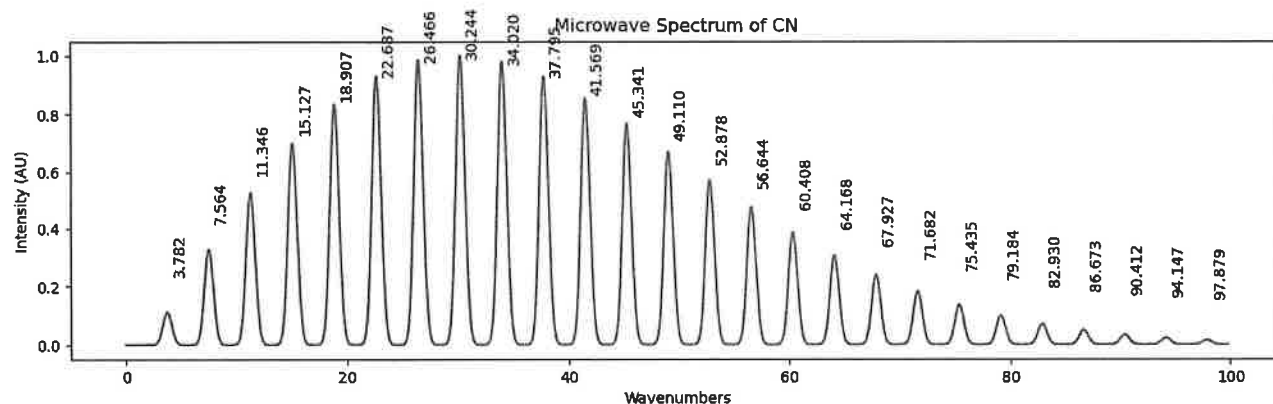


Quiz 11.2 – Rotational Spectroscopy

Name: Key

Below is a microwave spectrum of the CN radical



Using the spectrum, find the following quantities:

1. \tilde{B} 1.891 cm^{-1}
2. r (Bond length) 1.174 \AA
3. Temperature $\approx 300 \text{ K}$
4. \tilde{D}_J $6.49 \cdot 10^{-6} \text{ cm}^{-1}$

See the spreadsheet