

### CH301 Random Musings, October 28, 2008

1. I just say HSM3. My review: Awesome!!! \*\*\*Spoiler\*\*\*\*At bottom of musings. \*\*\*Spoiler\*\*\*\*
2. There will be a major exam in this class on Wednesday, November 5 from 7:30 till 9 pm. Details about exam format and procedure will be provided next Tuesday.
3. Here is a repeat of the question types on the exam, the chapter from which the material originates, and the worksheet where you can find similar questions.

number	chapter	Worksheet	Problem type
1	Chapter 3	Worksheet 6	Ranking bond polarity
2	Chapter 3	Worksheet 6	Assigning molecule polarity from VSEPR
3	Chapter 3	Worksheet 6	Assigning molecule polarity from VSEPR
4	Chapter 3	Worksheet 6	Bond angles from VSEPR
5	Chapter 3	Worksheet 6	VB theory of hybrid orbits
6	Chapter 3	Worksheet 6	Electronic geometry from VSEPR
7	Chapter 3	Worksheet 6	Molecular geometry from VSEPR
8	Chapter 3	Worksheet 8	Number of $\sigma$ and $\pi$ bonds in molecule
9	Chapter 3	Worksheet 8	AOs that comprise MOs in a bond
10	Chapter 3	Worksheet 8	MO theory
11	Chapter 3	Worksheet 8	Filling MOs of diatomic molecules
12	Chapter 3	Worksheet 8	Calculating bond order from MO
13	Chapter 3	Worksheet 8	Assigning paramagnetism from MO
14	Chapter 3	Worksheet 8	Ranking bond length from bond order
15	Chapter 3	Worksheet 9	Identifying delocalization (resonance)
16	Chapter 4	Worksheet 9	Ideal gas law history
17	Chapter 4	Worksheet 9	Gas law change of state calculation
18	Chapter 4	Worksheet 9	Calculating MW, M or $\rho$ from $PV=nRT$
19	Chapter 4	Worksheet 9	Reaction stoichiometry and $PV=nRT$
20	Chapter 4	Worksheet 9	Calculation of relative ratio of gas speeds
21	Chapter 4	Worksheet 9	Ranking non-ideality of gases
22	Chapter 4	Worksheet 9	Gas non-ideality theory
23	Chapter 5	Worksheet 10	IMF theory
24	Chapter 5	Worksheet 10	Assigning IMF to molecules
25	Chapter 5	Worksheet 10	Assigning IMF to molecules
26	Chapter 5	Worksheet 10	Defining physical properties
27	Chapter 5	Worksheet 10	Ranking physical properties by IMF
28	Chapter 5	Worksheet 10	Ranking physical properties by IMF
29	Chapter 5	Worksheet 10	Ranking physical properties by IMF
30	Chapter 5	Worksheet 10	Assigning type of solid to compounds

4. I will hold a review session for Exam 2 on Sunday evening from 7 till 8 pm in this class room and will cover the 30 question types below. Afterward Michael will hold a Q&A session on the material.

5. By late tonight all of the worksheets and answer keys for the upcoming exam will be posted. Details for the four worksheets are below:

- Worksheet 6 from the beginning of Chapter 3 was the subject of quiz 3—it covered 3-D drawing of covalent compounds using VSEPR and VB theory. Nine questions from the exam will come from this worksheet.
- Worksheet 8 covers MO theory from the end of Chapter 3 and contributes 6 questions to Exam 2.
- Worksheet 9 is on gases from Chapter 4 and contributes 7 questions to Exam 2.
- Worksheet 10 on IMF and liquids from Chapter 5 contributes 8 questions to Exam 2.

6. I will be provided a couple of practice exams:

- Tonight I will post a practice exam on the ChemPortal. It is likely harder than the exam next Wednesday and if you can do well with it, you will be fine with the exam.
- The TAs will prepare a practice exam 2 based on the 30 question types I provided—it will be posted this weekend.

I encourage you to take these practice exams under normal testing conditions only after you have learned a significant amount of the material so that you can more accurately test what you know.

7. Quiz 4 results are in. The average score was an 85, a bit higher than I might have liked because I had to throw out two questions that were incorrectly programmed. The questions tossed were the ranking bond energy question and the hydrogen fuel cell ideal gas law calculation. Corrections were made immediately and your Quest score should be correct.

8. This may sound like a broken record, but as we begin preparation for the exam 2, please do not give up if you are doing poorly. There are still 6 weeks until the final and if you can figure the course out by then, you can receive the grade you want. Those of you discouraged that your study habits have not yet yielded results need to keep after things. Please contact me and I will arrange for you to make an appointment so we can discuss ways to improve in time for the final.

9. Appropriate behavior in CH301. As a general rule in life, when folks start to feel a little comfortable around a place, they see how far they can push things—like putting their dirty shoes on your couch when they come over to visit. As you know doubt have noticed, in this class various misbehaviors are on the rise and as you could tell last Thursday, it makes me furious that some of you would show so little regard for me or your classmates. So listen up:

- Don't use my e-mail lists for your personal business
- If you are tardy, sneak in quietly and sit in the back.
- If you are tardy for a quiz, find your own scantron. We will not be providing them after the initial distribution.
- We have a limited number of calculators and pencils. When they are gone, they are gone, so don't show up expecting them to be provided.

10. Registration Information for Dr. Laude's CH301 Class in Spring 2009 Unique #52390

#### **FIGs**

If you are in a First-Year Interest Group, you will be able to register for the course through the FIG program during your normal registration time.

#### **ESP**

If you are in the Emerging Scholars Program, you will be registered automatically. Be sure to leave T/TH, 2-3:30 pm, open in your spring schedule.

#### **Juniors, Seniors and Graduate Students**

A sign-up sheet was made available in class.

**Sophomores**

Seats will be opened at exactly 4 pm (plus or minus a minute) on November 3 and November 4. You should be able to

register for the class at this time depending on the day you have access for registration.

**Freshmen**

Seats will be opened at 4 pm (plus or minus a minute) on November 5. You should be able to register for the class on

that day.

**A waiting list** will be started after registration is over. If you are not able to get into the class during normal registration, contact Judy Davis, [jkdavis@mail.utexas.edu](mailto:jkdavis@mail.utexas.edu). Students presently in Dr. Laude's CH301 class will be given priority on that list.

11. Public Service Announcements: Parent's Day: Most of you are freshmen and too naïve to realize you don't want your parents coming to visit on Parent's Day. So good news, Family Day is on November 1st and each of the Colleges puts on a nice event. In Natural Sciences we have an open house held from 9 am to noon on Saturday at the Texas Memorial Museum (the back of TMM is at the bottom of 24th and San Jacinto behind the mustang statue). There will be a brunch buffet, fun activities and the chance to meet faculty, look at some interesting research and program opportunities, and generally have your parent's snoop into your college life (at least the academic part of it.) As I mentioned, if you bring your parents and introduce them to me, I will act like you have gotten to know me really well and that I think the world of you as a student and human being.

## 12. Dave longs for simpler times.

Halloween used to be so simple. You put on a cheap plastic costume with a mask that made you smell your own breath, walked around your neighborhood for an hour on the 31<sup>st</sup> getting candy, went home and listened to the horror stories about the kid in Iowa who got a pin in his Milky Way bar or the one in Illinois with a razor blade in an apple, and then carefully ate your candy while wondering if you were going to die. And then around age ten, while trick or treating by pulling your shirt over your head to be the headless guy, some old lady tells you that you are too old to trick or treat and you slink home, what a loser. And Halloween was over.

These days it seems that Halloween goes on for a full week with all the safe parties at schools that seem more dangerous than actual trick or treating and your kids go home with massive amounts of plastic crap and bad candy you have to throw away overnight. And you have to decorate your yard with realistic severed limbs and freeze to death with 100,000 people on 6th street. I really don't get it the appeal.

By the way, I once gave a lecture dressed as a super sized Slurpee from 7-11. Surrounding yourself in cardboard and placing a giant red bean bag on your head does not make for the easiest of lecturing styles—but it got me Judy as an assistant—she wasn't sure she wanted to work for me until she read an article somewhere that mentioned my Slurpified lecture. These days, I dress in orange with a big belly so I look like a pumpkin.

Every Halloween for many years I have done a chemistry circus at Longhorn Halloween, with hundreds of people watching the demos I do in class. Here are some pictures from two years ago when I had a kid jump into a couple gallons of glue and red food coloring which wasn't exactly what I wanted to happen.



And then last year for the first time in the hundreds of chemistry circuses I have done over the last quarter century, I had a fireman shut my show down while I was exploding hydrogen balloons a couple feet above the heads of screaming four year olds. I guess on some level I can understand why he did it, but it was kind of sad. This year, things went a little smoother—lots of people in uniforms watching me intently, but I made it through unscathed.

Anyway, a Halloween poems for your reading pleasure. (Starting next week, as the days grow shorter and colder, and your work load skyrockets, I will start the first of five straight weeks of happy inspirational poetry to help get you through.

I have gone out a possessed witch,  
haunting the black air, braver at night;  
dreaming evil, I have done my hitch,  
over the plain houses, light by light:  
lonely thing, twelve-fingered, out of mind.  
A woman like that is not a woman, quite.  
I have been her kind.  
I have found the warm caves in the woods,  
Filled them with skillets, carvings, shelves,  
Closets, silks, innumerable goods;  
Fixed the suppers for the worms and the elves:  
Whining rearranging the disaligned.  
A woman like that is misunderstood.  
I have been her kind.  
I have ridden in your cart, driver.  
Waved my nude arms at the villages going by,  
Learning the last bright route, survivor  
Where your flames still bite my thigh  
And my ribs crack where your wheels wind.  
A woman like that is not ashamed to die.  
I have been her kind.

Anne Sexton

\*\*\*Spoiler\*\*\*\*The movie has a lot of dramatic tension and for awhile it was touch and go on whether Troy and Gabriella would stay together, but after Troy drove 1000 miles to climb a tree in a tux, it all worked out and now she's going to Stanford for an honors program and he's going to Berkeley to play basketball and be an actor. Oh, and Sharpay is going to U of A, so it's all good. \*\*\*Spoiler\*\*\*\*

