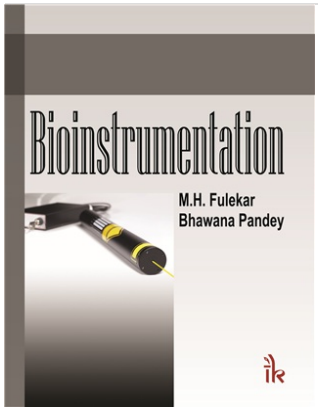
Book Information Sheet



Bioinstrumentation, 1/e

M.H. Fulekar & Bhawana Pandey

2013 | 437 pp | Paperback | ISBN: 9789382332398 | Price: 545.00

About the Book

The need of instrumentation in biological sciences began with the development of the telescope and the microscope by Galileo in the early 1600s. The invention of the compound microscope in 1610 gave birth to microscopic anatomy. In the 19th and early 20th century, microscopic anatomy opened up the areas of biological chemistry. The research in biology follows this by including more emphasis on process, quantification, problem solving, and "open-ended" laboratory activities. The measurement of physical, chemical and biological parameters using instruments in any living organisms is known as bioinstrumentation.

The realization of the present-day accomplishments in many disciplines has come out through the applications of inventions of modern scientific instruments. The modern scientific researches stand on two pillars, i.e., idea and technology. Ideas involve fresh insights, new concepts, and innovative approaches to scientific problems. Technology includes the development and use of complex scientific instruments and techniques. Ideas and technology are complementary and to a large extent, interdependent, most research projects in the physical, chemical and biological sciences depend upon the access to modern complex scientific instruments.

Salient Features

- UV-VIS-FT-RI Spectroscopy, Fluorescence Spectroscopy, Flame Photometry, Atomic Absorption Spectroscopy
- Gas chromatography, High Pressure Liquid Chromatography, Thin Layer Chromatography
- Gas Chromatography, Mass Spectroscopy, Nuclear Magnetic Resonance, Bioreactor
- Gel Electrophoresis, PCR, Biosensor, Microscopy.

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