

Final Presentations

ABE 201

Final Presentations (with Poster)

- In lab Monday 12/5/2016, DLRC 131
- Dress: Business casual
- Product: Samples are encouraged
- 3 Minute Presentation:
 - What is your product?
 - Why should someone buy it?
 - How does it compare to similar products on the market?
 - How did you arrive at the final product? What was the design process?

Final Presentations (with Poster)

- Everyone on the team is expected to participate in some way in the presentation
- Posters and poster boards (cork) will be provided.
- Setup starts at 2:30pm
- Evaluations start at 3:30pm
- See rubric for what is needed on the poster

Report Guide

ABE 201

Report Format

- **Beginning**
 - Title Page
 - Introduction
- **Middle**
 - What you did
 - Equipment/software used
 - Development of ideas
 - Development of software or problem solutions
 - Procedures used
 - Data to obtained
- **End**
 - Data analysis
 - Results obtained
 - Conclusions and recommendations for future work
- **References**
- **Appendix**
 - Sample calculations
 - Copies of computer programs
 - Extraneous data or tables

Style

- Written in Times New Roman 12 pt. font. All pages will be formatted to have 1" margins. The text should be left justified with a line spacing of 1.5.
- Use complete sentences formatted into paragraphs, organized into relevant sections.
- Bullet points are for presentations and memos, not for reports.

References and Citations

- If you make a claim, you should cite the source for your claim (data you collected in lab or a reference)
- References must be cited within the text.

“Liquid-liquid extraction is employed when a component of interest in a mixture can be removed by a component using a second liquid phase (Geankoplis, 2010).”

- All references cited in the text must be in reference section at end of report.

Geankoplis, C. (2010). *Transport Processes and Separation Process Principles*. Upper Saddle River, NJ: Prentice Hall, pg 776.

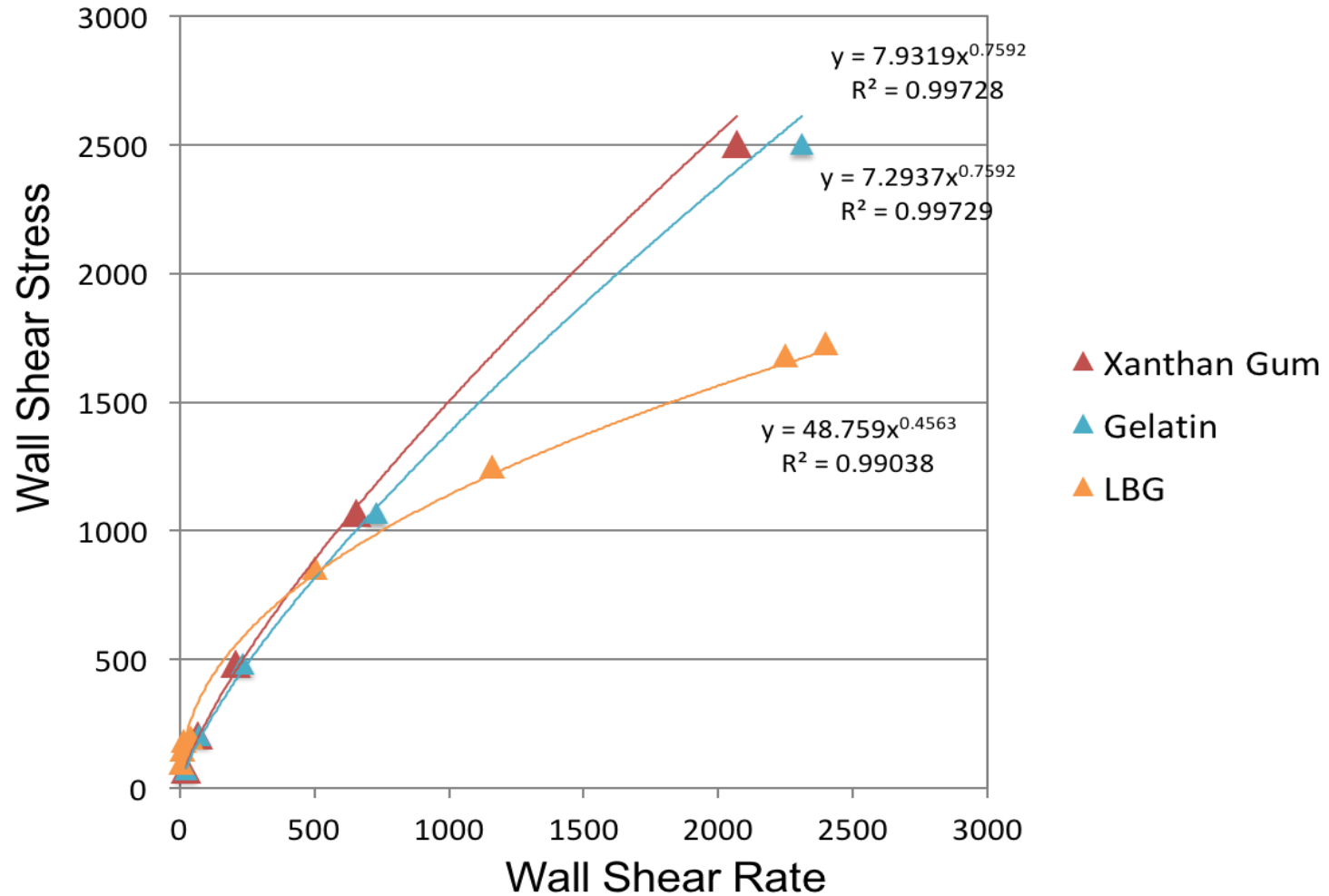
Ong, E. S., J. S. H. Cheong and D. Goh (2006). Pressurized hot water extraction of bioactive or marker compounds in botanicals and medicinal plant materials. *Journal of Chromatography A*, 1112(1-2): 92-102.

Visual Presentation of Data

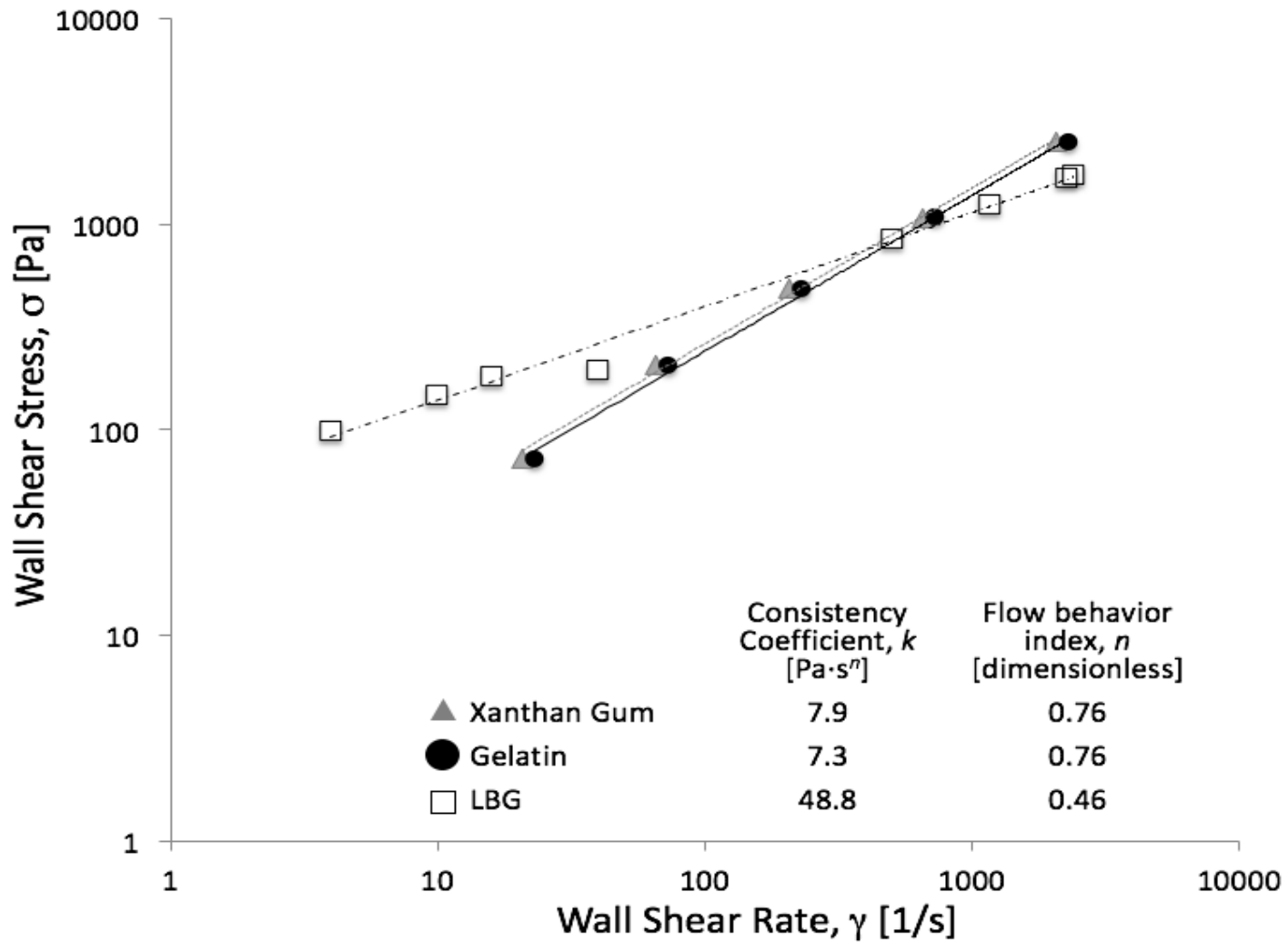
- Do not copy illustrations from any source, except food labels or competing product photos (add citation to figure title). You must make your own schematics.
 - Software suggestions to help construct schematics: MS Visio, MS Powerpoint, MS Paint, lucidchart.com, and digikey.com/schemeit
- Give the drawing a clear title and a figure number: **center the title below the drawing.**
- Label the parts for easy reference. Use arrows if necessary.
- Depending on the complexity of the drawing, assign numbers or letters to each part with an accompanying key or legend.
- Include dimensions when necessary.

Bad

Wall Shear Rate vs. Wall Shear Stress



Better



Edward Tufte

Maximize Data:Ink Ratio

1. Above all else show data.
2. Maximize the data:ink ratio.
3. Erase non-data-ink.
4. Erase redundant data-ink.
5. Revise and edit

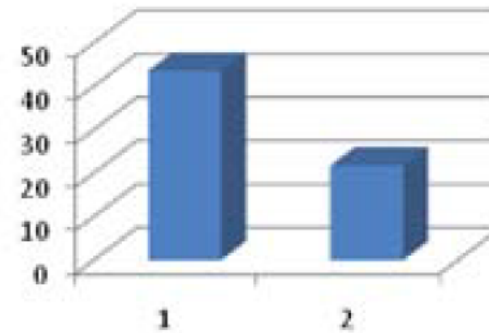
Related:

Increase the density of data (more data per cm²)

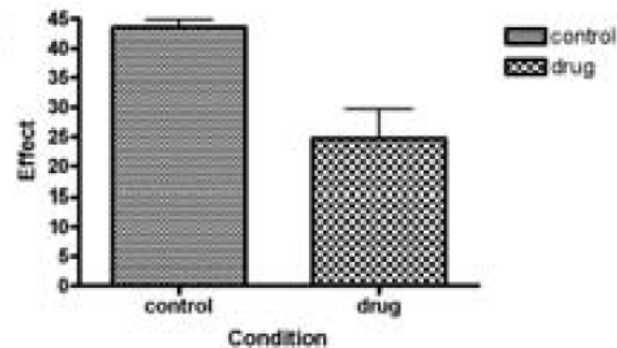
Eliminate “Chart-junk”

Applying Tufte Principles

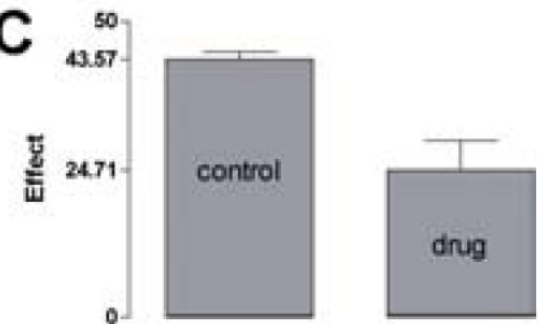
A



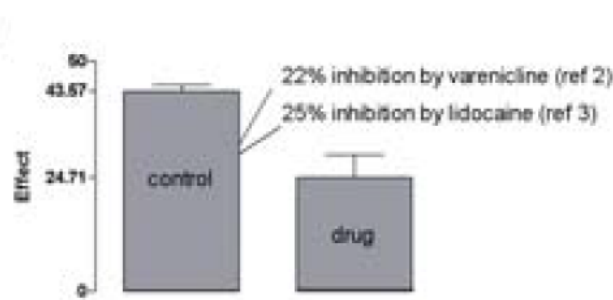
B



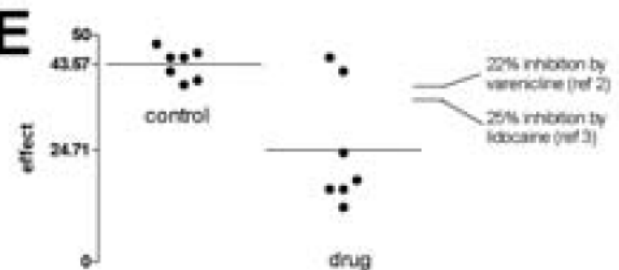
C



D



E



In Context (Figure Title Below)

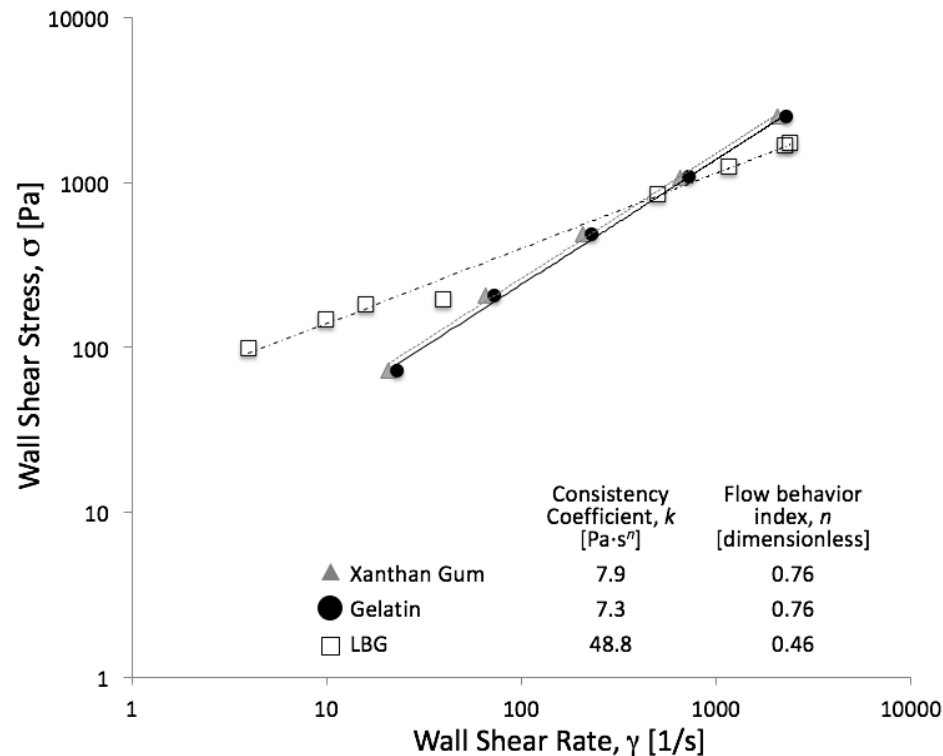


Figure 4: Behavior profile for xanthan gum (▲), gelatin (●) and locust bean gum (□) determined using a capillary flow viscometer at room temperature (22°C). The profile was plotted as a log-log plot to demonstrate the linear relationship between. Linear regression was performed to determine the fluid type; all regression lines had an R^2 value >0.98 . The three solutions all exhibited shear thinning behavior and was verified using the value of the flow behavior index, n , which was <1 in each case.

Tables (Title Above)

Table 1: Experimental results for K_{og} . The flow rate, Q , was the independent variable and ranged from 70 to 150 L/min.

Q	U	L	K_{og}
[L/min]	[m/s]	[L/min]	[mol NH₃/m²·s·atm]
70	2.42	0.80	0.78*
90	3.12	0.80	1.00
110	3.81	0.80	1.09
130	4.41	0.80	1.21
150	5.19	0.80	1.37

*A sample calculation to find this result is found in the sample calculation section of the appendix

Figures, Tables, and Equations

- Number figures, tables, and equations sequentially (separate numbering for each)
- If you include a figure, table, or equation it **must** be cited in the report narrative (paragraphs).
- The narrative should discuss the relevant aspects of the figure or table.

“As shown in Figure 4, locust bean gum (LBG), gelatin, and xanthan gum are shear thinning fluids. At low shear rates, LBG has the highest viscosity. However LBG has a significantly higher consistency than xanthan gum or gelatin, which exhibit similar rheological behaviors.”

Final Comments

- Follow rubric for general outline.
- If you need to cite information from another section, do so.

“As described above in sensory analysis section, we found that our product compared favorable to XYZ bites currently made by General Mills. Based upon this, we believe that taste is a strength for our product.”
- The report should be complete and stand alone: someone who was not in ABE 201 should be able to read and understand what you did.