What our trainees say about the recently concluded STUTI program at NIT Srinagar

Recently Concluded Synergistic Training Program Utilizing the Scientific and Technological Infrastructure (STUTI) conducted by PG Department of Physics, National Institute of Technology (NIT) Srinagar in Collaboration with Banasthali Vidyapith, Rajasthan was supported by DST, Govt. of India during May 20-26th, 2022, was well structured and very understandable.

The inaugural session of the workshop was presided over by Director NIT Srinagar, Prof. (Dr.) Rakesh Sehgal, in presence of Dean R & C, Prof Wani and Registerar, Prof S K Bukhari while Prof. M Chalkoo, from GMC Srinagar, delivered a lecture on new instruments for surgery. The mind-blowing lecture on robotic surgery by Prof Chalkoo was appreciated by audiences as he highlighted the role of technology in modern medical science. The insight of advanced analytical techniques were very useful towards the understanding of scientific and industrial processes needed commercially to bring innovations among different fields catering to applied sciences, engineering, and industrial sectors.

In his message, Dr. Vinay Kumar, HOD, NSM, CU Jammu said participants have understood and familiarized themselves with the various sophisticated instruments. “They were exposed to theory and hand-on practice on sophisticated instruments and characterization tools to design and implement for appropriate strategies for research work,” he said.

Dr. Kumar said the skill-based knowledge about the handling of various sophisticated instruments and characterization techniques and their analysis was also provided to all participants. “I liked the way you made a safe space for all participants. I feel honored to be a part of this event. I congratulated Dr. Shah, HoD Physics, and the conveners for making this program successful,” he said.

About the STUTI program, Dr. Gazala Anjum from SP College Srinagar said it was a wonderful experience for me. It enables the researcher and students to acquire knowledge about various state-of-the-art technological equipment and learn about their usage, she said. “Such programs help us in reorienting towards research work. It was also beneficial for enhancing the collaborative work which we all know is imperative for the growth of individuals, society finally leading to the development of the country,” Dr. Gazala said.

She said this platform also provided the opportunity to the participant to interact with some of the good resource persons in the form of scientists/professors and gain immense knowledge about the new areas of thurst in research.

Another delegate, Haya Qazi who is Research Scholar at AMITY said she was privileged to attend the inauguration of STUTI at NIT Srinagar. “The session was full of important information and facts. The best minds of the country were present there to speak on the occasion, and I truly learned a lot from their vast knowledge base,” she said. Haya said she is looking forward to attending more such events. The awareness generation on the I-stem portal was equally productive. Such seminars are a boon for society, especially the scientific community. It will truly help in nation-building and advancement of our society,” she said.

Dr. Shah Aarif Ul Islam, Faculty at IUST, Awantipora in his message said the STUTI Program conducted by the Deptt of Physics NIT Srinagar in collaboration with Banasthali Vidyapith Rajasthan was one of the best scientific events so far in his entire research career. “It was an event where the Researchers from, Universities, Colleges, and Research Centers shared a common platform to discuss and learn about the sophisticated instrumentation used in the field of materials research,” he said. Dr. Shah Aarif said the whole organizing team especially the Convener (Prof Ikram), Coordinator (Prof Parvez Alvi) and Chairman (Prof Shah) deserves all appreciation for conducting such a wonderful scientific event.

Dr. Abida from GDC Anantnag in her message said this workshop has enabled us to discover new realms of research and imparted adequate knowledge about new

equipment that will provide a boon in the field of research. “I am highly thankful to Dr. Shah Sir for his endless efforts. At the same time, I am highly thankful to Dr Ikram and Dr. Rubab for initiating this workshop. I want to bring in your notice that such programs be organized in the future with more emphasis on hands-on activities,” she said.

Ms. Yasmeen Gul from GDC Kulgam in his message expressed her gratitude to Dr. Shah who has always been a great support for me whenever I needed her. “Regarding the STUTI program I personally feel that it is the much-needed step towards fruitful research as having hands-on experience with the instruments will definitely lead to quality research,” she said. Dr. Yasmeen Gul said interacting with eminent researchers through such programs enhances the chances of collaboration. I do really appreciate the efforts of organizers who worked tirelessly to make it a success, she said.

Prof M A Chalko GMC Srinagar in his message said, it was a wonderfully organized workshop cum conference.“The inspiring talks to the audience were delivered by Director NIT Prof. Rakesh Sehgal Sahab, Dr. M Ashraf Shah Sahib HOD Physics elaborated on the theme of conducting this workshop with an energetic talk,” he said.

Prof. Chalko further said it was an honor to be invited by the organizers of the workshop for a talk which was liked by the audiences. it was a total success program of scientific spice with special hospitality for us as guests,” he said.

Dr Gulzar, CIRI, KU, said that
It was really a great learning experience to attend such a program where every participant got an opportunity to try hands on different spectroscopic and analytical equipment’s. Prof Shah Head of Physics department highlighted the importance of different electronic microscopic techniques in different areas and the revolution which was created by these instruments in the understanding of nanoscopic world. I had an opportunity to speak in this event on “Visualization of Exfoliation of 2D Materials into nanosheets by Different Microscopic Techniques” It was really a great feeling to make the diverse audience to understand how we can achieve a single atom or single polyhedral thick nanosheets and characterize them by extremely sensitive techniques like Transmission Electron Microscopy (TEM) and Atomic Force Microscope (AFM). A lecture on fundamentals of mass spectrometry and its applications in chemistry and biological science was instrumental to understand how we can make use this technique for characterization and understanding different mechanistic details. A lecture and

hands on training on “Electrochemical Impedance Spectroscopy in energy storage and conversion devices” to undercover the important kinetic information about the electrochemical systems namely charge transfer resistance, series resistance and Warburg impedance.

Er Nayeem Ahmad, NIT Srinagar in his message, this program achieved its goal of imparting practical knowledge to the participants.“The practical knowledge provided to the participants regarding the highly sophisticated equipment present at NIT Srinagar, particularly at Central Research Facility was impressive. Congratulations to HoD MA Shah and his team for making it a success,” he said.

HOD Physics and Chairman of the program, Dr. M A Shah said it was a successful event by the joint efforts of each member of the team and the faculty at Physics.

“As a chairman of the program I might have left few stones unturned for this versatile program of DST of training manpower and for that I ask for an apology,” he said. Dr. Shah said nonetheless I have selected mentors having research exposure of foreign universities for this program and spent good time in making the booklet "**The Tools of Discovery ".** “The other parameters of the program need to ascertain from the feedback of various participants and mentors,” he added.