

CH302 Random Musings March 5, 2009

1. There is a Quiz 3 the Thursday before Spring Break. The question types for that quiz are:
 - identifying buffers (after neutralization)
 - simple buffer calculation
 - buffer neutralization calculation
 - titration calculation (at the equivalence point)
 - polyprotic acid equilibria
 - polyprotic acid calculation (amphiprotic case)
 - approximations in acid base calculations
 - setting up complex equilibria calculations (mass and charge balance)
2. The material on acids and bases comes to an end today. Be careful what you wish for—next week we start electrochemistry.
3. Materials to be posted. I have placed a slew of worksheets on the web to help you with acid/base chemistry preparation. Of particular interest:
 - Here is a good place to start in learning the basics of acid base calculations:
[Worksheet 5 from 2009: 20 questions that take you systemically through the process of working acid/base calculations](#)
 - A wonderful worksheet on polyprotic acid calculations:
[Worksheet 7 from 2008: Problems that teach you how to understand titrations of polyprotics acids](#)
 - A worksheet on how to do complex equilibria:
[Worksheet 8 from 2008: 20 questions that introduce you to complex equilibria](#)
 - Two worksheets that make Dr. Vandebout and me at least feel like we tried to interest you in learning to identify acids and bases when you see their names or structures:
[Worksheet 8 from 2008: 20 questions that introduce you to complex equilibria](#)

And

[Worksheet 8 from 2008: 20 questions that introduce you to complex equilibria](#)
- 4.. Material to be posted:
 - A practice quiz 3 will be posted in the ChemPortal on Saturday.
 - A practice quiz 3 will be posted by the TAs on Monday.
 - This weekend I will generate a Worksheet 6 for 2009 that will provide you with a collection of equilibrium problems that we expect you to be able to do by the time you take the second exam. This worksheet will not be for the faint of heart and should only be tackled when you finally “get it.” But do understand that these are the kinds of questions you will see on Exam 2.

I am not even going to bother posting electrochemistry material until after the break.

4. For those of you planning to study over spring break, I will have the 30 question types from exam 2 ready for you next Thursday.

5. I have promised that there will be three extra credit opportunities this semester that will permit you to lower the cut scores for grades by up to three percent (one percent for each extra credit submitted.) Here is the first one.

Extra Credit 1. To earn 1% of your course grade that you can add to your point totals for the semester, complete the assignment below and follow the specific instructions given. This EC can be used to calculate exemptions. Depending on your method of grading, 1% will be worth 7 points for exemption, 10 points for overall course grade or 3 points if the final counts for everything.

Procedure:

- Complete the assignment below.
- Write it up (probably 100 words or so, but write as much as you want to tell the story.
- Submit it to my e-mail address: dalaude@mail.utexas.edu
- IMPORTANT. You must title the extra credit: EC1s09 Spring Break
- (If you do not use this EXACT subject you will not be filtered into the file from which I assign extra credit.)
- Due Date: Friday, March 27 at 11:59 pm.. I am going to be strict about the deadline this semester. You will receive an e-mail reminder over the break and one in the musings afterward.

Extra Credit Assignment:

During spring break I want you to teach a science-hater something interesting about chemistry that you learned in this class. To get the points, the person you teach has to say to you, “gee, I had no idea chemistry was that interesting” when you have finished (you can make them say it even if they don’t mean it.). You can choose what you teach but it should be something of interest and utility that you have learned from your experiences with chemical and physical equilibria.

6. Public Service Announcements:

- Explore UT. This weekend is UT’s annual open house. Many hundreds of free activities, performances and demonstrations will allow visitors to unravel scientific mysteries, unleash creative energies and uncover the wealth of educational opportunity at the University. If by some chance you wake up on Saturday before nightfall, and wander across campus, you will find yourself in the middle of a million people exploring UT (hence the name.) Natural Sciences is well represented along Speedway in front of Welch and in CNS buildings For example, I will be offering chemistry circuses at noon and 1 pm in which the demos I do in class are offered up to the general public.
- Texas Lonestars is putting on a benefit concert this Thursday for their main philanthropy, Project Princess. Project Princess provides central Texas underprivileged women with the opportunity to experience the once-in-a-lifetime magic of their high school prom without having to worry about the financial obligations the event requires. The Project Princess Benefit Concert featuring Player One, Bri Bagwell, and Curtis Grimes—it is from 10pm-1am this Thursday (tonight) at Buffalo Billiards downtown. Anyone 18 and up can attend. Wristbands are \$10 and can be purchased from any Lonestar or at the door.

- I was supposed to mention that the SG elections were occurring and that you should go vote. But my musings didn't mesh well with the election cycle and so instead I just wanted to mention that one of our very own was elected as an SG representative for CNS. Congratulations to him and if he wants to stand up and make a speech, he can.
- iCare (International and Community Aide and Reach Effort) is a new UT student organization that volunteers in the Austin community and also try to speed awareness about global issues and fundraise for preventive measures. They will have organizational meetings on March 4 (BEN 1.04), March 25 (BEN 1.122) and April 8 (BEN 1.122) or join the Facebook Group iCARE for more information.

7. Poetry Corner. I promise that after this week, and for the rest of the semester, we will have silly, happy, positive poetry. But not this week--this week, more hate poetry. We start with a poem by a classmate of yours:

Everyone has Sins, the seven deadly,
 your sin is Envy.
 I am no different, for I have Sin too,
 my Wrath for you.
 Your perverse arguments couldn't take her.
 My absence didn't let you claim stake to her.
 Old friend, the scales were cast off from my eyes,
 You slimy serpent,
 giver of Sin,
 I despise.

You could have learned from Tantalus,
 take your Lust elsewhere.
 You could have learned from Dante,
 for you in Hell is a circle there.
 Not even pills in her drinks inebriated her to sway,
 But no proof, so we leave that garden, my Sin to stay.
 Old friend, the scales were cast off from my eyes,
 You slimy serpent,
 giver of Sin,
 I despise.

And of course, the master of hate poetry, Sylvia Plath, who let her husband, British Poet Laureate Ted Hughes, know just exactly how much she hated him by committing suicide.



The Rabbit Catcher

It was a place of force—
 The wind gagging my mouth with my own blown hair,
 Tearing off my voice, and the sea
 Blinding me with its lights, the lives of the dead
 Unreeling in it, spreading like oil.

I tasted the malignity of the gorse,
 Its black spikes,
 The extreme unction of its yellow candle-flowers.
 They had an efficiency, a great beauty,
 And were extravagant, like torture.

There was only one place to get to.
 Simmering, perfumed,
 The paths narrowed into the hollow.
 And the snares almost effaced themselves—
 Zeros, shutting on nothing,

Set close, like birth pangs.
 The absence of shrieks
 Made a hole in the hot day, a vacancy.
 The glassy light was a clear wall,
 The thickets quiet.

I felt a still busyness, an intent.
 I felt hands round a tea mug, dull, blunt,
 Ringing the white china.
 How they awaited him, those little deaths!
 They waited like sweethearts. They excited him.

And we, too, had a relationship—
 Tight wires between us,
 Pegs too deep to uproot, and a mind like a ring
 Sliding shut on some quick thing,
 The constriction killing me also.

