

НОВА КНИЖКА

Посудін Ю.І. **Методи вимірювання параметрів навколишнього середовища.** 2014 р. John Wiley & Sons, Inc. 429 с. ISBN:978-1-118-68693-5

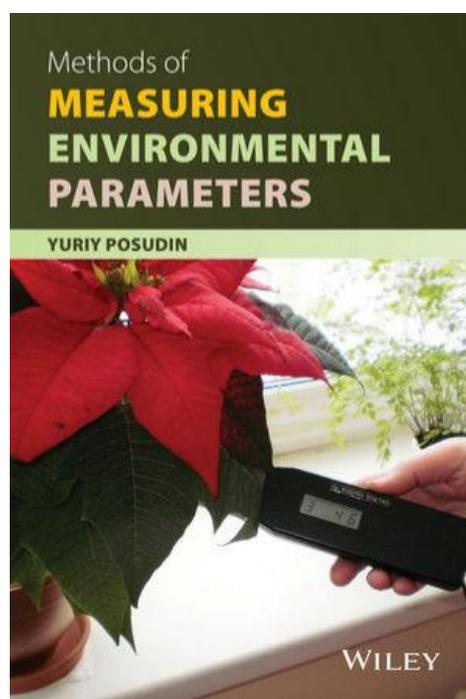
NEW TEXT-BOOK

Methods of Measuring Environmental Parameters. Posudin Yuriy. 2014. John Wiley & Sons, Inc. 429 p. ISBN: 978-1-118-68693-5

Environmental science is an interdisciplinary academic field that studies the anthropogenic and natural effects on the human and its environment. It is very important to provide quantitative assessment of climatic and meteorological factors, to measure the atmospheric, hydrologic and edaphic parameters and to develop complex approach to environmental monitoring and to estimate the quality of the main components of biosphere – atmosphere, hydrosphere, soil, vegetation.

The text-book “*Methods of Measuring Environmental Parameters*” of Prof. Yuriy Posudin introduces students of Environmental Science and Engineering to the modern methods of environmental control, principles of devices used for measuring environmental parameters.

The text-book provides brief introduction which contains principal definitions. Throughout the book, Yuriy Posudin describes the main climatic



(pressure, wind, temperature, humidity, precipitation, solar radiation), atmospheric, hydrographic, and edaphic factors; abiotic factors, their effect on quality of atmosphere and indoor air, soil, water; biotic factors, bioindication and biomonitoring as perspective methods of observing the impact of external factors on ecosystems; principal effects of environmental factors on living organisms, human health and ecosystems; basic methods and principles of modern instrumentation that can be applied for measuring environmental (mostly physical) parameters, with special emphasis on automated and remote sensing components of the environment; advantages and disadvantages of the main methods of measurement presented in the textbook.

The text-book “*Methods of Measuring Environmental Parameters*” is intended to be a useful overview reference for professional ecologists, environmental scientists, meteorologists, climatologists, atmospheric physicists, aerobiologists, and soil and water managers. It can also serve as a suitable textbook for undergraduate and graduate students in these academic disciplines.

The textbook has practical exercises, which allow a better understanding of the textbook content; the examples with solutions, and control exercises; questions and problems to provide self-testing the material presented in the text-book; constructive tests, for which there are no direct answers, but the student must find the answer himself. The indicative topics of seminars for initiating classroom discussions are proposed. Examples of extreme environmental situations are given for the curious students. The list of references, electronic references and further reading is given at the end of each chapter. An appendix and a subject index are included at the end of the text-book.

Yuriy Posudin is Doctor of Biological Sciences, Professor of Physics Department, National University of Life and Environmental Sciences of Ukraine, Kiev, Ukraine.

He studied at the Kiev State University (Radiophysical Faculty) 1964-1969, the Institute of Radiotechnique and Electronics, Moscow (1972-1975), and the Agrophysical Institute, St.-Petersburg (1992).

Dr. Posudin's principal scientific interests are the investigation of photobiological reactions of algae and plants, and the non-destructive quality evaluation of agricultural and food products.

Academic duties of Dr. Posudin include lecturing of a cross-section of environmental topics, such as "Environmental Biophysics", "Methods of Measuring Environmental Parameters", and "Environmental Monitoring with Fundamentals of Metrology".

Prof. Posudin has visited a number of Universities and Institutions in Europe, the United States, and Japan as visiting researcher. In addition, he conducted series of lectures in the University of Georgia, U.S.A., 1996; Hokkaido University, Japan, 2010; Jyväskylä University, Finland, 2010.

These visits undoubtedly influenced the forming of expanding horizons and world view of the author, who used this experience during preparation of this text-book.

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