

A social outreach programme on  
**Bacterial Exopolysaccharide and its Application**

Under the guidance of  
**Dr. Rajib Bandopadhyay**  
Professor  
Department of Botany  
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Submitted by  
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**TO WHOM IT MAY CONCERN**

This is to certify that, Ms Sanjukta Ghosh, an M.Sc. student (SEM-IV) of the Dept. of Botany, Burdwan University has very soundly and successfully delivered her seminar lecture on the topic 'Bacterial Exopolysaccharide and its Application' as a social outreach programme in this department on 26<sup>th</sup> July, 2019. The seminar topic is based on the student's project work performed under the supervision of Prof. Dr. Rajib Bandopadhyay of Botany Department, The University of Burdwan. I wish her all success in life.

*Swarnendu Mondal*  
26/7/2019

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### Acknowledgement

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Date: 05.08.19

Place: Burdwan

Sanjukta Ghosh. 05.08.19  
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### **3.4. Discussion and interaction with the students:**

Though it was explained in very basic level for understanding of the students but as the topic was new to them some questions were arisen in their mind such as –

#### **1. What is biofilm?**

**Ans.** Biofilm is the organized microbial communities, producing layer on any inanimate objects.

#### **2. What is bioflocculant?**

**Ans.** Bioflocculants are the biological substances which are used in purification of pollutants in water by clumping and precipitation of the pollutants. e.g., exopolysaccharides of bacteria act as bioflocculants.

#### **3. Why exopolysaccharides are produced by bacteria?**

**Ans.** Exopolysaccharides are protecting substance in bacteria against any stress condition. So bacteria produce EPSs for their protection.

Overall students showed interest and well response in the class.



**Fig 3: Performance in the classroom during social outreach programme**



**Fig4: Picture with the students**

#### **4. Outcome of the programme:**

Students were partially illuminated by this Social Outreach Programme. It will be a great achievement if the students are benefitted with this discussion and presentation. They were interested to study further and work in science laboratory and to discover new helpful research objectives.

#### **5. Conclusion:**

After the discussion and interaction with students, it can be concluded that the Social Outreach Programme has been given new idea to the students. The prime message of this programme has been conveyed to the students i.e. to build their interest in applied Biological Science that help them to think eco-friendly. The students were happy to be a part in completion of this programme and it was an enriched experience for me to take the class in front of the students first time. Overall, the Social Outreach Programme was successful.