

ANNOTATIONS

of science works published in international magazine
«River transport (XXIst century)» 1(101)'2022

The reconstruction of navigable structures of Gorodetskiy hydro-unit and alternative solutions / K. Morgunov, M. Kolosov, S. Egorov, D. Visherskaya // River transport (XXIst century). 2021. – № 5 (101). – p. 27-30.

The analysis of navigable structures of Gorodetskiy hydro-unit's reconstruction project and alternative variants.

Key words: Gorodetskiy hydro-unit, navigation.

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The proposals for amendments to russian legislation concerning safety of navigation and environmental protection / V. Dmitriev // River transport (XXIst century). 2021. – № 5 (101). – p. 32-35.

Describes the author's proposals for amendments to russian legislation concerning safety of navigation and environmental protection.

Key words: norms of international law, international treaties of Russian Federation, shipowner, small vessel, owner of the ship.

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Historical prerequisites and modern prospects of creation of Uni Trans-Ural Waterway on Eurasian continent / E. Chernyaev, T. Pilipenko, T. Boltushkina // River transport (XXIst century). 2021. – № 5 (101). – p. 36-39.

Analyses possibility of creating Uni Trans-Ural inland waterway. Describes historical prerequisites and modern prospects to realize the project.

Key words: Trans-Ural waterway, Iset project, connection of water basins.

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The principle of creation of intelligent expert system «The probability of agreement conclusion for cargo transportation» on water transport / A. Alpidovskiy // River transport (XXIst century). 2021. – № 5 (101). – p. 40-41.

Describes the author's principle of creation of system to estimate probability of agreement conclusion for cargo transportation with taking into account features of carrier and customer.

Key words: cargo transportation, carrier, customer, psychotype, expert system.

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The analysis of engine plasmic covers porosity's influence on their thermal conductivity / E. Gubin, D. Sibrikov, I. Shvetsov, V. Kuz'min // River transport (XXIst century). 2021. – № 5 (101). – p. 46-48.

Describes the results of experimental studies of thermal conductivity of plasmic warm protecting covers based on partly stabilized ZrO₂; dependences which help to estimate by calculated way thermal condition of surfaces of combustion chambers of heat engines with heat-protective coatings.

Key words: heat-protective coatings, combustion chambers, heat engines, effectiveness.

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The estimation of external factors' influence on river ship body's paintwork condition / O. Lebedev, M. Menzilova // River transport (XXIst century). 2021. – № 5 (101). – p. 48-50.

Describes the results of experimental researches of influence of high and low temperature, ultraviolet radiation and biofouling on condition of paintwork cover on metallic plates which imitate internal navigation ship's body.

Key words: ship's body, paintwork, ultraviolet radiation, biofouling, metal corrosion, adhesion.

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Machine learning in diagnostics and control systems of diesel engine's working process / D. Vatolin // River transport (XXIst century). 2021. – № 5 (101). – p. 51-54.

Describes potential of machine learning models in diagnostics and control systems of diesel engine's working process.

Key words: diesel engine, diagnostic systems, machine learning.

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The features of optimization task for combined ship's project characteristics / E. Ronnov, Y. Kochnev, I. Gulyaev // River transport (XXIst century). 2021. – № 5 (101). – p. 54-56.

Describes the features of optimization for combined ships for transportation liquid petroleum products and dry cargoes in direct and return trip accordingly. In general view shows mathematical model which helps to solve specified task in two variants.

Key words: combined ship, mathematical model, effectiveness of transportations optimization.

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The features of riverbed processes in rivers confluence's nodes (on the example of Obskiy basin) / T. Pilipenko, V. Belyaeva // River transport (XXIst century). 2021. – № 5 (101). – p. 57-58.

Describes the features of riverbed processes in rivers confluence's nodes in Obskiy basin. Analyses planned outlines of water areas in these zones, substantiates necessity of detailed research of local speed field.

Key words: nodes of rivers' confluence, classification of estuarine tributaries, stream, channel, floodplain.

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