

Book review

Color Theory and Its Application in Art and Design

Second Completely Revised and Updated Edition

G. C. AGOSTON

Springer Series in Optical Sciences, Vol. 19

Springer-Verlag, Berlin, Heidelberg 1987
[pp. i-xvi+286, with 139 Figures and 23 color plates]

In many countries, there are many books on color theory and its application, but this one written by G. A. AGOSTON is a special one. The expression "theory" mentioned in the title is not described in detail, but is rather in the background of the main considerations. Some suitable formulae connected with color measurement are given, without deriving, in the Appendix.

This work is addressed mainly to people dealing with colors, who do not need or are not able to understand all formulae and mathematical and experimental nuances of this region of physics. The lack of the deriving of formulae of the color measurement is compensated by 245 references, given separately for each chapter. This makes the book very useful also as the first manual for these scientists and engineerings, who want to study further the color measurement in a more mathematical way. The book of G. A. AGOSTON is easy to understand for all readers, despite the fact that all statements, designations, definitions and explanations are complete and accurate. It was possible because G. A. AGOSTON is worldwide known scientist dealing with color measurement. This opinion is shared by another well known scientists working in this field, i.e. David L. MacAdam (see Springer Series in Optical Sciences, Vol. 27).

The contents of G. A. AGOSTON's manual can be divided into four parts:

- i) Chapters 1-5 - statements:
 - concept of color,
 - perceived colors,
 - light and color,
 - colored materials.
- ii) Chapters 6-8.3 - CIE systems:
 - classical CIE chromaticity diagrams,
 - uniform CIE chromaticity diagrams,
 - CIE(x,y,z), CIELUV and CIELAB color spaces.
- iii) Chapters 8.4-9 - color systems (among others some national systems) being rather large collections of painted color chips.
- iv) Chapters 10, 11 - supplementary problems of great importance:
 - color names and notations,
 - condition of viewing and the colors seen.

Several problems are illustrated by excellent color plates.

In conclusion, I recommend this book to all artists, designers dealing with colors and scientists starting to study the color problems.

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