

B.C. BEZDEK N.

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1331. Imperfections of procedures for separation of cations.
A. Okal and M. Hradek (*Publ. Fac. Sci. Univ. Masaryk*, 11880,
No. 3, 9-22).--Separation of Ni^{2+} , Co^{2+} , Cu^{2+} , Mn^{2+} , Zn^{2+} , and Cd^{2+}
from Fe^{3+} , Al^{3+} , or Cr^{3+} by pptn. with excess of aq. NH_3 in presence
of NH_4Cl is incomplete, owing to co-pptn., ascribed in the case of
 $\text{Fe}(\text{OH})_3$ to adsorption of $(\text{Mn}(\text{NH}_3)_6)^{2+}$, of $\text{Al}(\text{OH})_3$ to formation
of insol. aluminates, and of $\text{Cr}(\text{OH})_3$ to a combination of factors.
In general, Ni^{2+} , Co^{2+} , and Mn^{2+} are bound more tenaciously than
are the other bivalent ions, and the stability of the co-precipitates
rises in the series $\text{Fe} < \text{Al} < \text{Cr}$. The qual. analysis of solutions
which may contain the above ions is best effected by means of
selective spot tests, followed by separation procedures appropriate
to the particular combination of cations so found. R. TRUSCOX.

CA

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Adsorption of trivalent metals during the precipitation of
trivalent metals with ammonia. A. Ošáček and M. Heřtík
(Univ. Brno, Czech.). *Chem. Listy* 64, 301-2 (1959).
Adsorption of Co, Ni, Mn, Cu, Zn, and Cd by the pptn. of
Fe, Al, and Cr hydroxides was followed rapidly. In 3 pptns.
The amts. of ions adsorbed after the 3rd pptn. are (in %):
30.7, 8.3, 17.7, 1.1, 1.3, 0 in Fe(OH)₃, 64.6, 23.1, 49.6,
0.8, 23.7, 0 in Al(OH)₃, and 66.9, 20.9, 58.1, 15.6, 38.0, and
12.6 in Cr(OH)₃. The expts. show that some of the methods
for the sepn. of Al, Cr, Co, Ni, Mn, and Zn are not quant.
even after several pptns. The contents of ions in the filtrate
may decrease below the limits of observations.
M. Hudlíček

1907

CA BEZDEK, T.

potentiometric determination of titanium in the presence of iron. Miroslav Bezdek and Arnost Okac (Masaryk Univ., Brno, Czech.). *Chem. Listy* 45, 5-7(1951).--Manganometric titration of Ti in the presence of Fe gave satisfactory results when the sample contained at least 50 mg. Ti. With the ratio of Ti:Fe varying from 1:1.25 to 1:12.5, the error increased from -1.7 to -20%. A 2 N HgSO₄ electrode was used in the potentiometric titration at 60°.

M. Hudlický

195]

RUPP, A.F.; BEZDEK, M., RNDr. [translator]

Large scale production of radioisotopes. Jaderna energie 3 no.4:111-
121 Ap '57.

1. Oak Ridge National Laboratory (for Rupp).

19
6
Irradiation equipment for a Co⁶⁰ source [equal to] 400 gram-equivalents of radium. Miroslav Bezděk, Jaromír Kučera, Bohumír Chutný, and Miloš Chálovský (Inst. Nuclear Research, Czech. Acad. Sci., Prague). *J. derm. energie* 6, 202-3(1960).—The app. and its manipulation are described.
H. Newcombe

HRABAK, F.; BEZDEK, M.

Polymerization of styrols with systems of benzoyl peroxide, primary and secondary amines. Coll Cz Chem 26 no.4:915-920 Ap '61.

1. Institut fur makromolekulare Chemie, Technische Hochschule fur Chemie, Prag.

(Styrene) (Benzoyl peroxide) (Amines)
(Polymers and polymerization)

21.4000

28453
Z/038/61/000/010/006/008
D291/D301

AUTHOR: Bezdek, Miroslav

TITLE: Radiochemical problems of nuclear fuels

PERIODICAL: Jaderná energie, No. 10, 1961, 352-355

TEXT: The article outlines radiochemical research in the field of nuclear fuels, conducted at the Ústav jaderného výzkumu ČSAV (Nuclear Research Institute, Czechoslovak AS). Members of the Institute were trained in the USSR and are now engaged primarily in studies of fuel regeneration and separation of long-lived fission products. Based on the data contained in foreign literature, and on Czech measurements, graphs with the dependencies of fission-products were compiled for U-233, U-235, and P-239 for periods of 1 sec to 32 years. These graphs allow direct reading of the activity of an individual fission product and of the entire fission-product mixture after certain periods which have elapsed since the fission. Isotopic ratios of some elements, their fission yields, and the fine structure of yield-vs-mass

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Radiochemical problems ...

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curves in the atomic-weight range of 130 - 150 were established for the fission of Pu-239. Another paper contains data on fission yields and half-lives of Ba-141 and Ba-142 decay. Several papers deal with the processing of irradiated-fuel solutions, namely the extraction of uranyl nitrate with diethyl ether, tributyl phosphate, methyl cyclohexanone, cyclopentanone, and other ketones. Special attention was paid to extraction at sub-normal acidity which improves the decontamination factors of uranium, however, also reduces the values of its distribution coefficient. The uranyl-nitrate extraction by counterflow-processes Purex (TBF) and Redox (MIBK) was studied in laboratory tests. It was found that uranium extraction with tributyl phosphate is influenced by hydrolytic products of the extraction agent, and the synergic effect and the composition of products in the organic phase were investigated in the uranium-VI-tributylphosphate-dibutylphosphate system. Various hydrolytic states of uranyl-ions and polyuranates were investigated and the formation of a polyuranate with the sum formula $(UO_3 \cdot H_2) \cdot N_2O_5$ to

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Radiochemical problems ...

$(\text{UO}_3 \cdot \text{H}_2\text{O})_n \cdot \text{Na}_2\text{O}$ could be derived from potentiometric titration and absorption spectra. The dependence of the polyurate composition on the pH value of the solution and the crystal structures of some isolated polyurانات were also determined. To decontaminate irradiated uranium, the following methods of radioisotope separation were studied: Extraction of some rare-earth metals by tributyl phosphate and their re-extraction by dilute nitric acid; extraction of Sr complexes with TTA and picrolonic acid by organic extraction agents; selective extraction of Cs (alkaline elements) by nitro-benzene in neutral or alkalic medium under the presence of dipicryl amine; and extraction of Rh by dragging it along into the melt of naphthol and subsequent extraction by non-polar solvents. Ion-exchange processes were studied and a method was developed which permits investigation of the kinetics of the ion-exchange reaction in a heterogeneous medium (ionexchange watery solution). The establishment of the exchange equilibrium depending on the ionex macrostructure and reaction

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Radiochemical problems ...

conditions was studied, and verification tests were conducted with Czechoslovak "OAL" and "L" anion exchangers. Several studies concerned the problem of radio-active waste absorption on difficultly soluble precipitates. Experiments were conducted with the absorption of Cs on Fe- and Al-hydroxide, and the absorption of Sr, Y and Ce on Mn-hydroxide. The absorption mechanism was explained and calculated, assuming ion-exchange between the isotope and the precipitate. Heteropoly-acids, containing Si, P, Mo, W, V, Ge, As, and B were tested for their suitability as separation agents of Ce-137 and other alkali metals from strongly acid solutions. An empirical method was developed for photometric analysis of hetero-acid complexes. The separation of Ce-137 from fission-product mixtures and the preparation of pure Ce-salts can be made by precipitation with dipicryl amine. Analytical determinations and studies of reaction mechanisms were also made by other methods such as: (1) Electrophoresis (separation and detection of rare-earth metals); (2) Polarography (determination of Ru- and Rh-complexes); (3) Photometry (determination of Ru with rubeanic acid); (4) Fluorometry; and (5) Radiometry (analysis of

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Radiochemical problems ...

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Am-241 contents in Pu by α and γ spectroscopy). There are 63
Soviet-bloc references.

ASSOCIATION: Ústav jaderného výzkumu ČSAV (Nuclear Research
Institute, Czechoslovak AS)

Card 5/5

BEZDEK, M.

Amino acid dependent regulation of RNA synthesis. Effect of starvation and of ionizing radiation injury on RNA synthesis in rat liver cells. Folia biol. (Praha) 10 no.4:312-317 '64.

1. Institute of Biophysics, Czechoslovak Academy of Sciences, Brno.

SOSKA, J.; SKALKA, M.; BEZDEK, M.

Effect of ionizing radiation on the free deoxyribonucleoside and deoxyribonucleotide content of regenerating rat liver. Folia biol. 8 no.4:239-250 '62.

1. Institute of Biophysics, Czechoslovak Academy of Sciences, Brno.
(RADIATION EFFECTS experimental) (LIVER experimental)
(NUCLEOSIDES AND NUCLEOTIDES chemistry)

BRODSKY, J.; BEZDEK, M. LUKAS, J.; HRABAK, F.

Purification of technical chloroprene. Chem prum 15 no.1:
23-30 Ja '65.

1. Section of Research and Development of Kaučuk National
Enterprise, Kralupy nad Vltavou (for Brodsky). 2. Institute
of Macromolecular Chemistry of the Czechoslovak Academy of
Sciences, Prague (for Bezdek, Lukas and Hrabak).

BEZDEK, M.; MENCL, J.

Oxidative extraction separation of ruthenium from the solutions of its compounds. Coll Cz Chem 30 no.3:711-723 Mr '65.

1. Institut für Kernforschung, Tschechoslowakische Akademie der Wissenschaften, Rez near Prague. Submitted February 10, 1964.

L 13549-66 EWA(j)/T/EWA(b)-2 JK

ACC NR: AP6005993

SOURCE CODE: CZ/0053/65/014/004/0269/0270

AUTHOR: Lukasova, M.; Soska, J.; Bezdek, M.; Reich, J.

ORG: Biophysics Institute CSAV, Brno (Biofysikalni ustav CSAV)

TITLE: Relationship between syntheses of RNA and DNA [This paper was presented at the meeting of the Czechoslovak Biophysical Society Section of the Czechoslovak Biology Association at the Czechoslovak Academy of Sciences, Brno, 22 September 1964.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 269-270

TOPIC TAGS: DNA, RNA, bacteria, organic synthetic process, biochemistry, antibiotic

ABSTRACT: Study in thermobacterium acidophyllum R 26: effect of uracil, thioglycolic acid, tagged precursors and actinomycin D. Latter permitted arrest at various phases, and thus determination of sequence, of synthesis of nucleic acids. JPRS

SUB CODE: 06, 07 / SUBM DATE: none / OTH REF: 001

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HW

L 13537-66

ACC NR: APS006005

SOURCE CODE: CZ/0053/65/014/004/0275/0275

AUTHOR: Bezdek, M.

ORG: Biophysics Institute CSAV, Brno (Biofysikalni ustav CSAV)

TITLE: Dual control of flagellum formation in chlamydomonas reinhardi [This work was presented during Biophysical Days in Brno, 12 June 1964.] 49 B

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 275

TOPIC TAGS: microbiology, antibiotic, biosynthesis, protein, chloride, ammonium salt, metal compound, alkali metal 65

ABSTRACT: At concentrations between 3.7×10^{-3} and 3.7×10^{-1} mols, LiCl, NaCl, KCl, CaCl₂, MgCl₂ and NH₄NO₃ strongly depress flagellum formation; the ammonium salt even suppressed it completely at 3.7×10^{-2} in 0.05 m triple bugger at pH 7; chloramphenicol, streptomycin and actinomycin D had no effect; cells so changed were unable to restore the flagellum even when transferred to proteosynthesis-promoting conditions. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1 HW

L 13548-66 EWA(j)/T/EWA(E)-2 JK

ACC NR: AP6006006

SOURCE CODE: CZ/0053/65/014/004/0275/0275

AUTHOR: Bezdek, M.; Soska, J.; Reich, J.; Lukasova, E.

ORG: Biophysics Institute CSAV, Brno (Biofysikalni ustav CSAV)

TITLE: Regulation of the synthesis of nucleic acids in thermobacterium acidophilum
[This paper was presented during Biophysical Days, Brno, 12 June 1964.]

SOURCE: Ceskoslovenska fysiologie, v. 14, no. 4, 1965, 275

TOPIC TAGS: biosynthesis, RNA, DNA, biochemistry, nucleic acid, bacteria, amino acid, glutamic acid, radioisotope, tracer study

ABSTRACT: Effect of deprivation of glutamic acid, tyrosine and leucine on RNA and DNA formation with or without chloramphenicol in the medium was studied with leucine-C¹⁴, orotic acid-C¹⁴ and thymidine-H³. Conclusion was that the biosynthetic control mechanisms for DNA and RNA are relatively independent of each other. [JPRS]

SUB CODE: 06 / SUBM DATE: none

Card 1/1 NW

BUDASHINSKI, B. [Budesinsky, B.]; BEZDEKOVA, A.; VRZALOVA, D.

Determination of uranium in its oxides and salts by a modified
Kjundsen-Wennerstrand method. Coll Cz Chem 27 no.7:1528-1532
Jl '62.

1. Institut yadernykh issledovaniy, Chekhoslovatskaya
Akademiya nauk, Rzhesh pod Pragoy [Rez u Prahy].

BEZDEKOVA, A.; BUDESINSKY, B.

Spectrophotometric examination of calcium ion reactions with calcion IREA and calcichromium. Coll Cz Chem 30 no.3:811-817
Mr '65.

Spectrophotometric examination of Ca^{2+} -ion reactions with thymolphthalexon. Ibid.:818-823

1. Institut fur Kernforschung, Tschechoslowakische Akademie der Wissenschaften, Rez near Prague. Submitted May 25, 1964.

CZECHOSLOVAKIA

BEZDEKOVA, A; BULESINSKY, B

Nuclear Research Institute, Czechoslovak Academy of Sciences
(Institut für Kernforschung, Tschechoslowakische Akademie der
Wissenschaften), Rez near Prague

Prague, Collection of Czechoslovak Chemical Communications, No 1,
January 1966; pp 199-206

"Spectrophotometric analysis of the reaction of magnesium ions
with 2-(2'-hydroxy-5'-sulfophenylazo) chromotropic acid."

BEZDEKOVSKY, Zdenek

Some notes on increasing the qualification of standardizers.
Prace mzda 10 no.12:559-561 D '62.

1. Spojene ocelarny, narodni podnik, Kladno.

BEZDEKOVSKY, Zdenek

Work of standardization groups. Prace mda 11 no.5:221-224 My '63.

1. Spojene ocelarny, n.p., Kladno.

BEZDEL. L. S.

"Catalytic Dealkylation of Side-Chains. Of the Aromatic Hydrocarbons under the Influence of Aluminosilicates." by B. L. Moldavsky and L. S. Bezdel. (p. 1633)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1946. Volume 16, No. 10

BEZDEL', L.S.; TEODOROVICH, V.P.

Solubility of carbon dioxide, hydrogen sulfide, methane, and
ethylene in methanol at low temperatures. Gaz. prom. no.8:38-43
Ag '58. (MIRA 11:8)
(Gases) (Methanol)

BEZDEL', L.S.; TEODOROVICH, V.P.

Studying the absorption rate of CO₂ and H₂ S by methyl alcohol in a countercurrent column at low temperatures.

Gaz. prom. 4 no.7:29-33 J1 '59. (MIRA 12:10)
(Carbon dioxide) (Hydrogen sulfide) (Absorption)

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77635
SOV/80-33-2-10/52

AUTHORS: Bezdel', L. S., Brounshteyn, B. I.

TITLE: Concerning Some Laws Governing Extraction in Systems:
Liquid-Liquid

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 2,
pp 323-332 (USSR)

ABSTRACT The laws governing the coefficient of extraction were investigated in systems: water (continuous phase) - acetic acid - benzene (disperse phase), and water (continuous phase) - benzoic acid - benzene (disperse phase). The experiments consisted in passing drops of benzene through a column (with or without packing) filled with the water/acetic acid or water/benzoic acid mixtures and determining the values of the coefficient of extraction by means of an equation which took into account the concentrations of the extractable substance at the top and the bottom of the column, the rate of feed of the disperse phase, the space velocity of the continuous phase, and other parameters. The amount of the extracted substance per unit of time can

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in Systems: Liquid-Liquid

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be expressed by the equations (1) or (2):

$$dM = K_x (x - x_p) dS \quad (1)$$

$$dM = K_y (y - y_p) dS, \quad (2)$$

where dS is the element of the interfacial area;
 x is the concentration of the extractable substance
in the disperse phase; x_p is the concentration of the
extractable substance in the disperse phase in equi-
librium with the concentration of the substance in the
continuous phase; y is the concentration of the extract-
able substance in the continuous phase; y_p is the
concentration of the extractable substance in the
continuous phase in equilibrium with the concentration
of the substance in the disperse phase; K_x is the
general coefficient of extraction in relation to the
continuous phase. K_x and K_y can be expressed by specific
coefficients of extraction k_c and k_d by Eqs. (3) and
(4).

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$$K_x = \frac{1}{\frac{1}{k_d} + \frac{\psi}{k_c}}, \quad (3)$$

$$K_y = \frac{1}{\frac{1}{k_c} + \frac{1}{\psi k_d}}, \quad (4)$$

where $\psi = \frac{p}{y}$ is the coefficient of distribution
 k_d is the specific coefficient of extraction in the
disperse phase; k_c is the specific coefficient of
extraction in the continuous phase. When the value of
 ψ is small, then

$$\frac{1}{k_d} \gg \frac{\psi}{k_c}, \quad (5)$$

$$K_x \approx k_d, \quad K_y \approx \psi k_d, \quad x_p = x_i,$$

where $x_1 = \psi y$ is the concentration of the extractable
substance on the phases boundary on the side of the
disperse phase. When the value of ψ is high, then

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disperse phase. When the value of ψ is high, then

$$\frac{1}{k_0} \gg \frac{1}{\psi k_{12}}, \quad (6)$$

$$K_y \approx k_c, \quad K_x \approx \frac{k_c}{\psi}, \quad y_p \approx y_1, \quad (7)$$

where $y_1 = \frac{x}{\psi}$ is the concentration of the extractable substance on the phase boundary on the size of the continuous phase. To obtain the total amount of the substance extracted per unit of time in a counter flow column, Eq. (1) and (2) are integrated over the total height H of the column and give Eq. (8) and (9):

$$M = k_c \Delta x_{cp} \sigma H, \quad (8)$$

$$M = k_c \Delta y_{cp} \sigma H, \quad (9)$$

where F is the area of the cross section and σ is the area of the boundary surface per volume unit of the column; Δx_{cp} and Δy_{cp} are given by Eq. (10)

$$\Delta x_{cp} = \frac{\Delta x_n - \Delta x_0}{\ln \frac{\Delta x_n}{\Delta x_0}}, \quad (10)$$

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and (11); also $\Delta x = x - x_p$, and $\Delta y = y - y_p$.
The indices "H" and "B" indicate the bottom and the
top of the column, respectively.

$$\Delta y_{cp} = \frac{\Delta y_H - \Delta y_B}{\ln \frac{\Delta y_H}{\Delta y_B}} \quad (11)$$

Equations (9) and (10) may be used for any ψ value
when this coefficient does not depend on x and y .
Otherwise the specific coefficients in the above
equations must be replaced by the general coefficients
 K_x and K_y . The specific area σ is proportional
in the first approximation to the feed space velocity
 V_d . Hence, Eq. (8) and (9) can be written as (12)
and (13) where k_{pd} and k_{pc} are expressed by Eq. (13):

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$$\left. \begin{aligned} \frac{M}{V_d} &= k_{pd} \Delta x_{cp} H \\ \frac{M}{V_c} &= k_{pc} \Delta y_{cp} H \end{aligned} \right\} \quad (12)$$

$$\left. \begin{aligned} k_{pd} &= k_d \frac{a}{V_d} \\ k_{pc} &= k_c \frac{a}{V_d} \end{aligned} \right\} \quad (13)$$

The coefficients k_{pd} and k_{pc} are derived coefficients of extraction for the dispersed and continuous phases. The mass M of the extractable substance can be expressed by the difference of the concentrations of the substance at the inlet of the column (x_H) and at the

outlet (x_B). Hence, Eq. (12) becomes (14):

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$$\left. \begin{aligned} k_{pd} &= \frac{x_H - x_B}{H \Delta x_{cp}} \\ k_{pc} &= \frac{y_H - y_B}{H \Delta y_{cp}} \cdot \frac{V_c}{V_d} \end{aligned} \right\} \quad (14)$$

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where V_c is the space velocity of the continuous phase. Drops of the disperse phase with diameter d rise in the continuous phase with a linear velocity u . Hence, the rate of feed $V_d = \frac{1}{6} \pi d^3 n u$, and $\sigma = \pi d^2 n$, where n is the number of drops per volume unit of the column, and the factor of proportionality between the coefficients of extraction in Eq. (13) can be expressed by Eq. (15):

$$\frac{\sigma}{V_d} = \frac{6}{u d}. \quad (15)$$

The values of the derived coefficients of extraction were calculated by Eq. (13) and (15). The mean diameter of the drops was determined photographically or by counting the number of drops in a given volume. It was found that the vertical velocity of the benzene drops as well as the value of k_d increased with increasing diameter of the drops up to $d = 5$ mm, and then remained practically constant up to $d = 12$ to 13 mm. It

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was assumed that the relationship between k_d and the diameter and vertical velocity of the drops is expressed by Eq. (17).

$$k_d = A \cdot Re^n. \quad (17)$$

The study of the system with a small value of the coefficient of distribution (water as continuous phase - acetic acid - benzene as disperse phase) in columns with and without packing showed that $\log k_d$ was a linear function of $\log Re$ (up to $Re = 200$). The same was true for the system with a high value of the coefficient of distribution (water as continuous phase - benzoic acid - benzene as disperse phase). It was also found that the interchange of phases (dispersion of benzene in water, or dispersion of water in benzene) had little influence on the coefficient of extraction, and that the latter remained practically constant in all the systems investigated when the rate of water and benzene feeds was increased 3 to 4-fold. The present study was made in 1952. There are 3 figures;

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ASSOCIATION: 3 tables; and 5 references, 4 German, 1 Soviet.
All-Union Scientific Research Institute for Petro-
chemical Processes (Vsesoyuznyy nauchno-issledovatel'skiy
institut neftekhimicheskikh protsessov)

SUBMITTED: June 6, 1958

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BROUNSHTEYN, B.I.; BEZDEL', L.S.; GORENBURG, V.P.; SOKOLOVA, Ye.A.

Modeling of liquid-liquid extraction processes in pulse columns.
Trudy VNIIneftekhim no.5:148-195 '62. (MIRA 15:7)
(Extraction (Chemistry))

S/780/62/000/005/001/002
I060/I243

AUTHORS: Bezdel', L.S. and Brounshteyn, B.I.

TITLE: Purification of gasoline from hydrogen sulfide by phosphate

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov. Trudy. no.5. Leningrad, 1962. Protsessy i apparaty neftekhimicheskoy tekhnologii, 205-217

TEXT: The purpose of this work was to determine the equilibrium distribution of H_2S between gasoline and phosphate solutions and to study the kinetics of the extraction process. K_3PO_4 solutions of various concentrations, with varying amounts of K_2HPO_4 added were studied. Solutions of isooctane (alkylate) distilled between 100-116°C were used in place of gasoline because of their identical behavior. Equilibrium concentrations of hydrogen sulfide in alkylate at 20°C were also determined in the system alkylate-hydrogen sulfide-solution of K_3PO_4 with K_2HPO_4 . Equilibrium concentrations of

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IO60/I242

Purification of gasoline...

H_2S in alkylate are extremely low - of the order of hundredths and thousandths of 1% which corresponds to a high degree of purification of gasoline. A higher degree of purification can be achieved with a 1 M solution of K_3PO_4 and with a 2 M solution. Hydrogen sulfide was extracted from alkylate by a solution of K_3PO_4 in a counterflow column. The extraction coefficient of alkylate does not depend on molarity and on the degree of saturation of the solution K_3PO_4 , KOH and of a mixture of K_3PO_4 and K_2HPO_4 . There are 5 figures and 6 tables.

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S/780/62/000/005/002/002
I060/I242

AUTHORS: Bezdel', L.S., Brunshcheyn, B.I., Ipat'yev, V.V. (Deceased), and Teodorovich, V.P.

TITLE: Purification of liquid propane-propylene fraction (PPF) from hydrogen sulfide by phosphate

SOURCE: Vsesoyuznyy nauchno-issledovatel'skiy institut neftekhimicheskikh protsessov. Trudy. no.5. Leningrad, 1962. Protsessy i apparaty neftekhimicheskoy tekhnologii, 217-255

TEXT: The authors reject the nitric acid purification method and recommend the US phosphate method. Solutions of K_3PO_4 of various concentrations were prepared by neutralization of H_2PO_4 or of orthophosphoric acid by caustic potash. The physical-chemical properties such as specific weight, boiling point, viscosity, and specific heat of 1 M and 2 M solutions of K_3PO_4 were studied at various degrees of saturation with H_2S . The authors determined the

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 IC60/I242

Purification of liquid...

equilibrium distribution of H_2S between the liquid PPF and the 2 M solution of K_3PO_4 and between the PPF fraction and the 0.18 M solution of $NaPO_3$ at $20^\circ C$. The vapor pressures of H_2S and water over a 2 M solution of K_3PO_4 at 100, 120, and $140^\circ C$ and of H_2S and water over a solution of $K_3PO_4 + K_2HPO_4$ at 120 and $140^\circ C$ were determined. The rate of absorption of H_2S from liquid PPF fraction by a 2 M solution of K_3PO_4 was measured. The driving force was determined by the difference between the concentration of K_3PO_4 in solution not combined with H_2S and its equilibrium concentration in relation to PPF. The formula for calculation of the rate of mass transfer was empirically confirmed by a series of experiments where the degree of saturation of the H_3PO_4 solution varied between 0.38 and 0.95, the concentration of H_2S in PPF from 0.5 to 6.5 mole %, and the height of the column between 0.32 and 1.30 m. The contact surface between phases in a spray column was determined and the value of the extraction coefficient was reduced to a unit of contact area

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Purification of liquid...

between the calculated phases. The number of theoretical plates required in the regeneration column for the solutions of K_2PO_4 saturated with H_2S and the minimum steam expenditure were calculated. There are 15 figures and 17 tables.

✓

Card 3/3

L 28337-66 EWT(1)/EWT(m)/T/EWP(t)/ETI IJP(c) JD

ACC NR: AP6013076

SOURCE CODE: UR/0048/66/030/004/0668/0670

AUTHOR: Bezel', V.S.; Gavrilov, F.F.; Panov, V.P.; Kraynyukov, N.I. 54
B

ORG: none

TITLE: Investigation of scintillation processes in ZnS:Ag single crystals /Report,
Fourteenth Conference on Luminescence held in Riga 16-23 September 1965/ 16

SOURCE: AN SSSR. Izvestiya. Seriya fizicheskaya, v. 30, no. 4, 1966, 668-670

TOPIC TAGS: scintillation, crystal phosphor, zinc sulfide, radioluminescence,
stimulated emission, crystal decay, emission spectrum

ABSTRACT: Although in general the regularities evinced in radioluminescence of ZnS:Ag
single crystals can be explained in the framework of the same energy band diagram as
that invoked for interpreting the photo- and cathodoluminescences of this phosphor,
the much higher excitation density in the case of radioluminescence gives rise to
some distinctive effects. The present work, accordingly, was devoted to experimental
investigation of the influence of the excitation density along the particle track on
the thermostimulated emission (glow curves), decay time, emission spectrum and
electroquenching. The specimens were relatively large ZnS:Ag (about 3×10^{-5} g/g Ag)
single crystals grown from a melt. The excitation was produced by Pu^{239} and ThC-ThC'
alpha particles, protons, deuterons, gamma rays and Hg ultraviolet. The glow curves
(reproduced in a figure) were recorded after excitation with 2 MeV and 5 MeV alphas

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L 28337-66

ACC NR: AP6013076

and with UV. All three glow curves have peaks at -150° , but only the glow curve obtained after UV excitation exhibits a broad peak located just below 0°C . The trap depth corresponding to the -150°C peak is estimated as 0.25-0.28 eV. The persistence of the scintillation falls off with increasing excitation density along the track in agreement with the theoretical curve adduced by the authors. The intensity in the short wavelength part of the radioluminescence spectrum increases with increasing excitation density for all forms of excitation. Electroquenching (quenching by a dc field) was found to be analogous to temperature quenching. Orig. art. has: 2 figures.

SUB CODE: 20/

SUBM DATE: 00

ORIG REF: 004/

OTH REF: 001

Card 2/2

БЕЗДЕНЕЖНИК А

Achieve new records! Izyl.rod. 8 no.6:4 Je '57. (MLRA 10:8)

1. Zamestitel' predsedatelya respublikanskogo komiteta Dobrovol'-
nogo obshchestva sodeystviya armii, aviatsii i flotu Belorusskoy SSR.
(White Russia--Aeronautics)

BEZDENEZHNYKH, I.S.

Methods of epidemiological analysis. Trudy TSIU 68:5-11 '64.
(MIRA 18:5)

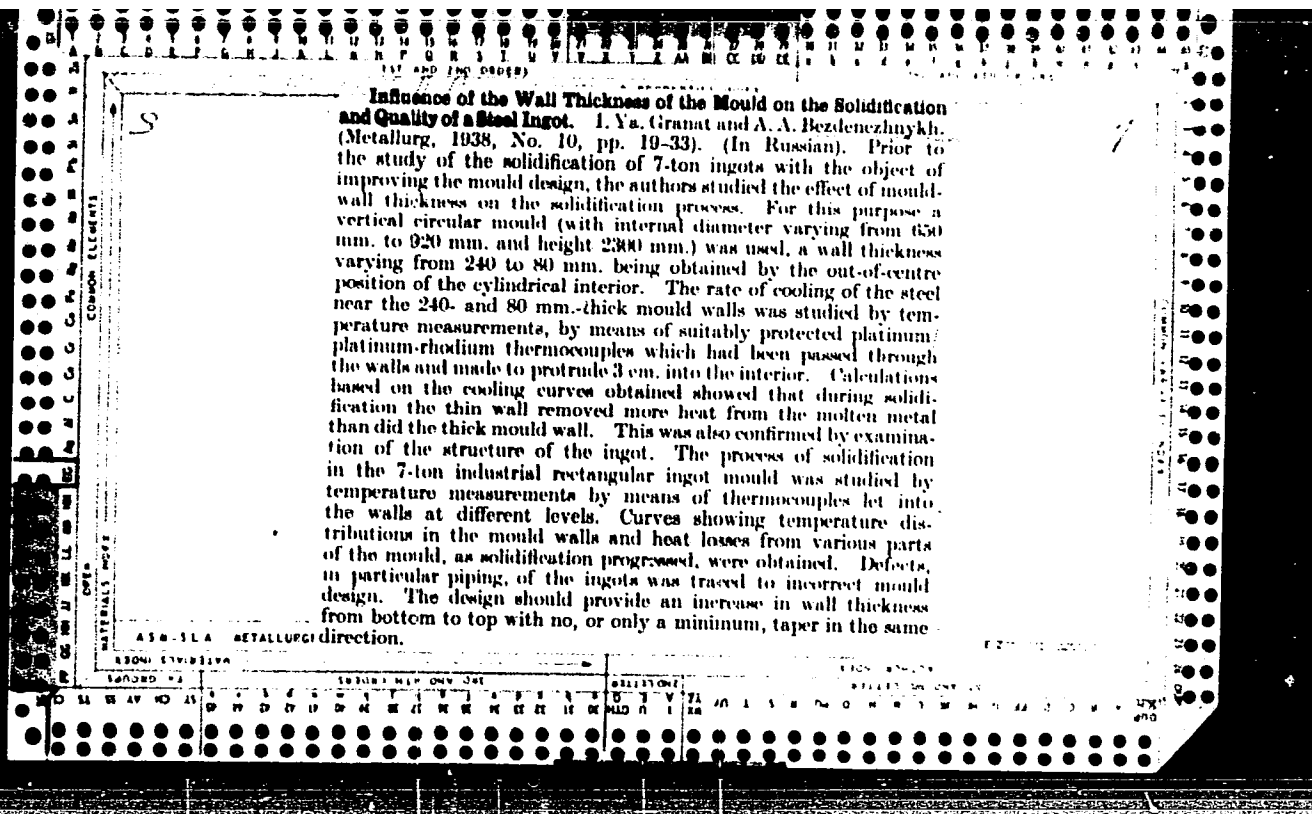
BEZDENKO, T.T., kand.sel'skokhoz.nauk

Combined use of biological and chemical methods for the control
of orchard pests. Zashch.rast.ot vred.i bol. 7 no.6:26-28 Je '62.
(MIRA 15:12)

1. Belorusskiy institut plodovodstva, ovoshchevodstva i kartofelya,
Minsk.

(White Russia—Trichogramma)

(White Russia—Fruit—Diseases and pests)



BEZDENEZHNYKH, A. A., NOSOV, G. I., NEYLAND, K. K., KSENEFONTOV, V. F. and LEBEDEV, Ya. I.

"Utilization of Alloy Scrap at Magnitogorsk Combine," Stal', No.6, pp. 10-18,
1946

Evaluation B-60428

BEZDENEZHNYKH, A. A., DOCENT

PA 19/49T78

USSR/Metals
Steel Ingots
Metallurgy, Ferrous

Oct 48

"Influence of Gas Evolution on the Formation of a 6.5-Ton Ingot From Boiling Steel," Docent A. A. Bezdenezhnykh, V. F. Agapov, A. M. Bligeyev, I. A. Tshchenko, V. M. Mityukovskiy, A. L. Kushnarev, Engineers, Magnitogorsk Mining Metal Inst, 7 pp

"Steel" No 10

Use of new method for collecting gases evolved from a solidifying boiling steel ingot (under

19/49T78

USSR/Metals (Contd)

Oct 48

positive pressure) indicated inaccuracy of vast majority of results of foreign researchers, who worked with a vacuum and extracted gases from metal and fettling simultaneously, using containers for taking samples. Main constituent of gases evolved is carbon monoxide (90%), not hydrogen. Vigorous boiling of the metal in the mold causes vertical circulation, which improves ingot structure. Manganese has considerable effect on rate of gas evolution. When content exceeds 0.40%, amount of gas decreases and ingot structure deteriorates.

19/49T78

BEZDENEZHNYKH, A.A.

133-8-6/28

AUTHORS: Bezdenezhnykh, A.A. and Bigeyev, A.M. (Cands.Tech.Sci.),
Dikshiteyn, Ye.I., Perchatkin, P.N. and Sirotenko, A.I.,
(Engineers).

TITLE: The development of the deoxidation process of rimming
steel. (Usovershenstvovaniye tekhnologii raskisleniya
kipyashchey stali).

PERIODICAL: "Stal'" (Steel), No.8, 1957, pp.701-707 (USSR).

ABSTRACT: An investigation of factors causing substantial varia-
tion in manganese losses during deoxidation of quality
low carbon rimming steels (08 kпH, 08 kпF, 08 kпF and
08 kп chemical composition is given in Table 1), produced
in 400 t open hearth furnaces was carried out. The follow-
ing students of MGMI participated in the investigation:
V. Antipin, N.Kuskov, B.Khorshun and others. The composi-
tion of pig used varied within comparatively wide limits,
% C 4.1-4.5, Mn 0.15-0.25, Si 0.65-1.0; S 0.025-0.055;
P 0.085-0.150. The limits of composition of metal and
slag during the individual smelting periods are given.
The composition of metal before deoxidation %: C 0.06-0.09;
Mn 0.04-0.09; S 0.030-0.033; P 0.007-0.010; slag: CaO 43-46;
SiO₂ 11-17, FeO 10-20. For the deoxidation of steel the
whole required amount of ferromanganese was added to the

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133-8-6/28

The development of the deoxidation process of rimming steel. (Cont.)

both in one lot at the beginning of tapping. Some retention of steel in the furnace after the above addition was used only when ferromanganese contained more than 1% of Si. Maximum possible manganese loss was calculated using A.M. Bigeyev's formula:

$$U_{\max} = \frac{77.5 K_{\text{Mn}} (\text{FeO})q}{100 + 0.775 K_{\text{Mn}} (\text{FeO})q} \quad (1)$$

where: q - relative proportion of slag %; K_{Mn} -

equilibrium constant of the deoxidation reaction

$[\text{Mn}] + [\text{FeO}] = (\text{MnO}) + \text{Fe l.}$ The dependence of maximum manganese losses in the furnace at 1600 C on the amount of slag and its FeO content is shown in Fig.1 and the frequency distribution of total manganese losses during deoxidation of low carbon rimming steel in 400 t furnaces (170 melts) in Fig.2. The maximum manganese losses during deoxidation can vary between 60 and 70% while actual losses varied from 30 to 70% (average 40-50%), therefore to obtain metal of a required composition the

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133-8-6/28

The development of the deoxidation process of rimming steel. (Cont.)

influence of the following factors on manganese losses was studied. 1) The influence of retention time in the furnace after deoxidation; 2) Duration of tapping (Fig.3); 3) The influence of metal temperature before deoxidation; 4) The influence of FeO content in slag (Fig.5). This influence becomes obvious only at FeO content above 12-14%; 5) The influence of silicon content in ferro-manganese (Fig. 6); 6) The influence of carbon content of metal before deoxidation (Fig.7) and as during decarburisation of steel 08 k_n ore additions are often made (1-1.5 t) not long before deoxidation, the influence of this addition was also studied (Fig.8). On the basis of the data obtained the consumption of ferromanganese for deoxidation for MMK conditions was calculated, using a formula derived by A.M. Bigeyev:

$$T_{\text{FeMn}} = 10^5 \frac{T([\text{Mn}]_f - [\text{Mn}]_r)}{[\text{Mn}]_{\text{FeMn}} \cdot (100 - U_{\text{Mn}})}$$

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where: T_{FeMn} - consumption of ferromanganese for the deoxidation of the whole charge of steel in kg.; T -

133-8-6/28

The development of the deoxidation process of rimming steel. (Cont.)

furnace capacity, tons; $[Mn]_f$ - manganese content of finished steel %; $[Mn]_r$ - residual manganese content in steel before deoxidation, %; U_{Mn} - total manganese losses (in furnace, runner and ladle), %. The frequency distribution of residual manganese content before deoxidation is given in Fig.9. To facilitate calculations under works conditions, tables were prepared (2 and 3) of required ferromanganese additions for various operating conditions encountered in practice. An example of calculations is given. It is stated in conclusion that the application of the method of calculating the required ferromanganese additions in practice decreased the consumption of the latter by 1 - 1.5 kg/ton of steel and prevented the production of metal outside the composition required.

There are 3 tables, 9 figures and 5 Slavic references.

ASSOCIATION: Magnitogorsk Mining-Metallurgical Institute and MMK.
(Magnitogorskiy Gorno-Metallurgicheskiy Institut i MMK).

AVAILABLE: Library of Congress
Card 4/4

BEZDENZHNYKH, A.A.

BEZDENZHNYKH, A.A., kandidat tekhnicheskikh nauk; BIGEYEV, A.M., kandidat tekhnicheskikh nauk; DIXHEBYN, Ye.I., inzhener; PERCHATKIN, P.N., inzhener; SIROTBENKO, A.I., inzhener.

Improving the technology of rimmed steel deoxidation. Stal' 17
no.8:701-707 Ag '57. (MLRA 10:9)

1. Magnitogorskiy gorno-metallurgicheskiy institut i Magnitogorskiy metallurgicheskiy kombinat.

(Open-hearth process)

PERCHATKIN, P.N., inzh.; ~~BEZDENEZHNYKH~~, A.A., dots., kand.tekhn.nauk

Metal desulfuration in 400-ton open-hearth furnaces. Izv.vys.
ucheb.sav.; chern.met. no.8:31-38 Ag '58. (MIRA 11:11)

1. Magnitogorskiy gorno-metallurgicheskiy institut.
(Open-hearth furnaces) (Desulfuration)

BANNYKH, A.M., prof.; BEZDENEZHNYKH, A.A., dots.; ZUTS, K.A., dots.

Scientific research carried out in 1957 at the Department of
Metallurgy of the Magnitogorsk Metallurgical Institute. Izv.vys. ucheb.
zav.; chern.met no.9:161-164 S '58. (MIRA 11:11)
(Magnitogorsk--Metallurgical research)

BEZDENEZHNYKH, A. A.

PHASE I BOOK EXPLOITATION

SOV/3942

Zaveryukha, Nikita Vasil'yevich, Engineer, Abdrashit Museyevich Bigeyev, Candidate of Technical Sciences, Leonid Andreyevich Volkov, Engineer, and Aleksey Andreyevich Bezdenezhnykh, Candidate of Technical Sciences

Razlivka stali v sovremennykh martenovskikh tsekhakh (Teeming of Steel in Modern Open-Hearth Furnace Plants) Sverdlovsk, Metallurgizdat, Sverdlovskoye otd-niye, 1959. 215 p. Errata slip inserted. 2,800 copies printed.

Ed.: M.I. Panfilov; Ed. of Publishing House: N.N. Tsymbalist; Tech. Ed.: R.M. Matlyuk.

PURPOSE: This book is intended for technical personnel of open-hearth furnace plants in the metallurgical and machine industries. It may also be useful to students of tekhnikumms and schools of higher technical education.

COVERAGE: The book reviews problems connected with the crystallization theory, the structure of ingots and ingot defects, their causes, and preventive measures. Modern methods of steel teeming are reviewed in detail, and equipment used at open-hearth plants is described. Work organization, automation and mechanization of certain processes, and safety measures are outlined. The following engineers

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Teeming of Steel in Modern Open-Hearth Furnace Plants

SOV/3942

took part in the writing of the book: N.I. Lopukhov, V.M. Kalashnikov, and I.S. Tkachev. The authors also thank D.P. Strugovshchikov, Engineer, N.F. Dobrov, Candidate of Technical Sciences, A.N. Morozov, Doctor of Technical Sciences, and M.I. Panfilov, Engineer, for their assistance. There are 48 references: 42 Soviet (including one translation), 4 German, and 2 English.

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1. Killed-steel ingot	8
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Card 2/4	

PERCHATKIN, P.N.; PANOV, A.S.; BEZDENZHENYKH, A.A.; BIGMYEV, A.M.; LATIMIN, V.N.;
D'YAKONOV, A.I.

Sulfur distribution between metal and slag during conversion
smelting of low-manganese pig iron. Izv. vys. ucheb. zav.; chern.
met. no.1:33-40 '60. (MIRA 13:1)

1. Magnitogorskiy gorno-metallurgicheskiy institut.
(Open-hearth process) (Desulfuration)

BEZ DENEZHNIKH, A A

PHASE I BOOK EXPLOITATION

BOV/5556

85

Moscow. Institut stali.

Novoye v teorii i praktike proizvodstva martenovskoy stali (New [Developments] in the Theory and Practice of Open-Hearth Steelmaking) Moscow, Metallurgizdat, 1961. 439 p. (Series: Trudy Mezvuzovskogo nauchnogo soveshchaniya) 2,150 copies printed.

Sponsoring Agency: Ministerstvo vysshego i srednego spetsial'nogo obrazovaniya RSFSR. Moskovskiy institut stali imeni I. V. Stalina.

Eds.: M. A. Glinkov, Professor, Doctor of Technical Sciences, V. V. Kondakov, Professor, Doctor of Technical Sciences, V. A. Kudrin, Docent, Candidate of Technical Sciences, G. N. Oyks, Professor, Doctor of Technical Sciences, and V. I. Yavovskiy, Professor, Doctor of Technical Sciences; Ed.: Ye. A. Borko; Ed. of Publishing House: N. D. Gromov; Tech. Ed.: A. I. Karasev.

PURPOSE: This collection of articles is intended for members of scientific institutions, faculty members of schools of higher education, engineers concerned with metallurgical processes and physical chemistry, and students specializing in these fields.

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85

New [Developments] in the Theory (Cont.)

807/5556

COVERAGE: The collection contains papers reviewing the development of open-hearth steelmaking theory and practice. The papers, written by staff members of schools of higher education, scientific research institutes, and main laboratories of metallurgical plants, were presented and discussed at the Scientific Conference of Schools of Higher Education. The following topics are considered: the kinetics and mechanism of carbon oxidation; the process of slag formation in open-hearth furnaces using in the charge either ore-lime briquets or composite flux (the product of calcining the mixture of lime with bauxite); the behavior of hydrogen in the open-hearth bath; metal desulfurization processes; the control of the open-hearth thermal melting regime and its automation; heat-engineering problems in large-capacity furnaces; aerodynamic properties of fuel gases and their flow in the furnace combustion chamber; and the improvement of high-alloy steel quality through the utilization of vacuum and natural gases. The following persons took part in the discussion of the papers at the Conference: S.I. Filippov, V.A. Kudrin, M.A. Glinkov, B.P. Nam, V.I. Yavoyakiy, G.N. Oyks and Ye. V. Chelishchev (Moscow Steel Institute); Ye. A. Kazachkov and A. S. Kharitonov (Zhdanov Metallurgical Institute); N.S. Mikhaylets (Institute of Chemical Metallurgy of the Siberian Branch of the Academy of Sciences USSR); A.I. Stroganov and D. Ya. Povolotskiy (Chelyabinsk Polytechnic Institute); P.V. Umrikhin (Ural Polytechnic Institute); I.I. Fomin (the Moscow "Serp i molot" Metallurgical Plant); V.A. Fuklev (Central Asian Polytechnic Institute);

Card 2/14

New [Developments] in the Theory (Cont.)

80V/5556

and M.I. Beylinov (Night School of the Dneprodzerzhinsk Metallurgical Institute).
References follow some of the articles. There are 268 references, mostly Soviet.

TABLE OF CONTENTS:

Foreword

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Yavovskiy, V. I. [Moskovskiy institut stali - Moscow Steel Institute].
Principal Trends in the Development of Scientific Research in Steel
Manufacturing

7

Filippov, S. I. [Professor, Doctor of Technical Sciences, Moscow Steel
Institute]. Regularity Patterns of the Kinetics of Carbon Oxidation
in Metals With Low Carbon Content

15

[V. I. Antonenko participated in the experiments]

Levin, S. I. [Professor, Doctor of Technical Sciences, Dnepropetrovskiy
metallurgicheskiy institut - Dnepropetrovsk Metallurgical Institute].

Card 3/14

New [Developments] in the Theory (Cont.)

80V/5556

9

Perchatkin, P.N. [Engineer], A.A. Bezdenezhnykh [Docent, Candidate of Technical Sciences], A.M. Bigeyev [Docent, Candidate of Technical Sciences], and V.N. Letimn [Engineer], [Magnitogorsk Mining and Metallurgical Institute]. Effect of Furnace Atmosphere on the Behavior of Sulfur During Melting in the High-Capacity Open-Hearth Furnace

361

Ivanov, R.M. [Candidate of Technical Sciences], Ye. V. Abrosimov [Moscow Steel Institute]. Temperature Regime of the Oxygen-Blown Open-Hearth Bath

371

Samarin, A.M. [Corresponding Member of the Academy of Sciences USSR], and A.P. Potrusayev [Engineer], [Moscow Steel Institute]. Change in Metal Composition Caused by Oxygen Blowing

379

Fiklev, V.A. [Docent, Candidate of Technical Sciences, Sredneaziatiskiy politekhnicheskii institut - Central Asia Polytechnic Institute]. Desiliconizing Pig Iron by Oxygen in a Special Spout While Pouring Iron Into the Open-Hearth Furnace

388

Card 13/14

AGAPOV, V.F.; BEZDENEZHNYKH, A.A.; PERCHATKIN, P.N.; DIKSHTEYN, Ye.I.

Fluxed sinter of sulfurous ores used in open hearth smelting.
Stal' 22 no.8:697-700 Ag '62. (MIRA 15:7)

1. Magnitogorskiy gornometallurgicheskiy institut i
Magnitogorskiy metallurgicheskiy kombinat.
(Sintering)
(Open hearth furnaces--Equipment and supplies)

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
<p>Production of selenium in the Ural electrolytic plants A. I. Gory and A. C. Bordenzhukh. <i>Isotopes</i> <i>Moscow</i> 1958, No. 8, 80-7. - A description of methods of extraction of Se and Te from slimes of Ural electrolytic Cu plants. The optimum conditions are summarized as follows: The slimes should not contain more than 0.5% Cu. The slimes are treated with acid, washed with water, and the residue is heated at 620° to 730°. When the volatilization of Se anhydride has ceased, charcoal is added to the residue, and heating continued to remove traces of Se. Se is removed from the volatilized powder by treating with hot water and 15% H₂SO₄, followed by pptn. with SO₂. The optimum concn. of Se for pptn. is 25 to 30 g/l, and the temp. 40° to 45°. If higher temp. is used, Te is also pptd. B. N. Dandoli</p>																																																			
<p>1ST AND 2ND ORDERS</p>																																																			
<p>3RD AND 4TH ORDERS</p>																																																			

BEZDENEZHNYKH, A.G., inzh.

New flexible cables for manual mine tools. Bezop.truda v prom;
4 no.12:27 D '60. (MIRA 14:1)

(Electric cables)

BEZDENEZHNYKH, A.G., inzh.; VERTYACHIKH, V.G., inzh.

Standardized norms for the distance of electrical leakage
along insulating components of explosionproof electrical
equipment. Vest. elektroprom. 34 no.3:19-22 Mr '63.
(Electricity in mining--Safety regulations) (MIRA 16:8)

VERTYACHIKH, V.G.; BEZDENEZHNYKH, A.G.

/ Certain characteristics of industrial casings for explosion-
/ proof equipment. Nauch. soob. VostNII no.3:87-92 '63.
/

Basis for standards on current leakage distances from
electrical equipment in mines. Ibid.:93-102 '63.

(MIRA 17:5)

BEZDENEZHNYKH, A.G.

Transient processes of leakage currents in mine section cable
networks. Vop.bezop.v ugol'.shakh. 4:235-250 '64.

(MIRA 18:1)

SHISHKIN, N.F., doktor tekhn. nauk; GORYUNOV, Yu.I.; KAYMAKOV, A.A.;
BEZDENEZHNYKH, A.G.; NOVOSEL'TSEV, R.K.; PECHENIN, V.S., kand.
tekhn. nauk

Area using pneumatic energy in coal mines: Using electric
power in coal mines. Ugol' 40 no.4:14-18 Ap '65.

(MIRA 18:5)

1. Institut gornogo dela im. A.A. Skochinskogo (for Shishkin).
2. Glavnyy energetik kombinata Kuzbassugol' (for Goryunov).
3. Vostochnyy nauchno-issledovatel'skiy institut po bezopasnosti
rabot v gornoy promyshlennosti (for Kaymakov, Bezdenzhnykh,
Novosel'tsev). 4. Kemerovskiy gornyy institut (for Pechenin).

Результаты работы

МАЙСОН, Г. А.; МАЙСОНОВИЧ, Р. Я.

1940. Итоги обследования с.-х. животных на территории в подольском районе, Киевского уезда (7 июля-августа 1937 года). Ст. Киев. обл. ветбакла хозяйства, вып. VII.

BEZDENEZHNYKH, G.; KONOVALOV, P.M.; ESLINGER, Yu.V.

Controlled spawning of Aral fish. Vop. ikht. no. 1:63-67 '53. (MLRA 7:6)

1. Rybovodno-biologicheskaya laboratoriya Aralrybvoda.
(Fish culture)

BEZDENEGHNYKH, M.M.

Improvement of shipping conditions on the Tom' River. Rech.transp.
18 no.7:35-40 J1 '59. (MIRA 12:11)

1. Glavnyy inzhener Obskogo Basseynovogo upravleniya.
(Tom' River--Inland water transportation)

BEZDNEZHNYKH, I.S.; SHAFERSHTEYN, D.L.
~~XXXXXXXXXXXXXXXXXXXX~~

Carriage of *Leptospira canicola* by wild rats in Sakhalin. Zhur.
mikrobiol. epid. i immun. no.12:71-72 D '54. (MLRA 8:2)

(RATS,

carriage of *Leptospira canicola*)

(*LEPTOSPIRA CANICOLA*,

carriage by rats)

BEZDNEZHNIK, I. S., KASHANOVA, N. I.

The Problem of Spreading Dysentery Through Food.

VOYENNO-MEDTSINSKIY ZHURNAL (MILITARY MEDICAL JOURNAL), No 3, 1955. p.60

BEZDENEZHNYKH, I.S.; SHAFERSHTEYN, D.I.

Dogs as carriers of *L. canicola* in Sakhalin. Zhur.mikrobiol.epid.
i immun. no.3:102-105 Mr '55. (MLRA 8:7)
(LEPTOSPIRA CANICOLA,
carriage in dogs)
(DOGS,
carriage of *Leptospira canicola*)

GUSLITS, S.V.; SLAVIN, G.P.; AGAFONOV, V.I.; BEZDENZHENYKH, I.S.;
RALL', Yu.M., professor

"Course in specialized epidemiology." V.A.Bashenin. Reviewed by
S.V.Guslits and others. Zhur. mikrobiol., epidem. i immun. 27
no.3:104-108 Mr' 56. (MLRA 9:7)
(EPIDEMIOLOGY) (BASHENIN, V.A.)

BEZDENEZHNYKH, I. S., KASHANOVA, N. I.,

"Leptospirosis of Cattle on Sakhalin Island," by I. S. Bezdenezhnykh and N. I. Kashanova, Chair of Military Epidemiology, Military Faculty, Central Institute for the Advanced Training of Physicians, Zhurnal Mikrobiologii, Epidemiologii i Immunobiologii, Vol 27, No 9, Sep 56, pp 60-63

This article describes serological and microbiological investigations to identify the reservoir of leptospirosis on Sakhalin Island. Two tables show, respectively, results of the examination of 163 sera from cattle; and the agglutination-lysis reaction between immune rabbit sera and Leptospira strains Hund Berlin, No 14, calves 660 and 705. On the basis of the results presented, it was concluded that cattle on Sakhalin are the reservoir of Leptospira of the type hund Berlin, vitulina (grippe-typhosa) and akiyami B. Infection of cattle with leptospiroses of the canicola type occurred on Sakhalin chiefly via water sources from dogs and gray rats, the principal carriers.

Sum 1258

BEZDENZHENYKH, I.S., kandidat meditsinskikh nauk

Conservation and forwarding of material for ornithosis tests. Voen.
med.zhur. no.12:76 D '56. (MIRA 10:3)
(ORNITHOSIS VIRUS)

BEZDENZHENYKH, I.S., podpolkovnik med. sluzhby, kand.med.nauk; KASHANOVA, N.I.
podpolkovnik med. sluzhby, kand.med.nauk

Importance of titration of Flexner dysentery pathogens in
epidemiological practice. Voen.med.zhur. no.3:88 Mr '57. (MIRA 11:3)
(DYSENTERY)

BEZPENEZHNYKH, I.S.; BOLDYREV, Tikhon Yefimovich, red.

[Ornithosis; epidemiology and prophylaxis] Ornitozy; epidemiologiya
i profilaktika. Moskva, 1959. 117 p. (MIRA 13:8)
(ORNITHOSIS)

BEZDENEZHNYKH, I. S., AGAFONOV, V. I., ROZHDESTVENSKIY, V. M.,
KUZHYAKIN, A. P.

"Comparative analysis of the basic rules of the epizootic and
epidemic processess."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

BEZDENEZHNYKH, I. S.

"On the natural nidi of leptospirosis on the island of Sakhalin."

report submitted at the All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

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SOURCE CODE: UR/0017/67/000/001/0025/0025

AUTHOR: Bozdenezhnykh, I. (Professor)

ORG: None

TITLE: Infections and protective forces

SOURCE: Voyennyye znaniye, no. 1, 1967, 25

TOPIC TAGS: infective disease, immunity, immunization, immunology, ionizing radiation, vaccine, human ailment, human physiology

ABSTRACT: The role of the human organism in combating infections is emphasized. The human organism's defensive mechanisms, classified as either general or specific, in accordance with the danger against which they provide protection, are discussed, as are the general factors which protect against any disease. The antibodies produced by vaccines are stressed and live polio vaccine is cited as one which provides immunity, albeit for a short time, against other forms of infectious diseases in addition to polio. Immunization is said to have already eradicated a number of diseases in the Soviet Union and mention is made of the fact that vaccination not only confers immunity but also provides the capacity to withstand ionizing radiation more easily. Orig. art. has: none.

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