

新东方背诵文选80篇：74化学的历史TheHistoryofChemistry

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Chemistry Chemistry did not emerge as a science until after the scientific revolution in the seventeenth century and then only rather slowly and laboriously. But chemical knowledge is as old as history, being almost entirely concerned with the practical arts of living.

Cooking is essentially a chemical process. so is the melting of metals and the administration of drugs and poisons. This basic chemical knowledge, which was applied in most cases as a rule of thumb, was nevertheless dependent on previous experiment. It also served to stimulate a fundamental curiosity about the processes themselves.

New information was always being gained as artisans improved techniques to gain better results. The development of a scientific approach to chemistry was, however, hampered by several factors.

The most serious problem was the vast range of material available and the consequent difficulty of organizing it into some system. In addition, there were social and intellectual difficulties, chemistry is nothing if not practical. those who practice it must use their hands, they must have a certain practical flair. Yet in many ancient

civilizations, practical tasks were primarily the province of a slave population. The thinker or philosopher stood apart from this mundane world, where the practical arts appeared to lack any intellectual content or interest. The final problem for early chemical science was the element of secrecy. Experts in specific trades had

developed their own techniques and guarded their knowledge to prevent others from stealing their livelihood. Another factor that contributed to secrecy was the esoteric nature of the knowledge of alchemists, who were trying to transform base metals into gold or were concerned with the hunt for the elixir that would bestow the blessing of eternal life. In one sense, the second of these was the more serious impediment because the records of the chemical processes that early alchemists had discovered were often written down in symbolic language intelligible to very few or in symbols that were purposely obscure. 化学的历史化学在17世纪的科技革命后才成为一门科学，其发展是缓慢而艰难的。但化学知识却象人类历史一样古老，与人们实际生活密切相关。做饭基本上是一个化学过程。同样，金属熔炼、使用药品或毒剂也是如此。人们在大多数情况下只是粗糙地运用这些基本化学知识，但这些基本知识的确是来自于前人的实验。它们同时也激发了人们对化学本身的兴趣。匠人们利用新技术来改良工艺，就增加了对化学的了解。但是，化学科学方法的发展却有许多阻碍的因素。其中最严重的问题就是要把浩如烟海的物质归纳为若干系统确实很困难。此外，还有社会和知识的原因。离开实际用途，化学就毫无价值；研究化学的人必须亲自动手，这就要求他们要有很强的动手能力。但在许多古代文明中，动手的活都是奴隶的行当。思想家与哲学家与此劳碌决不沾边，因为在他们看来，实际操作技能低智而乏味。最后，还有一个原因妨碍早期化学的发展，那就是保密。某个行家一旦发现了新技术，就竭力保密以防被人偷了饭碗。另一个原因加剧了知识封锁这是因为炼金术士的知识的的神秘性。

这些术士们要么想他便宜的金属变成黄金，要么期望找到一种长生不老药。从某种意义上说，这第二个因素带来了更严重的阻碍，因为早期术士们的研究成果记载于鲜为人知的或故意让人不懂的符号中。 100Test 下载频道开通，各类考试题目直接下载。详细请访问 [www.100test.com](http://www.100test.com)