

Preface

The large-scale production of several commodity chemicals, fertilizers, and metals has changed the modern world in ways not imagined throughout most of history. Human life spans and quality of life have been extended and improved radically because of our ability to mass produce chemicals such as sulfuric acid and calcium carbonate, ammonia-based fertilizers, as well as refine and alloy numerous different metals. These developments have given us a steady food supply, reproducibly mass produced medicines, ready supplies of clean water, ease and speed of communications and transportation, and an enormous variety of products and services that were unimaginable ever before in history. This book tries to survey the production of many of the elements and compounds which make such advances possible, and stimulate thought on how this can be made sustainable and as environmentally friendly as possible.

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Mark A. Benvenuto

