Fundamentals of Spectroscopy for Optical Remote Sensing

Homework #1 Assignment (Introduction – Amazing Applications of Spectroscopy)

Reading Materials:

Chapter 0. Introduction (lecture notes posted on the class webpage) Textbook "Laser Spectroscopy" Vol. 1, Chapter 1 "Introduction" Textbook "Laser Spectroscopy" Vol. 2, Chapter 10 "Applications of Laser Spectroscopy"

Please read the above materials and then write a report to cover the following aspects:

- 1. Among the applications described in the first lecture and in Chapter 10 of the textbook, what is the most fascinating application to your opinion? Please introduce how it works and why it is most fascinating to you.
- 2. What aspects of the spectroscopy do you intend to use or will you potentially use in your own research? Please introduce your research field and how you may need spectroscopy.
- 3. From Chapter 10, how many concepts look unfamiliar to you and what concepts do you like to study through this class? Please list a few.

HW #1 is due in class on Tuesday, September 3, 2013.