**CHEM523 Protein Denaturation Question Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. For 5 points of extra credit complete the spreadsheet, create a graph of the fraction of protein unfolded at each Urea concentration and determine the concentration of urea at which 50% of the protein is unfolded, Cm.

|  |  |  |
| --- | --- | --- |
| Urea (M) | Ellipticity at 224 nm (millidegrees) | Fraction of Protein Unfolded |
| 0.62 | -362 |  |
| 0.94 | -364 |  |
| 1.25 | -365 |  |
| 1.56 | -369 |  |
| 1.87 | -368 |  |
| 2.40 | -360 |  |
| 2.60 | -355 |  |
| 2.80 | -344 |  |
| 3.20 | -325 |  |
| 3.50 | -310 |  |
| 3.65 | -301 |  |
| 3.90 | -282 |  |
| 4.10 | -256 |  |
| 4.37 | -227 |  |
| 4.53 | -203 |  |
| 4.68 | -177 |  |
| 4.83 | -150 |  |
| 5.00 | -133 |  |
| 5.15 | -115 |  |
| 5.31 | -101 |  |
| 5.50 | -90 |  |
| 5.80 | -80 |  |
| 6.20 | -70 |  |
| 6.50 | -62 |  |
| 6.87 | -55 |  |
| 7.01 | -53 |  |
| 7.49 | -50 |  |
| 7.96 | -53 |  |
| 8.42 | -49 |  |