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Spalanie i kalcynacja. Analiza wczesnych poglądów na przyczyny wzrostu ciężaru ciał

Combustion and calcination. Analysis of early views on the causes of the increase in weight of substances

SUMMARY

The conceptions from the antiquity to the 18th c. are described. The analysis of the essay by Jean Rey (1630) shows that Rey suggested that the air became denser and increased in weight when heated, and that this denser air was attached to tin. The same idea is found in Lomonosov's Latin paper (1752) erroneously interpreted by Ganzenmüller in Gmelin's *Handbuch der anorganischen Chemie*, which was based on an erroneous Russian translation. The work of Robert Boyle suggesting the addition of the ponderous parts of flame and fire (1673) is discussed, as well as its critique by Boerhaave and Lavoisier. It was only Lavoisier who solved the problem, when he considered simultaneously both the increase in weight and the decrease in the volume of air during calcination. But even he was not yet aware of the difference between the physical attachment of bodies and the chemical bond between them.

Analecta – Studia i Materiały z Dziejów Nauki
[Analecta – Studies and Materials on the History of Science]
V, 1996, 1, 139-172