# Chemistry and What It's All About

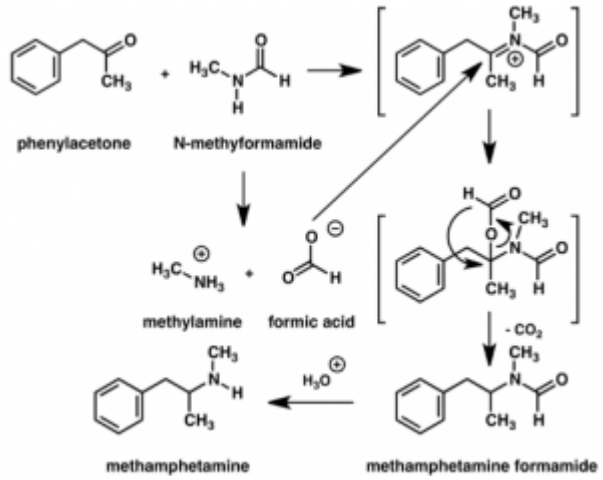
Explosions. Explosions everywhere. The accepted life of a chemist by society—or at least by most.

The rest believe chemists make drugs—lots and lots of drugs.

After being educated with actual chemistry classes, I have found that some aspects of these two theories are true, and some are false.

In Organic Chemistry (Chemistry 251), nearly all types of hydrocarbons (carbon atoms bonded to hydrogen atoms in long chains) react with oxygen to produce tremendous amounts of heat and light. These are the combustion reactions that so many uneducated people believe chemistry resides around. Yes, these molecules fuel your sport cars and minivans; however,

they are not all that chemistry involves.




Drugs. As a chemistry fanatic, I love the television series “Breaking Bad.” Walter White makes large quantities of one drug—methamphetamine. As you may guess, this is not what organic chemists do in lab everyday; however, drug making is a step in the right direction of what organic chemistry is all about.

Have a headache? Feeling sick? Take a drug! Meth may not be the best option here as you might infer; another more common option is acetaminophen—Tylenol—or ibuprofen. I synthesized ibuprofen in  Organic Chemistry Lab last week after utilizing large amounts of reagents, compounds, and techniques.

A tool that I utilized is called a RotoVap. For a couple thousand dollars, even you can use this tool to evaporate solvents.

In Chemistry 150 I learned that as pressure decreases, boiling points decrease. This is very useful to organic chemists because we can utilize this to separate aqueous compounds that have different boiling points. The RotoVap decreases the pressure and forces the compound with the lower boiling point to boil away, leaving the product that we search for behind.

With the ibuprofen—or any drug—remaining in the beaker, organic chemists help people with pains and aches that they might experience everyday.

Although explosions and drug synthesis do not depict all that organic chemistry is about, some aspects are true. The next time you take a pill, think of how organic chemistry might have influenced the creation and design of that specific medication.