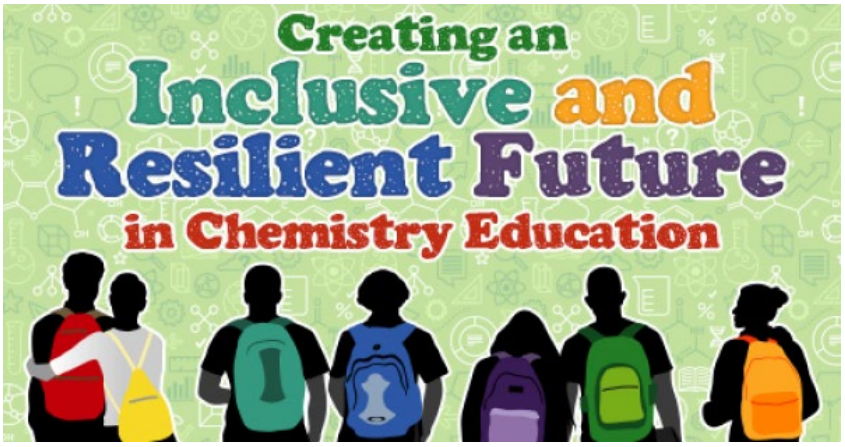
OrganicERs Newsletter Vol. 8 No. 1

Organic Education Resources

A *cCWCS* Community of Scholars



Leyte Winfield

Minoritized individuals are leaving the chemistry enterprise and other STEM pathways at rates that will disrupt workforce stability. The Journal of Chemical Education will publish a special issue (see *Journal of Chemical Education* Call for Papers: Special Issue on Diversity, Equity, Inclusion, and Respect in Chemistry Education Research and Practice by clicking here) to highlight effective strategies for investigating and preventing this exodus in order to create a resilient STEM workforce in the US and abroad. (read more)

Cathy Welder

I'm a part of the team that will lead a remote workshop this summer for Organic Chemistry instructors. Enrollment in this no-cost workshop will be limited to 30 participants to promote collaborative activities and community building for a diverse group of faculty. Experienced members of the OrganicERs Leadership Board will introduce and facilitate implementation of evidence-based instructional methods. I encourage you to apply. (read more) You can find the application form here.

Chemists amid Coronavirus

Justin Houseknect

Justin's efforts to conduct classes with active learning and specifications grading during the pandemic were highlighted in the Royal Society of Chemistry's publication Chemistry World. In it he describes how both pedagogies were just as effective with remote classes as those that were face to face. Specifications grading did become much more labor intensive during remote learning. In the subsequent semester when his university used the Hyflex approach, collaborative learning became more difficult to manage. Further details about the spring 2020 classes can be found in his recent Journal of Chemical Education article.

The Shrewd Guess: Can a Software System Assist Students in a Hypothesis-Driven Learning for Organic Chemistry?

Julia Winter

In a recent article in the Journal of Chemical Education, Julia Winter et al. have reported initial results indicating that Alchemie's Mechanism App (the App) can assist a hypothesis driven approach to learning organic reaction mechanisms for students. Many organic faculty would agree that learning reaction mechanisms with arrow pushing is one of the most difficult tasks for students taking organic chemistry. It is often difficult or impractical to give students timely feedback as they practice writing mechanisms. The App allows students to explore mechanisms with real time feedback. (read more)

YouTube Links to Lab Videos Filmed For COVID-19 Remote Teaching

Allison Dick

Perhaps your lab classes are completely remote, or you have students that must quarantine for two weeks. In our Member Spotlight, Allison has provided experiments for remote teaching that you may find useful for both semesters of the lab sequence.

Insights Gained While Teaching Chemistry in the Time of COVID-19

Often the OrganicERs newsletters have a section listing book and article recommendations from board members based on their recent reading. These days we've been reading a lot, as we adapt and try to cope with changes to our classrooms due to COVID. The Journal of Chemical Education recently published a special issue (over 1000 pages) entitled "Insights Gained While Teaching Chemistry in the Time of COVID-19." We have assembled a linked list of the articles focused on organic chemistry or written by members of the OrganicERs community. If you notice a missing article that you think belongs in this collection, please bring it to the attention of Jennifer Muzyka by sending an email to jennifer.muzyka@centre.edu.

OrganicERs Facebook Group Discussions

This is just a reminder that all discussions between OrganicERs members occurs on Facebook and not the forum at the OrganicERs website. During the pandemic, members have been sharing their efforts to teach both lecture and lab in different modalities.

Board Members' Picks

Some publications, presentations, and events that caught our interest.

From Cathy Welder

Some other Facebook groups

STEM faculty blundering through remote teaching in a pandemic

Figuring it out together... but six feet apart. This group is meant for those of us that generally like to teach traditionally (e.g., by blackboard), but are now scrambling to learn the tools we have ignored until now. Feel free to share your approaches (and the things that didn't work!).

Strategies for teaching chemistry online

From Jennifer Muzyka

Resources for Teaching Your Chemistry Class Online

In support of the dedicated educators who are meeting the challenge of keeping their students' chemistry education going, while schools are closed to slow the spread of the novel coronavirus (2019–nCoV), ACS Publications and the ACS Division of Chemical Education are sharing this collection of resources, including free to read articles from the *Journal of Chemical Education*.

Over the past several years, articles about distance learning of chemistry and teaching and learning chemistry online have appeared occasionally in the *Journal of Chemical Education*. This Virtual Issue includes many of these articles, along with a few additional resources, to provide guidance to chemistry instructors who are now finding themselves learning on the job an instructional format that is new, probably less-than-ideal, and presenting new challenges on a regular basis.