

Witnessing Global Warming in the High Arctic

Christoph Ruhsam

Christoph Ruhsam presents his first hand experiences of global warming in the High Arctic, which he travels since more than 30 years, in a multi-media talk. Privately organized expeditions lead him to West Greenland (Nuugssuaq peninsula), East Greenland (Sermilik Fjord), Northeast Greenland (Liverpool Land) and into the Russian archipelago of Franz Josef Land and beyond into the Arctic Ocean. He witnessed the record low sea ice cover in 2012 and captured the retreat of large glacier systems which meanwhile disappeared. His stunning photos show the impact of global warming which becomes apparent when comparing with satellite images of Google maps. Arctic sea ice reports published daily by national meteorological institutes on the Internet show clear evidence that a fundamental change is upon us.

Christoph Ruhsam is a passionate pure-landscapes photographer who has specialized in the Arctic, whilst ranging through the unspoiled and vast landscapes. His book FROZEN LATITUDES tells about his expeditions into the High Arctic and is conceptually a photographic tribute to the beauty of the cryosphere, with first hand stories about the impact of global warming on the snow and ice world observed over the past decades. He received his PhD about bio-medical signal processing at the Vienna University of Technology and lives in the lovely Wienerwald, Austria. Beside his main occupation as IT-manager he is engaged as Friend-of-APRI for public relations of the Austrian Polar Research Institute.

<https://frozen-latitudes.com>

The Polar Cryosphere and its Impact on Global Climate

Prof. Dr. Wolfgang Schöner

The talk of Wolfgang Schöner will highlight the role of the cryosphere in the climate system of the Earth. Obviously, global warming impacts the cryosphere in the Arctic by melting snow and various forms of ice. But the changing cryosphere in turn also impacts the climate system – not only in the Arctic but even in the mid-latitudes. The understanding of these processes is essential, because they show the high degree of interconnectedness of climate change at the global level and related global responsibility. Finally, it has also be mentioned that the polar cryosphere, through the ice core research, has particularly improved our todays understanding of climate change.

Wolfgang Schöner is Professor of Physical Geography at University of Graz (Austria) with a research focus on mountain climate change and its impacts on the cryosphere (snow, glaciers, permafrost). The research spots of his studies are distributed between the European Alps, the Arctic and Central Asia. The roots of his research lie in the study of Geography as well as Meteorology and Geophysics at Universities of Vienna and Innsbruck. In 1995 he finished his PhD on the topic of pollutants deposition in high-alpine snow cover in the frame of the European project ALPTRAC. He then worked in the Climate Research Department at the Austrian Weather Service ZAMG as vice-director of Sonnblick Observatory, coordinated the Austrian research contribution for the International Polar Year 2007/08 and was founding member of the Austrian Polar Research Institute APRI. Since 2014 he is Austrian Representative for the International Arctic Science Committee.

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