

ECOLOGICAL MONITORING OF SMALL WATER SYSTEMS: ALGORITHM, SOFTWARE PACKAGE, THE RESULTS OF APPLICATION TO THE UZH RIVER BASIN (UKRAINE)

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References:

1. Kocjuba I.G; Korobijchuk A.O., Radchenko L.M. Study of modern state water pollution hydrographic network Zhytomyr region. *Ecolog. Sci.* **2014**, 6, 96–103. <http://ecoj.dea.kiev.ua/archives/2014/6/13.pdf>
2. Aazami J., Esmaili-Sari A., Abdoli A., Sohrabi H., Van den Brink P.J. Monitoring and assessment of water health quality in the Tajan River, Iran using physicochemical, fish and macroinvertebrates indices. *J. Environ. Health Sci. Eng., Part A.* **2015**, 13, 29–41. DOI: 10.1186/s40201-015-0186-y.
3. Udod V.M., Yatsiv Yu. Integrated criteria for ecological evaluation of the efficiency of itravodemic processes. *J. Water Chem. Tech.* **2013**, 35 (6), 518–532.
4. Romanenko V.D., Zhukinskiy V.N. Current Problems and Achievements of Ukrainian Hydroecology in the Field of the Ecological Assessment of the State of Surface Water Bodies. *Hydrobiological J.* **2003**, 39(3), 3-20. DOI: 10.1615/hydrobj. v39. i3.10.
5. Bos R., De A., Sen G., Mukherjee A.D. Comparative study of the physico-chemical parameters of the coastal waters in rivers Matla and Saptamukhi: impacts of coastal water coastal pollution. *J. Water Chem. Technol.* **2012**, 34 (5), 246–251. DOI: 10.3103/S1063455X12050062.
6. Goncharuk V.V., Syroeshkin A.V., Kovalenko V.F., Zlatskiy I.A. Formation of a Test System and the Choice of Test Criteria When Biotesting Natural Waters. *J. Water Chem. Technol.* **2016**, 38 (6), 349–352. DOI: 10.3103/S1063455X16060084.
7. Nagaraju A., Thejaswi A., Sharifi Z. Assessment of Groundwater Quality and Its Suitability for Agricultural Usage in and Around Rangampeta Area, Andhra Pradesh, South India. *J. Water Chem. Technol.* **2016**, 38(6), 358–365. DOI: 10.3103/S1063455X16060102.
8. Gallah N., Bahri O.B., Lazreg N., Kamel Besbes. Water quality monitoring based on small satellite technology. *Int. J. Adv. Comp. Sci. Applic.* **2017**, 8 (3), 357–362.
9. Ramin Nabizadeh, Maryam Valadi Amin, Mahmood Alimohammadi, Kazem Naddafi, Amir Hossein Mahvi, Amir Hossein Mahvi. Development of innovative computer software to facilitate the setup and computation of water quality index Samira Yousefzadeh. *J. Environ. Health Sci. Eng.* **2013**, 11, 1–10. DOI: 10.1186/2052-336X-11-1.
10. Koichi Izumi; Masaki Matsudaira, Tsutomu Nagashige. River Monitoring System. *OKI Tech. Rev.* **2014**, 224. 81(2), 1–4.
11. Nolllet L.M.L., De Gelder L.S.P. Handbook of water analysis. – [3rd ed.]. Boca Raton: CRC Press, Taylor & Francis, **2014**. 979 p.
12. Sanitary rules and regulations for protection of surface water from pollution. San.Pin No. 0379-96. Edited. from 08/29/2007, 50–55 (in Ukr.).
13. State Water Cadastre. Annual data on as surface water sushi. Part 1. Rivers and canals. Dnipro basin / State Committee of Ukraine for Hydrometeorology. Central Geophysical Observatory. - 2001–**2012**. 2(1) (in Ukr.).
14. Skyba G.V, Skrypnichenko S.V. Transformation of hydrophysical properties of drained peat soils under the influence of anthropogenic factors. Bulletin of Poltava State Agrarian Academy. **2016**, 3, 28-31. DOI: <https://doi.org/10.31210/visnyk2016.03.06>