

Lucy Carpenter

University of York and Wolfson Atmospheric Chemistry Laboratories

Lucy Carpenter is a professor of atmospheric chemistry at the University of York and co-founder of the Wolfson Atmospheric Chemistry Laboratories, which now comprises around 70 people. She helped establish the Cape Verde Atmospheric Observatory, one of a few dozen World Meteorological Organization (WMO) Global Atmosphere Watch (GAW) stations worldwide which monitor climate and air quality gases over long time scales. She was a lead chapter author of the WMO/United Nations Environment Programme (UNEP) 2014 and 2018 Scientific Assessments of ozone depletion and serves as Chair of the WMO GAW Reactive Gases scientific advisory group. Her research group studies the complex interaction between the oceans and the atmosphere, in particular the chemistry of reactive halogens, organic carbon, and reactive nitrogen. She currently holds an ERC Advanced grant on ozone deposition to the oceans. Her work on oceanic and atmospheric halogens has established this chemistry as an important component of tropospheric ozone cycling. Her research has been recognised by a number of awards, and in 2019 she was elected a Fellow of the Royal Society.