PhaseBook
Liquid Vapor Transition: T-v & P-v Avatar

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T-v diagram@different pressures for water

- Both liquids and gases have continuous translational symmetry-reason behind the existence of critical temperature and pressure

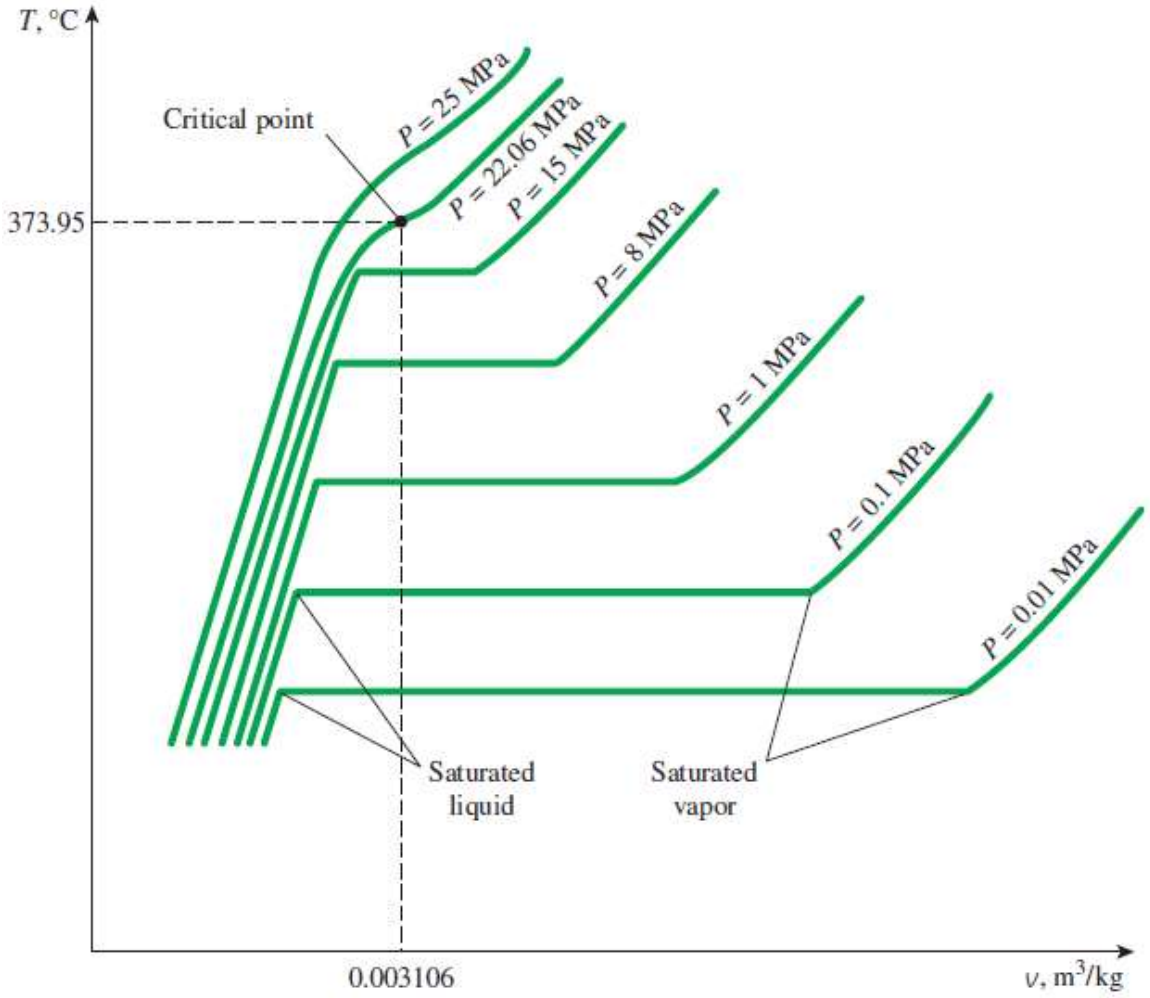
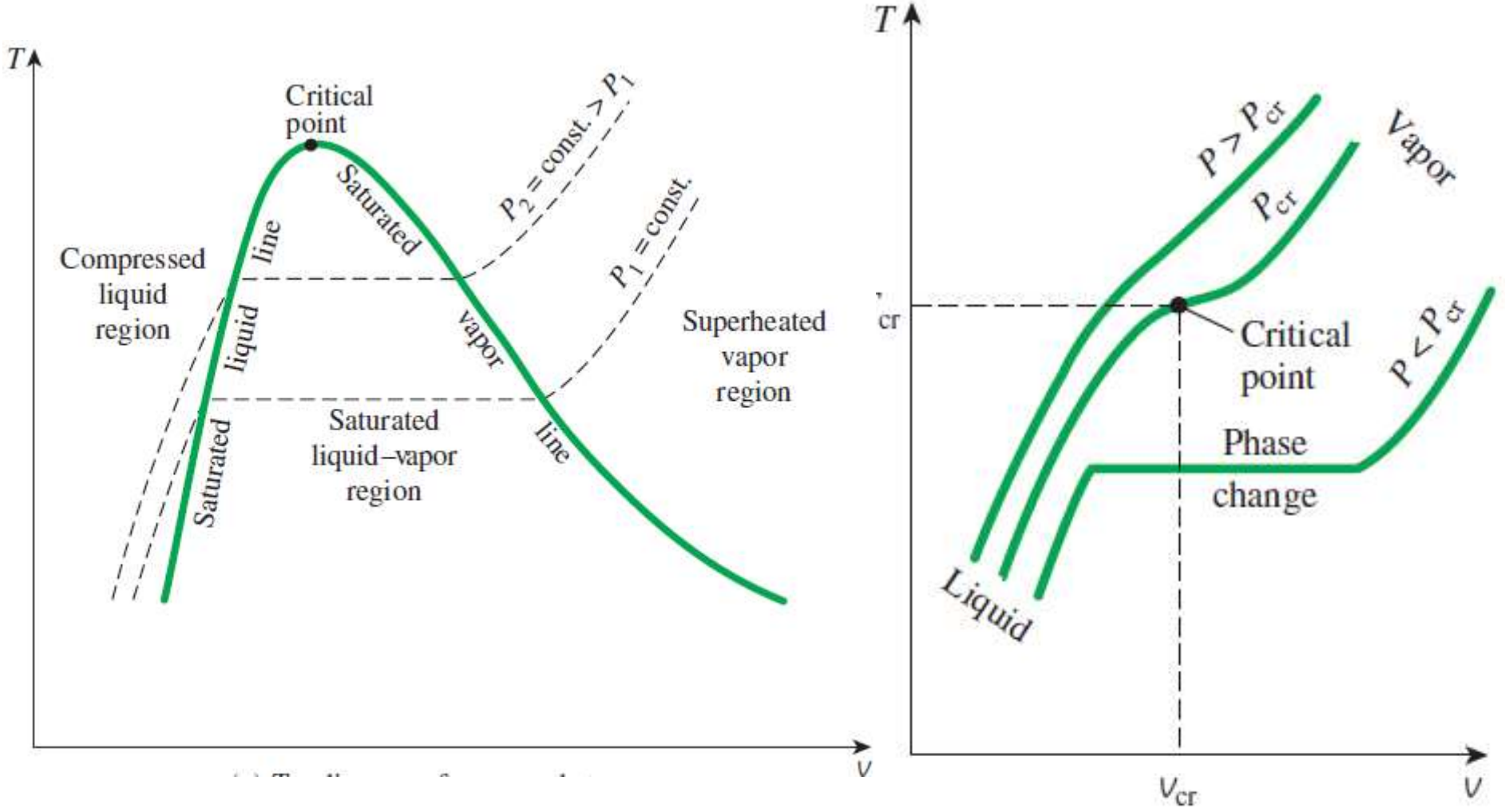


Fig: Cengel & Boles

T-v diagram@different pressures



- Super critical solvents are important in Chemical engineering/Chemistry

Fig: Cengel & Boles

T-v vs P-v

- Intuition suggests as T increases, v increases; As P increases, v decreases

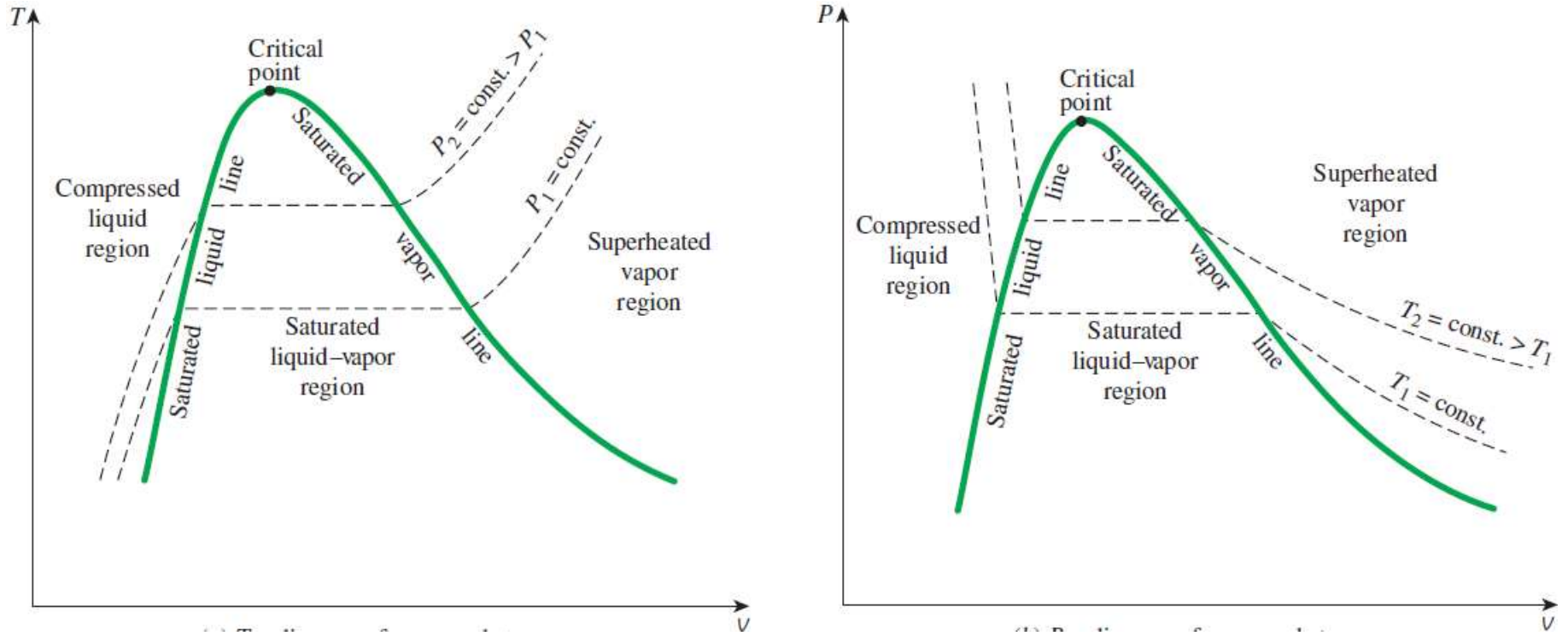


Fig: Cengel & Boles