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KYOTO PROTOCOL AND PROSPECTS OF UPDATING THE UKRAINIAN INDUSTRY

D. V. Stalinsky, A. A. Kaverinsky, A. A. Pavlenko

ENVIRONMENTAL AND RESOURCE-SAVING PROBLEMS' SOLUTION IN PROJECTS OF «GIPROSTAL»
The main trends of work carried out in the Institute associated with the effective use and saving of fuel and power resources, environment protection, wastes recycling of metallurgical processes are represented in the article.



GENERAL QUESTIONS OF INDUSTRIAL ECOLOGY

V. A. Botshstein, A. G. Notich

CONCERNING PRIORITIES OF THE GOVERNMENT CONTROL IN THE FIELD OF TECHNICAL DEVELOPMENT OF UKRAINIAN MINING AND METALLURGICAL ENTERPRISES' COMPLEX

The concept of power saving and ecological improvement of Ukrainian mining and metallurgical enterprises' complex according to the primary tasks of the «State program of development and reforming of mining and metallurgical enterprises' complex for the period up to 2011» is reflected in the article. It is shown the basic levers to influence on manufacturing processes in the mining and metallurgical complex from the side of the public authorities are the requirements for enterprises to meet the specifications on pollutants released to environmental medium and reduce power consumption of a product.

B. A. Gorlitsky

RESOURCE-ENVIRONMENTAL-AND-ECONOMIC OPTIMIZATION OF THE SYSTEM: PRIMARY NATURAL RESOURCES – INDUSTRIAL AND CONSUMPTION WASTES – ENVIRONMENT

Industrial and consumption wastes have valuable constituents and are the necessary component of any commodity production and securing of person life activity (for example, wastes of service sphere and solid household wastes of a housing sector). The problem of optimizing the relation concerning the dependence of the level and quality of people life from the quality and amount of wastes placed in the environment is considered.

Ya. Ya. Derevyanko, T. B. Rakhimova

ECOLOGY AND PERSON HEALTH

Problems of environment pollution in Ukraine by industrial and toxic waste products and their influence on conditions of life activity and person health are considered.

U. M. Matsevity, V. V. Solovey, T. V. Volovina, V. N. Lis'ev

INTEGRATED TECHNOLOGIES ARE THE METHODOLOGICAL BASIS OF AN INDUSTRIAL SYMBIOSIS

The concept of increasing the ecological compatibility of powerful solid-fuel energy-generated enterprises is stated. The opportunity of using the existing and perspective technologies of recycling secondary material and power streams to generate electric energy and other valuable products is shown.

E. P. Buravljov

ECOLOGICAL VECTOR OF POWER GENERATION DEVELOPMENT

General trends of fuel and energy enterprises' complex up-dating including scientific & technological, environmental and social aspects are considered. It is shown, that in a context of national safety it is expedient to establish the long-term National program of constant development of Ukrainian power generation as a part of economic program of the state development

V. S. Mishchenko, E. N. Matorin

NATIONAL PRIORITIES RELATED TO THE SOLUTION OF THE RESISTANT ORGANIC POLLUTANTS' PROBLEM

There are a lot of international obligations arisen before Ukraine in connection with the expected joining to the Stockholm Convention about resistant organic pollutants (ROP). These problems require developing the infrastructure for destruction/neutralization of thousand tons of polychlorinated diphenyls (PCDD) and PCDD-contained equipment and pesticides, providing of technological actions to reduce the emissions of polychlorinated dibenzodioxins and dibenzofurans at hundreds of enterprises and, eventually, for cleaning the territories polluted by ROP.



SCIENTIFIC RESEARCHES AND DEVELOPMENTS

L. F. Dolina, T. L. Bushina

TO THE QUESTION OF TREATMENT AND RECYCLING OF CITY EFFLUENT SEDIMENTS

Environmental and economic aspects of treatment and recycling of sediments in city effluents and petrochemical complexes are considered.

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THE INVESTIGATIONS OF INFLUENCE SOME OF POLYOLES ON SANITARY REGIME AND ORGANOLEPTIC QUALITIES OF WATER POOL.
Some data on investigation the influence of organic substances on the sanitary regime of water pool are resulted. It is proved that combinations being studied worsen water organoleptic qualities also have high stability in solutions and influence the level of oxygen and increase its biochemical using. The combinations do not influence the process of mineralization of organic substances but negatively influence the self-cleaning of water pool.

**NATURE PROTECTION TECHNOLOGIES AND EQUIPMENT****D. V. Stalinsky, G. M. Kanenko, V. V. Alhasova**

BLAST-FURNACE GAS CLEANING

Perfection of the technological scheme of blast-furnace gas cleaning requires optimizing some units' designs along with cooling and cleaning parameters of blast furnace gas. To increase the recovery of dry blast-furnace dust it is necessary to install additional tangential de-duster. At optimizing the regime parameters of scrubbers' operation on water supply and gas speed increase, water consumption for gas cooling and metal consumption are reduced according to the results of tests and investigations. To improve dust-collection efficiency and to control blast furnace gas consumption it is expedient to install adjustable Venturi tubes.

A. V. Erokhin, I. S. Berezhnoy, U. S. Gavriish, L. T. Lapina, D. V. Semenov

DEVELOPMENT AND MASTERING OF MANUFACTURING TYPE SIZE PRESSURE FILTERS WITH ANTHRACITIC-QUARTZ LOADING WITH 2000 MM AND 3000 MM OF CAGE DIAMETER

UkrSSEC «Energostal» has developed and mastered production of pressure filters with anthracitic-quartz loading with 2000 mm and 3000 mm of cage diameter (filter PF-2000 and PF-3000) at the own experimental plant. These filters are used at filtering stations with productivity up to 1500 thousand m³/hour for additional cleaning of effluents in water supply systems of hot-rolling mills and slab continuous-casting machines. The filter is different by high technical and economic parameters: average filtering speed – 30—40 m/hour, time of filter cycle — 24 hours, etc.

Z. S. Muzykina, S. I. Epshtein, N. A. Chaplyia, V. I. Mukha, L. G. Maksimenko, D. V. Man'kov

TECHNICAL APPROACHES FOR CLEANING OF EFFLUENT IN ROLLING SHOPS AT PbJSC «KRIVOROZHSTAL»

Water supply scheme of effluents in rolling shops of PbJSC «Krivorozhstal» is considered. Technical approaches for cleaning effluents in rolling shops and also total wastewaters of PbJSC «Krivorozhstal» which dumped into the river Ingulez are offered.

U. E. Zingerman, T. F. Trembach, V. B. Kamenuka

DUST-FREE COKE DRAWING ON BATTERIES OF COKE-CHEMICAL ENTERPRISES

Experience of development and introduction of units for dust-free coke drawing on batteries of coke-chemical enterprises enable significant improving of ecological conditions on coking batteries, reducing of dust emissions along with providing of more favorable labour conditions of the personnel.

**POWER AND RESOURCE SAVING. WASTES PROCESSING****V. V. Lugovsky, V. F. Makogon**

MAIN TRENDS OF ENVIRONMENTAL PROBLEMS' SOLUTION RELATED TO WASTES MANAGEMENT IN UKRAINIAN INDUSTRY

Main trends of activity in the field of industrial wastes' management in the leading industries of Ukraine are considered.

V. A. Noskov

DEVELOPMENT OF THE PREPARATION AND PROCESSING TECHNOLOGIES FOR INDUSTRIAL WASTES IS A KEY TO THE SOLUTION OF RESOURCE SAVING AND ENVIRONMENT PROBLEMS

Various technologies of preparation and processing of industrial wastes, ways of their realization are considered with the purpose of reducing the consumption of primary raw material and improving the environment conditions.

I. V. Korinko, N. P. Goroh

ENVIRONMENTAL AND ECONOMIC ESTIMATION OF THE COMPLEX PROCESSING OF SOLID HOUSEHOLD WASTES

Complex processing of household wastes is the most perspective solution of the problem of wastes handling providing power-saving technologies of raw components' processing.

**ECOLOGICAL MONITORING. METROLOGY. STANDARDIZATION AND CERTIFICATION****E. M. Varlamov, G. M. Katrichenko, L. L. Urchenko, O. E. Varlamov**

MAIN TRENDS OF DEVELOPING THE STATE SYSTEM FOR ENVIRONMENT MONITORING

Main trends of developing the state system for environment monitoring (SSEM) are directed on its improvement in the sphere of supply the public and local authorities along with the general public with on-line and adequate information about environment state in Ukraine. The problem, in question, can be solved under the condition of quality and continuous supervision. These tasks require developing the State Program including the main trends and ways of SSEM improvement.