

# STORIES FROM CHEMISTRY HISTORY

## SUSAN SOLOMON & THE OZONE HOLE



### SUSAN SOLOMON

BORN

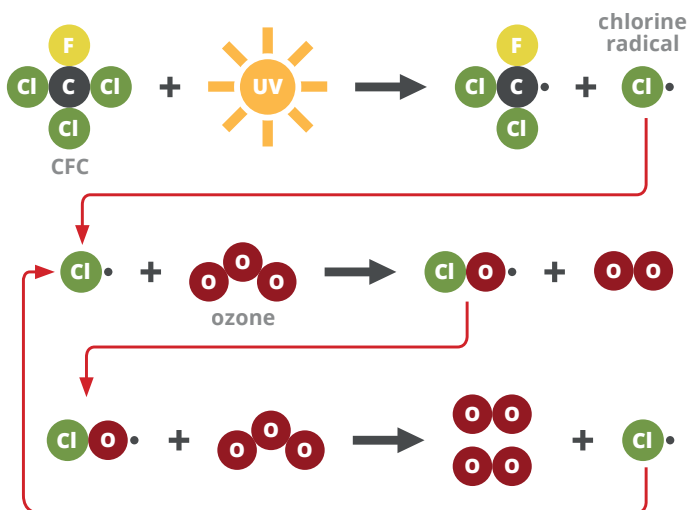
1956

Provided first direct evidence of chlorine compounds breaking down ozone



Solomon's work confirmed that ozone could react with chlorofluorocarbons on the surface of polar stratospheric clouds. Her work informed the Montreal Protocol, legislation which regulates chemicals that damage the ozone layer.

## OZONE AND CHLOROFLUOROCARBONS



### OVERALL



In the stratosphere, CFCs are broken down by UV radiation, releasing highly reactive chlorine radicals. These react with and break down ozone molecules. The chlorine radicals are regenerated, so they can go on to react with thousands of ozone molecules.



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