

### **Absorption spectroscopy pre-laboratory questions**

1. Why do we say that d-d transitions are "forbidden"?
2. Why are d-d absorption bands very broad?
3. Why do we say that f-f transitions are "forbidden"?
4. Why are f-f absorption bands extremely narrow?
5. Describe the absorption selection rule.
6. Why is a bad practice to use absorption data when the absorbance is greater than 2.0 in the range of interest?