

CHEMISTRY, LIFE & CIVILISATION

CHAPTER I

INTRODUCTION

IN these days, characterised as they are, by wonderful scientific discoveries, one is apt to ridicule the patient efforts of the alchemists in their search for the mysterious and elusive substance, the Elixir or Philosopher's Stone, which once found, they believed, would enable them to transmute base metals into gold and silver. With the advance of civilisation, the aims of the scientist have become the pursuit of truth and the unravelling of Nature's secrets. The multiplicity of problems which have stimulated research during the last century has resulted in an extensive widening of our chemical knowledge. Much awaits solution. As the following pages show this increased knowledge is beginning to have a profound effect on almost every phase of human activity. It has, however, made human society much more unsafe. Every effort must be made to ensure that civilisation is indeed advancing in the hope that chemistry will not be prostituted into the service of Armageddon. Many a subject, which a few years ago was merely one of scientific interest, is now the basis of a new chemical industry.

With his improved analytical methods the chemist is guarding the health of humanity. Food adulterants and impurities, and the poisons employed by

the criminal, are often easily detected. Improved methods of water purification, cooking, lighting and sanitation are the outcome of the increasing adoption of scientific methods. Diseases, which formerly were propagated by impure water, are rapidly disappearing, so are also others to which the human body is heir. Chemistry is having a marked effect on the feeding of man in devising methods for the wholesale production of fertilisers. It has had a marked influence on the modern means of housing, transport, and of entertainment, and in the production and economic use of fuel of all kinds.

Life itself has always been a subject of much speculation. As the result of chemical researches we are beginning to catch glimpses of many of the processes that are associated with life. Nutrition is being better understood. This knowledge should be reflected in the health and physique of the rising and future generations.

In the following pages the author has attempted to show the importance of chemistry in modern civilisation. We are living in a period of chemical evolution. Even industries that were originally developed on haphazard lines, are being handed over to chemical control in order that they may face present-day competition. Soon the financier, who focusses his interest on the salesman for his profits, will be compelled to give increasing attention to the chemist.