# DEPARTMENT OF STATISTICS

## Industrial Visit to CSIR-NEERI
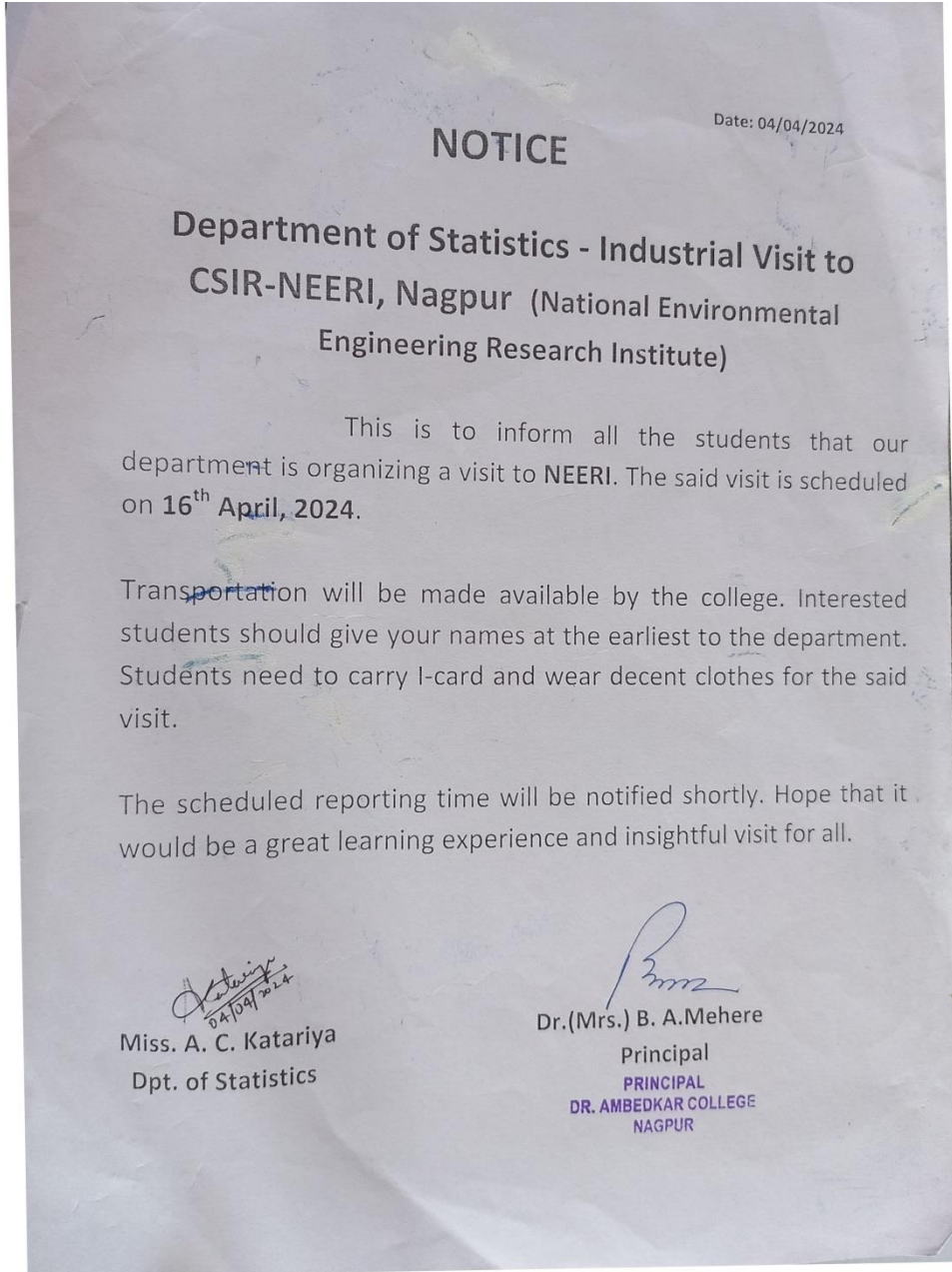### (An institute under the Ministry of Science and Technology, GoI)

Date: **16th April, 2024**

Place of visit: **NEERI, National Environmental Engineering Research Institute**
Approx. number of Students who visited: **35**
Count of Staff who visited: **03**

## NOTICE



Date: 04/04/2024

### NOTICE

**Department of Statistics - Industrial Visit to CSIR-NEERI, Nagpur** (National Environmental Engineering Research Institute)

This is to inform all the students that our department is organizing a visit to **NEERI**. The said visit is scheduled on **16th April, 2024**.

Transportation will be made available by the college. Interested students should give your names at the earliest to the department. Students need to carry I-card and wear decent clothes for the said visit.

The scheduled reporting time will be notified shortly. Hope that it would be a great learning experience and insightful visit for all.

Miss. A. C. Katariya
Dpt. of Statistics

Dr.(Mrs.) B. A.Mehere
Principal
PRINCIPAL
DR. AMBEDKAR COLLEGE
NAGPUR

## REPORT

The **Department of Statistics** organized an industrial visit to NEERI for students of all the years of B.Sc. on Tuesday, **16-04-2024** at **10:30 AM**.

The session started with a video giving introduction and journey of NEERI since its establishment in 1958. It mentioned about: *NEERI's Vision-*Leadership in Environmental Science and Engineering for Sustainable Development and *NEERI's Mission-*CSIR-NEERI would continue to strive for providing innovative and effective solutions for environmentally sustainable development and to help Government, industry and the society, especially the 800 million underprivileged people of India.
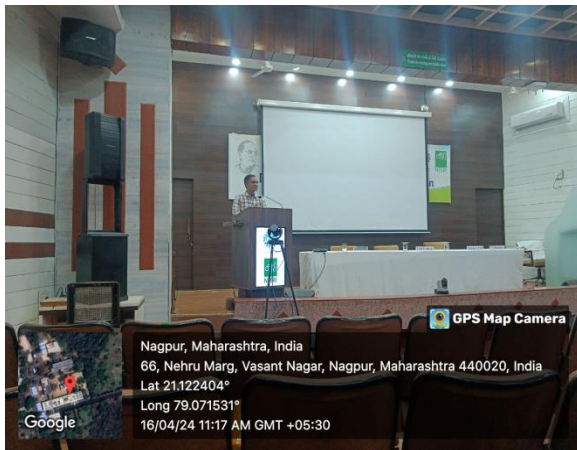


Then, Dr. Prakash Kumbhare, Sr. Principal Scientist & Head, addressed and interacted with students regarding NEERI's work, career opportunities, especially career with NEERI and other opportunities.

He enlightened about the work of NEERI which mainly includes:
- Water technology and management
- Air Pollution management
- Waste management

He also mentioned that NEERI has designed and developed a sustainable remediation process for mitigation of fluoride contamination in groundwater and its field application for domestic use.
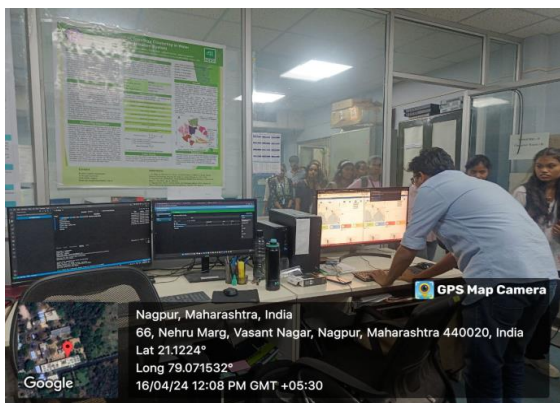
Along with this, he interacted with students on different topics:
- Subjects they have chosen in graduation
- Working of AI in the next 10 years.
- Discussed about 'data', 'variable', 'research', 'Statistics with application' etc

He also discussed the opportunities in NEERI. His talk concluded after Q & A.

Next, we visited **Cleaner Technology and Modelling Division (CTMD).**

Here, we were explained how this division develops sustainable solutions for environmental problems. We were also explained about Application of Advanced Numerical and Graphics Tools (XPSWMM, SPSS, MATLAB, etc) for Environmental Systems Modeling and Management and Application of Numerical Models for prediction of Environmental Quality.

Next we visited "**<u>NALA</u>**"- where dirty brook water undergoes processing and get converted into clean water. Water is purified by adding some good and / or bad bacteria. As of now, approx. 50000 litre water is purified per day which is then used for non-drinking purposes of the organization like agriculture, floriculture etc.
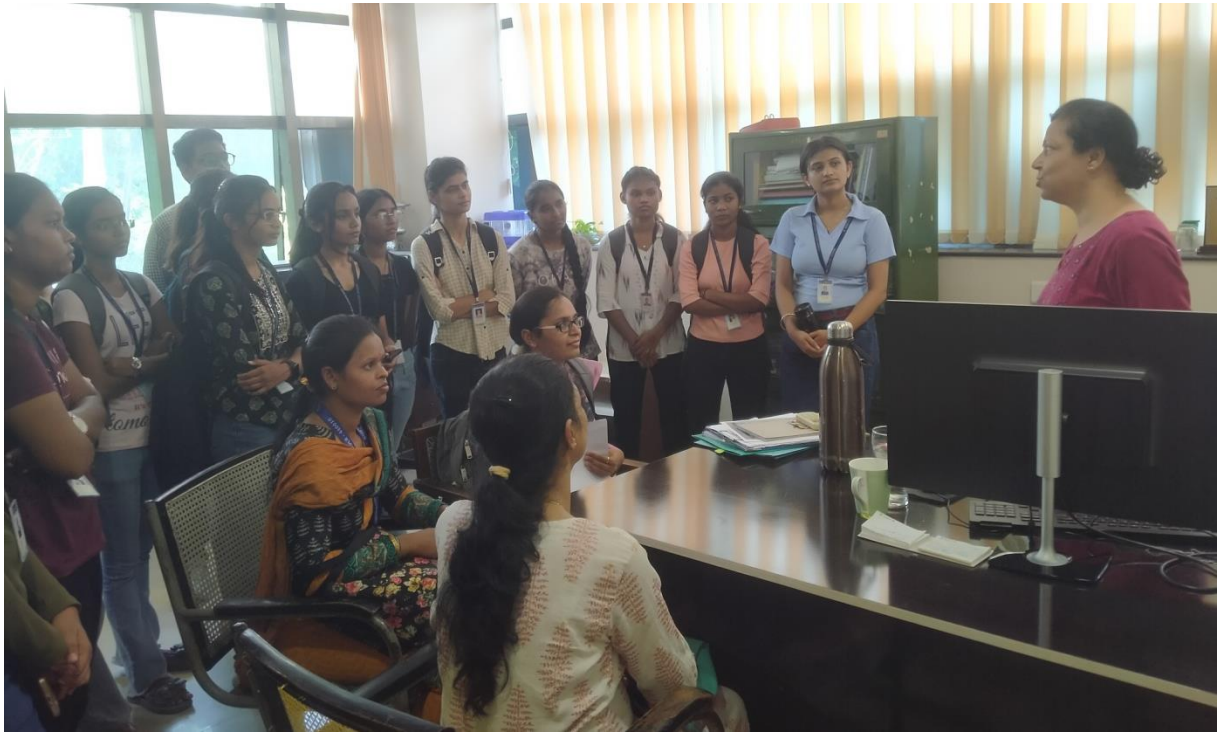


We also visited the <u>micro project where plants were grown only on ROCKS</u>.



Next we visited at **APC Division**, where **Dr. Asha Lalwani** Ma'am (Principal Scientist) interacted with students. Being a PhD in Statistics, she explained which and how the concepts of Statistics are used in the organization. Some of them are:

- Meaning of Statistics, Data, use of descriptive statistics like mean-median-mode in daily life
- Inferential Statistics
- Time series, multi-step forecasting
- Regression Analysis and Correlation

She also advised students to apply concepts studied on real-life data. For example: pick any small data from government website and perform regression analysis-- Temperature (x) and Particulate Matter in air (y).

Her talk ended with Q & A from students and teachers.

Students from SCoM, SCoM, PSM and ECoM groups were part of the visit.