



$^{19}\text{F}$  NMR (471 MHz,  $\text{CDCl}_3$ ) of crude 2,3,7,8-tetrafluorothianthrene and 4,4'-difluorobenzophenone (IS).

Quant.  $^{19}\text{F}$  NMR (471 MHz,  $\text{CDCl}_3$ ) at 25 °C for 2,3,7,8-tetrafluorothianthrene

$$\text{wt}(\%) = \frac{\text{mg}_{\text{IS}} \times \text{MW}_{\text{cpd}} \times \text{molar ratio} \times P_{\text{IS}}}{\text{mg}_{\text{cpd}} \times \text{MW}_{\text{IS}}}$$

$$\text{wt}(\%) = \frac{14.3 \text{ mg} \times 288.28 \text{ gmol}^{-1} \times 0.405 \times 1.0}{10.3 \text{ mg} \times 218.20 \text{ gmol}^{-1}} \times 100 = 74.3\%$$