is therefore analogous to sulphurous and phosphorous acids, according to the preceding suppositions. In this case we find from the proportion by weight between the oxygen and the carbon, that the density of carbon as gas would be 0.832 with respect to that of air as unity, and the mass of its molecule 11.36 with respect to hydrogen. There is, however, one difficulty in this supposition, for we give to the molecule of carbon a mass less than that of nitrogen and oxygen, whereas one would be inclined to attribute the solidity of its aggregation at the highest temperatures to a higher molecular mass, as is observed in the case of the sulphuric and phosphoric radicals. We might avoid this difficulty by assuming a division of the molecule into four, or even into eight, on the formation of carbonic acid; for in that way we should have the molecule of carbon twice or four times as great as that we had just fixed. But such a composition would not be analogous to that of the other acids; and, besides, according to other known examples, the assumption or not of the gaseous state does not appear to depend solely on the magnitude of the molecule, but also on some other unknown property of substances. Thus we see sulphurous acid in the form of a gas at the ordinary temperature and pressure of the atmosphere not withstanding its large molecule, which is almost equal to that of the solid sulphuric radical. Oxygenated muriatic acid gas has a density, and consequently a molecular mass, still more considerable. Mercury, which as we shall see further on, should have an extremely large molecule, is nevertheless gaseous at a temperature infinitely lower than would be necessary to vaporise iron the molecule of which is smaller. Thus there is nothing to prevent us from regarding carbonic acid to be composed in the manner indicated above, – and therefore analogous to nitric, sulphuric, and phosphoric acids, – and the molecule of carbon to have a mass expressed by 11.36.

Information and Announcements

Sagar

The National Institute of Oceanography (NIO) dedicated to ocean research, attracts visitors, particularly students, who come to learn about oceanography. A pocketbook, *Sagar*, was recently prepared to enable the visitor to pursue the fascinating world of the oceans. It provides an overview of the oceans: their formation, characteristics, and the dynamics that determine their evolution. It also contains information on how the interested reader can pursue these topics further through books and websites.

A complimentary copy of this pocket book *Sagar* is being sent to all *Resonance* subscribers, courtesy of NIO.