

1. Define the following terms and abbreviations. |

- 1.1. Isoelectric Point**
- 1.2. FRET**
- 1.3. CD spectroscopy/ CD molecule**
- 1.4. Fluorescence Quantum Yield**
- 1.5. Intrinsic Fluorescence**
- 1.6. Chemiluminescence**
- 1.7. GFP or EGFP**
- 1.8. SPR**
- 1.9. FSC and SSC**
- 1.10. FACS**

2. Answer the following questions:

- Why is CD used for protein studies?
- Why is fluorescence potentially more sensitive than absorbance?
- What is fluorescence anisotropy?
- What information does FSC and SSC provide in flow cytometry?
- How is cell cycle analyzed by flow cytometry?
- How can BIAcore sensogram be to measure k_a k_b and K_D of non-covalent molecular interactions?
- Name six UV methods for protein analysis
- How is FRET a “spectrographic ruler”?
- What are the 5 forms of ELISA?
- Why is SDS and Tetramethylethylenediamine used in SDS PAGE?