

Report of the Faculty Sensitization Programme
Cochin University of Science and Technology, Kochi on February 23, 2024

Bureau of Indian Standards (BIS), Kochi, signed Memorandum of Understanding (MoU) with Cochin University of Science and Technology, Kochi, to develop collaborative activities in the field of Standardization and Conformity Assessment on 19.12.2023.

The faculty sensitization programme and rapport building activity with the faculty and research scholars of the University, was organized on February 23, 2024. In this workshop, 41 Faculty Members, 14 Research Scholars and 26 M.Tech students were present.

I) BIS Team:

1. Shri Mohammed Ismail, Scientist – G & Head (Kochi Branch Office)
2. Dr. Surya Kalyani S., Scientist – E & Head (Think, Nudge and Move Department)
3. Smt. Junitha, Scientist – D (Kochi Branch Office)
4. Sh. Sai Kumar Vedula, Scientist – D (Kochi Branch Office)
5. Sh. Sudhanshu Rai, Scientist – D (Central Marks Department I)
6. Smt. Divya S., Scientist – D (Civil Engineering Department)
7. Smt. Neha Agarwal, Scientist – C (Electro Technical Department)

II) Programme:

The ceremony began with Manak Geet in Malayalam. Dr. Shobha Cyrus, Principal, School of Engineering, CUSAT presented the welcome address.

Shri Mohammed Ismail, Scientist – G & Head (Kochi Branch Office) presented the program objectives and spoke about the benefits of MoU towards development in Standardization and R&D projects and how it would benefit CUSAT & BIS. Smt. Divya S., Scientist – D (Civil Engineering Department) conducted an exercise through questionnaire on BIS: Don't you know me, in which the audience participated enthusiastically. Dr. Surya Kalyani S., Scientist – E & Head (Think, Nudge and Move Department) gave a presentation on the 'Overview of BIS' and a curtain raiser on the upcoming presentations.

Smt. Divya S., Scientist – D (Civil Engineering Department) gave a presentation on 'Participation in Sectional Committees and Working Groups of BIS' and demonstrated BIS Standards Formulation Portal.

Thereafter, Sh. Sudhanshu Rai, Scientist – D (Central Marks Department I) delivered a presentation on 'Introducing Standardization in Curriculum', propagating the idea of introduction of subjects on Standardization in modules/courses of key programmes in the following two formats:

- i) Course on general aspects of standardization (IIT Roorkee model)
- ii) Department specific courses

Smt. Neha Agarwal, Scientist – C (Electro Technical Department) introduced R&D projects related to Standardization to the participants and shared information on R&D guidelines and availability of ToRs on BIS portal and encouraged the participants to submit proposals on areas of interest.

Smt. Junitha, Scientist – D (Kochi Branch Office), provided the details of the BIS Standards Club initiative in her presentation. She also elaborated in detail the IEC logo contest and exhorted the audience to participate in the contest.

Following the presentations, discipline wise breakout sessions were held by Dr. Surya Kalyani S.(Biotechnology), Sh. Sai Kumar Vedula & Sh. Sudhanshu Rai (Mechanical) Smt. Neha Agarwal (Electrical), Smt. Junitha (Electronics and IT) and Smt. Divya S. (Civil) informing the participants about the Programme of Work of the respective disciplines, the Know your Standards feature of BIS website, the procedure to download free Indian Standards and the discipline wise R&D ToRs.

The program ended with a vote of thanks by Sh. Sai Kumar Vedula, Scientist – D, Kochi Branch Office.

III) Areas of Strength:

The existing framework of CUSAT, which can be fruitfully utilized by BIS in standardization and other activities of BIS are as follows:

1. **Research & Development:** The University has structured guidelines for quality research and the research facilities are enhanced periodically to support the faculty and Research Scholars. The Departmental Research Committee forms the apex body for the research activities of the departments. There is a Doctoral Committee to monitor the progress of each student registered for research in the University and its recognized Institutions. Additionally, there is a Research Advisory Committee for the entire University, which meets regularly to assess the progress of all the sponsored research projects running on the campus. Faculty member are encouraged to apply for research projects from International and national funding agencies apart from local bodies, industries and other funding sources for research projects.

2. **Consultancy:** Academic, industry and research interactions are promoted through the consultancy policy. The consultancy policy of the University encourages and assists faculty to provide knowledge inputs sought by industry, government agencies or other academic / research organizations. The University motivates the professionally qualified faculty members to utilize their expertise for consultancy services, which give the chance to the faculty to use the expertise in industry and obtain real life experiences. The decision process related to permitting an individual faculty member to undertake consultancy is taken at the department level where all consultancy proposals are addressed by the respective Heads of the Departments. If any remuneration is received for these assignments, it is mainly used for updating infrastructure and other facilities.

The University guidelines clearly specify the revenue sharing among the faculty members concerned, department and the University, in the case of income generated through consultancy projects. As per the Institutional policy, 30% of this revenue

is to be shared with the institution in the ratio 1: 5; one part (5% of total) goes to the Cochin University Fund (CUF) and the remaining 5 parts (25% of total) to the Department Development Fund (DDF). Consultancy Services are also provided through memberships in different committees and National Bodies. Many of the faculty members of the Department are members of Review Committee, Evaluation Boards, Board of Studies, Admission Committee, Research Committees, etc. through which they provide consultancy services to the Community at large.

3. **Expertise on Sustainability:** There are 130 courses across all programmes discussing issues concerned with Environment and sustainability. CUSAT has a specialized school named Environmental Studies which offers an M Sc. Environmental Science and Technology. The science of sustainable practices with the fundamental principles of science are inculcated in the curriculum and are available to students from other department as well. The curriculum of marine biotechnology discusses on how to find practical solutions through marine biotechnological interventions. Polymer Science & Rubber Technology Department addresses importance of environmental issues through a collection of courses such as Environment Quality Modelling, Waste energy Conversion and Environmental engineering. The Department of Industrial Fisheries put sufficient focus on the aquatic organisms inhabit and the need to conserve the resources. Energy conservation and sustainability engineering related courses are part of the engineering curriculum. Ship Technology offers unique In-Ship Recycling and Marine Pollution. The department atmospheric sciences addresses climate change in the regional scale and also generates high resolution regional weather forecasts on a daily basis.

4. **Introducing Standards in Curriculum:** Each course in a program is conceived by the Department Council. The syllabus, eligibility and evaluation regulations are framed by the Board of Studies comprising subject experts, industrial experts and other stakeholders. Later on this is scrutinised in the Academic Council of the University. Finally, the Syndicate of the University scrutinises the feasibility before approval.

5. **Internship:** Students are encouraged to take up internships during their vacations, thereby translating the classroom knowledge into practice.

6. **Students Clubs:**

- a. *Knowledge Forum and Journal Clubs:* Students can present their research paper or a review paper in their area of research in order to develop research aptitude and inculcate research ideas at an early stage.
- b. *Entrepreneurship Club:* Entrepreneurship Development Clubs at department level conducts programmes for students for instilling the passion for pursuing entrepreneurship. The clubs are run by student secretaries who coordinate various activities like entrepreneurship and mentoring sessions and events.
- c. *Student Cultural Clubs:* Departmental student clubs/councils conduct annual meet (Tech fest (SoE), Talent time (SMS) etc. These are national level events organised by students, enhancing the organising capability of students in a spectrum of activities including mobilisation of funds, design and promotion of events, conduct of events, etc.