

TMH-COSTED SERIES IN EMERGING TECHNOLOGY

Physics of Semiconductor Devices

PROCEEDINGS OF THE SECOND INTERNATIONAL WORKSHOP

DECEMBER 5-10, 1983, DELHI (INDIA)

EDITORS

S C JAIN • S RADHAKRISHNA



COMMITTEE ON SCIENCE & TECHNOLOGY IN DEVELOPING COUNTRIES

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PHYSICS OF SEMICONDUCTOR DEVICES

*Proceedings of the Second International Workshop on the
Physics of Semiconductor Devices
December 5-10, 1983, Delhi, INDIA*

Editors

S C JAIN

Solid State Physics Laboratory
Delhi

S RADHAKRISHNA

Department of Physics
Indian Institute of Technology
Madras

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Preface

The Second International Workshop on the Physics of Semiconductor Devices held during 5-10 December 1983 is sequel to the success of the first one held in 1981. Like the first one, the Second Workshop had attracted world wide attention and the response for participation from abroad as well as from within India has been overwhelming. The total participation this time has been around 450, which included around 80 scientists from Australia, Belgium, Canada, France, Italy, Japan, Poland, UK, USA, USSR and West Germany and developing countries like Bangladesh and Singapore. Emphasising the importance of the Workshop at the time of inauguration, Deputy Minister of Electronics, Government of India, said, "A Workshop like this following the one held in 1981 gives us a unique opportunity to get together and to expose ourselves to what is happening in the rest of the world, to exchange views and to define our own goals and objectives. The developments in microelectronics and semiconductor technology have enabled stupendous achievements in space technology, in computers and in every field which gives us a unique means of developing this technology for the benefit of mankind. Apart from the normal applications of microelectronics in improving productivity in the strategic areas, microelectronics also has a very great potential for developments and applications in education, in agriculture, in medicine, in transport, etc. It is thus of great value to India and other developing countries. Many applications have to be developed, and it is necessary therefore, that an understanding of this technology is built up and a large number of people are exposed to developments in expertise so that they can use this technology and apply it in a meaningful manner"

The Workshop was sponsored by COSTED and has been supported by several government departments, research institutions, and public and private sector undertakings. Editors are particularly grateful to Dr. V.S. Arunachalam, Scientific Advisor to Defence Minister and Dr. P.P. Gupta, Secretary, Department of Electronics for the keen interest they took and the support they provided to the Workshop. Editors would also like to express their appreciation of the very good support received from Dr. T.Rs. Reddy, Dr. V.K. Jain and Shri G.D. Sharda.

There were more than 70 lectures given by distinguished and world renowned scientists in the field of semiconductor devices. The topics covered have been broadly classified into four groups dealing with VLSI, Solar Cells, Materials and Discrete Devices. It is hoped that the proceeding will be useful to researchers in the field of semiconductors.

S.C. JAIN
S. RADHAKRISHNA

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