



**— University of Mosul —**  
**College of Petroleum & Mining Engineering**

# **Petrophysical properties of rocks**

## **Lecture one**

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## LECTURE CONTENTS

- Fundamentals of Rock Properties
- Routine Core Analysis Tests
- Special Tests



Porosity

Permeability

Saturation

Overburden pressure

Capillary pressure

Relative permeability

Wettability

## Reservoir Rock Characteristics

- ❖ To form a commercial reservoir of hydrocarbons, any geological formation must exhibit two essential characteristics.
- ❖ These are capacity for storage and transmissibility to the fluids concerned.

Storage capacity requires void spaces within the rock and the transmissibility requires that there should be continuity of those void spaces.