

royal palace for more than fifteen centuries devoted their energies and in many cases their lives to the delusive search for the philosopher's stone, that mythical jewel "the elixir of life" and the transformer of base metals into gold. It is needless to say that the ambitions of the alchemist were never realized. Throughout the Alchemistic period we find no tendency towards the scientific study of chemistry. We do find however, that by their strenuous efforts to solve the problem of transmutation, empirical knowledge was greatly increased; new processes were employed and valuable experiences recorded. To Geber, an Arabian chemist and writer of the 8th century, we are indebted for the first clear and concise account of chemical progress, prior to, and during the alchemistic period,—older writings there are none. He described the processes of filtration, crystallization, sublimation, cupellation, etc., and although an ardent believer in alchemy, he rendered valuable service in the realm of applied chemistry.

During the latter half of the 16th century alchemy declined and chemistry began to develop along other lines. By advocating chemical preparations for medicinal use Basil Valentine established a new epoch, the medico-chemical era. He was well supported by Paracelsus who taught that the object of chemistry is not to make gold but to prepare medicine. He regarded chemistry as the basis of the whole medical art. This doctrine of Paracelsus, that the province of chemistry was the adaptation of chemical substances to the cure of diseases, prevailed for the greater part of a century and resulted in the addition of a vast number of new preparations and a more careful examination of their composition and properties. It also introduced the study of physiological chemistry by the investigation of milk, blood, urine, saliva and other products of the animal body.

The middle of the 17th century marks the close of the medico-chemical era, and opens up a new epoch, a transition period from the dark ages of juggling, chicanery, alchemy and mysticism to an age of purely scientific investigation and healthy development. To Robert Boyle we are indebted for the first true conception of the aim of chemistry. He it was who first taught that the chief object should be to acquire a