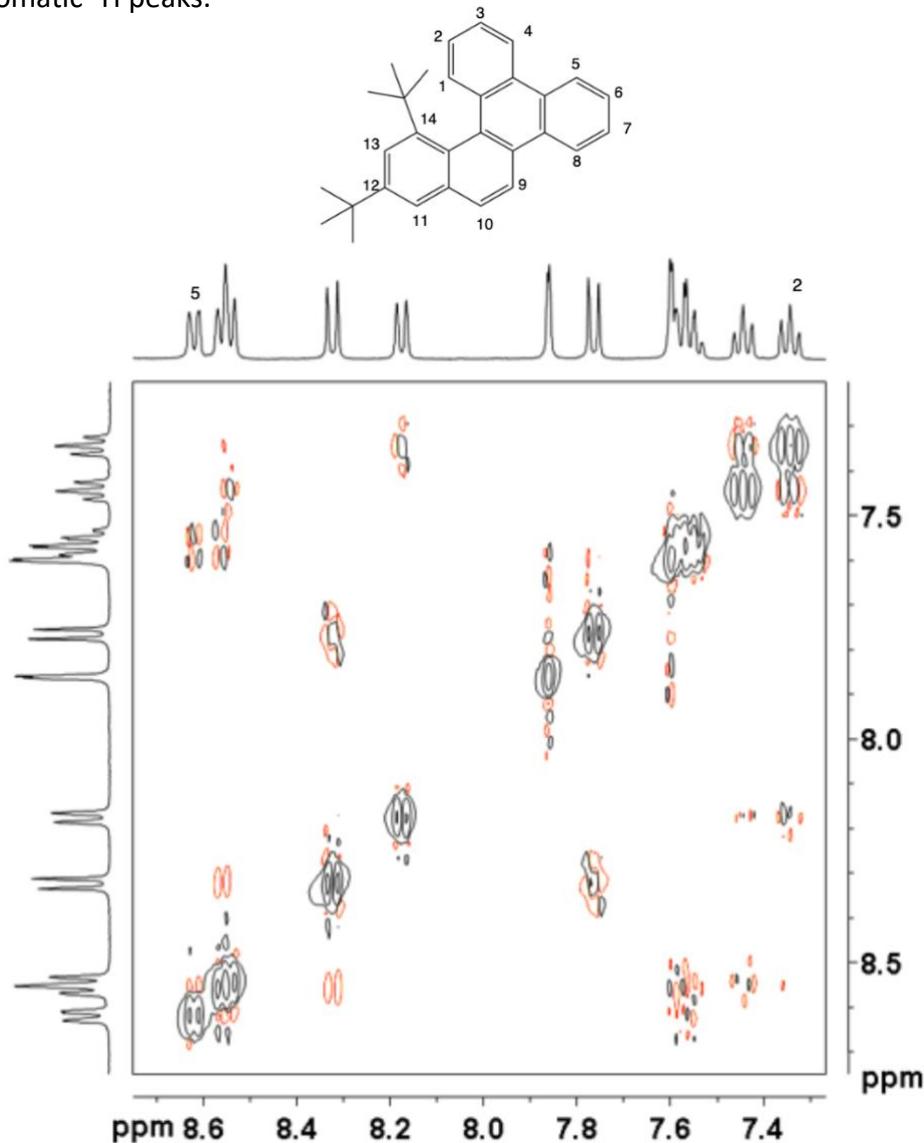


Jigsaw 4A

- [Keeler Section 9.7.4] The 2D NOESY (Nuclear Overhauser Effect SpectroscopY) experiment gives information on through-space interactions, which can be used to identify protons which are close in space. Below, you have the aromatic region of the ^1H 2D NOESY spectrum of 12,14-di^tbutylbenzo[g]chrysene. Assign the different aromatic ^1H peaks.



- [Keeler Section 12.2 and Hore Section 3.3] For each of the following compounds determine whether the protons are magnetically or chemically equivalent. Explain why.
 - Benzene
 - [From Past Exam] The 2,5 protons in furan