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

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!"

From the 1800's, a Russian dude they say, man.

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

The key to understanding products of acid halogenation 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 My name is Vladimir Markovnikov And there's just one thing that I did explain Which carbon gets, the halogen?

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

Vladimir Markovnikov My name is Vladimir Markovnikov And there's just one thing I did explain Which carbon gets, the halogen.

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

Vladimir Vasilyevich Markovnikov



Oh Lord, Make Me A Doctor With A Mercedes-Benz

Oh Lord, make me a doctor with a Mercedes-Benz My friends are all prelaw, I must make amends. Worked hard in organic, never thought it would end. So Lord, make me a doctor, with a Mercedes-Benz.

Oh Lord, won't you give me an "A" on the test, I have to show med-schools that I am the best. Tried hard all semester, the TA says I'm a pest, So Lord, won't you give me an "A" on the test.

Oh Lord, won't you give me a high MCAT score. My friends all got 520's, I have to get more. I went to Kaplan, oh man what a bore, So Lord, won't you give me a high MCAT score.

Oh Lord, won't you get me into Johns Hopkins U. Baylor would be nice, I'd like an interview O.K. let's be serious, A&M will do. So Lord, won't you get me into TAMU.

Oh Lord, make me a doctor with a Mercedes-Benz My friends are all prelaw, I must make amends. Worked hard in organic, never thought it would end. So Lord, make me a doctor, with a Mercedes-Benz.



Br +

?

 $S_N 2$

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 $S_N 2$.

"<u>Don't Stop, Believin'</u>

Just a Houston girl, Living in a Longhorn world. She took the premed train Straight to OChem 1

Just a Plano boy, Born and raised in full burnt orange, He took the premed train Straight to OChem 1

They study in a smoky room, Smell of vapes and Mountain Dew For an A they study all night It goes on and on and on and on

Alkanes to alkynes Up and down the I-35 Two students studying in the night Roadmaps, reactions Living just to pass the final Will they ever get it right

Working hard to get my grade Everybody wants an "A" Trying anything to ace this class Just one more exam Some will win, some will lose I don't want to sing the blues OChem never seems to end It goes on and on and on and on

Alkanes to alkynes Up and down the I-35 Two students studying in the night Roadmaps, reactions Living just to pass the final Will they ever get it right

Don't stop believin' Hold on to that "A" feelin' Roadmaps, reactions Ohohohohoh

Don't stop believin' Hold on Roadmaps, reactions Ohohohohoh

Don't stop believin' Hold on to that "A" feelin' Roadmaps, reactions Ohohohohoh

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 320N 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 320N Respect organic chemistry

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