

## Connecting Climate Change Science and Chemistry

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### Leaders:

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### Focus Area:

Applications of chemical principles using the phenomenon of climate change as the basis of instruction. The Visualizing the Chemistry of Climate Change (VC3) group is developing such materials. The Climate, Adaptation, Mitigation e-Learning (CAMEL) group has collected a wide range of education resources, many of which can be connected with the interactive modules created by the VC3 group.

### Ultimate Goal:

Using climate science principles as a rich context to teach concepts in introductory chemistry courses, providing broad dissemination of these principles, while helping students see the important and relevance of concepts in chemistry.

### Expected Outcomes of PI Forum:

- 1) Enrich a series of lessons and interactive resources that connect chemistry and climate change.
- 2) The establishment of a community of chemists who can create and use climate change principles in their teaching of chemistry.
- 3) Strength connections between this community and the broader chemistry education community so that these resources can be used broadly.
- 4) Develop synergy between VC3 project and related chemical education curricula, such as the units developed for the International Year of Chemistry.
- 5) Connect the VC3 project with the CLEAN project.

### Meeting Schedule and Topics

Mtg	Date	Time (EDT)	Topic
1	7/3	1-2:30 PM	Develop the method for complementing the 3 existing VC3 units with CAMEL resources and developing 2 new units, including energy.
2	TBD	TBD	Systematically work through the 3 existing VC3 units on Gasses, Isotopes, Acids and Bases
3	TBD	TBD	Continue work of session 3
4	TBD	TBD	Plan how to integrate the two new VC3 units with CAMEL resources
5	TBD	TBD	Develop a long-term plan for unit use, including ongoing assessment, in consultation with those who have piloted the existing units.
6	TBD	TBD	A session to which a broader range of chemical educators are invited.

### Desired Participant Characteristics:

Members of both teams with the addition of additional chemical educators who wish to use climate change as a means for teaching general chemistry topics. Participants would be expected to have experience in teaching general chemistry.

### Application process:

Requests for participation can be sent to Andy Jorgensen, [andy.jorgensen@utoledo.edu](mailto:andy.jorgensen@utoledo.edu) and include a statement about experience in the topic area and interest for future work.