Introduction to Measurements and Instrumentation

FOURTH EDITION

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To
the memory of my elder brother
AMIYA
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Metrology is the science and technology of measurement. Since time immemorial, reliable measurement of various commodities and quantities has been important for trade and commerce as well as for agricultural and industrial activities. The present-day drive towards globalisation of the economy has made this to be a priority task both at national and international levels. Modern engineering practices require sufficiently precise and fast measurements. Science is breaking new ground in measuring the very tiny and the very big. Therefore, an introductory course on instrumentation principles, with an appreciation of the possible errors in the measurements, constitutes an important part of learning for both science and engineering students.

Although many voluminous treatises on this subject are available, Dr Ghosh’s *Introduction to Instrumentation and Control* is a well-focussed textbook covering the physical principles rather than the engineering details, which can be taught in one semester of the undergraduate curriculum. The contents of the book cover most of the requirements of the students. Of course, each topic can become the subject of a detailed discussion. For example, the topic of signal conditioning is by itself a vast area of research work. Students specialising in various subjects will however find a common minimum amount of learning in this book.

Dr Ghosh’s presentation is lucid and the style is not verbose. I am sure that the book will be welcomed by the student community and become a success in its area.

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