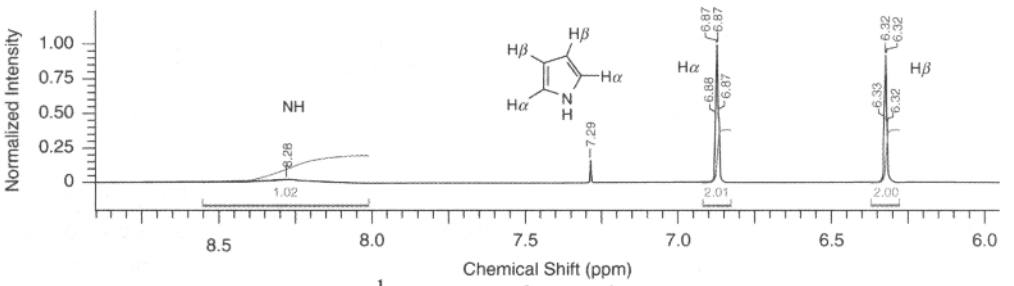
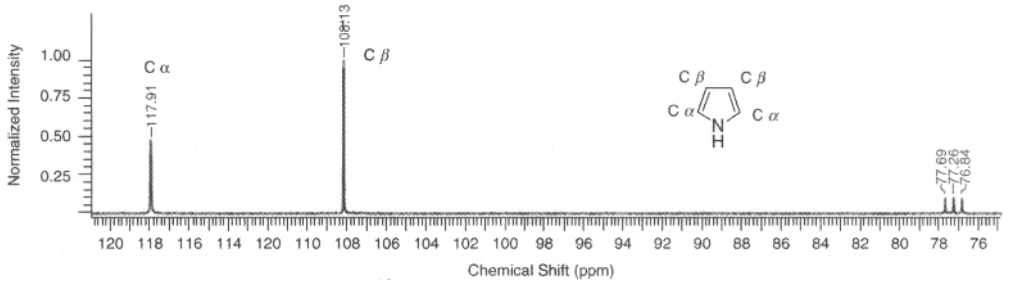


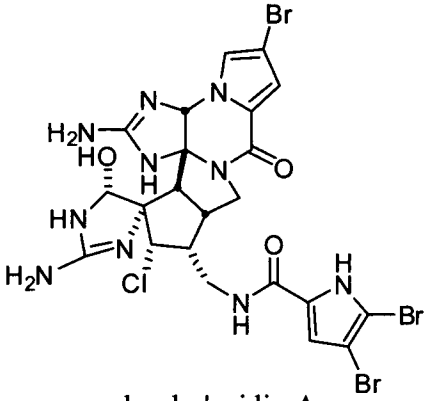

$^{1}$H-NMR of Pyrrole

For the $^{13}$C-NMR spectrum, Cα is further down field with a chemical shift of 117.9 ppm again thanks to the NH's group's inductive effect. Cβ has a chemical shift of 108.1 ppm.




$^{13}$C-NMR of Pyrrole

Pyrrole is possibly one of the most reactive heterocycles thanks to its lonepair electrons at the nitrogen atom. The enormous reactivity of pyrrole in electrophilic substitution reactions explains the occurrence of more than 100 naturally occurring halogenated pyrroles. Indeed, the pyrrole ring is widely distributed in nature. It occurs in both terrestrial and marine plants and animals. An illustration of the abundant complex natural pyrroles is konbu'acidin A, a sponge metabolite that inhibits cyclin-dependent kinase 4 (CDK4).




konbu'acidin A