



محاضرة رقم: 2

¹ Lecture No 2:

Practical

Advanced laboratory technique

TURBIDITY METER

Sawa University

College of health and medical techniques

Department of Medical Laboratories

. Stage third

جامعة ساوة الاهلية

كلية التقنيات الصحية والطبية

قسم تقنيات المختبرات الطبية

المرحلة / الثالثة

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Turbidimetry

An instrument used to measure the relative clarity of a fluid by •
measuring the amount of light scattered by particles suspended in
.a fluid sample



Turbidity

Turbidity is the cloudiness or haziness of a fluid.

- The turbidity of a sample may be due to a single chemical substance or a combination of several.
 - A turbidimeter measures obstruction to determine the haziness, or intensity of light, in a sample
 - Measured in: nephelometric turbidity units (NTU).



Principle

- Principle of Turbidimeter is established on the basis of scattering or absorption of light by solid suspensions or colloids in the solution. When this light is processed through the suspension, part of incident radiant energy is dissolute by absorption, reflection and reaction while remaining is transmitted

How to Use a Turbidity Meter

Basic Steps

- Prepare the sample
- Calibrate the device with standard solutions
- Insert the sample and take the measurement



Types of Turbidity Meters

- **Portable Meters:** Used in field applications for quick measurements.
- **Laboratory Meters:** Provide accurate measurements in a controlled environment.
- **Inline Meters:** Used for continuous monitoring of turbidity in industrial processes.

Any questions?



*Thank
You*