

Understanding Physical Environment

Physical Environment – A Dispersion System



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Dr Vinod Tare
Department of Civil Engineering
IIT Kanpur

Physical Environment – A Dispersion System

Gaseous → Air

Liquid → Water

Solid → Soil and Rocks

Air (Gas), Water (Liquid) and Soil/Rock (Solid) Dispersion System

- In dispersion system particles of one phase are dispersed throughout a medium that is in a different phase.
- Dispersion may be a two-phased system or a three-phased system.
- Composed of a dispersion medium and a dispersed phase.
- Dispersion medium is a continuous medium in which the dispersed phase is distributed throughout.
- Dispersed phase is the phase that is composed of particles that are distributed throughout the Dispersion Medium.
- **Dispersed phase is discontinuous whereas Dispersion Medium is continuous.**

Environmental Systems

Types of Dispersions

Dispersion Medium	Dispersed Phase	Type of Dispersion
Gas (Air)	Solid	Aerosol
Gas (Air)	Liquid	Mist
Liquid (Water)	Solid	Solution and/or Suspension
Liquid (Water)	Liquid (Oil)	Emulsion
Solid	Solid	Solid Gel
Solid	Liquid	Gel