

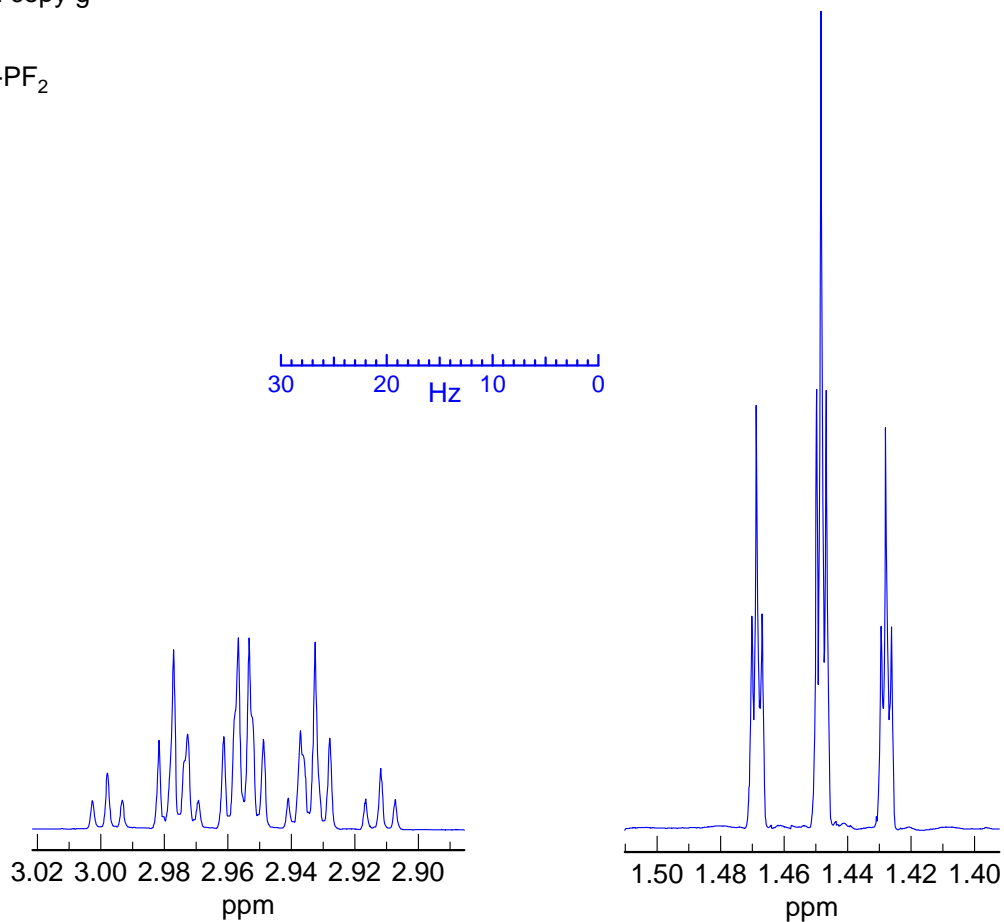
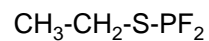
**Problem R-02P.** Analyze the multiplets, report identity and size of all couplings for  $\text{CH}_3\text{-CH}_2\text{-S-PF}_2$  whose  $^1\text{H}$  NMR spectrum is shown below. Use the form: d ( $^nJ_{\text{XY}} = 112$  Hz), q ( $^nJ_{\text{YZ}} = 32$  Hz).

**Problem R-02P** ( $\text{C}_2\text{H}_5\text{F}_2\text{PS}$ )

300 MHz  $^1\text{H}$  NMR spectrum

Source: E. A. V. Ebsworth, "Structural Methods in Inorganic Chemistry," Backwell Scientific Publishers

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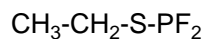


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tt,  $^3J_{\text{HH}} = 7 \text{ Hz}$ ,  $^5J_{\text{HF}} = 0.7 \text{ Hz}$ ,

4

30 20 10 0  
Hz

6

dqt  $^3J_{\text{HP}} = 8 \text{ Hz}$ ,  $^3J_{\text{HH}} = 7 \text{ Hz}$ ,  $^4J_{\text{HF}} = 2 \text{ Hz}$

