

To: ENRG 132 project teams  
From: John P. Watson, President, NovelEnzymes Inc.  
Date: November 18, 2019  
Re: Data Analysis



Your algorithm development has helped us gain insights into our testing protocols, equipment, and data analysis for our NextGen enzymes. For this milestone, you will refine your algorithms and help us determine an initial starting point for enzyme pricing. As our Q&HGL project moves toward its conclusion, it is important for you to understand our expectations for your submission of a final technical document. Here are the guidelines for what your final technical brief should include:

- A clear description in plain English (not code or pseudocode) of your algorithm for parameter identification. I understand that you have completed the project in MATLAB, but please write this description using platform-neutral language (our engineers may eventually code your procedure using another platform). Do not reference specific MATLAB commands or processes; instead write the description in a generic way.
- A concise description of your parameter identification results. Include a figure of your final Michaelis-Menten results, as well as a table of the maximum reaction velocities and Michaelis constants for each enzyme. Be sure that the table and figure are formatted professionally and suitable for communication of information to a technical audience.
- A 1-2 paragraph summary that answers the core questions we originally posed to you:
  - How can you characterize the error in this process? Please comment on the quality of the experiments themselves, and also on your parameter identification algorithm. Use evidence to support your case, including specific data from your analysis and outside references as appropriate.
  - What can NovelEnzymes honestly say about our products in terms of their performance, pricing, and manufacturing consistency?
- If you have used outside references, please list them at the end of the memo in reference format of your choice (APA or MLA, but use a consistent format throughout).

The technical brief **must not exceed 2 pages of text including references**, although figures or tables may go on to the third page. Under no circumstances are you allowed to exceed three total pages. You should compose your draft according to the guidance provided on the technical brief template provided by your instructor.

Your final technical brief will be submitted in two stages:

- You will submit a draft version (M4) before the start of Class 31. There will be an optional help session during Class 32 to get feedback on your draft.
- You will submit the final version (M5) of the technical brief by 5:00 pm on Friday, December 6.

Thank you as always, and we look forward to seeing your final technical brief.