FINAL REPORT

4th to 10th April 2022

NATIONAL INSTITUTE OF TECHNOLOGY WARANGAL

Day 1:- 04/04/2022

At 9.00 am the program started with the registration process of candidates and also distribution of stationary to the participants. The program started with the national song followed by inauguration by key guest honors. Then, at 10.00 am a theory session on Teaching and Learning XRD (X-Ray Diffraction) was held, from 12 :15 to 1: 15 PM was taken up by Dr. Sridhar Balasubrahmaniam, theory session on Teaching and Learning SEM (Scanning Electron Microscope) was taken up by Dr. P R Bangal and in the afternoon session a hands-on training on XRD for batch-1 was explained by Dr. Ajoy Kumar Pandey and hands-on training on SEM for batch-2 was explained by Dr. Uma Maheshwar Rao S and vise- versa for both instruments has been covered by the end of the day.

Day 2:- 05/04/2022

From 9 to 11 am, a theory session on Teaching and Learning XRD (X-Ray Diffraction) was held, from 11:15 to 1:15 PM was taken up by Dr. Sridhar Balasubrahmaniam, theory session on Teaching and Learning SEM (Scanning Electron Microscope) was taken up by Dr. P R Bangal in the afternoon session followed by hands-on training on XRD for batch 1 was explained by Dr. Ajoy Kumar Pandey and hands-on training on SEM for batch 2 was explained by Dr. Uma Maheshwar Rao S and vise-versa for both instruments has been covered by the end of the day.

Day 3:- 06/04/2022

From 9 to 10am, theory session on Teaching and Learning of NMR 1 (Nuclear Magnetic Resonance) Spectroscopy was taken up by Prof. V Rajeswar Rao, from 10 to 11AM Teaching and Learning of NMR 2 Spectroscopy was taken up by Prof. V Rajeswar Rao, from 11:15 to 1: 15 PM Teaching and Learning of LC-HRMS 1 (Liquid Chromatography High Resolution Mass Spectrometer) and Teaching and Learning of LC-HRMS 2 was taken up by Dr. Prabhakar. In the afternoon session Teaching and Learning of IR (InfraRed) Spectroscopy from 2:15 to 3:15 PM & from 3:15 to 5: 30 PM Hands-on Experience of LC-HRMS (Batch-1 was explained by Dr. D Kashinath . Hands on Experience NMR (Batch-2) was explained by Dr. K Hariprasad. And Hands on Experience of NMR (Batch-1)was explained by Dr. K Hariprasad Hands on Experience LC-HRMS (Batch-2)was explained by Dr. D Kashinath both instruments have been covered by the end of the day.

Day 4:- 07/04/2022

From 9 to 11 am theory session on Principles and applications of Fluorescence from 11:15 to 1: 15 PM was taken up byProf. V Jayathirtha Rao. Principles and applications of UV-Vis (Ultra Violet Visible) Spectroscopy was held, from 2:15 to 4:15 PM was taken up by Prof. V Rajeswar Rao Hands-on Experience on Fluorescence (Batch-1) was explained by Dr. Abdul Azeem, Hands on Experience UV-Vis Spectroscopy (Batch-2 was explained by Dr. Abdul Azeem. And Hands on Experience UV- Vis Spectroscopy (Batch-1) was explained by Dr. Abdul Azeem .Hands-on Experience Fluorescence (Batch-2)was explained by Dr. Abdul Azeem data data and from 4:15 to 5: 30 PM, a theory session on Teaching and learning of TG-DTA (Thermogravimetric-Differential Thermal Analysis) was taken up by Dr. Vishnu Shankar

Day 5:- 08/04/2022

From 9 to 11 am a theory session on Teaching and Learning of ESR (Electron Spin Resonance) Spectroscopy was taken up by Prof. Somu Srihari , followed by a theory session on Teaching and Learning of ICP -OES (Inductive Coupled Optical Emission Spectroscopy)from 11:15 to 1: 15 PM was taken up byDr. Mohana Krishna Reddy. From 2:15 to 4:15 PM Hands on Experience of ESR (Batch-1) was explained by Dr. Jugun Prakash and Hands on Experience on ICP –OES (Batch-2) was explained by Dr. Mohana Krishna Reddy and vise-versa has been covered. From 4:15 to 5: 30 PM a theory session on Teaching and learning of DSC was taken up by .

Day 6:- 09/04/2022

From 9 to 11 am, theory session on Teaching and Learning of NMR 3 (CMR) was taken up by and Teaching and Learning of NMR 4 (2D NMR) was held followed by a theory session on Teaching and Learning of LCHRMS 3 and Teaching and Learning of LCHRMS 4 was taken up by from 11:15 to 1: 15 PM. From 2:15 to 4:15 PM was taken up by Dr. Prabhakar , Hands on Experience on LCHRMS (Batch-1) was explained by Dr. D Kashinath, Hands on Experience on NMR (Batch-2) was explained. and vise-versa has been covered. And from 4:15 to 5: 30 PM, a theory session on Teaching and learning of Microwave synthesis of organic compounds was taken up by Prof. V J Rao.

Day 7:- 10/04/2022

From 9 to 11 am, a theory session on Teaching and Learning of BET was taken up byDr. A Venugopal, followed by a theory session on Teaching and Learning of HPLC from 11:15 to 1: 15 PM was taken up by Prof. P Nageshwar Rao. From 2:15 to 4:15 PM, Hands on Experience on HPLC (Batch-1) was explained by Prof. P Nageshwar Rao & Hands on Experience Microwave synthesis of organic compounds(Batch-2)was explained by Prof. V J Rao. & Hands on Experience Microwave synthesis of organic compounds(Batch-1) was explained by Prof. V J Rao., Hands on Experience Microwave synthesis of organic compounds(Batch-1) was explained by Prof. V J Rao., Hands on Experience HPLC (Batch-2) was explained by Prof. P Nageshwar Rao. And the programme concluded with a Valedictory and feedback session from 4:15 to 5:30 PM.