



## THE ROAD TO ENVIRONMENTAL CHEMISTRY IN REPUBLIC OF MOLDOVA PAVED BY THE ILLUSTRIOUS SCIENTIST AND RENOWNED ECOLOGIST VALERIU ROPOT

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**Abstract.** In this paper, the main scientific and innovative results are presented, which were obtained by the talented chemist and renowned ecologist Valeriu Ropot throughout his scientific career. The results of scientific investigations are bestowed and analysed, focusing on the quality of the waters of the Dniester and the Prut Rivers, Dubasari reservoir on the Dniester River, as well as the main water bodies in the Republic of Moldova. Recommendations are also presented regarding the studies on the improvements of water purification technologies from the Dniester and Prut Rivers, including practical applications for the removal of fluoride, iron, ammonium, and sulphide ions from groundwater. Another aspect of the work is devoted to scientific studies related to the solving of problems concerning the treatment of wastewater from industrial enterprises in the agro-industrial complex and from economic units, and galvanic processes. The paper also presents some practical recommendations for reducing the negative impact on the environment, of the discharge of hundreds of thousands of tons of brine into the Dniester River as a result of the accident at the mineral fertilizer plant in the Stebnik town, Ukraine. Moreover, the paper brings into discussion the results of studies aimed at developing methods for determining organic and inorganic pollutants in natural waters.

**Keywords:** water, wastewater, chemical composition, treatment technology, pollutant.

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