

Sophie Godin-Beekmann

FRANCE

Dr. Sophie Godin-Beekmann is a senior scientist at the French Centre National de la Recherche Scientifique (DR1 CNRS) and a specialist of the stratospheric ozone layer. She obtained her PhD at Pierre et Marie Curie University (UPMC) in 1987 and joined the CNRS in 1989, after a post-doctoral internship at the Jet Propulsion Laboratory (USA) with a National Science Foundation (NSF) fellowship. Since 1989, she has been working on the study of the middle atmosphere and its influence on climate. Her expertise covers the conception and use of ground-based and airborne lidar systems for the measurement of ozone and aerosol vertical distribution, the study of the long-term evolution of stratospheric ozone and other atmospheric parameters, the validation of satellite measurements, and the use of chemistry transport models for the study of stratospheric ozone depletion. In the frame of the international Network for the Detection of Atmospheric Composition Changes (NDACC), she has implemented several lidar systems for the long-term measurements of ozone in various parts of the world, including South of France, Antarctica, Reunion Island in the Indian Ocean and Argentina, in collaboration with Italian, Swiss and Argentinean research teams.

More recently, Sophie Godin-Beekmann has been involved in multidisciplinary research on the effect of solar ultraviolet radiation on human health. The studies involved atmospheric physicists, dermatologists, epidemiologists and public health actors. The research projects aimed at evaluating the risk and benefits of exposure to UV radiation. They included an evaluation, using chemistry climate model simulations, of past and future UV doses required for erythema appearance and vitamin D synthesis, and an evaluation of UV related doses in different environments. Sophie Godin-Beekmann was also involved in the study of the history of atmospheric chemistry. The research involved science historians and aimed at studying the history of global atmospheric chemistry from the beginning of the twentieth century up to the 2000s. A special attention was given to the evaluation of the power of expertise of atmospheric chemists in the political governance of global environmental issues such as the depletion of stratospheric ozone or climate change.

Sophie Godin-Beekmann has contributed to more than 105 publications in the peer-reviewed literature. In additional to national research projects, she has coordinated one and was a prime investigator of 16 EU-funded projects. She contributed as lead-author and co-author to various international assessments on stratospheric ozone and aerosols, including most WMO/UNEP Assessments on the state of the ozone layer. She was a lead author of the chapter on Polar Ozone of the most recent WMO/UNEP Assessment published in 2014. At national level, she worked as scientific delegate at CNRS in charge of Atmospheric research (2008 – 2012), and since 2012 she is the Director of the Observatory of Saint-Quentin en Yvelines (OVSQ). At international level, she has been a member of the NDACC steering committee (2002-2013) as co-chair of the lidar working group. She is currently a member of the Scientific Advisory Group on ozone for WMO and the IGACO-ozone panel. She is a member of the International Ozone Commission (IO₃C) since 2000 and was elected Secretary of IO₃C in 2008 and 2012.