## **Preface**

In this scientific edition, the reader will find the results of the latest research and technological developments in the field of environmental protection, ranging from the synthesis of absorbent materials to wastewater treatment and waste treatment technologies. The absorption and further degradation of various pollutants and the processing of solid production wastes are among the main stages in the creation of environmentally adapted industries.

Modern oil production technologies require the creation of modern and more effective surfactant substances, which must also meet modern environmental safety requirements.

The creation of modern composite materials and the practice of their use in mechanical engineering and construction bring to the fore the development and use of methods for assessing the fatigue strength of such materials and structures using them.

The reader will also find research results in the development of membranes for electrochemical devices and semiconductor compounds for use in photovoltaics.

The book will be useful and interesting to a wide range of specialists in various branches of modern production.