Introduction

If you’re reading this publication, there’s a high likelihood that you work in science—probably chemistry. You’ve used beakers, flasks, or 96-well plates in sample preparation, you’ve made up buffer solutions, you can identify a chromatographic trace or an atomic absorption wavelength, and you know the nuances of data acquisition and regulatory compliance. You may have used instruments of incredible sophistication, capable of quantifying an attomole of a protein, or perhaps designed a plant to make fine chemicals in multiton batches. These are the accomplishments of modern chemistry, and they require tools and materials undreamt of a century ago. This, the publication you hold, is a story of the companies and organizations that today provide these indispensable components to what we call the enterprise of the chemical sciences.

Throughout this supplement, we’ve used a 19th-century stereo scope to illustrate the historical range of chemical commerce. Microscopes based on the same principle as this device are used today to visualize three-dimensional biological systems. It’s our way of symbolizing that the best way, indeed often the only way, to understand the modern chemical world is to juxtapose it with its beginning. The early days of patent medicines were the foundation of today’s world of proteins, just as early chemical factories have become today’s fine and specialty chemical producers. And what better way to see the world of analytical chemistry than through two images of A mold of Beckman, founder of the modern instrument market, who passed away on May 18, 2004.

Chronicles of Chemistry II: Enterprise of the Chemical Sciences is divided into two broad areas. One is devoted to profiling the history of companies that have made their mark in the chemical, inorganic, agricultural, pharmaceutical, and biotech fields. The second section looks at those companies that have provided the laboratory tools of the modern chemistry laboratory. Chromatography, spectroscopy, and computers all play a part in the laboratory, but we also look at the record of companies that have provided the tools we take for granted, such as pH meters, laboratory supplies, and the coming world of nanotechnology that promises to revolutionize the next hundred years.

This supplement to ACS Publications is the second in our series devoted to the history of the chemical sciences in the 20th century. It was produced by the C&EN M agazine group editorial staff. The first supplement, Chronicles of Chemistry: Luminaries of the Chemical Sciences (http://pubs.acs.org/journals/luminaries), profiled many of the individual scientists who made the chemical discoveries upon which chemical commerce is built.

No publication of this type can be as comprehensive as many readers would like. Space constraints alone prevent us from reviewing the histories of all the organizations and companies that have made the chemical enterprise the centerpiece it is in life today. A s a small gesture to the larger community of outstanding chemical organizations, in the last section of this supplement, we present a timeline of foundings, accomplishments, and achievements that the editors felt deserved to be recognized despite the publication limits.

The past decade has seen extraordinary accomplishments in the chemical sciences. One only has to look at a daily newspaper for reports of new genes identified, new nanotube materials produced, and new instruments developed. These are the outcomes of today’s science, but they are only the tip of this discipline’s iceberg. Without companies to produce and commercialize these entities, they might forever be seen as scientific curiosities known to only a few. If a scientific discovery is to be useful to society, it must be nurtured and developed from a laboratory event into a commercial success. These companies have made their success in the enterprise of the chemical sciences.