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Book Review

Literature of analytical chemistry: a scientometric evaluation, by T. Braun, E. Bujdosó and A. Schubert, CRC Press, Boca Raton, FL, 1987, 259 pp., price US\$ 90.00 (U.S.A.), US\$ 100.00 (rest of world), ISBN 0-8493-6591-0.

In their introduction the authors state that "the primary purpose of this monograph is collecting and presenting in an organized manner the most pertinent sciento-and bibliometric information dealing with the statistical evaluation of the literature of analytical chemistry".

The average reader should have no difficulties with the technical terms, such as citation rates, impact factors, scientometric indicator values, etc., as these are either self-explanatory or well defined by the authors.

Now as the reader immerses himself in the book he will note that the actual scientific literature is examined from numerous points of view, to give various rankings of "importance". For example, Table 30 on page 54 gives the ranking of the first fifty leading journals on analytical chemistry according to productivity for the year 1977 and the *Journal of Chromatography* heads the list. There is however no explanation why the year 1977 was chosen as the book was published in 1987.

Then in Table 34 the *Journal of Chromatography* ranks third in the total number of citations for 1978, with again no reason given for the choice of year. In Table 35 it ranks highest for "influence measures" of "some analytical journals" and in the "cluster tree" of the group of specialty journals (Fig. 39) the *Journal of Chromatography* has the highest "amalgamation distance".

Now does this have any significance whatsoever? An Indian friend would say in such a case: "Perhaps yes", but I am rather inclined to say: "Perhaps no!" This book simply does not present sufficient data for a statistical evaluation. For example, "the number of publications" has a different meaning in different fields and in different countries. A short note on a new bit of apparatus and a major discovery are considered as equivalent in such evaluations. This becomes still more obvious when the "scientometric indicator values for 1978–1980" are tabulated for each country. Are 531 publications in India equivalent to about the same number (675) in England? In the case of Italy 267 publications are listed, about 10% of these are from the reviewer's research group and a further 10% from the group of Professor Liberti; how indicative is such a figure for research in Italy? Also what ends are served by publishing figures for the years 1978–1980 today?

This volume seems to have been conceived in the spirit of a scientific caucus race: there are tables where the U.S.A. are tops of the poll and others where the U.S.S.R. are first and then again those where Hungary is best. From some tables one can construe that German is more important than French, from others that Russian is only second in importance to English. Many readers will find in this book statistical backing for their own self-indulgence and also perhaps material to back up an application for research funds. So good fun can be had by most...