

**DEPARTMENT OF LIBRARY AND INFORMATION SCIENCE**  
**PANJAB UNIVERSITY, CHANDIGARH**



ASSIGNMENT- McGraw HILL DICTIONARY OF SCIENTIFIC AND  
TECHNICAL TERMS

SUBMITTED TO: -

PROF. PREETI MAHAJAN

SUBMITTED BY: -

ANITA RANI

M. LIS SEM-1

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## Preface

When the first edition of the *McGraw-Hill Dictionary of Scientific and Technical Terms* was published in 1974, its aim was to address the need created by the inadequate representation of the vocabulary of science, engineering, and technology in general English language dictionaries. The primary audience for the work at that time was the body of working scientists and researchers, and the community of professionals who reported on scientific developments; the general reader with an interest in science was then considered a secondary audience. In the course of two decades (and through four editions of the work), both the times and the Dictionary have changed. The standards of scientific literacy are higher than ever before, and fluency in the language of science plays an ever more critical role in our society. The vocabulary of science and technology, once the province of the specialist, is now an indispensable component of the general culture.

In addition to the growing prominence of scientific terminology in everyday life, the language of science has undergone increasingly rapid changes as the pace of research quickens and entirely new areas of scientific activity rise to prominence. Only a few decades ago, popular opinion held that all the important laws and phenomena were already known, and that all that would engage the scientific community would be ever more precise measurements and more inventive applications of existing knowledge. Recent events in science, however—the creation of whole new technologies, the development of new constructs for well-established fields, and the continuing flow of remarkable discoveries virtually wherever researchers look—have shown that this conventional attitude grossly underestimated human ingenuity and scientific creativity.

To keep pace with the increasing importance of scientific terminology in the contemporary world, as well as with rapid developments and expanding vocabularies in all areas of science and technology, some 5000 new terms have been added, and the fifth edition of the Dictionary contains 105,100 terms with 122,600 definitions. Many definitions are supplemented with detailed, informative illustrations, of which there are approximately 3000. In addition, synonyms, acronyms, and abbreviations are given under the appropriate entry as well as in the alphabetical sequence as separate entries, where cross-references to principal terms are provided. Every term is provided with a pronunciation. Where units of measurement are essential to the definition of a term, U.S. Customary units are given with International System (SI) or metric equivalents.

The definitions are written in clear, simple language that is understandable to the general reader, yet captures and is consistent with the specialized use of the term. Each definition is identified by the field in which it is used. There are 102 fields represented, some of which are highly specialized—such as atomic physics [ATOM PHYS] and molecular biology [MOLE BIO]—while others are more general—such as chemistry [CHEM] and science and technology [SCI TECH]. A definition is identified as belonging to the vocabulary of a specific field; where it is used in more than one field, a more general field is designated. For example, if a definition is used in both invertebrate zoology and vertebrate zoology, it is assigned to the field of zoology. An alphabetical list of field abbreviations and a complete list of fields with an explanation of the scope of each begins on page x.

The Appendix contains a full explanation of the International System of units with conversion tables for the U.S. Customary and the metric systems. It also includes a table of the chemical elements; a periodic table; lists of mathematical notation; a table of mathematical signs and symbols; tables of fundamental constants and elementary particles, with the most current values; schematic electronic symbols; semiconductor symbols and abbreviations; a geological time scale; a biographical listing of over 1500 noted scientists, both historical and modern, many of whose names appear in dictionary terms; and an outline of the classification of living organisms.

An explanation of how to use the Dictionary, describing alphabetization, format, cross-referencing, and so on, is on page ix. Notes on Pronunciation, in which the transcription system is explained, begins on page xv. A Pronunciation Key appears on page xvii.

The fifth edition of the *McGraw-Hill Dictionary of Scientific and Technical Terms*, now a standard of international reference, continues to serve the ever-growing needs of readers within and outside the scientific community, and is an indispensable tool for the general reader in understanding current developments in science and technology.

Sybil P. Parker  
EDITOR IN CHIEF

# **EVALUATION OF McGraw-Hill DICTIONARY OF SCIENTIFIC AND TECHNICAL TERMS**

## **AUTHORITY:**

- ❖ Title- McGraw-Hill dictionary of scientific and technical terms
- ❖ Editor in chief- Sybil P Parker
- ❖ Publisher- McGraw-Hill Education
- ❖ Contributor- McGraw-Hill Professional
- ❖ Place of Publication- United States
- ❖ 1<sup>st</sup> Edition: 1974
- ❖ Latest Edition: 7<sup>th</sup> ed. (2016)
- ❖ Language: English

## **INTRODUCTION:**

McGraw-Hill authors represent the leading expert in their fields and are dedicated to improving the lives, careers, and interest of readers worldwide. McGraw Hill dictionary of scientific and technical terms was first published in 1974. The aim of this dictionary was to address the needs created by the inadequate representation of the vocabulary of science, engineering and technology in general English dictionaries. The primary audience for the work at the time was the body of working scientists and researchers and the community of professionals who reported on scientific development. The general reader with an interest in science was then considered secondary audience. The seventh edition of 'McGraw-Hill dictionary of scientific and technical terms' continues to serve the needs of both scientific community and the general reader for high quality information and to contribute to scientific education and technological literacy. For more than three decades, this internationally known reference has been the easiest, fastest and most reliable way for anyone to gain fluency in the language of science and technology.

**SCOPE:**

- 'McGraw Hill dictionary of scientific and technical terms' includes all terms of science and technology.
- It contains more than 1,15,000 terms and 1,25,000 definitions from 100 areas of science and technology.
- In this, entries are complemented by 3,000 illustrations, appendices containing biographic listings, conversion tables, taxonomic classification charts and more.
- Each entry is classed into one or more of 104 fields, from 'Acoustics' to 'Zoology' for which abbreviations are inserted in the definitions.
- The scope of each field is defined giving the reader needed context and explanation.

**TREATMENT:**

- Acronyms and abbreviation are given within the definition.
- All terms include pronunciation based on pronunciation key given in the book.
- The definitions are written in simple language which can be understood by all its readers.
- A cross reference entry direct the users to defining entry. Cross reference is also made from variant spellings, abbreviations and symbols.

**ARRANGEMENT:**

The term in the McGraw Hill dictionary of scientific and technical terms are alphabetized on letter-by-letter basis.



### **FORMAT:**

It is available only in print version.

- Single volume book.
- Hard cover binding with 2,500 pages.
- Paper is smooth. Printing is clear and legible.
- Font is clear and readable.
- It has pictures and illustrations.

### **SPECIAL FEATURES:**

- Each term includes a helpful pronunciation guide.
- Only dictionary of science and technical terms which is thumbed indexed.
- There is 'How to use the dictionary'.
- A detailed scope note for each field is included in the dictionary.
- Thoroughly revised with 5,000 new terms in every new edition.

### **DRAWBACKS:**

- It is not available online.
- The thickness of the volume, its large dimensions and extremely thin pages.
- Periodic table is defined in the main part of the dictionary but there is no reference to the periodic table in the appendix, which would be missed if one did not browse through the back matter.
- It is not referring the reader to the appendix when appropriate.

## **CONCLUSION:**

The McGraw Hill dictionary of scientific and technical terms is famous for its broad-spectrum coverage. Its soul is general science its audience is anyone who has any business with science- biological, chemical or physical. Invaluable to scientists, researchers, teachers, students, as well as interested laypersons, the McGraw Hill dictionary of scientific and technical terms is truly the best way for anyone to gain fluency in the language of science. This dictionary is an excellent reference tool for most libraries and is recommended for academic and large public library.

## **REFERENCE:**

- [https://www.goodreads.com/book/show/25648.McGraw\\_Hill\\_Dictionary\\_of\\_Scientific\\_and\\_Technical\\_Terms](https://www.goodreads.com/book/show/25648.McGraw_Hill_Dictionary_of_Scientific_and_Technical_Terms)
- [https://books.google.co.in/books/about/McGraw\\_Hill\\_Dictionary\\_of\\_Scientific\\_and\\_Technical\\_Terms?id=xOPzO5HVFfEC&redir\\_esc=y](https://books.google.co.in/books/about/McGraw_Hill_Dictionary_of_Scientific_and_Technical_Terms?id=xOPzO5HVFfEC&redir_esc=y)
- <https://www.amazon.com/McGraw-Hill-Dictionary-Scientific-Technical-Terms/dp/007042313X>