

Computational methods are duly emphasized and amply illustrated by means of numerical examples worked out in detail.

The 9 chapters of this work following the introduction cover successively the following topics: "Frequency Distributions"; "Averages and Measures of Dispersion"; "Tests of Significance"; "Analysis of Variance"; "Regression and Correlation"; "Frequency Data and Frequency Tables"; "Sampling"; "Control Charts"; and "Prediction and Specification." A glossary of statistical terms and important tables are included.

In this reviewer's opinion, the outstanding chapters are those on "Analysis of Variance" and "Regression and Correlation"—especially the latter, in which linear regression is treated in a modern and practical fashion. Two types of regression are covered in detail. Perhaps the choice of the titles "Rubber Testing Type Regression" and "Penicillin Type Regression" to denote these two types is not a fortunate one. It seems reasonable to expect that such fundamental concepts not be made dependent on casual applications. This chapter has, as another laudable feature, a clear exposition of the treatment of regression by means of the methods of variance analysis.

The statistically trained reader may find that many of the topics mentioned in this book are treated in a somewhat sketchy manner. One could not expect, however, that all statistical methods useful to the chemist or the engineer would be exhaustively covered in less than 300 pages of text. Nevertheless, this reviewer believes that the inclusion of an introductory chapter on the principles of statistical design would have enhanced the value of the book, inasmuch as it would have shown the chemical reader the intimate relationship between the statistical design of an experiment and the statistical interpretation of its outcome. One therefore looks hopefully forward to the appearance of the second volume announced by the editor.

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Scientific Book Register

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