



Contents

Volume 288

Special issue devoted to the 15th Conference on Micropollutants in Human Environment 14–16 September 2022, Czestochowa, Poland

Part I

Editorial

M. Włodarczyk-Makula (Poland)	1
Removal of selected micropollutants from water by ultrasonication J. Copik, E. Kudlek, M. Dudziak (Poland)	2
The batch tests on new catalytic filtration masses creation by natural materials modification with MnO ₂ supporting by electrolysis with the view of Fe and Mn removal I. Skoczko, E. Szatylowicz, A. Kędra (Poland)	12
Water supply safety assessment considering the water supply system resilience B. Tchórzewska-Cieślak, J. Rak, K. Pietrucha-Urbanik, I. Piegdoń, K. Boryczko, D. Szpak, J. Żywiec (Poland).....	26
Novel solution of water disinfection for a branched water supply network D. Kowalski, B. Kowalska (Poland)	37
The coronavirus pandemic and its impact on water consumption as recorded by the water industry T. Cichoń, J. Królikowska (Poland)	45
Efficient removal of polyethylene and polyvinyl chloride microplastics from water using a modified coagulation process supported by the addition of a surfactant S. Ziembowicz, M. Kida, P. Koszelnik (Poland).....	51
The use of modified multi-walled carbon nanotubes for the removal of selected pharmaceuticals from the aqueous environment K. Kuśmierk, L. Dąbek, A. Świątkowski (Poland)	60
Removal of tetracycline and rhodamine from aqueous systems by pristine biochar derived from poultry manure M. Mercurio (Italy), S.J. Olusegun, K. Malińska, K. Wystalska, J. Sobik-Szołtysek, A. Dąbrowska, P. Krysiński, M. Osial (Poland)	72
Dynamic of bisphenol A biodegradation in laboratory conditions T. Ciesielczuk, J. Poluszyńska, C. Rosik-Dulewska (Poland).....	87
Adsorptive removal of chloroxylenol and chlorophene from aqueous solutions using carbon-halloysite nanocomposites obtained from corrugated cardboard as a carbon precursor B. Szczepanik, L. Frydel, P.M. Słomkiewicz, D. Banaś, I. Stabrawa, A. Kubala-Kukuś (Poland).....	93
Possibilities of removing microplastics from the aquatic environment using membrane processes M. Bodzek, A. Pohl (Poland).....	104
Influence of microplastic decomposition conditions on the emission of substances harmful to the environment M. Kida, S. Ziembowicz, P. Koszelnik (Poland).....	121
Genotoxicity assessment of aluminum oxide nanoparticles using in vitro methods N. Doscocz, M. Załęska-Radziwiłł (Poland).....	130
Water quality analysis in a municipal outdoor swimming pool complex before and during the COVID-19 pandemic J. Wyczarska-Kokot, M. Dudziak, A. Lempart-Rapacewicz (Poland)	140
Study of adsorption of differently charged dyes by carbon adsorbents I. Bordun (Ukraine, Poland), T. Vasylynych, M. Malovanyy, H. Sakalova, L. Liubchak, L. Luchyt (Ukraine)	151
Municipal wastewater management in Ukraine I. Vasylykivskiy, V. Ishchenko, H. Sakalova, G.C.H. Ullianodt, S. Polyvanyi (Ukraine)	159

Activated sludge vs. biofilm — effect of temperature on ammonia and nitrite oxidation rate in the hybrid reactor O. Zajac, M. Zubrowska-Sudol, M. Godzieba, S. Ciesielski (Poland).....	165
The influence of the physico-chemical composition of bottom sediments on their sorption capacity in relation to phosphates M. Miąsik, P. Koszelnik, L. Bartoszek, M. Chutkowski (Poland).....	178
The ability of <i>Typha latifolia</i> L. to accumulate nutrients from rural ponds A. Parzych, Z. Sobisz (Poland).....	188
Water pollution risk assessment resulting from leaching organic micropollutants from sewage sludge M. Włodarczyk-Makuła, J.R. Rak, B. Tchórzewska-Cieślak (Poland).....	197
Preliminary assessment of phosphorus mobility in sewage sludge for their potential leaching from soil M. Widłak, R. Stoińska, R. Kowalik (Poland).....	208
Pre-treatment of landfill leachate using potassium ferrate(VI) J. Muszyńska (Poland).....	215
Kinetics of changes in chemical oxygen demand values in leachate treated with Fenton reagent J. Muszyńska, J. Gawdzik (Poland).....	223
Comparative analysis of sorbents within the landfill leachate pretreatment process J. Muszyńska, J. Latosińska, J. Gawdzik, P. Czapik (Poland).....	234
Impact of humic substances on the bioavailability of copper and zinc during composting of sewage sludge in reduced structural material content conditions B. Janowska, K. Szymański, R. Sidelko, B. Walendzik (Poland).....	247
The effect of selected methods of conditioning of digested sewage sludge on the content of organic and biogenic compounds in sludge liquids B. Bień, J.D. Bień, B. Macherzyński (Poland).....	256
Forecasting the municipal sewage sludge amount generated at wastewater treatment plants using some machine learning methods J.D. Bień, B. Bień (Poland).....	265
Impact of effective microorganisms on the vermicomposting of sewage sludge D. Boruszko (Poland).....	273
Author Index	283