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Environmental chemistry has evolved significantly since the first edition of *Environmental Chemistry* was published in 1972. (One interesting aspect to this evolution has been that with each edition the calculation of the pH of ordinary rainwater has had to be revised because levels of atmospheric carbon dioxide had increased enough since each preceding edition to affect the result.) As in the early 1970s environmental chemistry dealt largely with pollution and its effects, it has a current emphasis upon sustainability. During the lifetime of the book, problems with waterborne pesticides and detergent phosphates that cause water eutrophication have largely disappeared as the manufacture and sale of these substances have essentially ceased. When the book was first published, it was not known with certainty what happened to large quantities of carbon monoxide emitted to the atmosphere by automobiles. It was suspected that soil microorganisms degraded this pollutant, but it is now known that the ubiquitous hydroxyl radical scavenges CO from the atmosphere. In 1972, the potential for stratospheric ozone depletion was ~~just~~ emerging as a major issue, but it was not known that refrigerant chlorofluorocarbons (freon compounds) were ultimately responsible for this threat. As the book progressed through various editions, the source of these materials was revealed: the southern hemisphere springtime Antarctic ozone hole.