## Organic Paranoia

In a dark, dingy dorm room, Chemistry notes everywhere, Warm smell of a red bull, Rising up through the air, Been studying for three days now, Beneath a shimmering light, My head grows heavy and my sight grows dim, I want to stop for the night. Could it be 4 AM now? I hear the tower bells. And I was thinking to myself That epoxide chemistry's hell. I worked on stereochemistry, Then the "rules of the day," I heard voices down the corridor, Thought I heard them say:

Welcome to organic paranoia, Such a scary place, You see it on my face, Plenty of room for more organic paranoia, This time of year, You can find it here!

Roadmaps in my memory Hey this final isn't so bad No reason to panic Or even be sad. Relax says the proctor, You finished this with ease, Turn it in any time you like, Then you are free to leave, Last thing I remember, I was running for the door, I was glad it is over Won't need to study any more. And then new voices came calling from far away, A lot better than the middle of the night, I heard them say:

Welcome to organic chem. euphoria It has all become clear, I am outta here! I'm living it up because of organic chem. euphoria What a nice surprise I won't need alibis.



 $S_N 2$ 

## Shape of $S_N 2$

The club ain't the best place to find nucleophiles So the lab is where I go Me and my friends in solvent Moving fast but reacting slow Come over and start up a reaction with just me And trust me I'll give it a chance now Let's react, stop, put your charge over here And then we start to react, and now I'm singing like You know I want to make a bond Your charge was handmade for a reagent like me Come on now, follow my lead I'm an electrophile, don't mind me Say now let's not talk too much Get through solvent and put your electrons on me Come on now, follow my lead, Come, come on now, follow my lead

I'm attracted to the charge of you We push and pull like charges do Although my orbitals are falling too Come on let's get bonding Transition state is coming true Time to finish the  $S_N 2$ Creating a bond brand new Come on let's get bonding Oh-I-oh-I-oh-I Come on let's get bonding Oh-I-oh-I-oh-I Come on let's get bonding Oh-I-oh-I-oh-I Come on let's get bonding We need to make a bond brand new Come on now let's  $S_N 2$ .

## Vladimir Markovnikov

Alkenes are the very best, their reactions are insane Alcohols are no match, and neither are alkanes Electrophiles hit alkenes, without a lot of pain Use HBr and HCl to make haloalkanes

But then I get confused as to what we're going to see Which carbon gets which atom? Call it regiochemistry I hear there's a brilliant man who gave us clarity What's his name? What's his name? I have to find the key

Well the word got around, they said "this guys insane, man!" A Russian dude they say, lived way back in a far away land Got his education and didn't forget from whence he came, man The world's got to know his name. What's his name, man?

Vladimir Markovnikov His name is Vladimir Markovnikov And there's just one thing he did explain Which carbon gets, the halogen?

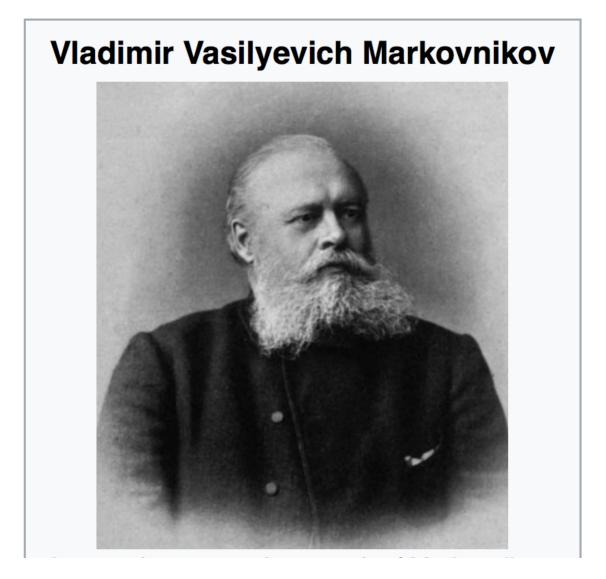
The key to understanding products of hydrohalogenation Is that a carbocation is formed by the HX protonation Stabilize the plus charge with overlapping orbitalization The official term of course, is hyperconjugation

The more stable cation forms of lower energy The halide ion comes in and reacts there naturally It's the one with more carbons, that's maybe two or three So X is on more substituted carbons don't you see

Vladimir Markovnikov His name is Vladimir Markovnikov And there's just one thing that he did explain Which carbon gets, the halogen?

So don't be throwing away his rule Don't be throwing away his rule Hey yo, its not that convoluted Halogen on the carbon that's more substituted So don't be throwing away his rule

Vladimir Markovnikov His name is Vladimir Markovnikov And there's just one thing he did explain Which carbon gets, the halogen. So don't be throwing away his rule Don't be throwing away his rule Hey yo, its not that convoluted Halogen on the carbon that's more substituted So don't be throwing away his rule



## We All Love Organic Chemistry

In the town where I was born, Lived a man of chemistry. And he told us of his life In the organic laboratory.

Making molecules to fight disease Coming up with their syntheses. So we sit in OChem 1 Learning organic chemistry.

Refrain: We all love organic chemistry Synthetic chemistry Molecules with "C" We all love organic chemistry Synthetic chemistry Molecules with "C"

All our friends think we're a bore Our grade point averages begin with 4. But we await graduation day To work in lab for meager pay.

But its OK, who else can say They're curing cancer or fighting AIDS. We hope that you in OChem 1 Respect organic chemistry

Refrain: We all love organic chemistry Synthetic chemistry Molecules with "C" We all love organic chemistry Synthetic chemistry Molecules with "C"