Appendix 5: Rubric used by graduate TAs to evaluate quality of biological rationale, relevant PE imagery usage, and logical conclusions of discussion section in the final enzyme catalysis research papers.

Student name	Biological Rationale: Did student discuss *how* their treatment might affect AP structure such that its ability to bind substrate/ its reaction velocity were changed? If yes, how well was this done? **1** (poorly; barely mentioned it) **2** (o.k.; explained it somewhat but missing several key details) **3** (well; explanation is only missing a few details) **4** (excellently; clear, logical & complete explanation)	Did student present any Protein Explorer-type images in their paper? **(y/n)** If yes, were images used to support biological rationale/conclusions? (*i.e.*, demonstrated where/how AP structure is affected by their experimental treatment)? **(y/n)**	In "Discussion": Were the conclusions about AP activity based on links between results and the biological rationale from the Intro? **(y/n)** If yes, how well was this done? **1** (poorly; conclusions barely made a link between results & biological rationale) **2** (o.k.; link was made but missing several key details) **3** (well; link was made & is only missing a few minor details) **4** (excellently; link was thorough, appropriate and logical)
	(y/n) 1 2 3 4	(y/n) (y/n)	(y/n) 1 2 3 4