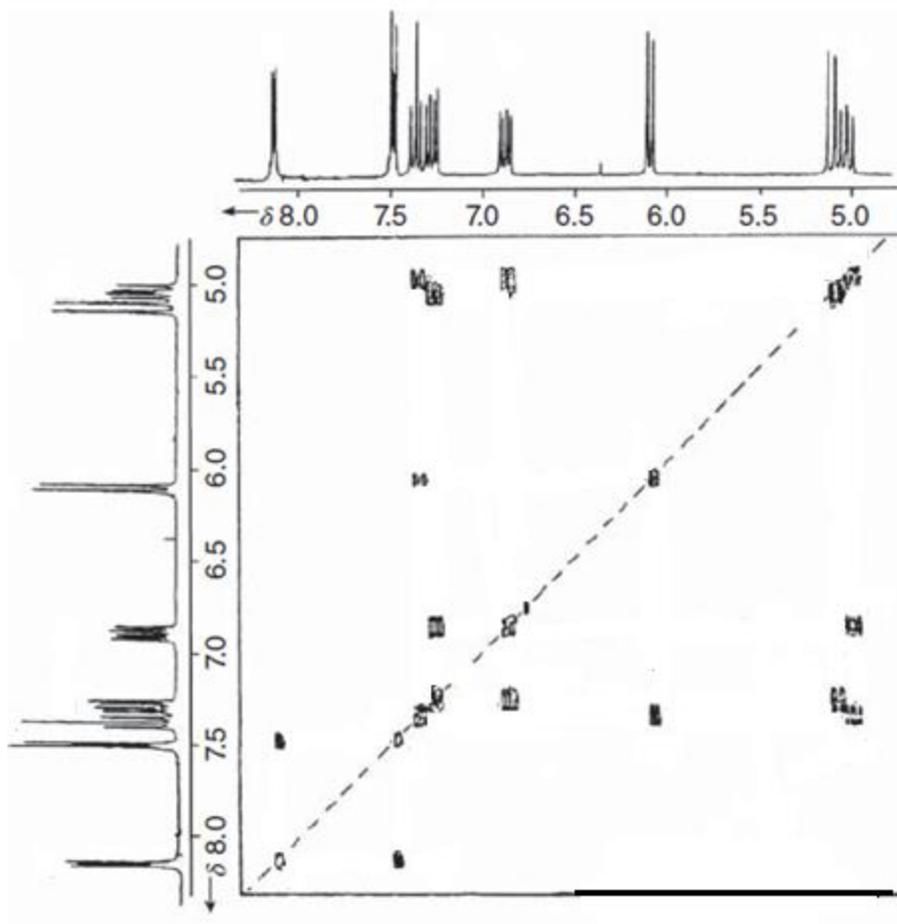
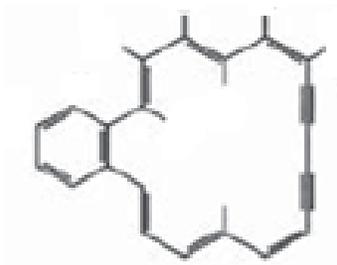
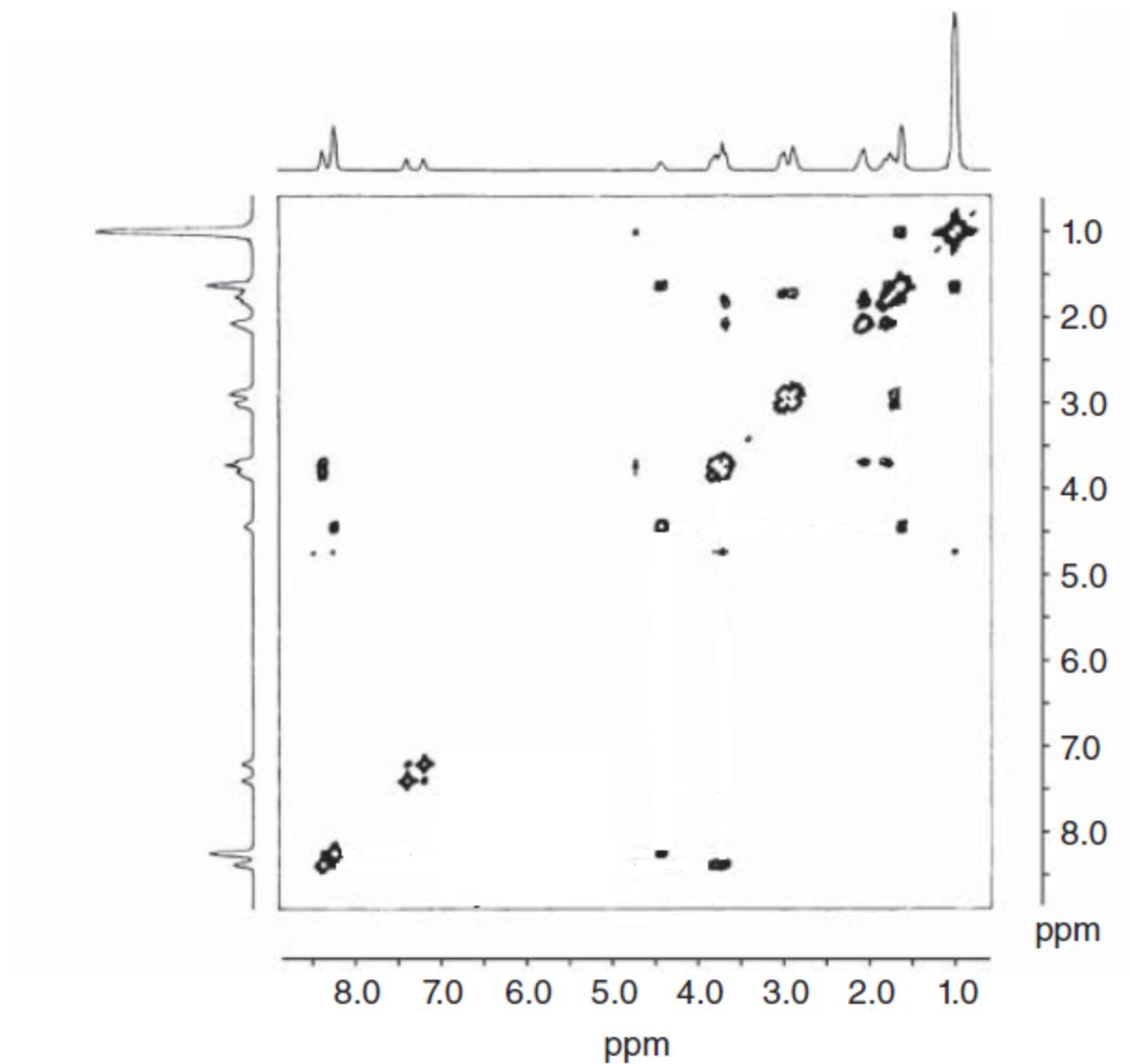
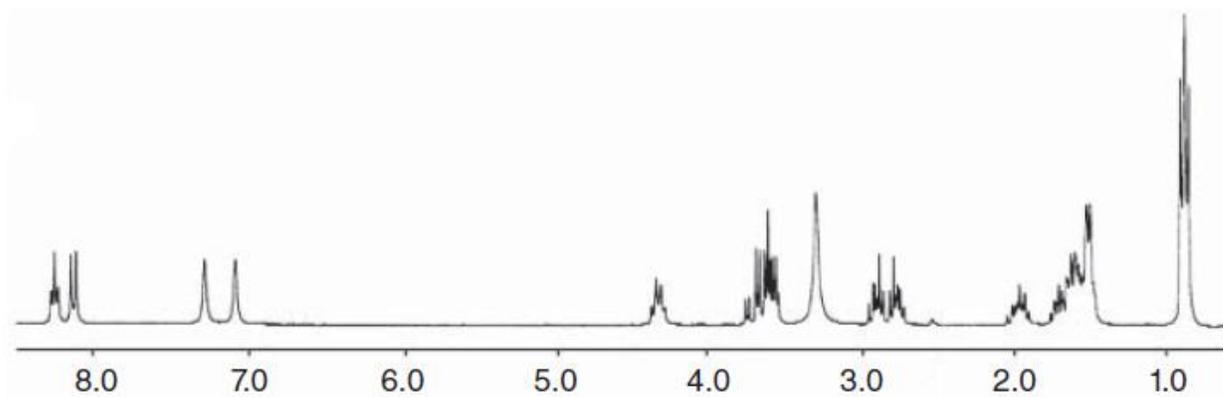


## Problems # 24

- 1- Define the spin system of the following compound, and (b) interpret the  $^1\text{H}$  NMR based on the presented H-H COSY spectrum.



- 2- The  $^1\text{H}$  NMR and H-H-COSY spectra of a tripeptide containing Proline, Leucine, and Glycine are shown below. Please identify the spin system(s) and assign the spectrum appropriately.



3- From now on, in the H-H COSY you will see false peaks in the spectrum. Explain what might be the source of such false or “asymmetric” peaks?

