From: Shawn Douglas shawn.douglas@gmail.com &

Subject: Re: gel buffer dyes - keynote file Date: February 15, 2018 at 11:56 AM To: Chaim Gingold cg@levitylab.com

Refreshing my chemistry knowledge here... The chemical diagrams are called Lewis Structures: <a href="https://en.wikipedia.org/wiki/Lewis\_structure">https://en.wikipedia.org/wiki/Lewis\_structure</a>

As for the colors, you might like to check out these pages:

https://en.wikipedia.org/wiki/CPK\_coloring https://en.wikipedia.org/wiki/Color\_of\_chemicals

I used this nice npm module to generate the SVG icons: <a href="https://www.npmjs.com/package/sdftosvg">https://www.npmjs.com/package/sdftosvg</a>

I saved all the commands and it would only take me a few minutes to regenerate everything with a custom color mapping.

If we think these look good to move forward, I'll just use our color palette to do these over when I have a moment.

Shawn

On Thu, Feb 15, 2018 at 11:41 AM, Shawn Douglas <<u>shawn.douglas@gmail.com</u>> wrote: One other thing I forgot to mention:

The "0.5x" and "1x" prefixes for the buffer names follow a convention for describing buffer concentrations. It's always in the form [float]x or [float]X, e.g. 10x, 10000x. We shouldn't change "0.5x TBE" to "TBE 1/2" since people won't know what it means.

I think we should also just drop the "TBE 1x" condition and use only 0.5x TBE and 1x TAE as our presets. I don't want to worry about trying to simulate the subtle differences between varying concentrations. But the difference between TBE and TAE is dramatic and should be easy to show.

On Thu, Feb 15, 2018 at 11:34 AM, Shawn Douglas <<u>shawn.douglas@gmail.com</u>> wrote:

I noticed we can rotate and/or flip xylene cyanol to make the structural similarities more obvious with the other dyes:

