

**Government of West Bengal**  
**Department of Science & Technology and Biotechnology (DSTBT)**  
**Vigyan Chetana Bhavan, Block-DD, Plot-26/B,**  
**Sector-I Salt Lake, Kolkata-700064**

**Application Format for Science Popularization Programme**

1. Programme Type (ref SN 11 of the Memorandum): **Conference**.....
2. Title of the proposed Programme: **STOP-BIOAMR Strategies and Technologies to Overcome Persistent Biofilm-mediated AntiMicrobial Resistance**
3. Target Group (Faculty, Teacher, Research Scholar, School/College/ University Student, Community): **Faculty, Teacher, Research Scholar and university student**.....
4. Duration (days): .....**2**....; Tentative Dates of the proposed Programme: **14<sup>th</sup> and 15<sup>th</sup> March 2026**
5. Aims, Objectives and Details of the Programme (attach separate sheet, if necessary): .....  
**Annexure III**.....
6. Name, Designation, Postal Address, mobile no. and e-mail id of the (only one) Programme Co-ordinator (PC) (attach separate sheet, if necessary):  
**Dr. Dibyajit Lahiri, Associate Professor, Department of Biotechnology, University of Engineering and Management Kolkata, University Area, Plot No -III-B/5, Main Arterial Road, New Town Action Area – III, Kolkata – 700160., Mob. No.-8017259210, Email: [dibyajit.lahiri@uem.edu.in](mailto:dibyajit.lahiri@uem.edu.in)**.....
7. Legal status of the Institute (School/College/ University/ Institute/ Polytechnic/ ITI/ Autonomous body/ registered NGO/ Trust etc.): **University**  
.....
8. Date wise detail Programme Schedule (attach separate sheet, if necessary): **Annexure III**..  
.....
9. Collaborating Institutions/ Organizations, if any, with their specific contribution: **None**.....
10. Expected number of participants and list of Resource Persons/ Invited Speakers: .....  
**Approx. 100 participants, 8 invited speakers**.....
11. Give details of the grant received from DSTBT in last three Financial Years, if any alongwith the date of submission of UC, Audited SoE, Report etc.:  
**Not Applicable**.....
12. Name and address of the authority to whom the allotted amount is to be credited (if sanctioned) who will also be responsible for submitting the UC, audited SoE, Programme Completion Report, Feedback, Still and Video photographs etc. of the grant:  
**Dr. Moupriya Nag, Associate Professor, Department of Biotechnology, University of Engineering and Management Kolkata, [moupriya.nag@uem.edu.in](mailto:moupriya.nag@uem.edu.in)**.....
13. Total Estimated Expenditure (**A**)/ Organisation's contribution (**B**)/ Contribution from any other sources (**C**) / Grant expected from DSTBT(**D**):  
**D : ₹3,00,000.. = (A: ₹50,000.. – B: ₹1,00,000.. – C: ₹1,50,000..)**  
(provide detail Budget break-up as per Annexure-I and Bank details as per Annexure-II):

### **Check List (put tick) of attachments to be submitted with the application**

- Proposed Total Budget with break-up (Annexure-I) and Bank Details (Annexure-II) in Institute/ Organization's letter head: **YES/NO** **Yes**
- For registered NGO/ Trust, filled in Application Format recommended by the appropriate Recommending Authority, viz., Jt.BDO/ BDO/ SDO/ DM/ Executive Officer- Municipality/ Commissioner-Municipal Corporation as the case may be (where the programme is actually going to be held): **YES/NO** **Not Applicable**
- For registered NGO/ Trust, attested copies of the registration certificate, latest renewal certificate, Memorandum and Rules & Regulations of the Organization, last three years Audited Statement of Accounts, Annual Reports etc., List of recommended beneficiaries: **YES/NO** **Not applicable**

### **DECLARATION**

Certified that the details furnished in the filled in format are correct to the best of our knowledge & belief and that the amount of financial assistance, if sanctioned, will be utilized for the purpose for which it is granted within the time as prescribed by DSTBT. We also undertake to abide by the General Guidelines and Terms & Condition prescribed by DSTBT and provide due coverage to DSTBT during the Programme and publications/ print and electronic media made from the Programme in future. We also declare that within one month after completion of the Programme we shall submit the Utilisation Certificate (UC), Audited Statement of Expenditure (Audited-SoE), Programme Completion Report, Feedbacks from the Participants, still and video photographs etc.



**Signature:**

**Date:** 9-12-25

**Name of Programme Coordinator:** Dr. Dibyajit Lahiri

**Designation:** Associate Professor

**Address:** University Area, Plot No. III-B/5, Main Arterial Road, New Town Action Area – III, Kolkata – 700160



**Signature:**

**Date:** 9-12-25

**Name of Head of the Institution:** Prof. Dr. Sajal

**Designation:** Dasgupta

**Designation:** Vice Chancellor

**Address:** University Area, Plot No. III-B/5, Main Arterial Road, New Town Action Area – III, Kolkata – 700160

**(Office Seal)**

### **RECOMMENDATION**

(only for registered NGO/ Trust)

Certified that the said Organisation is reputed in this field and I/ we recommend the said proposal for getting grant-in-aid from DSTBT, Govt of West Bengal for the benefit of the local College/ University Students/ Community etc.

**Signature:**

**Date:**

**Name of Recommending Authority:**

**Designation:**

**Address:**

**(Office Seal)**

### Annexure-I

#### Proposed Total Budget with break-ups

##### A. Total Estimated Expenditure

Sl. No.	Items required with justification and rate	Total Expenditure (A) (₹)
1.	Honorarium to Resource Persons/ Experts	45000
2.	Study materials, Consumables expenses	50000
3.	Hall rent, if any	NA
4.	Publicity materials	30000
5.	Travel expenses	15000
6.	T.A. to the external Resource Persons/ Experts	10000
7.	Documentation expenses including audio-visual	10000
8.	Light refreshments	125000
9.	Auditors' fee	10000
10.	Other expenses, if any (please specify)	5000 (contingency)
<b>Grand Total Expenditure (₹):</b>		<b>300000</b>

Please mention:

B. Institution/ Organization Contribution\* in ₹50,000.00/-

C. Contribution from any other sources

Registration of participants @ INR 1000/- per person) - ₹ 1,00,000/-

D. Grant expected from DSTBT (₹) = (A-B-C) 1,50,000/-



**Signature of Authorised Personnel with seal**

If C= 0

Undertaking: This organization/ institution is not receiving any kind of financial assistance from any other sources

**Signature of Authorised Personnel with seal**

\*At least 10% of the total budget contribution from the Institute/ Organization is desirable

Other Institutes of the Group

## Annexure-II

### Bank details of the Applicant Organisation

Name of the Organization	University of Engineering and Management Kolkata
Bank Account number & name of the Account holder/ Organization	Account No.- 164201000001924 University of Engineering and Management Kolkata
Type of Account (Savings or Current A/c)	Savings
Name of the Bank	Indian Overseas Bank
Name of the Branch with Branch address	Sector V, Salt Lake Branch (1642), Ashram Building, GN 34/2 , Sector V Salt Lake, Kolkata- Pin-700091
IFSC of the Branch	IOBA0001642
Mobile Number of the Programme Coordinator/ Head of the Organization	Program Coordinator- 8017259210
PAN / TAN of the Account holder/ Organization	TAN- CALIO1171C



Finance Officer  
University of Engineering & Management, Kolkata  
University Area, Plot No.-III-B/5, Newtown  
Action Area-III, Kolkata-700160

### Signature of Authorised Personnel with seal

#### Other Institutes of the Group

University of Engineering & Management (UEM) Jaipur – 6 Km, from Chomu on Sikar Road (NH-11), Jaipur-303807, Rajasthan Ph. 01423-516102  
 Institute of Engineering & Management (IEM) – Salt Lake Electronics Complex, Sector-V, Kolkata- 700091, West Bengal Ph. (033) 2357-2969  
 IEM Public School – GE, 4/A, Sector-III, Salt Lake, Kolkata – 700106, West Bengal (Near Tank No. 12, Behind NIFT Girls' Hostel)

## ANNEXURE III

### International Conference Proposal

**Theme: STOP-BIOAMR: Strategies and Technologies to Overcome Persistent Biofilm-mediated Anti Microbial Resistance**

**Date:** March 14-15,2026

**Context:** **STOP-BIOAMR: Strategies and Technologies to Overcome Persistent Biofilm-mediated AntiMicrobial Resistance** is a focused scientific conference dedicated to addressing one of the most critical and persistent challenges in global health antimicrobial resistance driven by biofilm-forming microorganisms. Biofilms act as protective niches that enhance microbial survival, promote genetic exchange, and significantly reduce the efficacy of conventional antimicrobial therapies, thereby accelerating the emergence and spread of AMR across clinical, environmental, industrial, and agricultural settings.

This conference aims to bring together researchers, clinicians, microbiologists, biotechnologists, engineers, policymakers, and industry stakeholders to foster interdisciplinary dialogue on the mechanisms underlying biofilm-associated resistance and to showcase cutting-edge strategies for its prevention, disruption, and eradication. Emphasis will be placed on innovative technologies, including anti-biofilm agents, nanotechnology-based delivery systems, quorum-sensing inhibitors, phage therapy, CRISPR-based approaches, advanced biomaterials, and next-generation diagnostics.

**STOP-BIOAMR** will also highlight translational and implementation-focused research, bridging fundamental microbial biology with real-world applications in healthcare, food safety, environmental management, and medical device design. Sessions will address surveillance of biofilm-mediated AMR, emerging resistant pathogens, regulatory perspectives, and One Health approaches that recognize the interconnectedness of human, animal, and environmental health.

By promoting collaboration, knowledge exchange, and innovation, **STOP-BIOAMR** seeks to catalyze actionable solutions and inform policies aimed at mitigating biofilm-driven antimicrobial resistance, ultimately contributing to improved infection control, therapeutic outcomes, and global health security.

#### 1. Aims of the Conference

The conference **STOP-BIOAMR: Strategies and Technologies to Overcome Persistent Biofilm-mediated Antimicrobial Resistance** aims to create a comprehensive platform for advancing understanding, innovation, and collaboration in addressing biofilm-associated antimicrobial resistance. The specific aims of the conference are to:

#### 2. Elucidate Mechanisms

To deepen understanding of the molecular, genetic, and physiological mechanisms by which biofilms contribute to antimicrobial resistance and persistence in diverse microbial pathogens.

#### 3. Promote Innovative Strategies

To highlight emerging and alternative strategies for preventing, disrupting, and eradicating biofilms, including novel antimicrobials, anti-virulence approaches, phage therapy, nanotechnology, and quorum-sensing inhibition.

#### 4. Showcase Advanced Technologies

To present cutting-edge tools and technologies for biofilm detection, imaging, modeling, and real-time monitoring, as well as advanced drug delivery and surface-modification technologies.

#### 5. Bridge Basic and Translational Research

To foster integration of fundamental research with clinical, industrial, and environmental applications, accelerating the translation of laboratory discoveries into practical solutions.

#### 6. Encourage Interdisciplinary Collaboration

To bring together experts from microbiology, medicine, biotechnology, materials science, engineering, and public health to stimulate cross-disciplinary partnerships.

## **7. Address Global and One Health Challenges**

To discuss the role of biofilm-mediated AMR within the One Health framework, encompassing human, animal, food, and environmental health perspectives.

## **8. Support Capacity Building and Policy Dialogue**

To empower early-career researchers and students, promote knowledge exchange, and facilitate discussions on regulatory, surveillance, and policy strategies aimed at controlling biofilm-driven AMR at local and global levels.

## **9. Specific Objectives**

The conference STOP-BIOAMR: Strategies and Technologies to Overcome Persistent Biofilm-mediated Antimicrobial Resistance is structured around the following specific objectives:

1. To analyze biofilm-associated resistance mechanisms in clinically, environmentally, and industrially relevant microorganisms, with emphasis on genetic regulation, metabolic adaptation, and stress tolerance.
2. To identify emerging biofilm-forming antimicrobial-resistant pathogens and discuss their epidemiology, transmission dynamics, and public health implications.
3. To evaluate novel anti-biofilm and anti-AMR strategies, including antimicrobial peptides, quorum-sensing inhibitors, phage therapy, enzyme-based approaches, and CRISPR-Cas technologies.
4. To explore nanotechnology- and biomaterial-based interventions for targeted drug delivery, surface modification, and prevention of biofilm formation on medical devices and industrial systems.
5. To present advanced tools and methodologies for biofilm detection, imaging, modeling, and real-time monitoring, supporting early diagnosis and effective intervention.
6. To bridge laboratory research with translational and clinical applications, focusing on case studies, pilot trials, and industry-led innovations.
7. To integrate a One Health perspective by examining biofilm-mediated AMR across human, animal, food, and environmental ecosystems.
8. To strengthen interdisciplinary and international collaborations among academia, healthcare institutions, industry, and regulatory bodies.
9. To support early-career researchers and students through dedicated sessions, mentoring, and opportunities for scientific exchange and capacity building.
10. To inform policy, surveillance, and regulatory frameworks by translating scientific evidence into actionable strategies for controlling biofilm-driven antimicrobial resistance.

## **10. Details of the Tentative Programme (2-Day Overview)**

The program is structured around four core pillars: The scientific program of STOP-BIOAMR: Strategies and Technologies to Overcome Persistent Biofilm-mediated Antimicrobial Resistance is structured around four core pillars that collectively address the complexity of biofilm-driven antimicrobial resistance from fundamental science to real-world implementation:

1. Mechanistic Insights into Biofilm-mediated Antimicrobial Resistance

This pillar focuses on the molecular, genetic, and physiological mechanisms underlying biofilm formation, maturation, and persistence, and their role in antimicrobial tolerance and resistance. Topics include regulatory networks, metabolic heterogeneity, horizontal gene transfer, stress responses, and host-pathogen interactions.

2. Innovative Anti-biofilm and Anti-AMR Strategies

This pillar highlights emerging therapeutic and preventive approaches aimed at disrupting biofilms and overcoming resistance. Emphasis is placed on novel antimicrobials, anti-virulence therapies, quorum-sensing inhibition, phage-based interventions, enzyme-mediated biofilm degradation, and combination therapies.

3. Advanced Technologies and Translational Solutions

This pillar addresses cutting-edge technologies for biofilm detection, imaging, modeling, and real-time monitoring, as well as nanotechnology-driven drug delivery systems, smart biomaterials, and surface engineering solutions. It bridges laboratory discoveries with clinical, industrial, and environmental applications.

4. One Health, Policy, and Global Implementation

This pillar integrates human, animal, food, and environmental health perspectives to address biofilm-mediated AMR as a global challenge. Discussions include surveillance, risk assessment, infection control, regulatory frameworks, stewardship programs, and policy-driven strategies for sustainable implementation.

### Day 1: Global Health Security & The Policy Framework (Saturday, March 14, 2026)

Time	Session Type	Theme/Topic	Key Deliverable
08:00am-09:00am	Registration & Networking	Arrival and Coffee	Delegate check-in and welcome pack distribution.
09:00am-9.30am	Inaugural Session	<b>Opening Session:</b> The Global Imperative of One Health.	Vision Setting by Head of the Institute
9.30am-10.15am	Keynote Lecture 1	Tackling Antimicrobial Resistance (AMR) <b>Dr. Saugata Hazra</b> <b>Associate Professor, IIT Roorkee</b>	Focus on environmental reservoirs and responsible usage in agriculture.
10.15am-11.00am	Keynote Lecture 2	Ecological Disruption and Disease Spillover. <b>Dr. Provash Chandra Sadhukhan, Scientist-F at ICMR-NICED, Kolkata</b>	Case studies on early warning systems (EWS) and joint animal-human disease monitoring.
11.00am-11.30am		<b>Tea Break</b>	

11.30am-1.00pm	Panel Discussion on policy synthesis	<b>Panelists:</b> <b>Dr. Banani Roychoudhury</b> , Founder Secretary Baranagar Baghajatin Social Welfare Organisation <b>Dr. Gargi Bhattacharya</b> Consultant Microbiologist Ruby General Hospital <b>Food processing</b> <b>Dr. Rina Rani Ray</b> Associate Professor, <b>MAKAUT Haringhata</b> <b>Dr. Neera Sen Sarkar</b> Associate Professor Department of Botany, Kalyani University	Networking and informal exchange with leading experts.
1.00pm-2.00pm	<b>Lunch Break</b>		
2.00pm-4.15pm	<b>Parallel Session for Oral and poster presentation</b>		
4.15pm-5.00pm	<b>Coffee Break</b>		

## Day 2: Planetary Health, Innovation, and The Future (Sunday, March 15, 2026)

Time	Session Type	Theme/Topic	Key Deliverable
09.00am-09.30am	Arrival & Coffee	Recap of Day 1 Outcomes	
9.30am-10.00am	Keynote Lecture 1	<b>One Health for Tomorrow:</b> Inspiring the Scientific Future. <b>Dr. Sulagna Basu</b> <b>Scientist G, ICMR NIRBI Kolkata</b>	Focus on AMR and its implications in next Pandemic
10.00am-10:45am	Keynote Lecture 2	Integrated Surveillance of Emerging Pathogens. <b>Dr. Indranil Samanta, Professor, West Bengal University of Animal and Fishery Sciences</b>	Focus on impact of extreme weather events and biodiversity loss on human and animal health.
10:45am-11:30am	Keynote Lecture 3	Water, Air, and Soil Quality as One Health Indicators. <b>Dr. Smaranika Pattanaik</b> <b>Associate Professor, Sambalpur University</b>	Deep dive into environmental toxicology and pollution-related diseases.
11:30 am-01:30pm	Parallel Session for Oral & poster presentation		
01:30pm-02:30pm	<b>Lunch Break</b>		
02.30pm-03.30pm	Closing Ceremony	Closing Keynote: The Next Decade of One Health	Implementation & Way Forward.

