

Janki Devi Bajaj Government Girls College Kota Rajasthan

Brief Report of Training Program (5-11 June 2023)

The seven-day hands on training on analytical instrumental techniques organised by the **Janki Devi Bajaj Government Girls College Kota Rajasthan** in association with IIT Gandhinagar Gujarat is identified as a **Project Management Unit (PMU)** funded by department of science and technology Government of India under STUTI (**Synergistic Training Program Utilizing the Scientific and Technological Infrastructure**) program from 5th to 11th June 2023.

Apart from the theoretical knowledge, the workshop aims to provide practical hands-on experience to the participants through a laboratory session where the characterization of samples and operation of instruments will be demonstrated to create awareness among the participants and to encourage their usage to develop scientific understanding.

The highlights of the training are -

- First day training started with inaugural function by our guest of Honour professor YK Vijay, IIS University Jaipur. Ex director of CDPE University of Rajasthan Jaipur. He impressed upon various instrumental techniques and their applications in conducting research. The evening session was conducted by Dr Manish Kumar Singh, senior project associate, DST, STUTI, IIT Gandhinagar. He shared various schemes offered by the department of science and technology for higher education and especially for the female scientist.
- On the second day of the program Professor Y K Vijay delivered a talk and hand's on training on Quantum science in visible range. He explained Vander wall force, dipole interaction, Bohr model, Raman effect etc by various physical models in an interactive manner. In the evening session Dr NK Acharya from MS University Baroda, delivered session on band gap analysis through direct and indirect method using spectrophotometer.
- The third day was handled by Mr Sravan Vijay and Mr Swapan Mohanty, senior manager, lab India. Who demonstrated UV visible spectroscopy and Fourier transform infrared spectroscopy techniques followed by hands on training.
- Fourth day Mr Sachin Chugh shared basic instrumentation information regarding NMR techniques and determination of structure of the material.

Evening session was conducted by Nilesh Chauhan, senior manager lab India demonstrate usage of spectrophotometer and basic instrumentation.

- Fifth day reserved for an instrumental visit to agriculture Research centre umedgdanj for explore and learn about various equipment in Trichoderma and biochemistry laboratories and on ways to carry out the analysis. The evening session conducted by two speakers Ms Princy Denis Varghese from IIT Mumbai and Dr Rajnith AR from Oxford instrumentation Mumbai who discussed scanning electron microscopy and electron back scattering diffraction techniques and its application in determination of the structure and orientation of materials.
- Sixth day both sessions were anchored by professor Vibhuti Rai from University of Lucknow which included absorption and emission spectroscopy. He shared very interesting case study about gemstones and application of FTIR techniques to identify the quality of gemstones. he also explained water conservation techniques.
- In the 7th day the first session was taken by Dr. Gupta on Characterization techniques by High power Liquid Chromatographic techniques and next session kept interactive and problem solving followed by a valedictory session.

Media Coverage



Day I (5 June 2023)



Day 2 (6 June 2023)



छात्राओं को बांटे पुरस्कार



संदेश न्यूज। कोटा. जेडीबी राजकीय कन्या महाविद्यालय कोटा व भारतीय प्रौद्योगिकी संस्थान गांधीनगर के संयुक्त तत्वावधान में विज्ञान व प्रौद्योगिकी विभाग द्वारा प्रायोजित सप्ताहिक प्रशिक्षण कार्यक्रम का समापन समारोह रविवार को आयोजित किया गया, जिसमें मुख्य अतिथि कोटा विश्वविद्यालय कोटा कुलपति प्रो. नीलिमा सिंह रही। कार्यक्रम का शुभारंभ में प्राचार्य डॉ. संजय भार्गव ने छात्राओं को प्रशिक्षण से प्राप्त ज्ञान का उपयोग शोध कार्य के लिए करने को प्रेरित किया। उन्होंने कहा कि इस कार्यक्रम से महाविद्यालय की गुणवत्ता में अभिवृद्धि होती है। कार्यक्रम संयोजक डॉ. विजय देवड़ा ने इस कार्यक्रम के प्रतिदिन हुए व्याख्यान तथा उपकरणों के प्रशिक्षण के बारे में संक्षिप्त जानकारी साझा की। कार्यक्रम मुख्य अतिथि कुलपति प्रो. नीलिमा सिंह ने शोध कार्य में उपकरणों के रखरखाव व अन्य आवश्यक जानकारी देते हुए शोध कार्य में उपकरणों के तथा समय प्रबंधन के महत्व को कई उदाहरण द्वारा समझाया। कार्यक्रम के अंत में प्रभारी संकाय डॉ. प्रतिमा श्रीवास्तव ने सभी अतिथियों, कार्यक्रम आयोजक तथा प्रतिभागियों व कर्मचारियों का कार्यशाला को सफल बनाने के लिए आभार व्यक्त किया। कार्यक्रम का सफल संचालन सचिव डॉ. जागृति मीणा ने किया तथा निमिष कुमार, प्रीति बैरवा ने इस आयोजन में महत्वपूर्ण योगदान दिया।

Day 7 (11 June 2023)

Deves

Dr Vijay Devra (Coordinator)