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Doctor of Economics, Professor, Department of Management Theory and Marketing

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Key words: *complex system, complexity, system.*

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IN SURGERY**

The article outlines the scientific heritage of professor L. E. Olifson who together with professor B. G. Nyzov developed and introduced into clinical practice the medication Miliatsil. Due to its exceptional composition Miliatsil is widely used in surgery and save people from diseases.

Key words: *professor, Miliatsil, treatment, surgery.*

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**ON PROSPECTIVE USAGE OF NANODISPERSED FORM OF
CALCIUM GLUCONATE WHEN CYLINDRICAL BONES
FRACTURED**

Histological technique identified acceleration of osteotylus formation and healing of long bone shaft fracture in experimental animals due to daily introduction per os of nanodispersed form of calcium gluconate during 14 days.

Key words: *nanodispersed form of calcium gluconate, bone fractures.*

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**ON PROFESSOR OLIFSON'S SCIENTIFIC HERITAGE
IN SURGERY**

The article outlines the scientific heritage of professor L. E. Olifson who together with professor B. G. Nyzov developed and introduced into clinical practice the medication Miliatsil. Due to its exceptional composition Miliatsil is widely used in surgery and save people from diseases.

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CORRECTION OF CHLOROHYDROCARBONS INTOXICATION OF OSSEOUS TISSUE BY NANODISPERSED FORM OF CALCIUM GLUCONATE AND ANTIOXIDANT VITAMIN MEDICAL SUBSTANCE

Repetitive daily two-month low dosed dichloroethane intoxication (total dose of 0.1 LD50) of viripotent male albino rats is accompanied by the osteo toxicity syndrome development.

Combined treatment with nanodispersed gluconate calcium and antioxidant vitamin medical substances against dichloroethane intoxication has therapeutic effect on bone metabolism inhibiting lipid peroxidation and reducing the intensity of resorptive processes and collagen catabolism.

Key words: *metabolism, dichloroethane, nanodispersed form of calcium gluconate, antioxidant vitamins.*

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FUNDAMENTAL AND APPLIED ASPECTS OF ENVIRONMENTAL PROTECTION ISSUES IN OIL AND GAS INDUSTRY

The introduction of absorbents with the application of new chemical reagents that intensify removal of hydrogen sulfide, carbon dioxide and organic sulfur compounds from gas brings to the foreground a problem of ecological safety when they get to environment. Microbial ecotechnologies are advanced and universal especially when microorganisms-decomposers are applied for recycling of high-flow dissolved organic reagents and enrichment of active sludge.

Key words: *absorbents, natural gas, microorganisms-decomposers, ecotechnologies.*

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EFFECTS OF PESTICIDES AND IRON CATIONS ON IMMUNE SYSTEM PARAMETERS AND LIPID PEROXIDATION IN WISTAR RATS

The article suggests the results of the research concerning the mass and number of thymus and spleen cells, the number of white blood cells and bone marrow cells, the intensity of peroxidation process depending on the content of the dialdehydes, MDA, superoxide dismutase and catalase activity in the blood and tissues of Wistar rats' hearts and livers. The rats received Fe^{2+} and herbicide 2,4-dichlorophenoxyacetic acid and their combination with drinking water. Moderate changes of the parameters under study in the groups who took ferrum and 2,4-DA, and evident parameter changes within the group taking the combined substances were identified.

Key words: *ferrum, pesticides, rat, number of cells, lymphoid organs, lipid peroxidation, blood serum, heart, liver.*

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LOCAL MEDICAL SERVICE TO PREVENT SICK RATE AND DISABILITY

The article presents the results of the opinion poll on preventive control held between the patients of the Orenburg regional clinics, including disabled people.

Key words: *prevention, incidence, disability, medical care.*

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**POLYCHLORINATED BIPHENYLS EFFECT ON MACROPHYTES
PHOTOSYNTHETIC APPARATUS ON EXAMPLE OF HORNWORT
(CERATOPHYLLUM DEMERSUM L.)**

The results of the model experiment that aimed at assessment of macrophytes sustainability to different concentrations of PCBs are suggested in the article. The dynamic changes of photosynthesizing pigments and carotenoids influenced by PCBs are considered.

Key words: polychlorinated biphenyls, macrophytes, photosynthetic pigments.

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**CHRONIC EXPOSURE EFFECT OF TRANSITION METAL NONTOXIC
CONCENTRATION DURING OXIDATIVE STRESS DEVELOPMENT
IN ANIMALS**

The article describes the effect that low concentrations of transition metals produce on the rate of lipid peroxidation and antioxidant enzymes activity. The experiment revealed that chronic intake of transition metals in concentrations that do not exceed the threshold increases the intensity of lipid peroxidation, on the one hand, and reduces the activity of antioxidant enzymes – superoxide dismutase and catalase, on the other hand.

Key words: transition metals, low concentrations, lipid peroxidation, antioxidant enzymes, oxidative stress, rats.

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**ENVIRONMENTALLY SUBSTANTIATED DECEASES.
ON RELEVANCE OF ADIPOSOPATHY, DEVELOPMENT REASONS,
TREATMENT AND PREVENTION METHODS**

The article continues the series of articles about the reasons, treatment and prevention methods of environmentally substantiated deceases. It characterizes adiposopathy as a dysfunctional disorder of adipose tissue. The article describes endocrine disruptors that have obese gene effect, change the functional capacity of adipose tissue and have priority in pollution of water, soil and air. It substantiates the necessity to conduct screening research for assessment of endocrine disruptors and obese genes effect to develop treatment and prevention methods.

Key words: *adiposopathy, pollutants, metals, endocrine disruptors, technogenic burden, federal targeted program.*
