

### Galwey WET Classification

- WET 1 Crystal structure maintained  
Structure is maintained or after dehydration, undergoes most minimal modifications without recrystallization or cracking. The rate control processes may either be by intracrystalline diffusion or surface desorption.
- WET 2 Diffusion across an adherent barrier layer  
Reactant and product lattices are similar, coherently and comprehensively bonded to one another without cracking. The rate controlling process is by diffusion and geometric mechanism.
- WET 3 Interface advance reactions  
These may occur in different forms but generally through nucleation and growth or contracting envelope mechanism. In this type of reactions, the rate control processes are interface and geometric control dictated.
- WET 4 Homogeneous reactions in crystals  
The rate controls may be by; explosive disintegration, progressive structural change or homogenous intracrystalline chemical change.
- WET 5 Melting and formation of impervious outer layer  
The reaction has typical kinetic characteristics as rate controls. Rate may be found to vary with particle size.
- WET 6 Comprehensive melting  
The rate controls are made up of chemical steps and/or diffusion reaction that is a homogeneous rate process.

### Petit and Coquerel Classification

Class I	No Structural Filiation between parent structure and resultant structure	Destroyed Disorganised
		Co-operative Disorganised
		Destroyed Crystallised
		Co-operative Crystallised
Class II	Structural Filiation between parent structure and resultant structure	Co-operative Reorganisation
		Topotactic