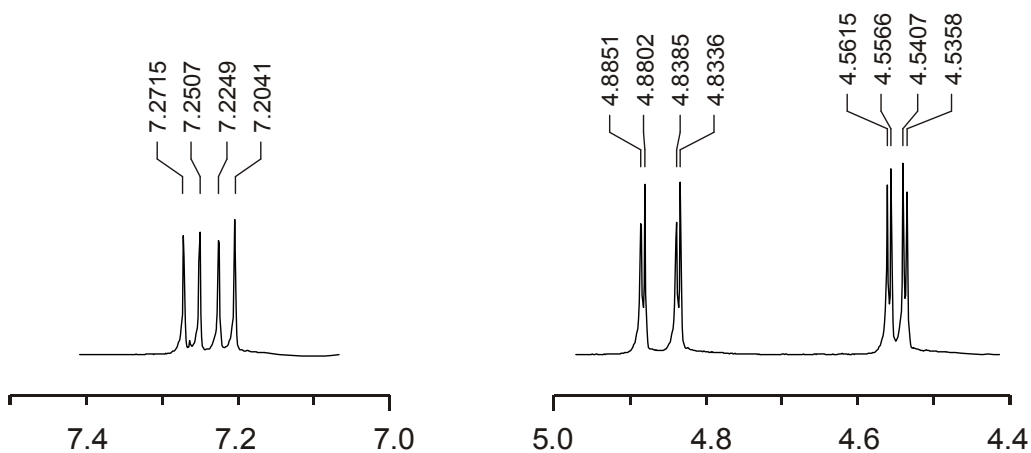
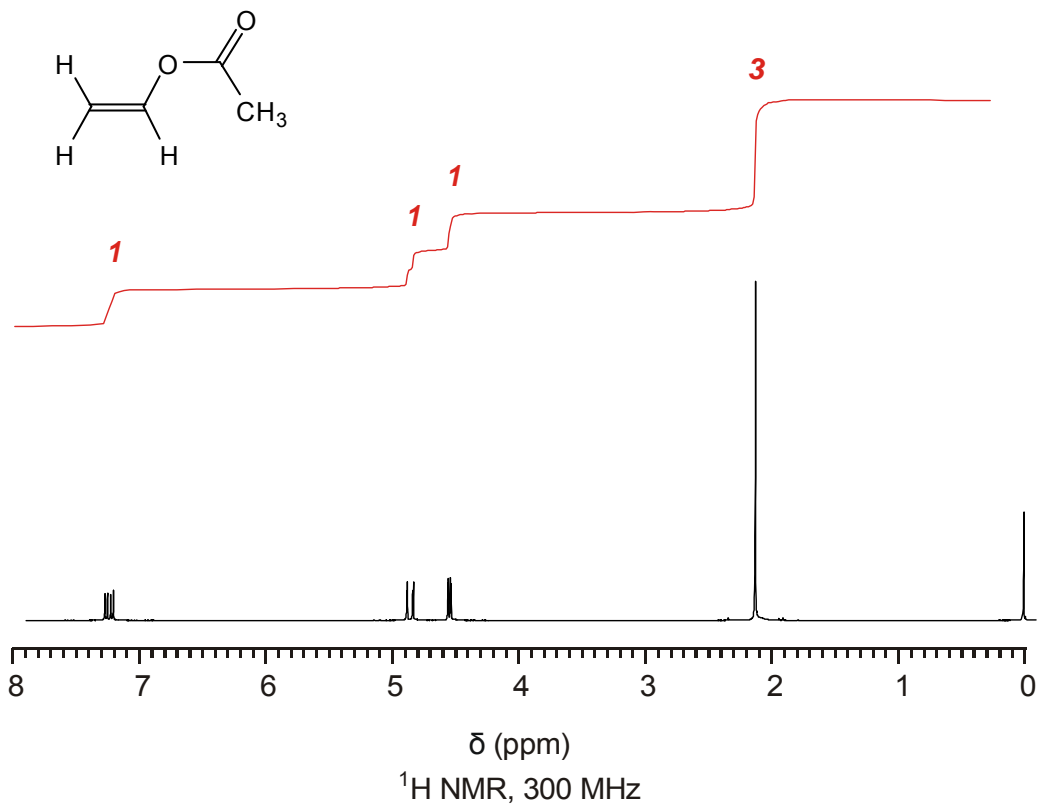


### Workshop 29 Complex Splitting Patterns in NMR

This Workshop deals with the NMR spectrum of vinyl acetate, shown below. The lower two spectra are close-ups from the upper spectrum.



The three vinyl protons in vinyl acetate are all inequivalent, and they all split one another.

- a. Each of the multiplets in the closeup spectra corresponds to one of the vinyl protons. Using the ppm labels, calculate coupling constants  $J$  for each proton to its neighbors.
- b. Which multiplet corresponds to which proton in the structure? (It might help to use the table of  $J$  values we looked at in lecture.)