

Things You Should Know

Chapter 5: Electronic Spectroscopy

Be able to define the following terms (using words, equation, or figures):

Fundamental Band	Hot band	Progression
Sequence band	Band origin	Null gap
P- Branch	R-branch	Band head
Combination differences	Franck-Condon Principle	

Concepts and Exercises:

1. Know the physical basis Franck-Condon principle for electronic transitions and be able to use it to predict the overall structure of an electronic band.
2. Be able to analyze a simple electronic spectrum of a diatomic molecule using combination differences.
3. Know the various processes described by a Jablonski diagram.
4. Be able to do all the exercises related to this chapter.