

7.10.2: Lecture Demonstrations

Sublimation of Non-Polar Iodine

Add iodine crystals to a pre-heated 2 L Erlenmeyer flask on a hotplate and observe the sublimation and subsequent formation of beautiful crystals.

Easy sublimation is due to *lack* of permanent charge.

Solubility of Polar vs. NonPolar Gases in Water

An HCl fountain can be used [1][2][3][4] to demonstrate the high solubility of HCl in polar water. Compare to oxygen, nitrogen.

References

- 1. Alyea, H.N.; Duton, F.B. "Tested Demonstrations in Chemistry", J. Chem. Educ., Easton, PA 1965, p. 13-14
- 2. Ned Steadman. J. Chem. Educ., 1992, 69 (9), p 764
- 3. Nicholas C. Thomas and Stephen Faulk, Randy Sullivan J. Chem. Educ., 2008, 85 (8), p 1063
- 4. J. Chem. Educ., 1995, 72 (9), p 828

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