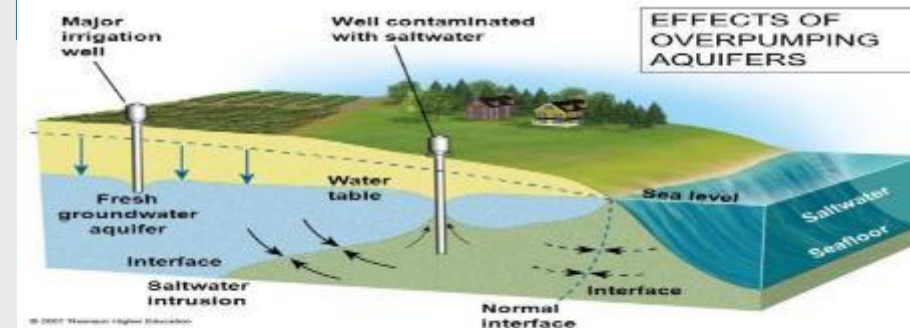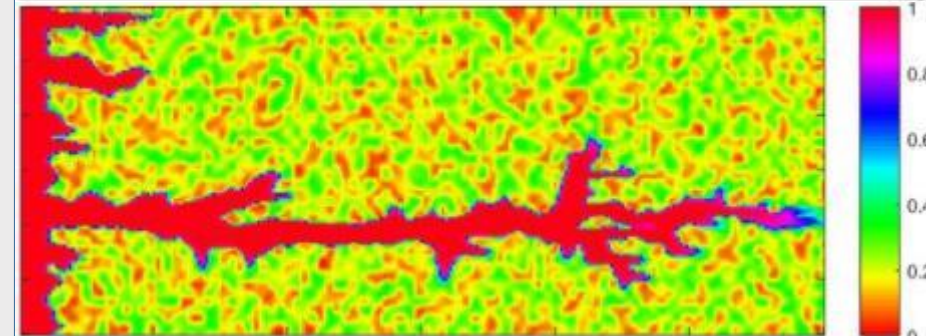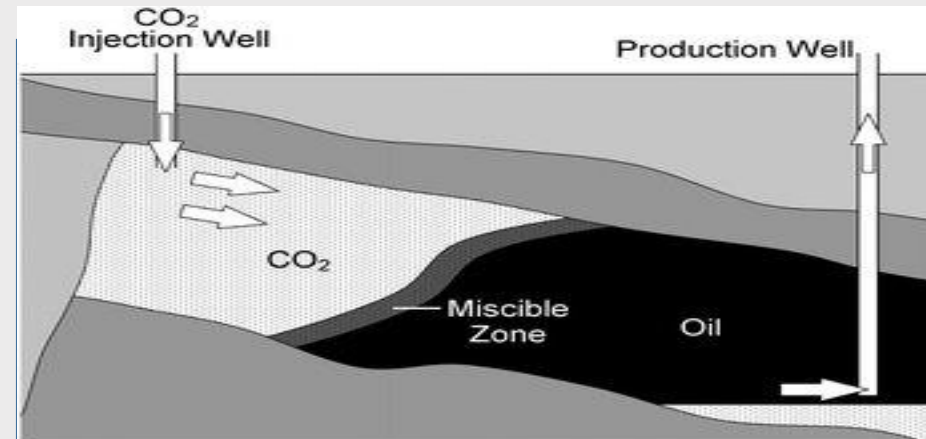# Yang Yang

Current research topics

Oil recovery

- Miscible displacements in porous media
- Wormhole propagation
- Fractured media
- Immiscible displacements
- Seawater intrusion and contaminants transportation

Gaseous detonation

- Euler equation
- Navier-Stoke equation

Chemotaxis model

- Blow-up solution
- Construct blow-up time

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Miscible displacements in porous media

- High-order numerical schemes
- Stability of the numerical scheme
- Saturation is between 0 and 1 (bound-preserving technique)
- Porosity is increasing and less than 1 (bound-preserving technique)