

Shiksha Mandal's Bajaj College of Science, Wardha An Autonomous Institution Affiliated to RTM Nagpur University, Nagpur In Association with



## St. Xavier's College (Autonomous), Mumbai

## **INVITES APPLICATION FOR**

## **Certificate Course in**

# INDUSTRIAL WASTEWATER MANAGEMENT

Eligibility: UG, Graduate & PG Science Students

Seats: 50

Course Fee: Rs. 350/- (Students of Parent Institute) Rs. 500/- (Other Students)

Last date for Registration: 25<sup>th</sup> November 2021

About Certificate Course: https://drive.google.com/file/d/1JCQ8ty Yzjq0J4E93HQVLioWGdvJAidz0/view?u sp=sharing

Registration Link: https://forms.gle/e5AvxA9PkP8HRrnz6

#### Patrons

**Dr. O. A. Mahodaya** Principal, Bajaj College of Science, Wardha **Dr. Rajendra Shinde** Principal, St. Xavier's College, Mumbai

#### **Dr. Pradip Tekade** Head/In-charge, Dept. of Chemistry, Bajaj College of Science, Wardha

### **Course Facilitators**

Mr. Marazban Kotwal Head, Dept. of Chemistry St. Xavier's College, Mumbai

### **Course Coordinators**

Dr. Mahejabeen Haque Bajaj College of Science, Wardha +91-7028308023

About: Bajaj College of Science, Wardha http://jbsw.shikshamandal.org/ Dr. Abhilasha Jain St. Xavier's College, Mumbai

About: St. Xavier's College, Mumbai https://xaviers.edu/main/







#### Skill based Certificate Course On "INDUSTRIAL WASTEWATER MANAGEMENT"

#### **Specifications of Course:**

A) Nature	- Certificate Course
B) Duration	- 60 hrs
C) No. Of Students to be admitted	- 50
D) Fee Proposed	- <b>350/-</b> (Students of Parent Institutes)
	- 500/- (Other Students)

#### I. COURSE OVERVIEW:

This course provides an understanding of various processes involved in the treatment of wastewater generated due to the anthropogenic activities prior to its discharge into the environment or its re-use. This course aids to understand various terminologies used in industrial wastewater treatment and to acquaint with different stages involved in treatment of industrial wastewater.

#### II. PREREQUISITE(S): UG/PG

#### III. COURSE OBJECTIVES:

The objective of the course is to impart knowledge and skills to the learner to:

- 1. Distinguish between the quality of domestic and industrial water requirements.
- 2. Understand the industrial process, water utilization and wastewater generation.
- 3. Impart knowledge on selection of treatment methods for industrial wastewater.
- 4. Gain knowledge on different techniques and methods for minimizing the generation.
- 5. Application of physicochemical and biological treatment methods for recovery, reuse and disposal of industrial wastewater.

### **IV. COURSE OUTCOMES:**

After completion of this course, the student will be able to demonstrate the knowledge and will have the ability to:

- 1. Identify environmental standards that apply to both direct and indirect industrial discharges.
- 2. Develop an overall treatment strategy for an industrial waste stream.

- 3. Specify design criteria for physical, chemical, and biological unit operations and processes necessary to treat an industrial wastewater.
- 4. Define and reason about fundamental concepts of wastewater treatment.
- 5. Design, conduct experiments and the ability to analyse the wastewater quality.
- 6. Select the most appropriate technique to control and treat industrial pollution.
- 7. Enhanced skills of the students will increase their employability in the related industries.

#### Mode of Teaching:

The theory lectures and practical sessions of the course will be conducted via Online mode i.e. Pre-recorded video lectures and/or online lectures.