CH302 Random Musings—February 26, 2009

- 1 Final scores for Exam 1 and the make-up are in—they are 79% for the regular exam (with the ranking of molar solubility killed) and 73% for the make-up (with three questions, phase navigation, auto-protolysis and strong acid calculation killed.) These scores are now final. In general are was really pleased—scores for both exams were well above what I typically see. Keep up the good work as the next exam, without a doubt, is always the hardest one given in the entire CH301 and CH302 sequence.
- 2. I meet often with students who are concerned about their performance in this class. I encourage you that if you feel uncertain about being able to earn the grade you want, that you schedule an appointment with me by sending me an e-mail. I have attempted to respond to the hundreds of e-mails that have come my way, but if you haven't heard back by now, then something has gone awry (like filters, bad addresses, unread e-mails) and you should resend your requests to me. I do intend to spend the two weeks before spring break meeting individually with as many of you as I can so please contact me so I can route you to Judy.
- 4. 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 equilbria
 - polyprotic acid calculation (amphiprotic case)
 - approximations in acid base calculations
 - setting up complex equilbria calculations (mass and charge balance)

Note that you have been taught to work the first four questions and polyprotic acid and complex system questions will be addressed in next week's lectures.

- 5. I know I sound like I am beating a dead horse (is that really an expression?) but please be diligent in learning the foundation for working acid base problems. In the same way you have made converting ${}^{\circ}C$ to K and J to kJ second nature in working thermo problems, you have to make using K_w to convert between K_a and K_b or writing a neutralization reaction, or identifying a spectator ion, absolutely second nature. If the seven steps in performing an acid base calculation are not as effortless as breathing, you have no chance to do well on the next quiz or exam.
- 6. One last plea: If you look at the problems above and have a sinking feeling the material is getting a lot more involved, it is. I can't stress enough that there needs to be a lot more effort as a class if you are going to earn the grades you want. Frankly, the attendance I have seen at my office hours since the last test is pathetic—8 people were at my office hours yesterday. It was great for them, they can now work the hardest of acid base problems. The rest of you? Anyway, this lack of participation as a class translates poorer overall grades. This is the last time I mention this. You reap what you sow.

- 7. I will be handing out gift cards to the 117 of you who bought the ChemPortal this spring. Please come up after class today with ID in hand, go to the correct table by last name, and we will get this done as quickly as possible. If you don't pick up your card today you can stop by my office during business hours or pick it up next Tuesday after class.
- 8. A lot of work has gone into creating some very nice worksheets to teach you how to do acid base problems. The worksheets and answer keys are now posted. Here are the worksheets and what they can do for you:
 - Worksheet 5 from 2008: 20 questions related to simple acid base and solubility equilibrium calculations and the approximations that permit them
 - Worksheet 6 from 2008: 20 questions that introduce you to neutralization and buffers
 - Worksheet 6 addendum from 2008: 8 more questions that introduce you to neutralization and buffers
 - Worksheet 5 from 2009: A systematic approach to working acid base problems—21 step by step problems that give you an appreciation that no matter how hard these problems are, the thinking behind how to do them is the same.

More worksheets to follow this weekend on the lectures for next week.

- 8. There were three errors on Worksheet 5 that have been cleaned up. They were errors in the calculation of answers to number 8, 13 and 17. The correct key is now posted as a pdf on the web site. Please take the time to download the new version so you aren't pulling your hair out over these answers.
- 9. Public Service Announcements.

Baal Dan Charities is a charity organization that focuses on helping street children in India (and hopefully other places around the world) as efficiently as possible and on investing in ways to provide these children with an education. This year they are hosting a **March Madness Dodge-Baal Dan tournament** on Saturday, March 8 with **64 teams** from different organizations around campus. The cost is \$60 dollars a team, and each team should be composed of 6 people. There will be **FREE food and t-shirts for participants**, a \$330 in prize **money** for the winning team, and cash prizes for the final 3 teams! All of the money that is raised will go directly to the charity. For more information on registration, visit the website at www.baaldan.com/dodgeball.

10. Valentines Day poetry drags on—angry poetry by your peers—sadly you all only submitted nice poetry. So these are from past classes, but admit it, isn't this the better stuff? Anguish makes you feel so very alive!!!

Valentines Day

Personal sentiment, hand to hand held,
Kisses and hugs (because sensitive sells),
Roses and cards we will send,
Though it's all about sex in the end,
But if he gets what he wants all is well.
She wants to think that she knows what she needs,
Showered with words, wowed with gestures and deeds,
That smack of love unceasing;
Naught but unknowingly increasing
The stock value of chocolate companies.
It will end in decay, just like always, the same;
Like severed plant genitals—what's in a name?
Your love's a faux, an ideal
A trick, dance, war, dross, joy, plot, shell, a spiel,

We just want sex, don't make it a game.

There is a girl blabbing nothing outside my window What do I have to show
To a world that the only way to destroy
Is to die like a baby boy
I could be happy in infinity
Of the space of my eyelid
But I know I'm somewhere else
Where the words on this page
Are better than the scribbling nonsense they are
And it would be real,
And I eat my last meal
Wish that I could feel
But now I don't even know if I'm real

A dove is a glove
That I wear in my heart
And though I like to dress smart
It doesn't have any part of the world of fashion
And you're there to put me down
And I'm sick of the frowns that follow me around
I would like the sky but there's no reason why
Shed say to this world with the nose of a girl
Turned up so loud that IT SINGS STEALS THE CLOUDS
I've never been here and though you're physically near
You're pushing me away to decay like the days that I loved

From a girl's bathroom at Burdine Hall

By the time you swear you're his Shivering and Sighing And he vows his passion is Infinite -- Undying Lady make a note of this One of you is lying

Hollow

Don't look at me with those piercing eyes... You can pick and probe but you'll never hear my smothered cries. Don't look too deep--you'll waste yourself, for there's nothing to see but an empty shell. Don't stare too intently into the void. Like a black hole, the darkness you can't avoid. I can see you straining to find the sparkle in my eye. But it's been washed away so long ago and left here in the cold to dry. There's nothing in me now... No tears, nor fire; No fears, nor desire. I am hollow, but I am sane. I am jaded, but I am tame. So, don't bother trying to gaze into the depths of my soul,

for, there is nothing there but space--emptiness amidst the lull.
There is fog and mist
and everything is gray.
But, in the coldness
there's no emotion to give away.
You think that I
am flesh and bone
But, the truth is, I am
made of stone.
Can you not see
the nothingness inside of me?
Do you hear me complaining?

This hollowness is captivating... mesmerizing... vindicating! The cold has frozen my heart and this numbness brings me peace No sadness, no pain; my mind finally at ease... I may be hollow, but I am sane. I may be jaded, but I am tame. So, remember this when next you try to look into me with piercing eyes. All you will see is the emptiness that sets me free.