# INSTITUTIONAL BIOSAFETY COMMITTEE

## Cotton University

Panbazar, Guwahati- 781001, Assam, India
Website: www.cottonuniversity.ac.in

### MINUTES OF IBSC MEETING

**Meeting Date and Time:** **24th September 2026 at 2:30 PM**
**Venue:** **Computer Centre, Cotton University**

**Meeting Agenda:**

1. Welcoming **New Members** of the IBSC
2. Discussion and approval of received proposals for carrying out research and development activities at the University.
3. Any other Business

The following members were present in the meeting:

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| **Prof. Santanu Sarma,** Dean, Research and Development, Cotton University |
| **Prof. Sujoy Bose** Gauhati University Department of Biotechnology, Guwahati |
| **Dr Raju Bharalee** Cotton University, Department of Molecular Biology and Biotechnology |
| **Dr Girindra Kumar Bora** Biosafety officer, CARI, Guwahati |
| **Dr Niraj Agarwala** Gauhati University, Department of Botany, Guwahati |
| **Dr Debabrat Baishya** Gauhati University, Dept. of Bioengineering and Technology |
| **Prof. Manjit Kumar Bhattacharyya, Dr Nameirakpam Nirjanta Devi, Dr Namram Sushindrajit Singh, Dr Akalesh Kumar Verma, Dr Hrishikesh Upadhyaya, Dr Purabi Deka Bose, Dr Leena Borah,** Cotton University |

**The following points were discussed in the meeting**

1. The Member Secretary delivered the welcome address, briefly introduced the external members, and presented an overview of the various activities undertaken by the Committee since its inception in 2016. This was followed by an address by the Prof. Santanu Sarma, Chairperson, who shared his views and provided valuable guidance on the role and responsibilities of the IBSC.

2. Eighteen (18) applications received for approval were discussed thoroughly in the meeting, and the following decisions were adopted.

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| Sl. No. | Appln No. | Name (PG/UG/ PhD) | Title of the research Problem | Remarks, if any |
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| 1 | IBSC/Apln/ 2025/61 | Doniel Deka, PhD Scholar, MBBT | Machine learning guided design of indigenous PGP consortia and nano-enabled formulation for sustainable crop production | Approved with the condition that the applicant should restrict his/her work up to Risk Group II for the isolation, screening and development of the proposed PGP consortia. Based on first phase of work, If the proposed pot-based experiment requires handling Risk Group II PGPB, further approval may be obtained from IBSC. |
| 2 | IBSC/Apln/ 2025/62 | Sampa Paul PhD Scholar, MBBT | Development of sustainable technology for the synthesis of high- value products from lignocellulosic biomass | Approved. As the proposed organism fall under risk group 1 |
| 3 | IBSC/Apln/ 2025/63 | Bipasha Choudhury, MSc. Botany | Developing a fungal consortium with plant growth promoting and water stress-tolerance properties from the rhizospheric soil of monocotyledonous weeds | Approved subject to condition that;<br>1. The applicant should provide details of the methods for fungal identification and risk-group assessment. Appropriate measures should be undertaken to confirm that potentially pathogenic or otherwise hazardous fungi are excluded before proceeding with further experimentation.<br>The student needs to give an undertaking (forwarded by supervisor) to restrict the work with only Risk Group I fungi |
| 4 | IBSC/Apln/ 2025/64 | Kuldeep Nath, MSc , MBBT | Isolation and characterization of cellulolytic bacteria from the gut of termites associated with tea plants (Camellia sinensis) | Approved with a recommendation to use BSL II facility |
| 5 | IBSC/Apln/ 2025/65 | Bhumismita Nath, MSc, Botany | Developing a consortium of fungus with drought tolerance and plant growth promoting properties from the rhizosphere of dicotyledonous weeds of Cotton University Campus | Approved subject to condition that;<br>1. The applicant should provide details of the methods for fungal identification and risk-group assessment. Appropriate measures should be undertaken to confirm that potentially pathogenic or otherwise hazardous fungi are excluded before proceeding with further |

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| | | | | experimentation.<br>The student needs to give an undertaking (forwarded by supervisor) to restrict the work with only Risk Group I fungi |
| 6 | IBSC/Apln/ 2025/66 | Farhana Wahid, MSc, EBWS | Study of soil microbial diversity and abundance (bacteria and fungi) in different land use types of Kamrup (M) district | Approved |
| 7 | IBSC/Apln/ 2025/67 | Jyotishman Das MSc, MBBT | Adaptive Evolution of bacterial responses to persistent environmental contaminant | Approved with a recommendation to work under BSL II facility and disposal of evolved culture needs to be specified. |
| 8 | IBSC/Apln/ 2025/68 | Pratiksha Bora MSc, Botany | A study on the effects of native and commercial AM Fungi on secondary metabolite production of Eryngium foetidum L. | Approved with recommendation to provide source and composition of commercial AM fungi inoculum. |
| 9 | IBSC/Apln/ 2025/69 | Arghadip Sarkar, MSc, MBBT | Isolation, identification and bioprospecting of endophytic Fungi from Aquilaria species for bioactive secondary metabolites | Approved subject to condition that;<br>1. The applicant is requested to submit a **detailed methodology for fungal identification and risk-group assessment** to demonstrate that potentially pathogenic or otherwise hazardous fungi will be **identified and excluded before further experimentation**.<br>2. Allowed only to work with Risk Group I |
| 10 | IBSC/Apln/ 2025/70 | Prerona Saloi MSc, Botany | A comparative analysis of growth of Eryngium foetidium L. inoculated with native and commercial AM fungi | Approved with recommendation to provide source and composition of commercial AM fungi inoculum to be used. |
| 11 | IBSC/Apln/ 2025/71 | Kakoli Kashyap UG, Botany | Efficacy of broad-spectrum antibiotics and medicinal plant extracts against certain bacterial strains isolated from the environment | Not approved.<br>1.Since the proposed work involves the isolation and handling of microorganisms from environmental samples, which may potentially contain microorganisms belonging to **Risk Groups II, III, or IV**, the proposed work **should not be undertaken in the existing facility described in the application**.<br>2.The proposal should be **revised to restrict the proposed work** |

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| | | | | **exclusively to microorganisms belonging to Risk Group I** and resubmitted to the IBSC for consideration and approval **within one week**. |
| 12 | IBSC/Apln/ 2025/72 | Bhumika Hazarika UG, MBBT | Metabolite profiling and bioactivity of medicinal plants used in the preparation of traditional starter cultures for wine preparation in Assam | Approved. Endangered plant should be avoided |
| 13 | IBSC/Apln/ 2025/73 | Nibedita Sinha UG, MBBT | Microbial approaches for sustainable remediation of cadmium contamination and plant growth enhancement | Approved with handling of bacteria that comes under risk Group II and not III.<br>Plant growth enhancement part is permitted only for risk group I |
| 14 | IBSC/Apln/ 2025/74 | Bharti Das UG, MBBT | Bioprospecting indigenous cellulolytic bacteria for cellulase production and deinking of waste paper | Approved with recommendation to use BSL II facility |
| 15 | IBSC/Apln/ 2025/75 | Roop Hriday Roy UG, MBBT | Green synthesis of silver nanoparticles using *Garcinia pedunculata* leaf extract and evaluating its biological activity | **Approved**, with the following conditions:<br>should use **type strains instead of MDR clinical strains** for the *in vitro* biological assay of the synthesized nanoparticles. A declaration to this effect, duly signed by the concerned supervisor, should be submitted to the IBSC. Further it is recommended to dispose all liquid waste in accordance with the **institute's approved liquid-waste disposal protocol**. |
| 16 | IBSC/Apln/ 2025/76 | Hriddhirupa Choudhury UG, Botany | Biofilm attenuation by phytochemical plant extract and molecular docking of phytochemicals against biofilm/quorum-sensing targets with in-silico design of a candidate sgRNA against a biofilm-associated gene | Approved with a recommendation to use risk group I or type Strain. The waste phytochemicals have to be discarded through institutional waste disposal mechanism. |

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| 17 | IBSC/Apln/ 2025/77 | Sudipta Kumar Rabha, UG, Botany | Phytochemical profiling and piscicidal activity of *Persicaria hydropiper* (L.) Delarbre plant extract in *Heteropneustes fossilis* | Not approved in the present form.<br>Its seems that the proposed work has already been completed as reflected in the submitted proposal. Needs to resubmit the revised proposal within a week. |
| 18 | IBSC/Apln/ 2025/78 | Naina Bora UG, MBBT | Exploring gut bacteria of the Tea Looper (*Hyposidra talaca*) for their potential role in pesticide detoxification and tolerance | Approved with recommendation to work in BSLII facility |

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3. It was resolved that no Principal Investigator/Supervisor shall participate in the pre-screening of any proposal in which they are the applicant or the applicant is a student (PhD scholar/dissertation student) under their supervision.
4. It was resolved that, in cases where the applicant is a student, the concerned supervisor must thoroughly review the research proposal/synopsis to ensure its completeness, including all relevant details and the methodology and should give a endorsement certificate in the first page of the proposal/synopsis as per required format.
5. The DBT nominee recommended conducting a three-level workshop on awareness of IBSC guidelines and biosafety practices for faculty members, research scholars and students, and laboratory technicians.
6. The House strongly recommended the Departments of Botany and Environmental Biology and Wildlife Sciences (EBWS) to urgently procure Class II Biosafety Cabinets (BSCs) to facilitate the safe handling of microorganisms isolated from sources that may potentially contain Risk Group 2 (RG-2) microorganisms. The availability of appropriate biosafety facilities is essential for ensuring compliance with applicable biosafety guidelines and for obtaining IBSC approval for the proposed research activities in their departments. The House further advised both departments to adopt a resolution in their respective DAC meetings in accordance with this recommendation and initiate the necessary steps for procurement at the earliest.
7. The house recommended that centralized facilities for the safe **biological waste disposal** be established and maintained by the University Administration in accordance with applicable biosafety and regulatory requirements.
8. A valid MoU/ Certificate with the authorized waste disposal facility should be be attached with the application for IBSC approval, wherever applicable.
9. The application for using Biosafety Cabinet Type II in the respective department should be duly endorsed by the respective Principal Investigator (if it is procured under a project) and Head of the Department.
10. The House emphasized that academic integrity and ethical standards shall be maintained while preparing and submitting research proposal

The meeting concluded at 6.00 pm with a vote of thanks by Dr. Raju Bharalee, Member Secretary, IBSC, CU.

**Sig & Date:** 15/10/26
Dr Raju Bharalee
**(Secretary, IBSC, CU)**
Department of MBBT, CU

**Sig & Date** 15/10/26
Prof. Santanu Sarma, Dean, Research and Development, CU, and
Chairman (nominated), IBSC, Cotton University

Dean,
Research & Development
Cotton University
Guwahati-781001

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