

Communicating Climate Science: A Historic Look to the Future

**AGU Chapman Conference on Communicating Climate Science;
Granby, Colorado, 8–13 June 2013**

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The June 2013 Chapman Conference brought together a diverse group of researchers, educators, and media for 5 days in Colorado to explore how to better communicate climate science. Multidisciplinary thinking was a key theme of the meeting. Participant expertise included urban planning, science, psychology, philosophy, history, film and documentary production, communications, journalism, public relations, and business. All helped to create a stimulating and inspirational atmosphere. The meeting program accommodated almost 100 submitted abstracts.

Richard Alley's keynote, "The State of the Climate System," helped identify the current state of climate communication and set the direction of the conference with the question, "If you're looking for new science, are you sure you're at the right meeting?" Participants agreed that the majority of the population understands the issues associated with climate change sufficiently to support the need for action now. Those in attendance also agreed that climate communication and education need a more concerted, multidisciplinary approach.

A number of oral sessions followed, beginning with presentations and discussions of the history of climate science communication. These discussions helped provide an understanding of past climate communications efforts and created a foundation for deliberations on moving forward. A series of individual perspectives on communicating climate science followed, including presentations from colleagues in the social and information sciences and psychology and a review of the battles on the frontlines of the climate science debate.

The first afternoon session discussions provided a review of the "bleeding edge topics in climate science." These included the state of the climate system, nuclear winter risks, Arctic permafrost and carbon feedbacks, climate and water, geoengineering, and the historical role of nuclear energy, as well as a sobering review of humanity and the global carbon system. The evenings featured discussions on 37 poster presentations.

The next several days combined presentations on improving climate communication with dedicated questions and group discussions. Specific sessions addressed better ways

to share climate change research with the public, in classrooms at a variety of education levels, and with policy makers. Overall, the meeting format facilitated discussion—almost 10 hours were allocated for questions and small-group meetings that produced short reports encompassing ideas, proposals, and plans to better share climate change knowledge with society.

There was general consensus among conference participants on the significant risks associated with climate change. Discussions sometimes centered on the poor state of climate change preparedness around the globe, but more often conference attendees expressed optimism that there is so much the greater community can do to improve the situation. The Six Americas Report (A. Leiserowitc et al., <http://environment.yale.edu/climate-communication/files/Six-Americas-September-2012.pdf>) was acknowledged as a sound definition of American public opinion on climate change. Seventy percent of citizens say the United States should reduce greenhouse gas emissions, regardless of what other nations do. Similar work found that 6 in 10 Canadians believe climate change is real and caused by human activity (Environics Institute, <http://bit.ly/FocusCanada2013>). The majority of U.S. citizens support decreasing fossil fuel use and increasing the use of renewable energy. Overall, people support action on climate change. Delegates agreed that collective efforts should focus on providing clear communications on effective mitigation and adaptation strategies, capacity, and technology.

Most presentations were webcast for the public, and viewers were invited to participate through questions and discussion points. The videos are recorded and available for viewing at <http://www.youtube.com/user/AGUvideos> under "Chapman Conference—climate science" and at <http://climatesolutionscenter.com>. Session conveners took a number of questions from online participants in different locales. The meeting featured a lively Twitter discussion that engaged the delegates and many remote participants from around the world.

The meeting reports will be featured at <http://climatesolutionscenter.com> in June 2014. The website will be evolving with short submissions from conference participants, links to the accompanying webcast videos, a summary of the short reports that came out

of the delegate discussion sessions, and a discussion link that allows users to submit questions to conference presenters.

Participants recommended the creation of a broadly based, multidisciplinary climate communications portal. The goal is to coordinate international sharing of high-quality, possibly refereed, climate change communication and education materials. For example, the Intergovernmental Panel on Climate Change (IPCC) shares research through working group reports that summarize the best science.

Another outcome of the meeting was broad support for collaboration on communicating all aspects of climate science, mitigation, and adaptation. Many delegates see AGU as a leading partner in this area. Delegates agreed that society needs good information on the science of climate change, but equally important, society needs to hear from many voices and disciplines on the impacts, mitigation, adaptation, resource allocation, and policies in order to generate widespread support for combating the problem.

The AGU Chapman Conference on Communicating Climate Science united a broad mix of disciplines collaborating on climate change solutions. Delegates agreed on the need to expand efforts to address the growing challenges that must be faced as global climate change accelerates.

The organizers extend thanks for financial support to Nature Climate Change, the Robert Riecker Fund, the AGU Atmospheric Science section, and the AGU Global Environmental Change focus group. Our efforts would never have succeeded without the stellar support, kindness, and hard work of the staff at AGU headquarters. Many thanks as well to the AGU staff who offered a series of communication seminars.

Our meeting began by honoring the contributions of two people: the late Stephen H. Schneider, whose work inspired us to hold the conference, and Martin I. Hoffert, our much appreciated senior colleague, who could not participate as a keynote speaker due to an injury. Our path forward lies in a paraphrase of one of Steve's favorite songs: Teach your children, and your parents, well.

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Editor's Note: Natasha Andronova passed away on 1 June.