



**Bureau of Indian Standards**  
**Report on Chemistry and Chemical Engineering Convention**

**Subject:** - Report on **Annual Convention of BIS** with Deans and HoDs of Chemistry and Chemical Engineering discipline of MoU partner institutes

**Venue** : Dhauladhar Heights Resort, Dharamshala

**Date** : 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, Dharamshala on the 23rd and 24th of August 2024.

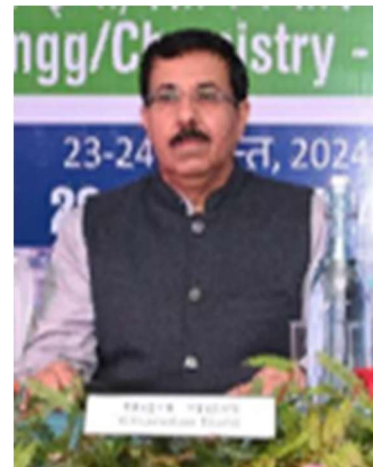
**Day 1 (23/08/2024) – Sessions and Activities:**

The event started with a welcome to all delegates, Deans and HoDs of Chemistry and Chemical discipline of MoU partner Institutes followed by rendering of Manak Geet.



**Shri Chandan Bahl, Deputy Director General (IR&TIS, MS, SCM)**, inaugurated the convention and highlighted the critical role of academia in standardization process.

He underlined the importance of engaging with educational institutions and discussed the initiatives taken up by BIS to involve faculty, research scholars and students in the standardization activity. The participants were informed about the 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 the significance of contributions that academicians can make and 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 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 on 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, Chemical Department, and Shri Chinmay Dwivedi, Scientist-E & Head, Petroleum, Coal, and Other Related Products Department**



They delivered technical presentations on the ongoing standardization work detailing about the work programme including published standards and standards under development and revisions in their respective departments. They illustrated the processes of standards formulation, constitution and composition of Technical Committees under their departments highlighting on the current status of participation, especially from the academic partners.

They also informed the participants about the positions vacant for Academia in various technical committees while highlighting the significance of contributions of the academia in the process of standardization.

Additionally, two technical sessions were conducted during the convention, led by Mr. Shivam Dwivedi, Scientist-C, and Ms. Shubhanjali Umrao, Scientist-C.

Mr. Dwivedi highlighted the various Indian standards developed by BIS related to polymers and plastic recycling in his presentation while Ms Umrao presented the Indian standards related to safety and hazards in process industries including standards on various Personal Protective Equipment.

### **Day 2 (24/08/2024) – Interaction and Field Visit:**

The second day of the convention focused on strengthening the collaboration between BIS and academic institutions, particularly in enhancing the existing Memoranda of Understanding (MoUs). In order to make programme more interactive and engaging, a group exercise session was conducted. During the session, seven groups were formed and tasked with identifying key areas where new standards are required.





Attendees engaged actively and 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.

### Actionable Points and Key Takeaways:

- a) **Enhancing R&D Guidelines through Collaboration and Innovation:** Revising the content of technical proposals in the R&D guidelines to better align with field experience can be further strengthened by collaborating with incubators for hackathons and inviting R&D proposers to showcase their ideas in dedicated sessions.
- b) **Collaborating with MoU Partners:** Organizing Faculty Development Programmes and Sponsoring conferences with MoU partners will allow BIS to deliver subject-specific lectures, thereby initiating outreach programs with both the institutes and their industry partners.
- c) **Awareness Programme:** Introducing a mandatory one-week program for students that emphasizes the importance of standards and promotes their significance during technical fests in the institutes.
- d) **BIS Involvement in Curriculum Development:** Involving BIS officers in the Board of Studies for designing the course curricula and reviewing the course content for integrating Standards into technical education.



The convention concluded with a field visit for all the delegates. All participants expressed their gratitude to BIS for organizing such a well-executed event. This convention is expected to significantly benefit the collaboration between the organizations, serving the broad national interest in the future