

## ***“Monitoring of Ground Water Quality: Chemical Analysis & Interpretation in Andhra Pradesh”***

### **Preamble:**

On the occasion of World Water Day, arranged a Guest Lecture on “**Monitoring of Ground Water Quality: Chemical Analysis & Interpretation in Andhra Pradesh**” on 22<sup>nd</sup> March 2025.

### **Participants:**

130 Students of Chemistry and Botany.

### **Resource Person:**

**Sri Guru Raghavendra, Deputy Director, Ground Water Department, Government of Andhra Pradesh.**

### **Description of the Programme:**

On the occasion of World Water Day, the Department of Chemistry organized a Guest Lecture on “**Monitoring of Ground Water Quality: Chemical Analysis & Interpretation in Andhra Pradesh**”. The event featured a distinguished chief guest, **Sri Guru Raghavendra, Deputy Director, Ground Water Department, Government of Andhra Pradesh**, who provided an insightful talk focusing on water quality and its analysis. The session commenced with a presentation of pledge by students and faculty members, based on a document authored by the Government of Andhra Pradesh regarding World Water Day. This introduction set the stage for the lecture, emphasizing the significance of water conservation and quality assessment. During the lecture, the chief guest elaborated on the water quality parameters of both surface water and groundwater in Andhra Pradesh. He provided an overview of water testing laboratories in the state, mentioning that there are five major laboratories located in Vijayawada, Kadapa, Kurnool, Visakhapatnam, and Rajahmundry. These laboratories are responsible for testing 18 different water quality parameters, ensuring that water is assessed for its suitability for drinking and agricultural purposes. The lecture also covered the various instruments used in water quality analysis. The guest speaker explained the role of different analytical devices, including the pH Meter, which measures water acidity, the Conduct meter for electrical conductivity, the Flame Photometer for detecting metal ions, the Nephlo Turbid meter for turbidity measurement, and the UV-Visible Spectrophotometer, which helps identify chemical compounds in water. These instruments play a crucial role in determining water safety and usability. Furthermore, the speaker provided insights into the chemical analysis of water, discussing the different chemicals used in water testing and their significance in detecting contaminants and pollutants. He explained how these tests help in determining whether water is safe for human consumption or suitable for agricultural applications. The session emphasized the importance of scientific methods in ensuring water quality and protecting public health.

In his concluding remarks, the chief guest stressed that water conservation is a shared responsibility and urged everyone to take steps toward saving water. Following the lecture, he engaged in an interactive session with students, addressing their queries and providing valuable guidance on career opportunities in water analysis and chemistry-related fields.

The Department of Chemistry extends its sincere appreciation to the guest speaker for his informative and engaging lecture. The session was highly beneficial for students, enhancing their understanding of water quality assessment and its real-world applications.

