

A report on training on “Instrumentation (Data Analysis and Interpretation - LCMS & NMR)”

A 5 days training on “Instrumentation (Data Analysis and Interpretation - LCMS & NMR)” was organized by Chemistry & Bioprospecting Division (C&BP), ICFRE- Forest Research Institute (FRI), Dehra from June 12-16, 2023 for the scientists of ICFRE under CAMPA-HRD component of the ICFRE. Altogether 10 scientists from different institutes of Indian Council of Forestry Research & Education (ICFRE) namely ICFRE-AFRI, Jodhpur, ICFRE-FRI, Dehradun, ICFRE- IFB, Hyderabad, ICFRE-IFP, Ranchi, ICFRE-IWST, Bengaluru. ICFRE-RFRI, Jorhat and ICFRE- TFRI, Jabalpur attended the training. This training was aimed to advance the analytical capabilities of the scientists of the ICFRE working in the area of natural products by imparting them knowledge and skills for use of advance instrumentation techniques of LC-MS and NMR spectroscopy. Inaugurating the training on June 12, 2023, the chief guest Dr. Renu Singh, Director, FRI highlighted the role of these techniques not only in probing the chemical diversity of the forests but also in identification of their novel chemical entities for varied industrial applications. The participants were given deep insights of several aspects of LCMS and NMR Spectroscopy techniques. Through eight technical sessions comprising of 16 lectures and 4 laboratory demonstrations, basic and applied aspects of these techniques including hardware and software of the instruments, their functionality and applications, design of experiments, acquisition of data, their processing and interpretation were explained to them. Expert faculty namely Dr. I. P. Singh, Professor, NIPER Mohali, Dr. Sanjeev Kanaujiya, Senior Principal Scientist, CSIR-CDRI, Lucknow; Dr. Sanjeev Kumar Shukla, Senior Principal Scientist, CSIR-CDRI, Lucknow; Dr. Upendra Sharma, Principal Scientist, CSIR-IHBT, Palampur; Dr Krishna Mohan Poluri, Associate Professor, IIT Roorkee; Shri Saurabh Nagpal and Shri Amod Yadav, Application Engineer, Agilent Technologies India Pvt. Ltd.; Dr. V.K. Varshney, Scientist-G; Dr. Vineet Kumar, Scientist-G, Dr. S.S. Bisht, Scientist-E and Dr. K. Murali, Scientist-B from the FRI shared their excellent expertise, experiences and deliberated on these aspects. Participants took active part in all theoretical and practical sessions curiously and enthusiastically, that made this programme truly interactive. The training was concluded on June 16, 2023 with the valedictory session chaired by Dr. Renu Singh, Director, FRI. She expressed satisfaction on successful completion of the training and called upon the participants to utilize the knowledge and skills acquired by them in their current and forthcoming research programmes. Dr. S.S. Bisht was the convener of the event.