Session #28: Homework Problems

Problem #1

Poly (vinyl chloride) is represented by the formula

Draw molecular structures for tetramers (n=4) of the atactic, isotactic, and syndiotactic forms of PVC.

Problem #2

- (a) Polyethylene exists either as a linear (straight-chain) polymer or as a branched polymer. Which is the high-density form? Explain.
- (b) In visible light high-density polyethylene (HDPE) is opaque (white) while low-density polyethylene (LDPE) is transparent. Explain.
- (c) Which form of PE is mechanically more flexible? Explain.
- (d) Which form of PE has the higher melting point?

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