

ACCESSION NR: AT4028335

S/0000/63/000/000/0128/0139

AUTHOR: Mel'nikov, A. Kh.; Firsova, T. P.; Molodkina, A. N.; Morozova, T. G.;  
Aksenova, I. V.

TITLE: Investigation of the reaction of sodium superoxide and potassium superoxide  
with water vapor and carbon dioxide and the synthesis of percarbonates

SOURCE: Soveshchaniye po khimii perekisny\*kh soyedineniy. Second, Moscow, 1961.  
Khimiya perekisny\*kh soyedineniy (chemistry of peroxide compounds); Doklady\*  
soveshchaniy. Moscow, Izd-vo AN SSSR, 1963, 128-139

TOPIC TAGS: sodium peroxide, potassium peroxide, water vapor, carbon dioxide,  
percarbonate, percarbonate synthesis, oxygen, water, sodium superoxide, potassium  
superoxide

ABSTRACT: The authors investigate the reaction of sodium superoxide and potassium  
superoxide with water vapor and carbon dioxide at a lowered temperature and study  
the properties of the solid phase of the peroxide type formed in the process of this  
reaction. The work is divided into two segments: 1) the investigation of reaction  
process kinetics of sodium and potassium superoxides with water vapor and carbon  
dioxide in the presence of water vapor and 2) the synthesis and study of properties

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of the peroxide type of solid phases formed in the low temperature reaction of sodium and potassium superoxides with carbon dioxide and water vapor. Diagrams of the illustrations are shown; graphs showing the kinetic curves of oxygen separation, water vapor and carbon dioxide absorption are presented. Tables presenting the composition of potassium and sodium percarbonates are given. The study of the reaction kinetics shows two directions of the process dependent on the temperature. Within a temperature region of from  $+10^{\circ}$  to  $-10^{\circ}\text{C}$ , sodium and potassium superoxides react with water vapor and carbon dioxide, accompanied by a discharge of superoxide oxygen only and the formation of sodium and potassium percarbonates. The intermediate phases of the reaction process of sodium and potassium superoxide with water vapor and carbon dioxide at low temperatures are synthesized. Some of the properties, previously unpublished (thermo-stability, specific weight, hydrolysis, etc.) are studied. Orig. art. has: 4 tables, 9 figures, and 9 formulas.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. NS Kurnakova AN SSSR  
(Institute of General and Inorganic Chemistry AN SSSR)

SUBMITTED: 13Dec63

DATE ACQ: 06Apr64

ENCL: 00

SUB CODE: CH

NO REF SOV: 017

OTHER: 019

Card 2/2

L 21000-66 EWT(1)/EWT(m)/EWP(t) SCTB/LJP(s) JD/DD  
ACCESSION NR: AP5025512 UR/0062/65/000/009/1678/1679  
541.11+655.39 16  
13

AUTHOR: Firaova, T. P.; Molodkina, A. N.; Morozova, T. G.; Aksenova, I. V.

TITLE: The melting temperature of potassium superoxide 27

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 9, 1965, 1678-1679

TOPIC TAGS: potassium superoxide, air regeneration, life support

ABSTRACT: Potassium superoxide ( $KO_2$ ) is of considerable importance as an agent for regenerating air. In this work, samples containing 89-99%  $KO_2$  and potassium peroxide, carbonate, hydroxide and small amounts of water were subjected to differential thermal analysis. It was found that at atmospheric pressure the melting points of various samples ranged from 490 to 530C. At pressures of 1-2 mm the melting points dropped to 350-415C. In the course of the experiments it was observed that molten potassium superoxide reacts vigorously with the glass walls of the container to form potassium silicate. This reaction is accompanied by evolution of nascent oxygen. Orig. art. has: 3 figures. [VS]

ASSOCIATION: Institut obshchey i neorganicheskoy khimii im. N. S. Kurnakova Akademii nauk SSSR (Institute of General and Inorganic Chemistry, Academy of Sciences, SSSR)  
Card 1/2

<b>L 21000-66</b>	
ACCESSION NR: AP5025512	
SUBMITTED: 08Jan65	ENCL: 00
NO REF SOVI 002	OTHER: 005
	SUB CODE: IC, GC, TD
	ATD PRESS: 4118
Card 2/2 BK	

L 37207-66

ACC NR: AP6014414

(A)

SOURCE CODE: UR/0062/66/000/004/0757/0759

AUTHOR: Firsova, T. P.; Molodkina, A. N.; Morozova, T. G.; Stasevich, N. N.

ORG: Institute of General and Inorganic Chemistry im. N. S. Kurnakov Academy of Sciences SSSR (Institut obshchey i neorganicheskoy khimii Akademii nauk SSSR)

TITLE: Preparation and properties of sodium peroxide dihydrate

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 4, 1966, 757-759

TOPIC TAGS: sodium compound, peroxide, heat resistance, thermogram, dehydration

ABSTRACT: The dihydrate of sodium peroxide was obtained by vacuum dessicating the octahydrate at 0° over P2O5. A thermogram for the dihydrate was drawn; its density was determined to be 1.98 ± 0.09 gm/cm3. Attempts to dehydrate to the monohydrate were not successful. Dehydration at 0° did not reduce the water of crystallization content. At 20° the water was removed slowly but hydroxide was formed simultaneously. Orig. art. has: 1 figure and 3 tables.

SUB CODE: 07/ SUBM DATE: 16Sep65/ ORIG REF: 007/ OTH REF: 007

UDC: 541.549+546.33+661.49

Card 1/1 MLP

MOLODKINA, L. N.

"Paralyses, Produced by Blood Transfusions into the Central Nervous System, after Instances of Experimental Epilepsy in Rats," Dok. AN, 66, No. 2, 1949. Moscow State Univ. im. M. V. Lomonosov, c1949-.

KRUSHINSKIY, L.V.; FLESS, D.A.; MOLODKINA, L.N.

Analysis of physiological processes based on experimental reflex  
epilepsy. Zh.obsh.biol. 11 no.2:104-119 Mr-Apr '50. (CIBL 19:2)

1. Of the Scientific-Research Institute of Zoology and of Pushkin  
Zoological Station MGU.

KRUSHINSKIY, L.V.; PUSHKARSKAYA, L.P.; MOLODKINA, L.N.

Experimental investigation of cerebral hemorrhage induced by  
nervous trauma. Vest.Mosk.un. 8 no.12:25-44 D '53. (MLRA 7:2)

1. Kafedra fiziologii vysshey nervnoy dayatel'nosti.  
(Brain--Hemorrhage)

KRUSHINSKIY, I.V.; MOLODKINA, L.N.; PRIGOZHINA, Ye.L.; SHABAD, I.M.

Study of the role of neural trauma on malignant tumors. Zhur.vys.  
verv.deiat. 4 no.6:877-881 N-D '54. (MLRA 8:7)

1. Kafedra vysshey nervnoy deyatel'nosti biologo-pochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta.

(NERVOUS SYSTEM, physiology,  
eff. of inj. on exper. cancer)

(NEOPLASMS, experimental,  
eff. of nervous system inj.)

USSR / Human and Animal Physiology (Normal and Pathological). Nervous System. Epilepsy T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 97868

Author : Krushinskiy, L. V., Molodkina, L. N.

Inst : Not given

Title : Hemorrhage Into the Spinal Cord as a Result of Experimental Epilepsy

Orig Pub: Uspekhi sovrem. biol., 1957, 44, No 2, 220-231

Abstract: In rats during the period of lactation, the attacks of "zvankovoy" epilepsy are complicated by fractures of the extremities and paralysis of hind extremities due to bleeding into the spinal cord more frequently than in usual animals; furthermore, the frequency of these complications is

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USSR / Human and Animal Physiology (Normal and Pathological). Nervous System. Epilepsy T

Abs Jour: Ref Zhur-Biologiya, No 21, 1958, 97868

directly proportional to the volume of lactation or to the number of baby rats nursed by the female. The addition of powdered shell of fresh-water mussel, containing 98 percent of carbonate and lactate of  $Ca^{2+}$ , to the diet of the lactating females lowers the frequency of the above-mentioned complications. Frequent fractures of the extremities after apileptiform attacks are connected with demineralization of bones during the period of lactation, and hemorrhages into the spinal cord, having a traumatic origin, with deformation of corresponding parts of the vertebral column during the attack (which is also contributed to by demineralization) occurred. The origin of hemorrhage is also explained by the increase of vascular porosity as a

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MOLODKINA, L.N.

KRUSHINSKIY, L.V.; KORZHOV, V.A.; MOLODKINA, L.N.

Effect of electric shock on pathological states caused by sound stimuli in rats [with summary in English]. Zhur.vys.nerv.deiat. 8 no.1:95-102 Ja-F '58. (MIRA 11:3)

1. Laboratoriya patofiziologii kafedry fiziologii vysshey nervnoy deyatel'nosti Biologopochvennogo fakul'teta Moskovskogo gosudarstvennogo universiteta.

(NOISE, effects, exper. neurol. disord., eff. of electric shock in rats (Rus))

(ELECTRICITY, effects, on exper. neurol. disord. induced by noise (Rus))

SOV/26-59-4-23/43

17(1)  
AUTHOR:

Molodkina, L.N., Candidate of Technical Sciences  
(Moscow)

TITLE:

New Developments in the Study of Nervous Activity  
(Novoye v izuchenii nervnoy deyatel'nosti)

PERIODICAL:

Priroda, 1959, Nr 4, pp 97-99 (USSR)

ABSTRACT:

The author describes new developments in the study of nervous activity initiated by Soviet scientists, e.g. a research method on the interrelation of basic nervous processes at sound irritation developed in the Laboratoriya patofiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta (Laboratory of Pathophysiology of Higher Nerve Activity of the Moscow State University) under the direction of Professor L.V. Krushinskiy, by causing nervous fits with rats similar to epileptic fits of human beings. In this connection, the preparation suggested by Professor M.Ya. Sereyskiy for healing epilepsy has been tested, and after certain changes

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SOV/26-59-4-23/43

New Developments in the Study of Nervous Activity

in its composition, recommended for hospital use. Further experiments have been carried out in I.P. Pavlov's Laboratory on inertia of irritative processes and in L.V. Krushinsky's Laboratory on inverted (reserve) relations. The method of sound irritation might also prove successful in studying means for cerebral hemorrhage prophylaxis. There is 1 photo.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M.V. Lomonosova (Moscow State University imeni M.V. Lomonosov)

Card 2/2

KRUSHINSKIY, L.V.; MOLODKINA, L.N.; LEVITINA, N.A.

Time and conditions for the restoration of an exhausted inhibition process during the activity of sound stimuli. Zhur.vys.nerv.deiat. 9. no.4:566-572 JI-Ag '59. (MIRA 12:12)

1. Laboratoriya patofiziologii kafedry fiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta.  
(REFLEX CONDITIONED)

KRUSHINSKIY, L.V.; STESHENKO, A.P.; MOLODKINA, L.N.

The protective effect of carbon dioxide inhalation on the development of hemorrhagic shock conditions. Nauch.dokl.vys.shkoly: biol.nauki no.2:73-77 '60. (MIRA 13:4)

1. Rekomendovana kafedroy fiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta im. M.V. Lomonosova. (CARBON DIOXIDE--THERAPEUTIC USE) (SHOCK)

KRUSHINSKIY, L.V.; MOLODKINA, L.N.

New experimental model of chronic disease of the nervous system.  
Zhur. vys. nerv. deiat. 10 no. 5:779-785 S-0 '60. (MIRA 13:12)

1. Laboratoriya patofiziologii kafedry fiziologii vysshey nervnoy  
deyatel'nosti Moskovskogo gosudarstvennogo universiteta.  
(MOVEMENT DISORDERS)

MOLODKINA, L.N.; KOTLYAR, B.I.

Some data on the pharmacodynamics of promedol. Nauch. dokl. vys.  
shkoly; biol. nauki no.4:85-91 '61. (MIRA 14:11)

1. Rekomendovana laboratoriyey patofiziologii Moskovskogo gosudar-  
stvennogo universiteta im. M.V.Lomonosova.  
(PROMEDOL)

MOLODKINA, L.N.

State of excitability during systematic traumatization of the nervous system by an acoustic stimulus. Nauch. dokl. vys. shkoly; biol. nauki no.2:94-97 '62. (MIRA 15:5)

1. Rekomendovana kafedroy fiziologii vysshey nervnoy deyatel'nosti Moskovskogo gosudarstvennogo universiteta im. M.V.Lomonosova.  
(SOUND—PHYSIOLOGICAL EFFECT) (NERVOUS SYSTEM—WOUNDS AND INJURIES)

KRUSHINSKIY, L.V.; MOLODKINA, L.N.; POPOVA, N.P.

Interrelation between extrapolation and conditioned reflexes  
in birds. Ornitologia no.6:408-417 '63. (MIRA 17:6)

MOLODKINA, L.H.

Effect of a long-term interruption in the systematic action of the auditory stimulus on the myoclonic hyperkinesia induced by the same stimulus. Nauch. dokl. vys. shkoly; biol. nauki (MIRA 19:1) no.1:62-64 '66.

1. Rekomendovana kafedroy fiziologii vyyeshey ne vnoy deyatelnosti Moskovskogo gosudarstvennogo universiteta. Submitted July 3, 1964.

S/117/60/000/012/015/022  
A004/A001

AUTHORS: Malinina, N., Molodkina, M., Datskiy, M., Filippov, G.

TITLE: Cement Models for the Manufacture of Dies

PERIODICAL: Mashinostroitel', 1960, No. 12, p. 36

TEXT: Generally the complex profile of the working surface of forging dies for blades is machined on copying milling machines according to wooden model templets. These models lose their geometrical shape rather quick because of temperature fluctuations and the effects of air moisture in the storing rooms. Instead of having model sets for forging dies made of wood, the manufacture of which takes a model maker of the 6th grade some seven days, the Leningradskiy metallicheskiy zavod (Leningrad Metallicheskiy Plant) produces these models from cement. The templets used for the cement-model making serve also for the checking of the die shape during the milling operation and fitting work. At the beginning a frame work is manufactured from templets, distance sleeves and gaging pins. Braces are mounted on the sides of the framework, tightened by wedges and cramps. Then diluted construction gypsum is filled into the framework, the side walls of which are removed after the solidification of the gypsum. The profile of the die

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Cement Models for the Manufacture of Dies

S/117/60/000/012/015/022  
A004/A001

model is then shaped subsequently between every pair of neighboring templets, the surplus gypsum being cut away flush with the templet profile. Those parts of the profile for which the framework does not provide a templet is done by surface gaging. The ready gypsum mold is covered with a thin nitro-lacquer coating and greased with stearin diluted with kerosene in order to prevent the gypsum from sticking to the cement. Side walls are mounted to the ready mold and the cement is poured in. The process of the cement model setting takes 3-4 days. The cast cement model-templet has a smoother and better surface than the wooden ones, while its manufacture costs by 2-2.5 times less than that of wooden model-templets. There are 4 figures.

Card 2/2

LOSEV, V. V.; MOLODOV, A. I.; GORODETSKIY, V. V.

"Influence of the following diffusion step on the kinetics of a rapid electrode process."

report presented at 15th Mtg, Intl Comm of Electrochemical Thermodynamics & Kinetics, London & Cambridge, UK, 21-26 Sep 1964.

Karpov Physico-Chemical Inst, Moscow.

5(4) 5.4600

67959

SOV/20-130-1-31/69

AUTHORS: Losev, V. V., Melodov, A. I.

TITLE: The Influence Exercised by the Anions on the Anodic Dissolution of Indium Amalgam

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 130, Nr 1, pp 111-114 (USSR)

ABSTRACT: After having given a survey of publications dealing with anodic processes the authors establish that the accelerating anion effect on the anodic dissolution of metals has not yet been explained. Since the ordinary polarization measurements are rendered difficult in the case of considerable distance from the equilibrium potential due to concentration polarization, since, however, they cannot be carried out near the equilibrium potential due to the occurrence of an inverse process the authors combined the polarization measurements with radiochemical measurements. Thus one of the two electrode processes can be studied with an equilibrium potential and also with a strong inverse process (Refs 7-10). The influence exercised by the sodium halide- and sodium sulfate concentration on the velocity  $i_a$  of the true anodic process of dissolution of 0.1 M indium amalgam in 0.01 M  $\text{In}(\text{ClO}_4)_3 + 0.01 \text{ M HClO}_3$  was investigated

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The Influence Exercised by the Anions on the  
Anodic Dissolution of Indium Amalgam

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at 20° and with constant ionic strength (3 M) which was maintained by the addition of  $\text{NaClO}_4$ . Figure 1 shows the radio-chemically determined dependence of  $i_a$  on the potential. The ionization of In occurs also with strong cathodic polarization. Figures 2 and 3 show the dependence of  $i_a$  on the potential  $\varphi$  for concentrations of  $\text{Na}_2\text{SO}_4$  on 0.05 - 0.9 M,  $\text{NaCl}$  on 0.05 - 2.7 M,  $\text{NaBr}$  on  $1 \cdot 10^{-3}$  - 2.7 M and  $\text{NaI}$  on  $1 \cdot 10^{-3}$  - 1 M. A linear dependence exists between  $\varphi$  and  $i_a$ . With increasing concentration  $C$  of  $\text{SO}_4^{2-}$  and  $\text{Cl}^-$  the curves of  $i_a$  shift into negative direction. The experimental data correspond to the equation  $i_a = kC^x$  where  $x$  is equal to 1 for low concentrations, with increasing concentrations it also increases. It follows therefrom that the ion  $\text{SO}_4^{2-}$  and  $\text{Cl}^-$  take an active part in the anodic process. For

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The Influence Exercised by the Anions on the  
Anodic Dissolution of Indium Amalgam

NaBr and NaJ (Fig 3) also an increase in the exchange current with increasing concentration of Br<sup>-</sup> and J<sup>-</sup> ions was observed. The experimental data are interpreted by the occurrence of different types of ions in the different concentration ranges.

$i_a = k [In] [J^-] \exp(\beta \varphi F/RT)$  holds for iodine where  $\beta = 2.32$ . ✓

The authors refuse the explanation of the accelerating effect of the J<sup>-</sup> and Br<sup>-</sup> ions due to the change of the structure of the electric double layer. It seems to them more probable that the halogen ions (except F<sup>-</sup>) and sulfate ions take an active part in the anodic ionization of In. In conclusion it is mentioned that the authors thank Ya. M. Kolotyркиn for advice. There are 4 figures and 21 references, 10 of which are Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L. Ya. Karpova (Scientific Research Institute of Physical Chemistry imeni L. Ya. Karpov)

PRESENTED: June 16, 1959 by V. A. Kargin, Academician

SUBMITTED: June 12, 1959

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87411

S-4600

1043, 1087, 1273

S/020/60/135/006/027/037  
B004/B056

AUTHORS: Losev, V. V. and Molodov, A. I.

TITLE: The Mechanism of Anodic Dissolution of Indium Amalgam in Acid Solutions

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 135, No. 6, pp. 1432 - 1435

TEXT: It was the purpose of the present work to investigate the action of pH upon the anodic ionization of metals. The experiments were carried out with indium amalgam. Polarization was measured, and furthermore, the dependence of the anodic and cathodic processes on the acidity of the solution varying from  $9.5 \cdot 10^{-4}$  M to 3.5 M  $\text{HClO}_4$  was radiochemically determined. For the anodic process (rate  $i_a$ ), the linear dependence of  $\log i_a$  on the potential  $\varphi$  was found. The inclination of the straight line corresponds to the experimental transfer coefficients  $\beta = 2.2$ . With increasing acid concentration (from  $9.5 \cdot 10^{-4}$  to 0.5 M) the exchange current

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The Mechanism of Anodic Dissolution of  
Indium Amalgam in Acid Solutions

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B004/B056

$i_0$  drops from  $1 \cdot 10^{-3}$  to  $2 \cdot 10^{-5}$  a/cm<sup>2</sup>. Within the range of concentration  $C$  of HClO<sub>4</sub> from  $5 \cdot 10^{-3}$  to 0.2 M, linear dependence of  $\log i_0$  on  $\log C$  was found. For the anodic process, the equation  $i_a = k[\text{In}][\text{H}^+]^{-1} \exp(\beta\phi F/RT)$  (1) holds, where  $\beta = 2.2$ . The complex character of the cathodic process is caused by the hydrolysis of indium ions. Besides the ions  $\text{In}(\text{H}_2\text{O})_6^{3+}$ , the ions  $\text{In}(\text{H}_2\text{O})_5\text{OH}^{2+}$  appear. The rate of the cathode process is given by  $i_k = k''[\text{In}(\text{H}_2\text{O})_5\text{OH}^{2+}] \exp(-\alpha\phi F/RT) = k''K_h[\text{In}(\text{H}_2\text{O})_6^{3+}][\text{H}_3\text{O}^+]^{-1} \exp(-\alpha\phi F/RT)$ .  $K_h$  is the coefficient of hydrolysis. This equation represents the experimental data. The easier discharge of the hydrolyzed ions is explained by the action of the OH-groups which facilitates the electron transition. The production and discharge of multiply charged metal cations takes a step-wise course. B. N. Kabanov and D. I. Leykis are mentioned. There are 3 figures and 13 references: 5 Soviet, 4 US, 1 Czechoslovakian, 1 Danish, 5 German, and 1 Japanese.

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The Mechanism of Anodic Dissolution of Indium  
Amalgam in Acid Solutions

S/020/60/135/006/027/037  
B004/B056

ASSOCIATION: Fiziko-khimicheskiy institut im. L. Ya. Karpova (Physico-  
chemical Institute imeni L. Ya. Karpov)

PRESENTED: July 8, 1960, by A. N. Frumkin, Academician

SUBMITTED: July 7, 1960

X

Card 3/3

LOSEV, V.V.; MOLODOV, A.I. (Moscow)

Radioactive-tracer technique for measuring exchange rate between mercury and mercurous salts. Zhur.fiz.khim. 35 no.11:2487-2493  
N '61. (MIRA 14:12)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.  
(Mercury--Isotopes)  
(Mercury salts)

LOSEV, V.V. (Moskva); DEMBROVSKIY, M.A. (Moskva); MOLODOV, A.I. (Moskva)

Apparatus for measuring the exchange current and true rate of the anodic process on amalgam electrodes with the aid of radioisotopic tracers. Zhur.fiz.khim. 37 no.8:1904-1907 Ag '63. (MIRA 16:9)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova.  
(Electrodes) (Radioactive tracers) (Amalgams)

S/020/63/148/005/022/029  
B190/B102AUTHORS: Losev, V. V., Molodov, A. I.

TITLE: The effect of fluorine ions on the anodic dissolution of indium amalgam and some laws governing the electrode processes involving complexes

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 148, no. 5, 1963, 1114-1117

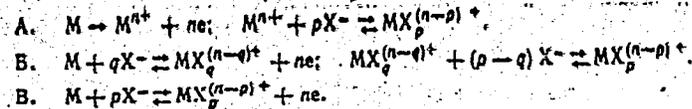
TEXT: As in previous investigations (DAN 130, 111, 1960) the authors studied the way fluorine ions affect the anodic processes by examining the polarization curves together with radiochemical measurements in 0.1 M indium amalgam in a solution of  $0.01 \text{ M In}(\text{ClO}_4)_3 + \text{NaClO}_4 + \text{HClO}_4$  with additions of NaF (0.01-0.2 M) at constant ion strength and pH 1.3. The exchange current density  $i_0$  ( $\text{a/cm}^2$ ) was measured as a function of the potential at various NaF concentrations was found to drop exponentially with increasing  $i_0$ , almost independently of the NaF concentration. The

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The effect of fluorine ions on the ...

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polarization curves however differed considerably for different NaF concentrations. When not only the  $MX_p^{(n-p)+}$  complexes predominant in the solution take part in the electrode processes, but also other complexes in equilibrium with the former, the processes



will also occur at the same time. A refers to the contribution of the simple hydrated metal ions, B to that of the non-predominant, and C to that of the predominant complexes. The rates of the anodic and cathodic processes are then given by

$$\begin{aligned} i_a &= k_A [M] e^{\beta_1 eF/RT} + k_B [M] [X^-]^q e^{\beta_2 eF/RT} + k_C [M] [X^-]^p e^{\beta_3 eF/RT}; \quad (1) \\ i_c &= k_A' [M^{n+}] e^{-\alpha_1 eF/RT} + k_B' [MX_q^{(n-q)+}] e^{-\alpha_2 eF/RT} + k_C' [MX_p^{(n-p)+}] e^{-\alpha_3 eF/RT}. \quad (2) \end{aligned}$$

Assuming that all  $\alpha_i$  can be replaced by  $\alpha$  and all  $\beta_i$  by  $\beta$ , and that

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$\alpha + \beta = n$ , the total exchange current can be given by

$$i_0 = [M]^{a/n} [MX_a^{(n-p)+}]^{b/n} [A_0^0 [X^-]^{-\beta p/n} + B_0^0 [X^-]^{-\alpha p/n} + C_0^0 [X^-]^{\alpha p/n}] \quad (3)$$

where  $A_0^0, B_0^0, C_0^0$  denote the standard current densities per unit concentration of the reacting particles. From Eq. (3) it follows that  $i_0$  drops first with increasing addend concentration ( $C_{add}$ ), but with further increase of the latter the mechanisms  $E$  and  $F$  will increase in importance causing the current to rise again. Thus, in general, the  $i_0(C_{add})$  curve will have a minimum.  $i_0$  decreases with increasing  $C_{add}$  only in the case of  $F^-$  ions; for  $SO_4^{2-}$  or  $Cl^-$  ions  $i_0$  is virtually independent of  $C_{add}$ , but even small additions of NaBr or NaI raise  $i_0$ . This is due to the fact that  $i_0$  corresponds to the sequence  $F^- < SO_4^{2-}, Cl^- < Br^- < I^-$ . There are 2 figures and 1 table.

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The effect of fluorine ions on the ...

S/020/63/140/005/022/029  
B190/B102

ASSOCIATION: Fiziko-khimicheskiy institut im. L.Ya. Karpova (Physico-chemical Institute imeni L.Ya. Karpov)

PRESENTED: July 11, 1962, by A. N. Frumkin, Academician

SUBMITTED: July 16, 1962

Card 4/4

MOLODOV, A.I.; LOSEV, V.V.

Exchange current and rate of the anodic process on amalgam electrodes ~~is~~ dependent on the foreign electrolyte concentration. Zhur. fiz. khim. 38 no.6:1481-1487 Je '64.

(MIRA 18:3)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

MOLODOV, A.I.; LOSEV, V.V.

Effect of the concentration of a foreign electrolyte on the cathodic process on amalgam electrodes. *Elektrokhimiya* 1 no.1:53-58 Ja '65.  
(MIRA 18:5)

1. Nauchno-issledovatel'skiy fiziko-khimicheskiy institut im. L.Ya. Karpova, Moskva.

MOLODOV, A.I.; LOSEV, V.P.

Kinetics of electrode processes on zinc amalgam in ammonia solutions. *Elektrokhimiya* 1 no.2:149-154 F '65. (MIRA 18:6)

1. Fiziko-khimiicheskiy institut imeni Karpova, Moskva.

LOSEV, V.V.; MOLODOV, A.I.; GORODETSKIY, V.V.

Polarization measurements in the presence of concentration  
polarization. Elektrokhimiya 1 no.5:572-578 My '65. (MIRA 18:6)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

MOLODOV, A.I.; LOSYV, V.V.

Nature of the cathodic process of indium reduction on an amalgam from acid solutions. *Elektrokhimiya* 1 no.6:651-658 Je '65. (MIRA 18:7)

I. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

MOLODOV, A.I.; LOSEV, V.V.

Particular features of the kinetics of the anodic process on  
indium-amalgam. *Elektrokhimiya* 1 no.10:1253-1257 0 '65.

(MIRA 18:10)

1. Fiziko-khimicheskiy institut imeni Karpova.

MOLODOV, P.A.

Some anatomophysiological features of the forearm and their significance in treating closed diaphyseal fractures. Ortop.travn. i protez. 20 no.1:23-30 Ja '59. (MIRA 12:3)

1. Iz kafedry ortopedii i travmatologii (nach. - prof. I.L. Krupko) Voenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova. (FOREARM, fract. closed diaphyseal fract., management (Rus))

MOLODOV, P.A.

Apparatus for repositioning fractures of the distal end of  
bones of the forearm. Ortop.travm. i prctex. 20 no.3:65-66  
Mr '59. (MIRA 12:6)

I. Iz kafedry ortopedii i travmatologii (nach. - prof.I.L.  
Krunko) Voenno-meditsinskoy ordena Lenina akademii im.  
S.M.Kirova i kafedry khirurgii (zav. - dotsent M.I.Lytkin)  
Saratovskogo meditsinskogo instituta.  
(ORTHOPEDICS, appar. & instruments  
appar. for repositioning fract. of distal  
end of forearm (Rus))

MOLODOV, P.A.

Rare form of fracture-dislocation of the bones of the forearm.  
Ortop.travm. i protaz. 20 no.7:61-63 JI '59. (MIRA 12:10)

1. Iz Saratovskogo meditsinskogo instituta.  
(FOREARM fract. & disloc.)

VORONTSOV, A. V., dotsent; MOLODOV, P. A., kand. med. nauk

Analysis of errors and complications in the treatment of patients with diaphyseal fractures of the bones of the forearm. Vest. khir. no.4:103-107 '62. (MIRA 15:4)

1. Iz kafedry travmatologii i ortopedii (nach. - prof. I. L. Krupko) Voenno-meditsinskoy ordena Lenina akademii im. S. M. Kirova. Adres avtorov: Leningrad, Botkinskaya ul., d. 13, klinika ortopedii i travmatologii.

(ARM—FRACTURE)

MOLODOV, P.A., kand.med.nauk

Diagnostic errors in traumatic luxations of the femur. Vest.khir.  
no.5:97-99 '62. (MIRA 15:11)

1. Iz khirurgicheskoy kliniki (nach. - dotsent M.I. Lytkin)  
Saratovskogo meditsinskogo instituta i kliniki travmatologii  
i ortopedii (nach. - prof. I.L. Krupko) Veyenno-meditsinskoy  
ordena Lenina akademii im. S.M. Kirova.  
(FEMUR---DISLOCATION)

MOLODOV, Ya., instruktor profilaktiki (Osinniki, Kemerovskaya obl.)

Our experience. Pozh. delo 8 no.10:7 0 '62. (MIRA 15:10)

(Osinniki—Fires and fire prevention)

IVANOV, I.D.; MOLODOVA, G.A.

Polarographic modification of Bertrand's method in determining  
the activity of some carbohydrases. Mikrobiologiya 30 no.2:337-  
340 Mr.-Ap '61. (MIRA 14:6)

1. Institut biokhimi imeni A.N.Bakha AN SSSR.  
(CARBOHYDRATES) (POLAROGRAPHY)

FENIKSOVA, R. V.; MOLODOVA, G. A.

Production of purified enzymatic preparations from surface mold  
fungi cultures. Mikrobiologiya 30 no.3:534-539 My-Je '61.  
(MIRA 15:7)

1. Institut biokhimi imeni A. N. Bakha AN SSSR.

(MOLDS(BOTANY)) (ENZYMES)

IVANOV, I.D.; MOLODOVA, G.A.; RAKHLEYEVA, Ye.Ye.

Role of H-bond in the maintenance of the conformation and formation of enzyme-substrate complex of  $\alpha$ -amylase of *Aspergillus oryzae*. *Izv. AN SSSR. Ser. biol.* no.2:257-273 Mr-Apr '65.

(MIRA 18:4)

1. All-Union Distillery and Enzyme Industry Research Institute, Moscow.

MOLODOVA, G.A.; IVANOV, I.D.; NIKOLAYEV, G.M.

Role of calcium ion in maintaining the conformation and active center of  $\alpha$ -amylase in *Aspergillus oryzae*. Izv. AN SSSR.Ser.biol. no.3:359-367 My-Je '65. (MIRA 18:5)

1. Institut fermentnoy i spirtovoy promyshlennosti, Moskva.

Molodova, K. A.

Category: USSR

C

Abs Jour: RZh--Kh, No 3, 1957, 7791

Author : Bukhovets, S. V. and Molodova, K. A.

Inst : Leningrad Pedagogical Institute

Title : Complex Platinum Compounds Containing Acetylene Derivatives

Orig Pub: Uch. Zap. Leningr. Ped. In-ta, 1955, Vol 3, 186-190

Abstract: The reaction of  $K[(C_8H_{14}O_2)Cl_3Pt]$  (I) with  $CS(NH_2)_2$  results in the displacement of acetylene glycol from the central core. This shows that the acetylenic bond is preserved when an acetylene group is introduced in the complex. The reaction of I with  $C_2H_5N$  in aqueous medium leads to the formation of  $[(C_8H_{14}O_2)C_2H_5NClPt]$ ; in acetone medium a displacement of glycol from the complex takes place. Excess  $KNO_2$  with I gives  $K_2[(NO_2)_2Cl_2Pt]$ ; when one mole of  $KNO_2$  is reacted with I, there is apparently formed the compound  $K[(C_8H_{14}O_2)NO_2Cl_2Pt]$ . With  $NH_3$ ,  $[PtCl_2NH_3(C_8H_{14}O_2)]$  is first formed, followed by  $[PtNH_3ClNH_3(C_8H_{14}O_2)]Cl$ . It can be seen from

Card: 1/2

-18-

Category: USSR

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Abs Jour: RZh--Kh, No 3, 1957, 7791

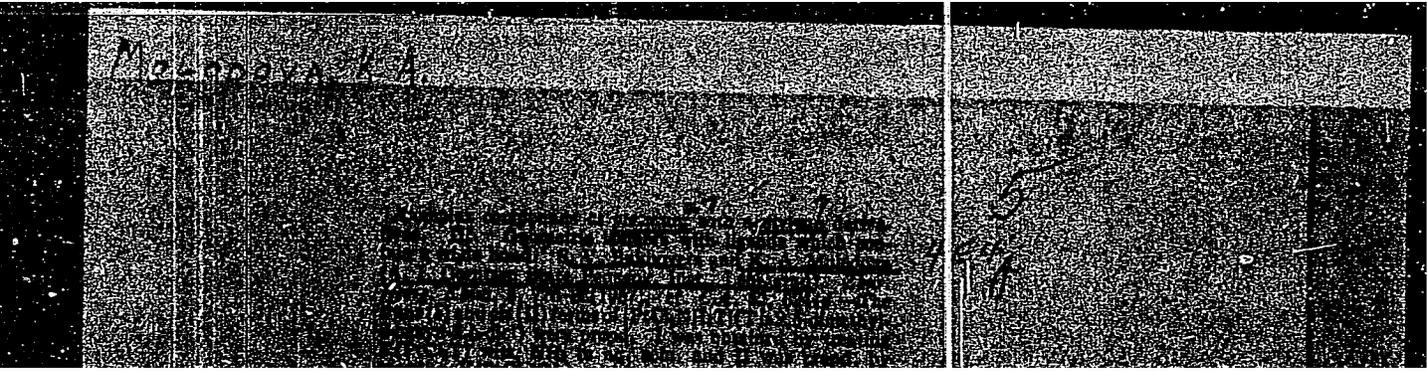
all the above reactions that the acetylene glycol along with an increased trans-influence has a lower coordination strength than  $\text{CS}(\text{NH}_2)_2$ ,  $\text{C}_5\text{H}_5\text{N}$ , and the nitro group and a higher coordination strength than  $\text{NH}_3$ . Compounds containing addenda with two acetylenic bonds bonded to the central core, e.g., tetramethylhexadiene diol, diphenylbutadiene, and diphenylpentadiene, have been synthesized:  $\left[ \begin{array}{c} \text{Cl} \\ | \\ \text{Pt} \\ | \\ \text{X-C} \quad \text{C-C} \quad \text{C-X} \end{array} \right]_2 \text{PtCl}_2$ , where X is  $\text{C}_6\text{H}_5$ ,  $(\text{CH}_3)_2\text{C}(\text{OH})$ , etc. Thus ring closure does not occur when two triple bonds are present even when two isolated double bonds are present. The data from the hydration of Pt complexes with 2-substituted diacetylene derivatives and from their reactions with  $\text{CS}(\text{NH}_2)_2$  provide ample evidence on the preservation of the triple bonds in the diacetylene addendum on introduction into the complex. It is assumed that the coordination of acetylene derivatives proceeds by a transfer of electrons from the triple bond to the Pt atom.

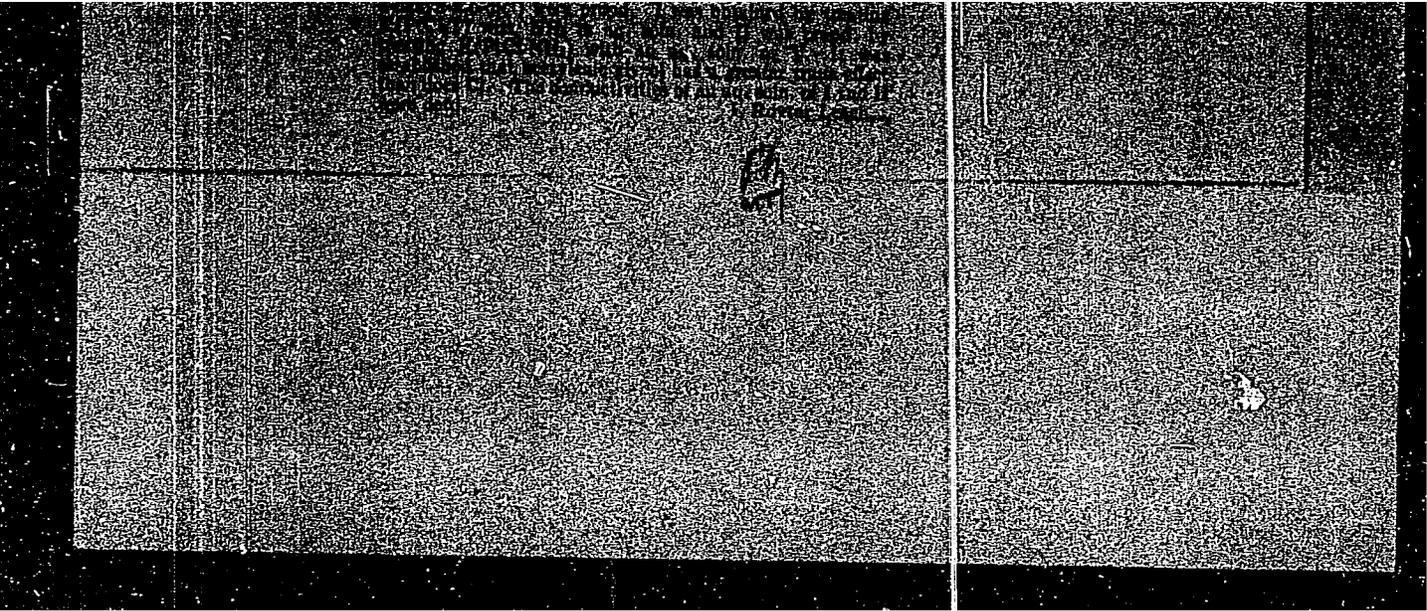
Card : 2/2

-19-

MOLODOVA, K. A., Cand Chem Sci -- (diss) "Complex compounds of platinum with acetylene derivatives in the inner sphere and some of their properties." Len, 1957. 14 pp (Len State Pedagogical Inst im A. I. Gertsen, Chair of Organic Chemistry) (KL, 2-58, 111)

-14-





**AUTHORS:** Bukhovets, S.V., Molodova, K.A. SOV/ 78-3-7-13/44

**TITLE:** Complex Compounds of Platinum With Acetylene Derivatives  
(Kompleksnyye soedineniya platiny s atsetilenovymi proizvodnymi).  
IV. On the Stability of the Coordination Substituents ("Addents")  
With Two and Three Bonds (IV. Ob otnositel'noy koordinatsionnoy  
prochnosti addendov s dvoynoy i troynoy svyaz'yu)

**PERIODICAL:** Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 7, pp 1540-1545  
(USSR)

**ABSTRACT:** The strength of coordination substituents ("addents") with three  
and two bonds in complex compounds of platinum was investigated.  
Experiments were carried out with acetylene glycol and tetra-  
methylbutindiol. It was found that complex compounds of platinum  
with substituents ("addents") containing double bonds cannot be  
produced. It follows from the experiments carried out that  
"addents" containing three bonds are of a more stable linkage in  
the internal domain of the platinum complex than those with double  
bonds. It was shown that the acetylene derivatives of tetramethyl-  
butindiol displace the ethylene- and phenylethylene groups from  
the interior of the platinum complex, but they are, however, not

Card 1/2

Complex Compounds of Platinum With Acetylene Derivatives.

SOV/78-3-7-13/44

IV. On the Stability of the Coordination Substituents

("Addenda") With Two and Three Bonds

displaced by ethylene and phenylacetylene. There are 7 references, 6 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut im. A.I.Gertsena (Leningrad State Pedagogical Institute imeni A.I.Gertsen)

SUBMITTED: July 2, 1957

1. Complex compounds--Chemical properties
2. Platinum--Properties
3. Acetylene derivatives--Chemical reactions

Card 2/2

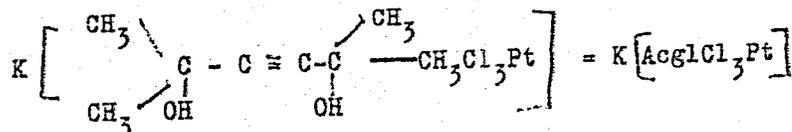
AUTHOR: Molodova, K. A.

SOV/78-3-11-9/23

TITLE: On the Interaction Between Tetramethyl Butenediol Trichloroplatinic Potassium With Pyridine, Ammonia, and Other Reagents (O vzaimodeystvii tetrametilbutindioltrichloroplatoata kaliya s p.ridinom, ammiakom i drugimi reagentami)

PERIODICAL: Zhurnal neorganicheskoy khimii, 1958, Vol 3, Nr 11, pp 2472 - 2479 (USSR)

ABSTRACT: In the present paper the author investigated the interaction between the complex compounds of platinum (with acetylene - glycol addenda) and ammonia, pyridine, and other reagents. The complex compounds of tetramethyl butynediol trichloroplatinic potassium were used as initial compounds:



Card 1/3

In the case of an action of excess thiourea on the compound

On the Interaction Between Tetramethyl Butynediol SOV/78-3-11-9/23  
Trichloroplatinic Potassium With Pyridine, Ammonia, and Other Reagents

$K[Acgl Cl_3 Pt]$  in acid or neutral medium a compound of the following composition is produced:  $[Pt_4CS(NH_2)_2]Cl_2$ .

In the case of an interaction between potassium nitrite and  $K[Acgl Cl_3 Pt]$  the nitrite group displaces the acetylene - glycol group from the complex under the formation of:  $K_2[(NO_2)_2 Cl_2 Pt]$ . In the case of an interaction between  $K[Acgl Cl_3 Pt]$  and pyridine the compound  $[Acgl PyCl_2 Pt]$  is produced. If more pyridine is added, the acetylene - glycol group is removed from the complex under formation of  $[Py_2 Cl_2 Pt]$ . In the case of an interaction between  $K[Acgl Cl_3 Pt]$  and ammonia an amine group is produced in the inner complex under the formation of monoamine  $[Acgl(NH_3)Cl_2 Pt]$  and diamine  $[Acgl(NH_3)_2 Cl Pt]Cl$ . It was found that in the case of an action of excess pyridine and ammonia on  $K[Acgl Cl_3 Pt]$  the acetylene - glycol group

Card 2/3

On the Interaction Between Tetramethyl Butynediol                      SOV/78-3-11-9/23  
Trichloroplatinic Potassium With Pyridine, Ammonia, and Other Reagents

is completely removed from the inner sphere of the complex compounds. There are 7 references, 7 of which are Soviet.

ASSOCIATION: Leningradskiy gosudarstvennyy pedagogicheskiy institut im.  
A.I.Gertsena (Leningrad State Pedagogical Institute imeni  
A.I.-Gertsena)

SUBMITTED: August 3, 1957

Card 5/3

MOLODOVA, K. A.

"Complex Compounds of Platinum with Acetylene Derivatives in the Internal Sphere and Some of Their Properties."

dissertation for the degree of Cand. of Chem. Sci. submitted at Leningrad Pedagogical Inst. im A. I. Gertsen.  
Leningrad, 1957

Metallovedeniye i Obrabotka Metallov, 1958, No. 8, p. 63.

PETROV, A.A.; MOLODOVA, K.A.

Conjugated systems. Part 160: Direction of the reaction of propargyl bromide with magnesium bromovinyl-, propenyl-, and phenylacetylenes. Zhur.ob.khim. 32 no.11:3510-3514 N '62.  
(MIRA 15:11)

1. Leningradskiy tekhnologicheskij institut imeni Lensoвета.  
(Propyne)  
(Acetylene compounds)

MOLODOVSKIY, A.V.

G

USSR

Abs Jour : Ref Zhur - *Biologiya*, No 22, 1958, No 99550

Author : Molodovskiy, A.V.

Inst : Not given

Title : On the Problem of Transfer of Fleas of Rodents by Birds.

Orig Pub : *Zool.zh.*, 1957, 36, No.10, 1577-1580

Abstract : Experiments were carried out in the spring of 1955 in the Ispul'skiy rayon of the Gur'yevskaya oblast (semidesert zone). 10 fleas (*Oropsylla ilovaiskii* and *Ceratophyllus laeviceps*) were released on the most common birds of that rayon (all adults), viz., *Oenanthe isabellina* (11 specimens), sand-martens (7) and gray larks *Calandrella pispoletta* (9) caught in nests and marked with rings. The fleas were first stained with fluorescein. The freed birds were submitted to investigation. The maximal periods of persistence of fleas in the featherings of the various birds were: in the sand-martens up to 25-40 minutes, in

Card 1/2

10

USSR

G

MOLODOVSKIY, A.F.

Whooper swan on the Mangyshlak Peninsula. Ornitologiya no. 7:481 '65.  
(MIRA 18:10)

SHIRANOVICH, P.I.; MOLODOVSKIY, A.V.; OSOLINKER, B.Ye. [deceased];  
DEREVYANCHENKO, K.I.; SAMARIN, Ye.G.

Microclimate of the burrows of the greater gerbil *Rhombomys*  
*opimus* Licht. Zool.zhur. 44 no.8:1245-1254 '65. (MIRA 18:11)

MOLODOVSKIY, A.V.

Flamings on the southern Mangyshlak Peninsula. Zool. zhurn. 42  
no. 12:1885-1886 '53 (MIRA 1767)

1. The State University of Gorky.

MOLODOVSKIY, A.V.

Flight of commercial water birds in the southern Mangyshlak  
Peninsula. Ornitologia no. 54345-355 '62. (MIRA 1642)  
(Mangyshlak Peninsula--Water birds)  
(Mangyshlak Peninsula--Birds--Migration)

PAVLOV, A.N.; MOLODOVSKIY, A.V.

Predatory birds of Mangyshlak and their abundance. Zool. zhur.  
41 no.6:951-954 Je '62. (MIRA 15:7)

1. Rostov-on-Don Research Anti-Plague Institute, and State  
University of Gorkiy.  
(Mangyshlak Peninsula--Birds of prey)

DEREVYANCHENKO, K.I.; MOLODOVSKIY, A.V.; KALUZHENOVA, Z.P.

Contact of rodents with other wild animals through bloodsucking  
arthropods on the Mangyshlak Peninsula. Zool. zhur. 42 no.6:  
903-913 '69. (MIRA 16:7)

1. Astrakhan Anti-Plague Station, the State University of  
Gorky, and Central-Asian Anti-Plague Institute, Alma-Ata.  
(Mangyshlak Peninsula—Animals as carriers of disease)  
(Fleas—Host animals) (Ticks—Host animals)

MOLODOVSKIY, V.A.  
eA

2

The oxidation of diisopropyl ether in the liquid phase.  
 V. A. Molodovskii and M. B. Nelman. *Zhur. Fiz. Khim.*  
 (*J. Phys. Chem.*) 25, 30-8 (1951). Diisopropyl ether (I)  
 was shaken in O<sub>2</sub> and the decrease of the O<sub>2</sub> pressure (p  
 mm. Hg) was detd. The rate  $-(dp/dt)$  had a max. (e.g.,  
 7 min./hr.) after, e.g., 10 hrs. The concn. c of peroxides  
 in I, detd. iodometrically and polarographically, increased  
 for, e.g., 10 hrs. and then remained const. (e.g.,  $10^{-4}$   
 moles/ml.). At 40°,  $-(dp/dt) = 10^{-4}(0.1 + 0.4 \times$   
 $10^4 p)$  mm./hr. within one exp., the original p being 578.  
 The acceleration due to peroxides was proved (also by using  
 old I contg. peroxides; it took O up more rapidly than  
 did fresh I. The  $-(dp/dt)$  for the first 5 hrs. of oxidation of  
 fresh I at 40° in O<sub>2</sub>, 2O<sub>2</sub> + N<sub>2</sub>, and air was 1.0, 3.2, and  
 1.7, resp. The apparent energy of activation between 10°  
 and 50° was 12,500 cal./mol., i.e. smaller than for many  
 hydrocarbons. J. J. Ulkerman

Gorky State U.

MOLODOVSKIY, V. A.

10

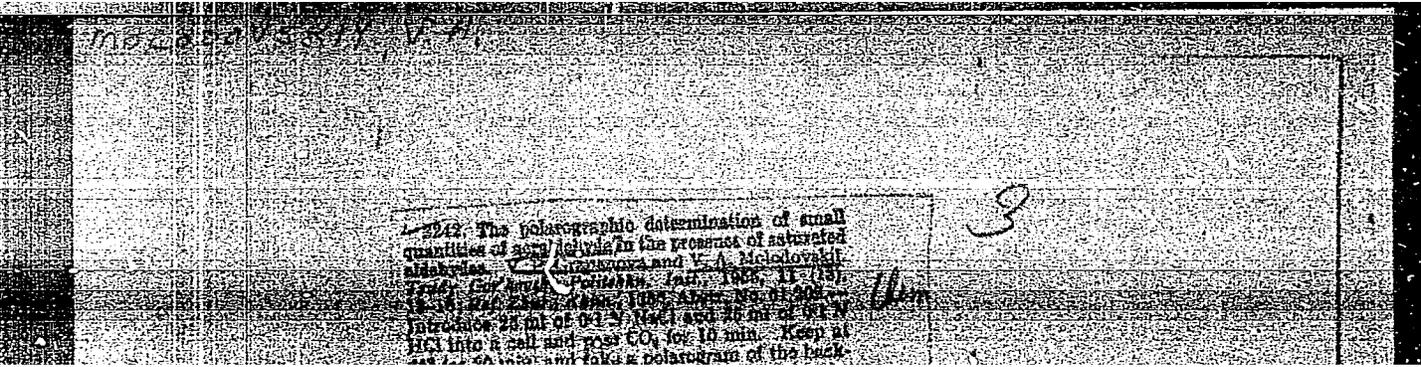
Retardation of the oxidation of diisopropyl ether and amylene fraction by inhibitors. M. B. Neiman, V. A. Molodovskiy, and G. A. Rogdarin. *Zhur. Fiz. Khim.* 73, 387-391(1969). Cf. C.A. 43, 4085d. - Oxidation of (Me<sub>2</sub>CH)<sub>2</sub>O by O<sub>2</sub> at 575 mm. Hg and 40° is slightly accelerated by 0.01% pyrogallol, hydroquinone (I), (PhNH<sub>2</sub>), and turpentine oil (II), and slightly retarded by 0.01% resorcinol (III), iso-PrOH, pyrocatechol, 2- and 1-naphthol (IV), without a latent period,  $r$ . No peroxides are formed in the presence of inhibitors, except II, which increases the peroxide concn. by about 50%. The weak effect of the inhibitors shows that the reaction chain is very short. Oxidation of "amylene fraction" (V) (obtained by pyrolysis of kerosene and b. 25-42°) started after  $r = C_1/T$  ( $C$  and  $\gamma$  are const. for the given system and  $T = \text{abs. temp.}$ ). At 6 atm. of O<sub>2</sub>,  $r$  was 64 and 15 min. at 65° and 100°, resp. It was raised at 100° to 40 min. by 1 g./l. of PhOH, to 430 min. by 1 g./l. of *p*-PhCH<sub>2</sub>NH<sub>2</sub>Cl<sub>2</sub>OH, and to intermediate values by I, III, and IV.  $r$  increased linearly with the concn. of IV (0.0-0.1%) and increased with pressure. The reaction chain in the oxidation of V has approx. 140 links. Cf. C.A. 30, 7019<sup>a</sup>. J. I. Bikerman

Chair Physico Chem, Gor'kiy State U.

MOLODOVSKIY, V.A., kand. tekhn. nauk; AGAFONOVA, A.L.;  
~~GRABENKOVA, V.P.~~; KOZYULINA, R.M., red.

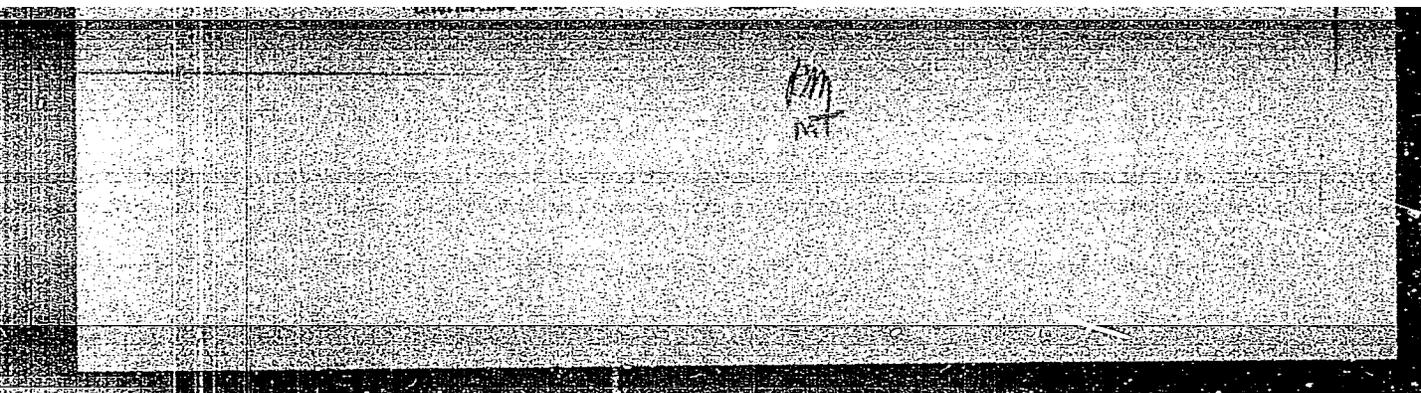
[Laboratory work in physical chemistry] Praktikum po  
fizicheskoi khimii. Gor'kii. No.3-4. 1963.  
(MIRA 17:7)

1. Gorkiy. Politeknicheskii institut.



"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R001135020018-0



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*MOLODOZHNIKOV, A. A.*

124-58-9-10562

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 9, p 160 (USSR)

AUTHOR: Molodozhnikov, A. A.

TITLE: How to Determine Residual Stresses on Welding (K voprosu opredeleniya ostatochnykh napryazheniy pri svarke)

PERIODICAL: Vestn. Mosk. un-ta. Ser. matem., mekhan., astron., fiz., khimii, 1957, Nr 3, pp 31-38

ABSTRACT: A study of the residual stresses in a circular plate on heating at its center. The following assumptions are made: 1) the welding process is simulated by the instantaneous application of a heat source; 2) stresses occurring at temperatures in excess of 600°C are small; 3) the Poisson ratio, the linear expansion coefficients, and the modulus of elasticity are independent of the temperature; 4) the process can be described by the theory of small plastico-elastic deformations. The examination comprises the problem of a plate with a hole into which a circular solid disk is welded, also that of a cylindrical pipe which is to be welded along its cross-section perimeter. Experiments relative to the spot heating of a plate substantiate the theoretical deductions.

Card 1/1 1. Welding--Stresses 2. Welding--Test methods G. A. Nikolayev

SOV/137-58-10-21009D

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 90 (USSR)

AUTHOR: Molodozhnikov, A. A.

TITLE: Determination of Residual Welding Stresses (Opredeleniye ostatochnykh napryazheniy pri svarke)

ABSTRACT: Bibliographic entry on the author's dissertation for the degree of Candidate of Physical-Mathematical Sciences, presented to the MGU (Moscow State University), Moscow, 1958

ASSOCIATION: MGU (Moscow State University), Moscow  
Ref. RZhMet, 1958, Nr 7, abstract 15019

1. Welding--Stresses 2. Stress analysis

Card 1/1

MOLODOZHNIKOV, M.M.

Extending the cultivation of sweet potatoes and chayote. Trudy  
Bot.inst.Ser.6 no.7:157-159, 1959 (MIRA 13:4)

1. Vsesoyuznaya selektsionnaya stantsiya vlazhnosubtropicheskikh  
kul'tur, Sukhumf.  
(Sweet potatoes) (Chayote)

MOLODOZHNIKOV, M.M.

Introduction of tropical medicinal plants in the humid subtropics  
of the Georgian S.S.R. Trudy Bot.inst.Ser.6 no.7:285-287 '59.  
(MIRA 13:4)

I. Zakavkazskaya zonal'naya opyt'naya stantsiya Vsesoyuznogo  
instituta lekarsvennykh i aromaticheskikh rasteniy, Kobuleti.  
(GEORGIA--BOTANY, MEDICAL)

GUBANOV, I.A.; KRAMEN, D.S.; KUVAYEV, V.B.; MOLODCHNIKOV, M.M.; SHESTER, A.I.

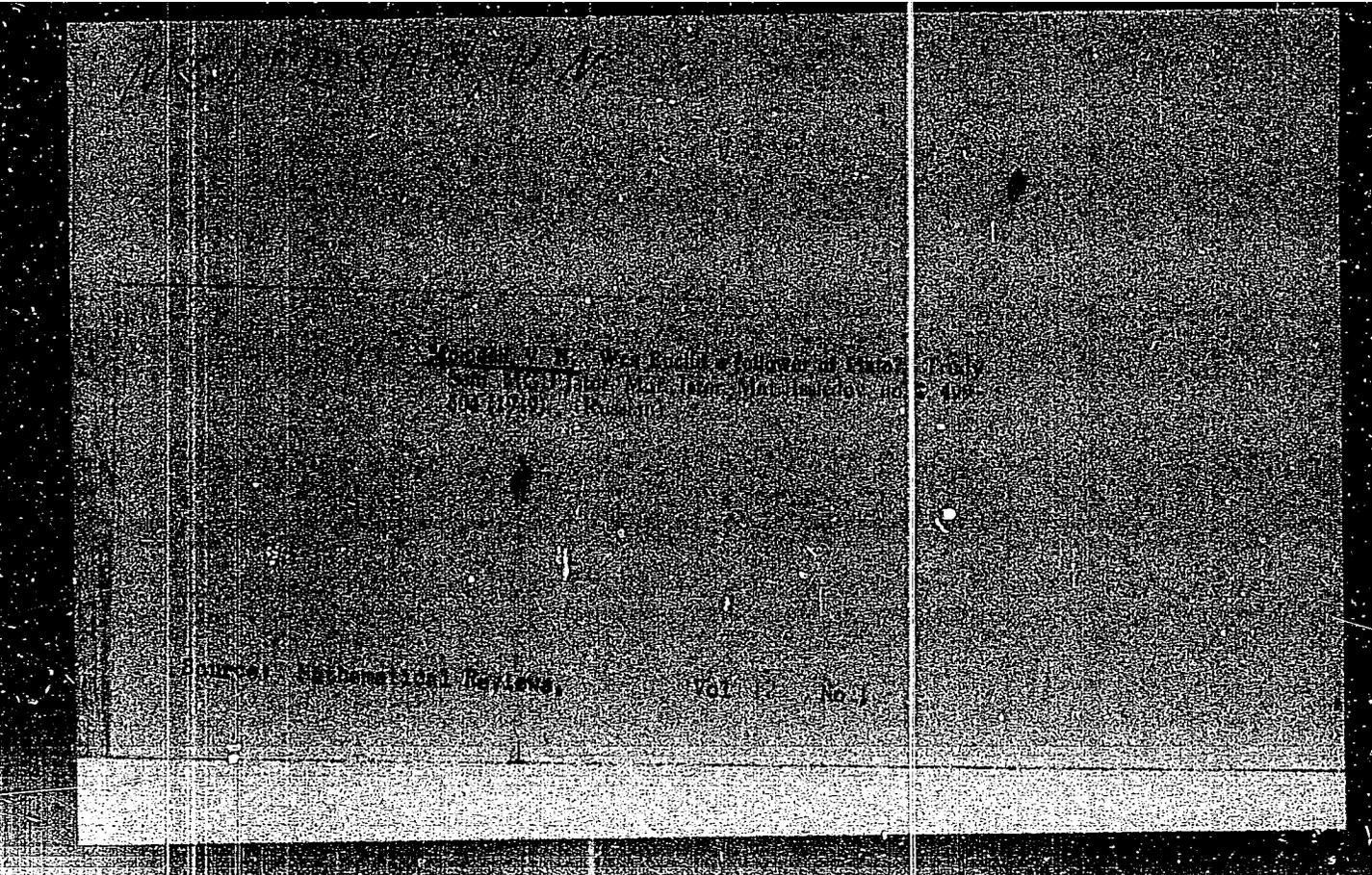
Work results of the expeditions of the All-Union Scientific  
Research Institute of Medicinal and Aromatic Plants studying  
wild medicinal plant resources. Rast. res. 1 no. 4:533-541 \* 65.  
(MIRA 19:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lekarstvennykh  
i aromaticeskikh rasteniy, Moskva. Submitted March 28, 1965.

MOLODSHIY, V.N.

effektivizm v matematike, M., Sotsekgiz (1938), 1-88.  
Ponyatiye kompleksnogo chisla v yego razvitii. Zh. Matem v shokle, I (1946).

SO: Mathematics in the USSR, 1917-1947  
edited by Kurosh, A.G.,  
Markushevich, A.I.,  
Rashevskiy, P.K.  
Moscow-Leningrad, 1948



MOLODSHIY, V.N.

22920 K voprosy ob uchebnike po istorii matematiki. Matematika B shkole,  
1949, No. 4, S. 9 - 12.

SO. LETOPIS' NO. 31, 1949

Moledt, V. N. The teaching of natural numbers in the  
18th century. Trudy Sem. MGU Istor. Mat. Istor. Mat.  
Izvedov. no. 3, 431-466 (1950). (Russian)

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FRANK A. BOOK EXPLANATION 8/17/1955

Moscow. Vysheye tekhnicheskoye uchilishche  
 Mashiny i tekhnologiya obrabotki dvaleniyami, abornik stroy  
 (Machines and Processes for the Pressworking of Metals; Collec-  
 tion of Articles) Moscow, Mashiz, 1960. 246 p. (Series: Itsi  
 Trudy, 77, 93) Extra slip inserted. 3,500 copies printed.

Ed.: A.I. Zlamin, Doctor of Technical Sciences, Professor, Ed. of  
 Publishing House; G.V. Qbrynsk, Tech. Ed., K.I. Sokolov,  
 Managing Ed. For literature on Heavy Machine Manufacturing (Mashziz);  
 S.Ya. Golovina, Engineer.

**SUMMARY:** This collection of articles is intended for workers in  
 scientific research institutions and in die-forging shops, and  
 for engineering students.

**CONTENTS:** The book contains papers from the Department of Machine  
 and Processes for the Pressworking of Metals of the NPIU (Moscow  
 Higher Technical School, Invent. N.A. Bauman). The papers deal with  
 theoretical and practical aspects of metal pressworking and with  
 the theory and design of forging machines and press design.  
 The authors deal with machine hydraulics (selection of drives  
 of presses, pressure in cylinders). A design of a hydraulic power  
 source type "press-hammer", which can work as a percussion press  
 or forging press, is presented. Problems of the theory of plastic  
 deformation in forging, upsetting, and forming are explained  
 17 reference cards (Nos. 33 to 49) are appended to the articles  
 pertaining to the state of stress of metal in plastic deformation.  
 These cards are the summary of data presented in collection  
 No. 79 of the NPIU 1957. No personalia are mentioned. Refer-  
 ences accompany most of the articles.

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