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Kitap İncelemesi / Book Review

Kimyasal Etimoloji ve Ötesi: Kitap incelemesi

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Özet: Bu çalışmada kimyasal isimlerin etimolojisini ve bağlamını tartışan "The Etymology of Chemical Names: Tradition and Convenience vs. Rationality in Chemical Nomenclature" isimli kitap hakkında bir inceleme yapılmıştır. Söz konusu kitabın amacı, organizasyonu, bölüm ana hatları ve diğer bazı yönleriyle birlikte okuyucu sayısı hakkında bilgi verilmiştir. Öğretme-öğrenme perspektifinden kitabın özelliği ve etkililiği ilgili alanyazına atıfta bulunularak tartışılmıştır.

Anahtar kelimeler: Kimyanın dili, etimoloji, kavramsal çerçeve.

Sorumlu yazar: Abdul HASIB, Kazipur Government Mansur Ali College, Kazipur-6710, Sirajgonj, Bangladeş.

Yazar, kitabın "inceleme kopyasının", yayıncı De Gruyter, Almanya'dan alındığını bildirir.

Chemical Etymology and Beyond: A Relevant Book Review

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Abstract: A review of the book "The Etymology of Chemical Names: Tradition and Convenience vs. Rationality in Chemical Nomenclature" discussing the etymology and the context of chemical names has been carried out. The aims, organization, chapter outlines, and the readership of the book along with some other facets have been briefed. The specialty and the efficacy of the book from a teaching-learning perspective have been projected with reference to the cited literature.

Keywords: Chemical language, etymology, conceptual framework.

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Alexander Senning

The Etymology of Chemical Names, Tradition and Convenience vs. Rationality in Chemical Nomenclature.

Walter de Gruyter GmbH, Berlin/Boston, Oct. 2019.

XIV + 505 pages,

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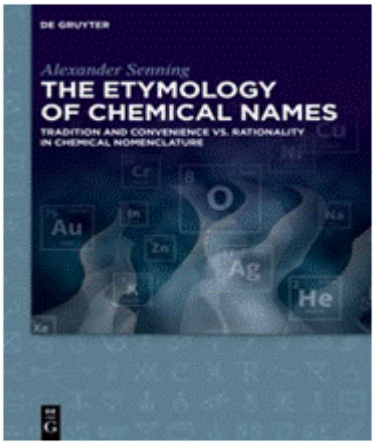

While searching for the descents of chemical names, this masterwork "The Etymology of Chemical Names: Tradition and Convenience vs. Rationality in Chemical Nomenclature" by Alexander Senning would surely open up the other horizons of knowledge regarding chemical languages that any reader could hardly imagine before, leading to go far beyond the etymology, and accordingly the part of the title of this review "chemical etymology and beyond" sounded.

"Recognition of word roots and the pattern of evolution of scientific terms can help understand chemistry concepts", (Sarma, 2004) and a "unified manner to show the connection of various concepts vis-à-vis the terms" (Sarma, 2004) is much needed. Such a unified approach to chemical names and concepts has, with an emphasis on etymological bisection of each entry therein, been outlined by the author with such a sagacity that I am not fully eligible to comment on, rather; the readers should rely on the evidence as quoted right here verbatim, "the thinking and knowledge ensconced in this book are the fruit of more than half a century's university teaching and research as well as extensive nomenclature work" (preface).

While the resources on the theoretical chemistry are available, (List of Important Publications in Chemistry., n.d.; Trending EBooks about Chemistry., n.d.) the same on the vocabulary of chemical terms have recently attained the status of being available (Senning, 2007, 2019) from that of being extremely limited (Sarma, 2006) and the standard literature of chemistry including the textbooks, dictionaries, glossaries, and indexes "do serve as reference material, but do not provide a systematic vocabulary learning vis à vis the concepts" (Sarma, 2006). And yes, there lies the specialty with the present volume- it aims to develop a conceptual framework into the reader's mind about the topics concerned.

In light of the above facets- the categorization and the origin of the words as well as the prospect of the conceptual framework (Conceptual Framework, n.d.) to be used in the chemical language, I get some sound reasons for which a book like this is much necessitated especially in academia with a teaching-learning perspective. Sorting the words may well provide the learners a way to overcome the terminological difficulties and language barriers they usually face while assimilating a science subject like chemistry (Quílez, 2019). And our present author not only categorized the chemical names but also made valuable suggestions, comments, and even constructive criticisms substantiated by a plethora of examples based on traditional, historical, and scientific accounts relating to the chemical nomenclature which has been reasoned, in his voice, as "an understanding of the way the language of chemistry developed to its present stage should be well served by the examples and comments given" (preface). In these ways, there existed no room in considering this as a lexicographical work provided that the author had a

previous book "Elsevier's Dictionary of Chemoetymology" (Senning, 2007) from which it can easily be apprehended that there were other aspects considered in composing this chef-d'oeuvre as had been manifested in its text repeated here ad verbum:

> the present book is devoted to providing a coherent picture of how the trivial and systematic names in current use developed over time and especially how a series of conflicting demands had to be reconciled during the creation of the current IUPAC rules in order to make them practically useful" (p.1).

The aim, overview, and organization of the book have been briefed clearly in the "Preface" and the "Introduction" having only two pages of the text altogether. There are twenty chapters with a lot of sections as well as subsections and whenever necessary, each section has been started with a short discussion that would make the readers well-acquainted with the various philological events coming thereafter. The main discussion of the book has been started with the second chapter "Samples of trivial and semi trivial names" and is followed by the three successive chapters on different systematic ways of nomenclature under the rudimentary, the IUPAC, and the CAS names. The naming of the elements, lipids, terpenes, carbohydrates, amino acids, other natural products, minerals each has been discussed consecutively in the individual chapters. One would find the chapter "Named reactions and named concepts" a fascinating one. The INN system and the ISO Common names have also been briefed with sufficient elaboration and specific examples.

Going through the book we can explore that the trivial and the semi trivial names are chiefly based on sources, colors, uses, taste or smell, physical and chemical properties whereas the eponyms, demonyms, and toponyms are equally used for traditional (sec.2.3-4), systematic (sec.6.3.4-5, sec.6.4.1-2) and other hybrid systems. A good account on the naming of the minerals (chap.13), the drugs and excipients (chap.14), the pesticides, and other agrochemicals (chap.15) would further provide this book a coherent reason for it would undeniably be required by a broader readership beyond the community of the pure chemists e.g., the geologists, soil-scientists, mineralogists, agricultural scientists, pharmacists and so on. There are the charming stories behind the derivatization game, (sec.3.8), superstition in chemistry (sec.3.10), fake news about the discovery of the elements (sec.6.10), famous named diamonds (sec.13.2.1.1), chemical names with disputed etymology (chap.19) and chemical names without known etymology (chap.20). The author's sense of humor though found occasionally for examples, "no, traumatic acid will not traumatize……., "and no, warfarin is not a chemical warfare agent…….", "and again no, osmium and osmosis are not etymological congeners" etc. (sec.2.8) would undoubtedly rejuvenate the tired neurons in an engaging way.

Albeit the discussion central to this masterwork stemmed from etymological perspectives, there were other things as well to be explored- a vivid description of, in the voice of the author, "many historical facts of relevance to chemical nomenclature" (p.2), a good number of well-drawn molecular shapes of various compounds (sec.2.2.1, sec.4.1, etc.), an elaborate depiction of various versions of periodic tables (tables 6.1.A-D) with its controversies (sec.6.8.2) were only a few to be mentioned in this brief write-up. And importantly, whenever it was applicable, each entry was accompanied by, along with its traditional name (surname?), a systematic IUPAC name (given name?) which in many instances stretched from two lines e.g., Oxyacanthan (p.194), etc. to that of three e.g., Evonine (p.192), etc. or even more e.g., Vincaleukoblastine and Vobtusine; (p.196), etc.

Even though there is a source language index, a general subject index has not been provided with, as a result of which one would find it tedious to ferret out any desired term or word in the text. Understandably that, there might have the constraints to curb the size of such a voluminous work along with some other purposeful intentions as tipped off in its "subtitle" and that it was not aimed at all to serve as a lexicon, couldn't we expect such a general index to be available in its next edition?

Finally, on the occasions of adopting chemistry textbooks for the colleges and the universities, in the cases of the demands for valuable reference books in the libraries or while enriching an individual amateur collection of chemistry books, I should say, whatever the instances might be; that this masterpiece should be prioritized as a much handy one.

Conflict of Interest Declaration

The author has not declared a potential conflict of interest during the research, authorship, and publishing of this article.

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Ethical Approval

No data were collected from human participants during the research. All ethical standards were taken into consideration and followed during the research.

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