Technology, BIT Mesra.

Next, after the lunch break, a lab demonstration (from 2:00 PM to 5:00 PM) on high-performance liquid chromatography and plasma analysis was provided by Dr. Animesh Ghosh and Dr. Bapi Gorain.

Highlights of the Day-3 (Dated: 12th June, 2022)

On the third day, two lectures were conducted based on the single-crystal X-ray diffraction. These two lectures (the first one from 10:00 AM to 11:15 AM and the second one from 11:30 AM to 12:45 PM) were delivered by Dr. Debajyoti Ghoshal, Department of Chemistry, Jadavpur University, Kolkata.

Following the lunch break, a practical demonstration (from 2:00 PM to 5:00 PM) on single-crystal X-ray diffraction was provided by Dr. Debajyoti Ghoshal.

Highlights of the Day-4 (Dated: 13th June, 2022)

On the fourth day, two lectures were given based on differential scanning calorimetry and thermogravimetric analysis. These two lectures (the first one from 10:00 AM to 11:15 AM and the second one from 11:30 AM to 12:45 PM) were delivered by Dr. Goutam Sarkhel, Department of Chemical Engineering, BIT Mesra.

Next, after the lunch break, a practical demonstration (from 2:00 PM to 5:00 PM) on differential scanning calorimetry and thermogravimetric analysis was provided by Dr. Goutam Sarkhel.

Highlights of the Day-5 (Dated: 14th June, 2022)

On the fifth day, two lectures were given based on powder X-ray diffraction. These two lectures (the first one from 10:00 AM to 11:15 AM and the second one from 11:30 AM to 12:45 PM) were delivered by Dr. Rajeev Kumar, Department of Physics, BIT Mesra.

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Rajeev Kumar
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Next, after the lunch break, a practical demonstration (from 2:00 PM to 5:00 PM) on powder X-ray diffraction was provided by Dr. Rajeev Kumar.

Highlights of the Day-6 (Dated: 15th June, 2022)

Similarly, on the sixth day, two lectures were given based on field emission scanning electron microscope. These two lectures (the first one from 10:00 AM to 11:15 AM and the second one from 11:30 AM to 12:45 PM) were delivered by Dr. Samrat Mukherjee, Department of Physics, NIT Patna, Bihar.

Next, after the lunch break, a practical demonstration (from 2:00 PM to 5:00 PM) on field emission scanning electron microscope was provided by Dr. Samrat Mukherjee.

Highlights of the Day-7 (Dated: 16th June, 2022)

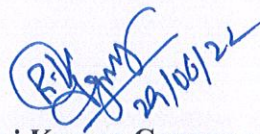
Similarly, two lectures based on FTIR and particle size analyser were given on the seventh day (the last day of the training program). The first lecture (from 10:00 AM to 11:15 AM) was delivered by Dr. Venkatesan J., Department of Pharmaceutical Sciences and Technology, BIT Mesra and the second lecture (from 11:30 AM to 12:45 PM) was delivered by Dr. Ritwik Maiti, Department of Mechanical Engineering, BIT Mesra.

Next, after the lunch break, a practical demonstration (from 2:00 PM to 5:00 PM) on FTIR and particle size analyser was provided by Dr. Venkatesan J. and Dr. Ritwik Maiti.

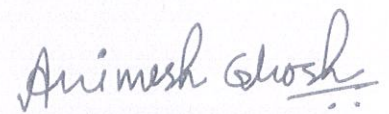
Following that, the certificate distribution took place, followed by a closing speech. Throughout the training programme, a formal discussion environment was established for the exchange of scientific and technological knowledge.


Dr. Sagar Pal

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Dr. Animesh Ghosh

Program Coordinator

