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The present textbook is a part of book series for courses of the project "Network for Master Training in Technologies of Water Resources Management" (NETWATER).

It contains up-to-date materials about technology of membrane production and application in industry and science. Textbook gives membrane classification, characteristics and recommendations of proper use. It describes outdoor environmental factors and mode variables to take into consideration while organizing membrane processes. Great attention is paid to membrane processes use for water treatment.

The textbook is developed for bachelor and master students of the programmes: 280700 "Technosphere Safety", 022000 "Ecology and Nature Management", 241000 "Power- and Resource-Saving Processes in Applied Chemistry, Petrochemistry and Bioengineering" and 270800 "Construction" as well as for postgraduates, teachers and researchers dealing with development of water treatment technologies, waste water purification, design of municipal and industrial water drain and water supply systems and for mastering English.

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