

Wydział Nauk o Środowisku
Egzamin dyplomowy
Studia stacjonarne II stopnia - kierunek: Inżynieria środowiska
specjalność: Process Engineering and Environmental Protection
studia stacjonarne
od cyklu kształcenia 2018/2019

Zagadnienia dyplomowe	Efekty kierunkowe
1. Enzymes used in genetic engineering.	K_W02
2. Molecular techniques in studies of microbial communities.	K_W03
3. Granular sludge as an example of advanced wastewater treatment technologies.	K_W04
4. Types of biomass in wastewater treatment systems.	K_W05
5. Technology of membrane bioreactors in wastewater treatment.	K_W06
6. The use of filtration in water treatment – iron and manganese removal.	K_W07
7. The use of filtration in water treatment – water softening.	K_W08
8. Unit processes in activated sludge with integrated removal of carbon, nitrogen and phosphorus.	K_W09
9. Activated sludge – definition, mechanisms for removing carbon organic substances from wastewater.	K_W10
10. The major operational parameters in wastewater treatment systems.	K_W11
11. The role of extracellular polymers in biomass formation in wastewater treatment.	K_W12
12. Phosphorus removal from wastewater.	K_W14
13. Mechanisms of biological nitrogen removal from wastewater.	K_W16
14. Biodiesel production, types of substrates, mechanism of process.	K_U03
15. Technological concept of biodiesel production.	K_U04
16. Stabilization of municipal waste in reactors with passive aeration; biological stability of waste.	K_U06
17. Sewage sludge composting – definition, process characteristics, feedstock composition.	K_U07
18. Factors affecting the efficiency of soil bioremediation.	K_U08
19. The role of statistics in environmental science; environmental monitoring.	K_U10
20. The role of statistics in environmental science; impact assessment.	K_U11
	K_U14
	K_U15
	K_K01
	K_K03

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| <ol style="list-style-type: none">21. Environmental pathways of toxic chemicals; types of processes that govern the movement and transformation of chemicals in the environment.22. Mechanisms of chemical disease; non-cancer and cancer health effects.23. Natural polymers for the bioplastic production.24. Production of polyhydroxyalkanoates (PHA) using pure cultures of microorganisms.25. Polyhydroxyalkanoates (PHA) – definition, chemical structure, properties and applications.26. Strategies for polyhydroxyalkanoate (PHA) production by mixed microbial cultures with the use of renewable waste materials as substrates.27. Bioremediation methods for soils contaminated with oil and oil products.28. Soil remediation techniques – characteristics and criteria of their division.29. Biosorption as a method for dye removal from wastewater.30. Phytoremediation as a strategy for soil treatment. | |
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