

PRESS RELEASE

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Climate Engineering: Recent findings and open questions

Scientific symposium in Berlin shows current state and possibilities of CE research

03 July 2015/Berlin. Climate change is progressing. On the international climate change policy scene propositions to counter climate change with large-scale measures, so-called Climate Engineering, are now being discussed. But could these measures help us to advance? What impacts are hoped for and feared? From the 7th to the 10th of July scientists from 15 countries and different disciplines will exchange research results at the “Climate Engineering Research Symposium 2015“ (#CERSYM15) in Berlin. At the same time the organizers are inviting interested citizens to a public science show on Climate Engineering on Thursday, July 9th.

The preparations for the 21st climate conference of the United Nations, which will take place in Paris in December this year, are in full swing. But while on a political level the negotiations are focusing on potential protective measures for the climate, threshold levels and burden sharing, climate change continues to progress. In spite of many opposing efforts, concentrations of carbon dioxide in the atmosphere have increased rapidly in recent years. Against this background ideas on large-scale measures, so-called “Climate Engineering”, are proposed time and again. The aim of these measures is to manipulate the climate system in order to limit climate change. However, many of these measures have inherent uncertainties in regard to their efficiency and their side-effects. In order to exchange their views on the latest research findings scientists from 15 countries will meet for the “Climate Engineering Research Symposium 2015“ (#CERSYM15) in Berlin from the 7th to the 10th of July.

Summarized under the term ‘Climate Engineering’ are numerous methods, for example, the fertilization of the ocean in order to stimulate plankton growth, since plant plankton absorbs carbon dioxide by means of photosynthesis. Others propose spraying aerosols into the atmosphere or into cloud formations in order to block solar radiation. Large-scale afforestation is also included under the umbrella term. “However, all these propositions would interfere at least regionally if not globally in the eco, weather and climate systems as a consequence. This involves risks”, says Professor Andreas Oschlies from the GEOMAR Helmholtz Centre for Ocean Research Kiel. He coordinates the priority program “Climate Engineering - Risks, Challenges, Opportunities?”, created by the German Research Foundation (DFG) three years ago. “The aim of the interdisciplinary project is not to develop Climate Engineering techniques but to evaluate in a neutral and transparent manner how efficient the ideas, which have been discussed on many levels internationally, are and what side

effects they might have”, says Professor Oschlies. The final objective is to provide a profound basis of information, which enables broad societal discussion about Climate Engineering. In total 16 universities and research institutes in Germany, Austria and France are involved in the project.

The aim of the symposium in Berlin, organized by the DFG priority program, is, therefore, not only to enable an international exchange on the current state of knowledge. The participants also want to identify open questions, which still remain to be answered in the future. “Among these are ethical, legal and social science oriented questions. In the end, we need to clarify who under which conditions would be allowed to do Climate Engineering and how decisions about this could be reached in a responsible way”, underlines Professor Oschlies. Additionally, he said that it is important to communicate the scientific results to the general public: “Otherwise a broad discussion is not possible”.

During the symposium people who are interested will already be able to participate in the debate. On the homepage of the symposium a blog will keep people informed about the topics and content of the symposium. On Thursday, July 9th at 19:00 pm the organizers are inviting everyone to the open evening event “Pointing Science – Views Onto a Man-Made Climate“ in the Berlin-Brandenburg Academy of Sciences and Humanities, Markgrafenstraße 37, 10117 Berlin. Experts, laypeople and the audience will have equal chances to speak during the interactive show. Professor Oschlies and Prof. Alexander Proelß, expert on International law at the University of Trier, will take part in the show as experts. The audience will be able to express their views or ask questions via microphone, sms or twitter and they will decide by voting via laser pointer which thematic course the show will follow. There is no entrance fee and registration is not necessary.

“Dialogue with the public is especially important to us. On the one hand, we need reliable scientific data on Climate Engineering measures. But climate change and the respective suggested solutions could affect everyone, particularly the future generation. This means that we should try to include everyone in the discussion about these suggested solutions”, says Professor Oschlies. For this purpose on the morning before the symposium a workshop with several school classes from Berlin will take place.

Contact: Jan Steffen (GEOMAR, Communication & Media), Phone: +49 431/600-2811,
[presse\(at\)geomar.de](mailto:presse(at)geomar.de)