

## Chapter 96

### Bartleson, C. James 1929–1987



Image courtesy of R.W.G. Hunt

C. James Bartleson was an American color scientist who made very important contributions to colorimetry and visual science.

Bartleson graduated as an Associate of Photographic Science at the School of Photography at Rochester Institute of Technology (RIT), Rochester NY, USA, in 1951. He received a Ph.D. at the City University, London, England, in 1977.

After high school, he enlisted in the marines and served as a frogman using photography. After his discharge in 1948, he spent a year doing freelance aerial photography and then enrolled in the School of Photography at RIT to obtain his degree of Associate of Photographic Science in 1951. There followed a three-year period working on the new Ansco Plenachrome system at the Pavelle Color Corporation in New York City.

## 96.1 Bartleson–Breneman Effect

In 1952, he moved to Rochester, NY, to start a career with the Eastman Kodak Company. His first assignment was in the Color Control Department under Ralph Evans, but his flair for research was noticed and in 1957 he moved to the Physics Division where he started his research on color and tone reproduction which led to the publication of a series of very significant papers, one of the most outstanding, in 1967, co-authored with Ed Breneman, being on the effect of light and dark surrounds on apparent contrast. His papers attracted various awards, and he was one of the first recipients of the C. E. K. Mees Award. He was also author, co-author, or editor of several books, including the five-volume series on “Optical Radiation Measurements.” He was also much sought after as a lecturer, and his award of the British Colour Group’s Newton Medal was accompanied by a masterly presentation [1].

In 1967, his outstanding reputation led him to be chosen to establish a research facility for the Macbeth Company, later the Macbeth Color and Photometry Division of the Kollmorgen Corporation, in Newburgh, NY.

When his time at Kollmorgen came to an end in 1974, the following year, at the then age of 45, he enrolled in the School of Ophthalmic Optics and Visual Science at The City University, London, England, and obtained his Ph.D. in 1977. With typical enthusiasm, he constructed an ingenious apparatus for studying the effects of adaptation on perception, and the resulting thesis was of outstanding quality.

He then returned to Rochester, NY, to resume his career at Kodak, where he soon established a reputation as a most valuable consultant for other members of the staff.

He was President of the Association Internationale de la Couleur (AIC) from 1978 to 1981, reviving it from a moribund state, and he took part in several committees of the CIE (Commission Internationale de l’Éclairage).

His main interests included optics, vision, photometry, colorimetry, color perception, color applications, and color photography. His leisure interests also included photography and travel.

Bartleson was a co-author of R. W. Breneman, R. M. Hanes and C. J. Bartleson, *Color: a Guide to Basic Facts and Concepts*, New York: Wiley 1963. He was the co-editor with Franc Grum of Vol. 2 in the five-volume series *Optical Radiation Measurement*, titled *Color Measurement*, New York: Academic Press 1980.

He also authored some 50 original papers, mainly dealing with color photography and vision.

## Reference

1. R.W.G. Hunt, A brief look back. *Color Res. Appl.* **16**, 1 (1991)