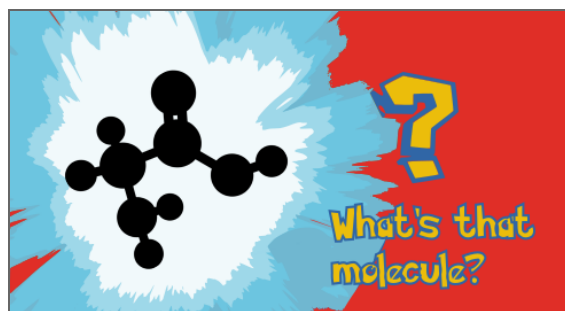


Figure 1 is a plot of Signal-to-Noise Ratio (SNR) versus Frequency (MHz) for the 1200 MHz ^1H NMR spectrum of 1,2,3,4-tetrahydro-1,5-benzoxazine. The x-axis ranges from 11000 to 12000 MHz, and the y-axis ranges from 0 to 200 SNR. The spectrum is divided into four main regions: isotopologues (11000-11200 MHz), conformers (11400-11600 MHz), excited states (11800-12000 MHz), and radicals (11900-12000 MHz). Key peaks are labeled with their corresponding chemical structures and names.

Region	Frequency (MHz)	Chemical Structure / Name
Isotopologues	~11000	benzonitrile
	~11010	benzonitrile (13C4)
	~11020	(Z)-pent-2,4-dienitrile (syn)
	~11030	(E)-pent-2,4-dienitrile (anti)
	~11040	Z-hex-4-enitrile
Conformers	~11200	benzonitrile
	~11210	(Z)-pent-2,4-dienitrile (syn)
	~11220	(E)-pent-2,4-dienitrile (anti)
	~11230	vinylene-2,4-diene-2,5-diol
	~11240	vinylene-2,4-diene-2,5-diol
Excited states	~11400	(Z)-pent-2,4-dienitrile (syn)
	~11410	(Z)-hex-4-enitrile (anti)
	~11420	(E)-pent-2,4-dienitrile (anti)
	~11430	(E)-pent-2,4-dienitrile (anti)
	~11440	(E)-pent-2,4-dienitrile (anti)
Radicals	~11600	ethynylbenzene
	~11610	benzonitrile
	~11620	3-hex-4-enitrile
	~11630	3-hex-4-enitrile
	~11640	3-hex-4-enitrile



Simple neural networks can identify aspects of the molecule from spectroscopic parameters