

# This Week's Citation Classic

Eckenfelder W W, Jr. *Industrial water pollution control*.  
New York: McGraw-Hill, 1966. 275 p. [Dept. Civil  
Engineering, Univ. Texas, TX]

**This book was developed to serve as a technical guide for scientists and engineers engaged in industrial water pollution control. It attempts to apply theory to the practical solution of current water pollution problems. [The SCI® indicates that this book has been cited over 115 times since 1966.]**

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"The work leading to this book spans a period of 15 years and became the first book detailing the technologies applicable to industrial water pollution control. Over this period, I had been serving as a consultant to industry to develop water pollution control problems. During the course of this work, I realized that nothing existed in print to assist the engineer in making technical decisions in the pollution control area. Most of the engineers I encountered were civil, chemical, or mechanical engineers and had little training in the environmental area. While the environmental area utilized the theory and principles common to other areas of science and engineering, the application to industrial wastewater problems presented unique challenges.

"It therefore became apparent that a serious education gap existed between the engineers and scientists in industry and the technology applicable to water pollution control. This fact led to the early development of a continuing education program in industrial water quality management. Over the years,

this has developed into a worldwide program. The notes for these courses were the forerunner of this book. This book was an effort to apply engineering principles to the development of solutions to water pollution problems. While the book preceded the high level of activity in industrial pollution control due to the Water Quality Act of 1972, most of the technologies discussed in the book are still applicable today.

"Environmental engineering relative to water pollution is a unique field since it encompasses virtually all scientific and social disciplines. Basic environmental decisions are political, social, and economic. Defining water quality criteria involves biology and chemistry. Implementation of water pollution control spans civil, chemical, and mechanical engineering. Environmental engineering as a field of study is relatively new, largely coming into its own in the late 1900s. It is no wonder, therefore, that the number of professionally trained persons in this field is low. It further follows that the technical literature, particularly informative books in the field, is only now coming into its own.

"One reason this book is highly cited is that it is the only book that covers several technologies as they specifically apply to industrial wastewaters. The book also develops some unique approaches to biological treatment of industrial wastewaters.

"In 1980, this book was updated to consider the many new requirements for the discharge of industrial wastewaters. In addition, the more advanced courses, both in continuing education as well as formalized environmental engineering on the graduate level, require a more comprehensive text. This new text is *Principles of Water Quality Management*.<sup>1</sup>

1. Eckenfelder W W, Jr. *Principles of water quality management*.  
Boston, MA: CBI Publishing Co., 1980. 717 p.