

Advances in
**LUMINESCENCE
SPECTROSCOPY**

Cline Love / Eastwood, editors



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ADVANCES IN LUMINESCENCE SPECTROSCOPY

A symposium sponsored by
ASTM Committee E-13 on
Molecular Spectroscopy
Atlantic City, NJ, 7 March 1983

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L. J. Cline Love, Seton Hall University, and
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Dedication

With great sorrow we note the death of Professor Gordon F. Kirkbright (1938 to 1984) of the University of Manchester Institute of Science and Technology. After receiving his Ph.D. from the University of Birmingham, he did post-doctoral studies in the United States and Austria and then joined the staff of Imperial College in London in 1964. During his years there, he did extensive research in atomic absorption and fluorescence, molecular fluorescence and phosphorescence, photoacoustic, and atomic emission spectrometry with emphasis in the latter on inductively coupled plasmas. During this time, he retained an active interest in the affairs of a London-based company, EDT Research, of which he was a founding director.

In 1980, the University of Manchester Institute of Science and Technology undertook a major step in the development of analytical methodology by forming a new Department of Instrumentation and Analytical Science. Professor Kirkbright was appointed as the first head of the newly established chair in analytical science. The center is recognized today as being a major development in international analytical chemistry, coupling important advances in chemistry with improvements in instrumentation. Professor Kirkbright received the 1983 Gold Medal of the Analytical Division, Royal Society of Chemistry, for his outstanding research work. His list of publications is in excess of 200 papers, and he was on editorial advisory boards of major journals such as The Analysts, ARAAS, Canadian Journal of Spectroscopy, and Spectrochimica Acta. He had recently been appointed Editor-for-Europe for Applied Spectroscopy.

Professor Kirkbright was noted not only for his science, but for his wit and joy of life. Energetic both at work and away, he was a regular figure at major international conferences and at American meetings such as EAS, FACSS, and the Pittsburgh Conference. His scientific contributions and careful scholarship inspired his research students and colleagues alike, and his dedicated classroom teaching profoundly influenced the lives of many young scientists. His creative innovations in several areas of analytical

chemistry should serve as scholarly bench marks to many scientists, both now and in the future. His untimely death at the age of 46 is a shock and profound loss to us all. One of his last scholarly works on "Some Photoacoustic Studies of Consequence in Luminescence Spectroscopy" is included in this publication. This volume is dedicated to Professor Kirkbright.

Foreword

The symposium on Advances in Luminescence Spectroscopy was held in Atlantic City, NJ on 7 March 1983. ASTM Committee E-13 on Molecular Spectroscopy and its Subcommittee E13.06 on Molecular Luminescence sponsored the meeting. L. J. Cline Love, Seton Hall University, and DeLyle Eastwood, U.S. Army Corps of Engineers, served as chairmen of the symposium and are editors of the publication.

Related ASTM Publications

New Directions in Molecular Luminescence, STP 822 (1983), 04-822000-39

Compilation of Methods for Emission Spectrochemical Analysis, Seventh Edition, 1982, 03-502082-39

ASTM Manual on Practices in Molecular Spectroscopy (E-13), Fourth Edition, 1980, 03-513079-39

An Introduction to X-Ray Spectroscopy, published in Great Britain, 13-109000-39

Quantitative Mass Spectroscopy, published in Great Britain, 13-114000-39

A Note of Appreciation to Reviewers

The quality of the papers that appear in this publication reflects not only the obvious efforts of the authors but also the unheralded, though essential, work of the reviewers. On behalf of ASTM we acknowledge with appreciation their dedication to high professional standards and their sacrifice of time and effort.

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