## Annual convention for Deans & HoDs of Partner Institutes – Chemistry and Chemical Engineering,

## Dharamshala - 23 & 24 August 2024

BIS organized a Convention for Deans and Heads of Departments (HoDs) of MoU Partner institutions of the Chemical Engineering and Chemistry disciplines. The event took place at Dhauladhar Heights Resort, Dhauladhar on the 23rd and 24th of August 2024.

Shri Chandan Bahl, Deputy Director General (IR&TIS, MS, SCM), inaugurated the program and emphasized the critical role of academia in the standardization process. He highlighted the importance of engaging with educational institutions and discussed how BIS has initiated efforts to involve students from grades 9 to 12 by establishing Standards Clubs in schools and colleges. The aim of these clubs is to cultivate future quality ambassadors and informed consumers. He also shared that the program of engaging with academic institutions began in December 2020. Initially, there was apprehension on both sides, but gradually, faculties became convinced of the initiative's value, and more institutions are now joining the list. He also outlined the various opportunities that can be leveraged through a BIS-Academia partnership, including the active participation of faculty members in the standards formulation process, fostering a cohesive relationship between research and standardization efforts, and sensitizing students to the fundamental concepts of standardization. He underscored how these collaborations can drive innovation, enhance the quality of research, and integrate academic insights into national and international standards.

Dr. Surya Kalyani S, Scientist-E and Head of the Think, Nudge & Move Department at the Bureau of Indian Standards (BIS), delivered an insightful presentation providing an overview of BIS. She outlined the organization's core functions and its critical role in developing and maintaining national standards. Dr. Kalyani emphasized the comprehensive process of standard formulation, detailing each step from the initial identification of standardization needs to the drafting, public consultation, and final approval stages. She highlighted the importance of stakeholder engagement, including the participation of academia, in ensuring that standards are robust, inclusive, and effective.

Following this, Ms. Neha Yadav, Scientist-D, gave a live demonstration of revamped BIS's Standardization Portal. She showcased the latest digital initiatives and platforms developed to streamline the standardization process and making it more accessible and efficient. Ms. Yadav illustrated how these tools are designed to facilitate greater participation from academia and other stakeholders by providing easy access to draft standards, enabling the submission of comments and suggestions, and offering a range of other interactive features to enhance collaboration.

Shri Ajay K Lal, Scientist-F & Head of the Chemical Department, and Shri Chinmay Dwivedi, Scientist-E & Head of the Petroleum, Coal, and Other Related Products Department, delivered technical presentations on the ongoing standardization work in their respective fields.

Two technical sessions were held during the convention, led by Mr. Shivam Dwivedi, Scientist-C; and Ms. Shubhanjali Umrao, Scientist-C. Mr. Dwivedi in his presentation highlighted the various Indian standards developed by BIS related to polymers and plastic recycling while Ms Umrao presented the Indian standards related to safety and hazards in process industries including standards on various Personal Protective Equipment.

In addition to above, in order to make programme more interactive and engaging a group exercise session was conducted. In the group exercise session, seven groups were formed and tasked with identifying key areas where new standards are needed. Attendees engaged actively and pin-pointed approximately 30 critical areas requiring standardization, with primarily focusing on safety and waste management. Few of the important topic suggested for standard formulation are product specification standards for polycarbonate and polystyrene products, high performance polymer product such as ABS, Membrane filter, waste derived fuels and gases, cosmetic products. Code of practice for disposal of flammable material, e-waste, requirements for microplastics in different matrices, storage and disposal of chemicals in chemical laboratory, selection of solid waste for conversion to waste recovery fuel, disposal of solar panels. Guideline document for Segregation of cement waste, segregation of waste from chemical industries, sector specific carbon footprint standards.

The convention concluded on a high note, with the second day featuring a session that discussed the key takeaways from the event, beneficial to both BIS and the academic community. **Some important takeaways for BIS included as follows:** 

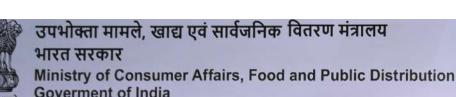
- a) Organizing faculty development programs
- b) Revisiting the content of technical proposals in the R&D guidelines to better align with field experience
- c) Conducting meetings with MoU institutes in various regions to better understand the initiatives taken by these institutes
- d) Sponsoring conferences with MoU partners, where BIS could deliver subject-specific lectures initiating outreach programs with MoU institutes and their industry partners
- e) Collaborating with incubators for hackathons, and inviting R&D proposers to present their ideas in dedicated sessions.

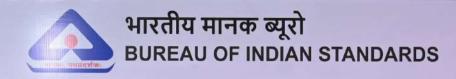
## For academic institutions, the key takeaways included as follows:

- a) Implementing a mandatory one-week program for students focused on standards
- b) Reviewing course content from a standardization perspective and designing curricula accordingly

c) Promoting the significance of standards at technical festivals in colleges.

This was followed by visit and a sightseeing tour, providing a unique opportunity for participants to engage in informal networking and foster stronger connections between the Bureau of Indian Standards (BIS) and the academic community. Overall, this convention marks a significant step forward in bridging the gap between academia and standardization bodies, creating pathways for research which will directly impact policy and industry practices. It set the stage for a more dynamic partnership, ensuring that India's standards are not only in tune with global developments but are also at the forefront of technological and scientific advancements.





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## **Annual Convention with MoU Partner Institutes**









