



# Photo-Electronic Image Devices

PROCEEDINGS OF THE EIGHTH SYMPOSIUM HELD AT  
IMPERIAL COLLEGE, LONDON, SEPTEMBER 5-7, 1983

EDITED BY

**B. L. MORGAN**

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## PREFACE

The Eighth Symposium on Photo-Electronic Image Devices was held at Imperial College, University of London, from September 5 to 7, 1983. On this occasion the symposium was organized in cooperation with S.P.I.E.—the International Society for Optical Engineering, and was one of three conferences held in the same week at Imperial College. As for the seven previous symposia, the proceedings are here published as volumes in the series, *Advances in Electronics and Electron Physics*. I would like to express my gratitude to Dr. P. W. Hawkes and Academic Press for making this possible. After each of the earlier symposia the organizers considered the alternatives of publishing the proceedings in this hard-backed form or publishing it by photocopying the authors' typescripts and off-set printing. The former has the disadvantage of a longer elapsed time between the symposium and the publication of its proceedings, but enables the contents to be presented in a uniform style with consistent units and notation. Moreover, the organizers have often been told that the series of hard-backed volumes provides a comprehensive and permanent reference work for this field. To control production costs some compromises had to be made compared to earlier proceedings, for instance, it was no longer possible to redraw a majority of the diagrams; however, it is hoped that this volume will maintain the standard of the series.

The symposium was opened by Professor J. D. McGee and it is a great pleasure to record here my thanks to him. Professor McGee started the Symposia on Photo-Electronic Image Devices in 1958 and has taken an active role in every one since then. I hope and expect to see him at the Ninth Symposium.

Finally, I would like to thank the Organizing Committee, Professor Jim Ring, Dr. Harold Ables, and Dr. Geoffrey Towler for planning the program. I would also like to thank all those members of the Astrophysics Group of Imperial College who gave their cheerful and unstinting help in running the symposium.

February 1985

B. L. MORGAN



## ABBREVIATIONS

For the most part the Editors have tried to keep to the units and terminology currently accepted and to adopt consistent abbreviations following *Système Internationale* usage wherever possible.

References cite journals abbreviated as recommended in *Science Abstracts*. Citation of earlier Symposia is frequent and the Editors have sought to simplify by the use of "Adv. E.E.P." for "Advances in Electronics and Electron Physics" followed by the appropriate volume and page numbers.