

Chemists set up web site to crowd source chemical reaction validation

January 23 2013, by Bob Yirka

(Phys.org)—A group of chemists, some willing to give their real names, some not, have set up a web site called [Blog Syn](#), for the purpose of inviting chemists to recreate the chemical reactions as presented in professional journals such as the *Journal of the American Chemical Society*. The aim is to improve writing accuracy, the team says, not vilify those that report their findings in a public forum.

One of the most [fundamental concepts](#) in the [chemical sciences](#) is the idea of reproducibility. If one team of researchers follows certain steps to create a new type of reaction or product, others must be able to do the same, otherwise, it's as if it never happened in the first place. In some respects, it's similar to a regular household cookbook. It's only useful if anyone can recreate the dishes in it in the same way as was done by the original cook. The problem in the chemical world is that the descriptions given in journals are sometimes not clear enough – leaving those trying to follow along scratching their heads.

To help clear things up, a blogger known as See Arr Oh and his or her pals, Matt Katcher, Organometallica and BRSM have created a web site whose purpose is to offer a platform for chemists attempting to recreate reactions from experiments gleaned from published journals. It all started, they say, when a paper published in 2009 had to be updated when others began blogging about their lack of success in replicating the results of a well known reaction.

There are other sites already in existence that serve roughly the same

purpose, e.g. Organic Syntheses, SyntheticPages, etc., Oh acknowledges, but they are a platform for chemists to update their own work. With Blog Syn, it's all about chemists not involved in the original research attempting to replicate the results using only published information. The format for the new site is quite simple – an experiment is chosen and then chemists log in and post their results in trying to replicate the original claims.

Thus far, the site has reviewed and tried to replicate just one reaction – an iron / sulfur catalysis which was successfully recreated by three of the chemists, though all three found the yields to be lower than was reported by the [chemists](#) in the published work (JACS). The team hopes their efforts will entice others to join in and in so doing nudge those that publish in professional journals to improve their descriptions.

© 2013 Phys.org

Citation: Chemists set up web site to crowd source chemical reaction validation (2013, January 23) retrieved 26 April 2024 from <https://phys.org/news/2013-01-chemists-web-site-crowd-source.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--