

NOVOZHNYUK, Z.M.
LENDINSKIY, V.V. [deceased]; NOVOZHNYUK, Z.M.

New representatives of the series of tetrachlorodisulfitoiridites.
Zhur. neorg. khim. 2 10:2490-2491 0 '57. (MIRA 11:3)
(Iridium salts)

NOVROTSKAYA, V.S.; RAYEVSKAYA, V.S.; RAYEVSKIY, A.N.

Peculiarities of wind regime over irrigated fields in the southern
Ukraine. Meteor. i gidrol. no.8:35-38 Ag '57. (MLRA 10:8)
(Ukraine~Winds)

NOVRUZLY, I.M.

**Study of certain petroleum products as solvents for DDT and hexachlorocyclohexane. Trudy Inst.khim.AN Azerb.SSR 15:126-130 '56.
(MLRA 9:11)**

(Solvents) (DDT (Insecticide)) (Cyclohexane)

AGAYEV, G.N.; NOVRUZOV, A.A.

Cauchy's problem for an ordinary differential equation in Banach space. Dokl. AN Azerb. SSR 13 no.11:1149-1152 '57. (MIRA 10:12)

1. Institut fiziki i matematiki AN AzerSSR. Predstavleno akademikom AN AzerSSR Z.I. Khalilovym.
(Differential equations)

NOVRUZOV, A.A.

Some qualitative theorems for a linear elliptic equation of the second order. Izv.AN Azerb.SSR.Ser.fiz.-mat.i tekhn.nauk no.5: 39-43 '60. (MIRA 14:4)

(Differential equations, Partial)

16.3500

28637

S/020/61/139/006/002/022
C:11/C333AUTHOR: Novruzov, A. A.

TITLE: Properties of solutions to elliptic equations

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 139, no. 6, 1961, 1304-1307 X

TEXT: Let K_R be the open sphere in the n -dimensional space with radius R and center in the origin O ; let $\mu^n E$ be the n -dimensional Lebesgue measure of a set E . Assume that G lies in K_R , contains O and has boundary points on the boundary of K_R . Consider

$$\sum_{i,k=1}^n \frac{\partial}{\partial x_i} (a_{ik}(x) \frac{\partial u}{\partial x_i}) + \sum_{i=1}^n b_i(x) \frac{\partial u}{\partial x_i} + c(x)u = 0 \quad (3)$$

in G , where

$$\sum_{i,k=1}^n a_{ik}(x) \xi_i \xi_k > \alpha \sum_{i=1}^n \xi_i^2, \quad \alpha > 0 \quad (4)$$

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for arbitrary real ξ_i , $\sum_{i=1}^n \xi_i^2 \neq 0$,



$$(\text{grad } a, \vec{\xi})|_G \geq 0, \quad |a_{ik}(x)| \leq a_0; \quad (5)$$

$$\text{div } \mathbf{b} \geq 0; \quad (6)$$

$$(\mathbf{b}, \vec{\xi})|_G \leq 0; \quad (7)$$

$$c(x) \leq 0 \quad (8)$$

are assumed to be satisfied, where $a = \sum_{j=1}^n \sum_{k=1}^n \frac{\partial a_{jk}}{\partial x_j} \cos \alpha_j \cos \alpha_k$,

$\mathbf{b} = (b_1, b_2, \dots, b_n)$, and $\vec{\xi}$ -- local vector from 0 to the point in question.

Lemma: Let Γ be the part of the boundary of G lying rigorously in K_R . Let (3) be defined in G . There exists a constant M only depending on

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S/020/61/139/006/002/022

0111/0353

Properties of solutions to . . .

α, α_0 , the inequalities (4), (5) and n such that, if for every R it holds

$$\mu_n^G < \mu_n^{K_R/M} \tag{9}$$

the inequality

$$2u_c < \max_{x \in \bar{G}} u(x), \text{ where } u_0 = u(0),$$

is satisfied for every positive solution $u(x)$ of (3) in G which is continuous in \bar{G} and vanishes on Γ .

The lemma is indirectly proved. Four theorems are concluded from the lemma.

For a solution $u(x)$ of (3) defined in G and vanishing on Γ theorem 1 implies from (9) and $u_0 > 0$ the relation

$$\sup u(x) > u_c \exp \left(\mu_n^{K_R/M} \mu_n^G \right)^{\frac{1}{n-1}},$$

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C11/0331

Properties of solutions to . . .

where $M_1 > 0$ is a constant only depending on a_0, α, n , (4) and (5).

Theorem 2 considers (3) in K_R and assumes that $|u(x)| < \alpha$ that G_1, G_2, \dots are the maximal connected domain, where α is a constant sign, and that $G_{i_1}, G_{i_2}, \dots, G_{i_m}$ are those of these domains for which

1. $G_{i_k} \cap K_{R/2}$ is not empty and 2. $\max_{x \in G_{i_k} \cap K_{R/2}} |u(x)| \geq \alpha$. It is shown then that

$$m < M_2 \left(\lg \frac{1}{\alpha}\right)^{1/(n-1)}, \quad 0 < \alpha < 1,$$

where M_2 only depends on α, a_0, n , (4) (5).

In theorem 3 G is unbounded, contains 0 and has the property

$\mu_n(G \cdot K_R) < \alpha$, where R is arbitrary and

$$\sigma < \mu_n K_R/M \quad (6)$$

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A solution $u(x) > 0$ of (3) vanishing on the boundary is defined in G .
It is $M(r) = \max_{\sum_{i=1}^n x_i^2 = r^2} u(x)$. It is shown that it holds

$$\sum_{i=1}^n x_i^2 = r^2$$

$$M(r) > u_0 \exp(R^{n-1} r / M_3 G)^{1/(n-1)},$$

for all $r > R$, where $M_3 > 0$ only depends on α, a_0, n , (4), (5). X

Theorem 4 (Phragmen, Lindelöf): Let G be an unbounded domain with the following property. There exists a number $\eta > 1/M$ such that, if $G_m = G \cap K_{2^m}$, where K_{2^m} is the sphere of radius 2^m with the center in the origin O and m is a natural number, it holds

$$\omega_n G_m / \omega_n K_{2^m} < \eta$$

for all $m > m_0$. Let a solution $u(x)$ of (3) continuous in \bar{G} and non-
Card 5/7

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S/070/6/19/005/002/022

G/11/07/77

Properties of solutions to . . .

positive on the boundary of G be defined in G. Then 1.) either $u(x) \leq 0$ everywhere in G; 2.) or

$$\liminf_{R \rightarrow \infty} \frac{M(R)}{R^{(1/M_4 \eta)^{(n-1)}}} > 0,$$

where $M(R) = \sup_{\sum_{i=1}^n x_i^2 = R^2} u(x)$ and $M_4 > 0$ only depends on α, a_0 , the

inequalities (4), (5) and on the space dimension n.

The author thanks Ye. M. Landis for aid and guidance.

There are 5 Soviet-bloc references.

Card 6/7

28637

S/020/61/139/006/002/022
C111/C333

Properties of solutions to . . .

ASSOCIATION: Moskovskiy gosudarstvennyy universitet imeni M. V.
Lomonosova (Moscow State University imeni M. V. Lomonosov)
Institut matematiki i mekhaniki Akademii nauk Azerb. SSR X
(Institute of Mathematics and Mechanics of the Academy
of Sciences Azerbaydzhanskaya SSR)

PRESENTED: April 10, 1961, J. G. Petrovskiy, Academician

SUBMITTED: April 4, 1961

Card 7/7

NOVRUZOV, A.A.

Theorems of the Hadamard and Phragmén-Lindelöf type. Izv.
AN Azerb. SSR. Ser. fiz.-mat. i tekhn. nauk no.2:37-48 '63.
(MIRA 16:10)

NOVRUZOV, A.A.

Behavior of the solution to the first boundary value problem
with zero boundary conditions for a parabolic equation. Dokl.
AN Azerb. SSR 19 no.10:9-13 1963. (MIRA 17:6)

1. Institut matematiki AN Azerb. predstavleno akademikom AN
Azerbaydzhanskoj SSR Z.I. Khalilovym.

NOVRUZOV, A.A.

The Harnack inequality for the solution of elliptic equations.

Izv. AN Azerb. SSR. Ser.fiz.-tekh.f mat. nauk no.1:3-6 '65.

(MIRA 1846)

Country :
CATEGORY :

ABS. JOUR. : IZVest., No. 19, 1958, No. 57120

INST.
TITLE

ORIG. PUB.

ABSTRACT

CARD://

1957, No 1, 2), 23-27.

NOVRUZOV, Ch.M., Cand Agr Sci -- (d. 1958) "^{for growing}Basic ~~procedures~~
for growing resistant corn crops ~~is~~ under the irrigated
conditions of the Kirovabad ~~Zone~~ Zone." Kirovabad, 1958,
16 p; (Min of Agr USSR. Azerbaijan Agr Inst)
101 copies (KL, 23-57, 159)

- 11 -

NOVRUZOV, G.M.; KROTKOV, Yu.I.

Teledynamomentering of beam wells. Azerb. neft. khoz. 40 no.6:30-31
Je '61. (MIRA 14:8)

(Oil wells) (Dynamometer) (Telemetering)

NOVRUZOV, G.M.; SHCHELKONOGOV, L.I.

New piston-stroke and stress gauges for teledynamomentering
deep-well pumps. Mash. i neft. obor. no.9:33-36 '63.
(MIRA 17:2)

1. AzNIElektrotekhprom.

NOVRUZOV, K.

The growing of grains and legumes in the Deynau District. Uch.
zap. Chard. gos. ped. inst. no. 2:105-119 '57. (MIRA 12:8)
(Deynau District--Grain)

Cultivated
NOVRUZOV, K., Cand Biol Sci --(diss) "~~On the~~ Vegetation
of ~~the~~ Deynauskiy Rayon, ~~the~~ Chardzhovskiy Oblast."
Chardzhou, 1958, 16pp (Turkmen ~~SSR~~ State Univ im A.M. Gor'kiy),
250 copies. (KL, 41-58, 120)

Handwritten notes:
... of the Deynauskiy Rayon ...

NOVRUZOV, K.

Local vegetable crops of Deynau District, Chardzhou Province.
Isv. AN Turk. SSR no.4:71-78 '58. (MIRA 11:10)

1. Turkmenskiy gosudarstvennyy universitet imeni A.M. Gor'kogo.
(Deynau District--Vegetable gardening)

NOVRUZOV, K.

Local apple from Deynau District, Charduzhou Province. Izv.AN
Turk.SSR no.6:113-116 '59. (MIRA 13:5)

1. Turkmenskiy gosudarstvennyy pedagogicheskiy institut imeni V.I.
Lenina.
(Deynau District--Apple)

MIKHEL'SON, O.A.; NOVRUZOV, K.

Problems of conservation in training biology teachers. Izv.AN Turk.
SSR.Ser.biol.nauk no.3:12-13 '62. (MIRA 15:9)

1. Turkmenskiy pedagogicheskiy institut imeni V.I.Lenina.
(TURKMENISTAN--TEACHERS, TRAINING OF)
(TURKMENISTAN--CONSERVATION OF NATURAL RESOURCES)

NOVRUZOV, M.

The largest in Azerbaijan. Prom. koop. 14 no.5:30 My '60.
(MIRA 13:12)

1. Zamestitel' predsedatelya pravleniya arteli invalidov "Madomnik,"
Baku.

(Baku--Vocational rehabilitation)

NOVRUZOV, M.A., aspirant

Primary tuberculosis of the tonsils. Probl. tub. 41 no.6:88-90
'63. (MIRA 17:9)

1. Iz detskoy kliniki (zav. - prof. M.P.Pokhitonova) i
patomorfologicheskoy laboratorii (zav. - prof. V.I.Puzik) Tsentral'nogo
instituta tuberkuleza (dir. - deystvitel'nyy chlen AMN SSSR prof.
N.A. Shmelev) Ministerstva zdravookhraneniya SSSR, Moskva.

NOVRUZOV, M.A.

Tuberculosis of the palatine tonsils. Azerb. med. zhurn. no. 12:
73-77 '62. (CMBR 17:4)

NOVRUZOV, M.E.

Our experience in the extraction of a cataract preserving a
round pupil. Sbor. nauch. trud. SOGMI no.14:135-138 '63.
(MIRA 18:9)

1. Glaznoye otdeleniye zheleznno-dorozhnoy bol'nitsy st.
Yasinovataya.

~~NOVRUZOV, N.; YEVMEENOV, G.; SOMOV, V.~~

Mobile pumping station. Pozh.delo 5 no.7:25 Jy '59.
(MIRA 12:9)
(Fire extinction--Water supply)

EFENDIYEV, G.Kh.; NOVRUZOV, N.A.; GEYDAROV, A.S.

Geochemistry of thallium in the pyrite-complex metal type deposit.
Izv.AN Azerb.SSR. Ser.geol.-geog.nauk no.1:30-38 '65.

(MIRA 18:8)

L 42972-86 EWT(m)/T DJ
ACC NR: AR6024954 (A) SOURCE CODE: UR/0081/66/000/006/P036/P036

AUTHOR: Orudzheva, I. M.; Novruzov, Sh. K.

TITLE: Study of additives synthesized from derivatives of naphthenic hydrocarbons

SOURCE: Ref. zh. Khimiya, Part II, Abs. 6P244

REF SOURCE: Azerb. neft. kh-vo, 1965, 37-38

TOPIC TAGS: antioxidant additive, lubricating oil

ABSTRACT: In order to develop antioxidant motor-oil additives whose composition includes phosphorus and sulfur, monochlorides of cyclohexyl- and methylcyclohexylphosphorous acids were prepared. The chlorides obtained were subjected to condensation reactions with various alkyl phenols (C₃-C₁₀) and sulfide-disulfide alkyl phenols. The effect of the synthesized compounds on the performance characteristics of D-11 oil was investigated. Tests of these compounds for the oxidation resistance, thermal stability, and anticorrosive properties of the diesel oil showed that the induction period of the oxidation, determined by the method of the AzNII, increases from 30 to 70-100 min, and the time of absorption of 10 ml of oxygen, from 240 to 340-355 min. The anticorrosive properties were tested under drastic conditions (method of NAMI); in the presence of the additives, the corrosion decreases from 360 to 1-13 g/m². The thermal stability of D-11 oil increases from 25 to 60-105 min. Phosphorus- and sulfur-containing compounds in combination with SB-3 and BFK additives have practically no effect on

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L 42972-66

ACC NR: AR5024954

the wetting properties of the oils. Authors' abstract. [Translation of abstract]

SUB CODE: 11

Card 2/2 MLP

Novruzova, A. Sh

20-5-22/54

AUTHORS: Topchiyev, A. V., Academician
Novruzova, A. Sh.,

TITLE: An Investigation of the Nitration of Isopropylcyclohexane by Nitric Acid (Issledovaniye reaktsii nitrovaniya izopropiltsiklogeksana azotnoy kislotoy)

PERIODICAL: Doklady Akad. nauk SSSR, 1957, Vol. 115, Nr 5, pp. 931-933, (USSR)

ABSTRACT: In a previous paper of the first named author all the more important references to published works on the nitration of cyclohydrocarbons up to 1948 were put down. Later on other authors published reports on experiments in the nitration mechanism of cyclohexane and the reciprocal action of this substance with diluted nitric acid. The present work will deal with the results of the reaction named in the title under different conditions in its process. The experimental part of the work will give a close description of the basic raw substances and the methods; the influence of temperature, the influence of temperature, the influence of the length of the process, the influence of molar conditions, and the influence of the concentration of nitric acid are described in detail. Summing up one can say that the best conditions for this reaction in its liquid phase are given at: 80-85°, 15 hours duration, a concentration of the nitric acid of 48% (d = 1,3) and a mol-proportion of hydrocarbon to nitric acid at 1 : 2,5. The conversion (transformation)

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20-5-22/54

An Investigation of the Nitration of Isopropylcyclohexane by Nitric Acid

of the first is 57% and the yield (output) of the nitro-raw-product and the mononitropropylcyclohexane 98,3 and 78,6 respectively, expressed in percentage of the relationship of the converted hydrocarbon. According to the authors the course of the reaction depends upon the dynamics of quantity of the nitrogen-dioxide, gained from nitric acid under various condition; a decrease in temperature and length of the reaction, reduce the decay ability of the nitric acid into nitrogen-oxides. This was proven in a special experiment in which isopropylcyclohexane was nitrated in the presence of small amounts of ammoniumsulphate. In spite of the excellent conditions for a nitration of isopropylcyclohexane not the slightest nitration could be observed. There is 1 figure and 2 Slavic references.

SUBMITTED: July 13, 1956

ASSOCIATION: Institut nefti Akademii nauk Azerb. SSR.

AVAILABLE : Library of Congress

Card 2/2

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30652

S/081/61/000/020/038/089
B140/B110

AUTHORS: Mekhtiyev, S. D., Novruzova, A. Sh., Sharifova, S. M.

TITLE: Catalytic alkylation of cyclohexane and methyl cyclohexane with olefins

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 157, abstract 20Zh66 (Azerb. khim. zh., no. 5, 1960, 9 - 15)

TEXT: Cyclohexane (I) and methyl cyclohexane (II) are alkylated with propylene and n-butylene in the presence of 12.5% $AlCl_3$ (referred to cyclane) at 50°C while stirring for 8 - 20 hrs. The unreacted I or II is distilled off in a column (22 theoretical plates), and the residue is fractionated in vacuo. The physicochemical properties of the separated fractions were determined. The nature of hydrocarbons obtained by alkylation of I with n-butylene or of II with propylene was not determined. Alkylation of I with propylene has shown that the yield in alkylate rises from 73.47% to 120.7% (referred to the weight of the cyclane used) as the molar ratio of I to C_3H_6 decreases from 3:1 to 1:1.5. A fraction boiling

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S/081/61/000/020/038/089
B140/B110

Catalytic alkylation of cyclohexane...

at 91 - 94.5°C/13 mm Hg was separated from the main fraction (b.p.
85 - 95°C/10 mm Hg, n_D^{20} 1.4550, d_4^{20} 0.8350) obtained by alkylation of I
with propylene. Dehydrogenation of this fraction gave 2,6-dimethyl
naphthalene, m. p. 110 - 110.5°C (from CH_3OH), which indicates the
presence of 2,6-dimethyl decalin in the alkylate. [Abstracter's note:
Complete translation.]

X

Card 2/2

MEKHTIYEV, S.D.; RIZAYEV, R.G.; NOVRUZOVA, A.I.

Oxidative ammonolysis of p-tert-butyltoluene. Dokl. AN Azerb.
SSR 21 no.5:17-19 '65. (1965)

1. Institut neftekhimicheskikh protsessov AN AzerbSSR.

L 20315-66 EWT(m)/EWP(j) RM

ACCESSION NR: AP5018350

UR/0316/65/000/002/0018/0023

AUTHOR: Mekhtiyev, S. D.; Rizayev, R. G.; Kambarov, Yu. G.; Novruzova, A. Sha.

TITLE: Oxidative ammonolysis of toluene

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 2, 1965, 18-23

TOPIC TAGS: oxidation, ammonolysis, toluene, catalyst carrier

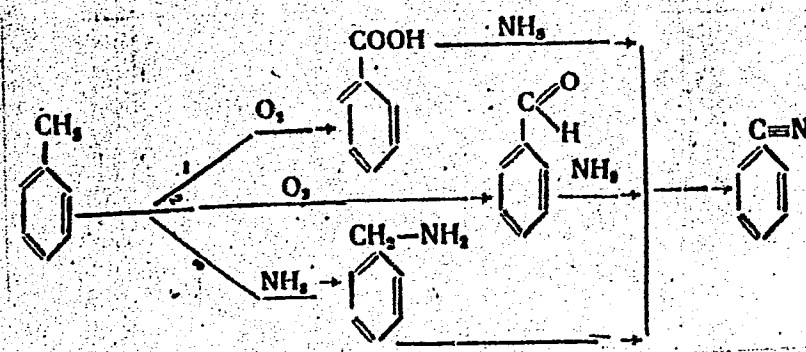
ABSTRACT: The purpose of this work was a detailed investigation of the oxidative ammonolysis of toluene on relatively inexpensive catalysts in order to select the optimum conditions for the formation of benzonitrile with high yield. The catalysts consisted of 6% V_2O_5 and 2% MoO_3 deposited on fused Al_2O_3 with specific surface 93.5 m^2/g , measured by the BET method. It was found that increase of the ratio of air to toluene from 2 to 12 moles results in increase of the yield. This apparently results from two parallel and independent reactions which result in the production of benzonitrile according to the following scheme:

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ACCESSION NR: AP5018350



Since the rate of the oxidative ammonolysis reaction of alkylaromatic hydrocarbons exceeds significantly the rate of direct nitrile formation upon increasing the supply of air, it must proceed by paths 1 and 2. The increase of the ratio of NH_3 to toluene from 2.3 to 4.5 moles/mole significantly increases the conversion of toluene and the yield of benzonitrile. Increase of this ratio to 15 moles/mole resulted in a large decrease of the conversion of toluene. The optimum temperature of the

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L 20315-66

ACCESSION NR: AP5018350

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ammonolysis of toluene was found to be 380-400° C. The optimum yield was 87%. "The authors wish to express their gratitude to G. P. Korneychuk of the IFKh AN Ukrainian SSR, for the determination of the surface area of Al₂O₃ carrier and to V. L. Khodzhayeva for obtaining IR spectra of the synthesized products." Orig. art. has: 5 figures.

ASSOCIATION: INKhP AN Azerb. SSR

SUBMITTED: 12Nov64

ENCL: 00

SUB CODE: OC, GC

NO REF SOV: 004

OTHER: 012

Card 3/3 BK

NOVRUZOVA, B. B. Cand Med Sci -- (diss) "Dynamics of ~~the~~ ^{under} pthohistological
changes of the trachomatose conjunctiva ~~in~~ various methods of treatment."
Baku, 1959. 18 pp (Azerbaijani State Med Inst im N. Narimanov), 200 copies
(KL, 48-59, 117)

USSR / Human and Animal Morphology. Sensory Organs. S-4

Abstr Jour: Ref Zhur-Biol., No 14, 1958, 64880.

Author : Novruzova, B. Kh.

Inst : Azerb. State Institute for the Advancement of Surgeons.

Title : The Dynamics of the Patho-Histological Changes of the Trachomatous Conjunctiva in Treatment by Various Methods. Report II.

Orig Pub: Sb. tr. Azerb. gos. in-ta usoversh. vrachey, 1957, vyp. 3, 226-230.

Abstract: No abstract.

Card 1/1

75

NOVRUZOVA, F.

The Second All-Union Conference on the Preparation and Analysis of High-Purity Elements, held on 24-28 December 1963 at Gorky State University im. N. I. Lobachevskiy, was sponsored by the Institute of Chemistry of the Gorky State University, the Physicochemical and Technological Department for Inorganic Materials of the Academy of Sciences USSR, and the Gorky Section of the All-Union Chemical Society im. D. I. Mendeleev. The opening address was made by Academician N. M. Zhavoronkov. Some 90 papers were presented, among them the following:

A. I. Alekperov and F. Novruzova. An amperometric method for Hg and polarographic for Te, Cu, and Pb in pure Se.

(Zhur ANAL Khim. 19 No.6, 1964 p.777-79)

L 06452-57 EWT(m)/EWP(t)/ETI IJP(c) JD
ACC NR: AP6029343 SOURCE CODE: UR/0316/66/000/002/0117/0121

AUTHOR: Alekperov, A. I.; Novruzova, F. S. 27
13

ORG: Institute of Inorganic and Physical Chemistry, AN AzerbSSR (Institut neorganicheskoy i fizicheskoy khimii AN AzerbSSR)

TITLE: Polarographic determination of some impurities in pure selenium 7

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 2, 1966, 117-121

TOPIC TAGS: polarographic analysis, tellurium, selenium, copper, lead

ABSTRACT: A method was developed for determining Te, Cu and Pb polarographically in pure selenium. It is based on recording polarographic waves of these impurities. When the latter are electrolytically reduced, the Se(IV) ions are polarographically inactive and in some cases their solutions serve as the polarographic background for the determination. The effect of pH of the medium, surface-active agents, temperature, etc. on the peak of the Te(IV) wave was determined. The peak is thought to be due to the catalytic liberation of hydrogen. Copper and lead were determined by amalgam polarography preceded by their concentration in the amalgam form on a stationary mercury drop. The relative error of the determination is $\pm 5-10\%$ for Te, $\pm 15\%$ for Cu, and $\pm 15-18\%$ for Pb. Orig. art. has: 3 figures, 2 tables and 2 formulas.

SUB CODE: 07/ SUBM DATE: 24Mar65/ ORIG REF: 004/ OTH REF: 003

Card 1/1 MPE

SADYKHZADE, S.I.; YULICHEVSKAYA, S.D.; NOVRUZOVA, R.D.; SALIMOV, M.M.

Addition of α -chloro ethers to vinylisopropenylacetylene.
Azerb. khim. zhur. no.5:45-49 '63 (MIRA 17:8)

NOVRUZOVA, Z. A.

Physical and mechanical properties of the wood of wing nut.
Izv. AN Azerb. SSR. no.9:39-48 S '55. (MLRA 9:1)
(Walnut) (Wood--Testing)

NOVRUZOVA, Z.A.

Physicomechanical properties of the wood of *Parrotia persica*
C.A.N. Trudy Inst.bot.AN Azerb.SSR 19:113-138 '55. (MLBA 9:8)
(Wood)

Novruzova, Z.A.

USSR /Chemical Technology. Chemical Products
and Their Application

I-27

Wood chemistry products. Cellulose and its
manufacture. Paper.

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 32649

Author : Novruzova Z.A.

Inst : Academy of Sciences Azerbaydzhan SSR

Title : Physico-Mechanical Properties of "Dzel'kva"
Wood

Orig Pub: Izv. AN AzSSR, 1956, No 7, 73-87

Abstract: No abstract.

Card 1/1

~~POVRIZOVA, Z.~~

Technical properties of boxwood. Dokl. AN Azerb. SSR 5 no.5:411-414
'59. (MIRA 12:8)

(Box) (Wood)

NOVRUZOVA, Z.A.

Qualities of linden wood from the Lenkoran forest group.
Trudy Inst.bot.AN Azerb.SSR 21:166-174 '59. (MIRA 13:3)
(Lenkoran Lowland--Linden)
(Wood)

NOVRUZOVA, Z.A.

Wood of the Caspian honey locust. Izv. AN Azerb. SSR. Ser. biol.
(MIRA 14:5)
'1 med.nauk no.1:73-80 '60.
(HONEY LOCUST)

NOVRUZOVA, Z.A.

History of the development of xylology in Azerbaijan. Dokl. AN
Azerb. SSR 16 no.11:1097-1100 '60. (MIRA 14:2)

1. Institut Botaniki AN AzerSSR. Predstavleno akademikom AN
AzerSSR I.K. Abdullayevym.
(Azerbaijan--Wood)

NOVRUZOVA, Z.A.

Anatomical structure and physicommechanical properties of wood in
the pear *Pyrus hyrcana*. *Izv. AN Azerb. SSR. Ser. biol. i med.*
nauk no.2:25-29 '61. (MIRA 14:6)
(LEKORAN REGION—PEAR) (WOOD)

NOVRUZOVA, Z.A.

Anatomical structure of wood of the linden tree *Tilia Prilipkoana*
Wagn. et A.Grossh. Dokl.AN Azerb.SSR 18 no.1:71-75 '62.
(MIRA 15:3)

1. Institut botaniki AN AzSSR. Predstavleno akademikom AN AzSSR
I.D.Mustafayevym.
(Azerbaijan--Linden) (Wood--Anatomy)

NOVRUZOVA, Z.A.

Anatomic structure of the wood of *Ficus hyrcana* A.Grossh.
Dokl. AN Azerb. SSR 18 no.2:69-75 '62. (MIRA 15:7)

1. Institut botaniki AN AzSSR. Predstavleno akademikom AN
AzSSR I.K. Abdullayevym. (Wood--Anatomy)
(Azerbaijan--Fig)

NOVRUZOVA, Z.A.

Elements of xylem in the stems of some species of the genus *Populus*
as related to their ecology. Izv. AN Azerb. SSR. Ser. biol. 1 med.
nauk no.3:13-17 '63. (MIRA 16:6)
(Azerbaijan--Poplar) (Plant cells and tissues)

NOVRUZOVA, Z.A.

Effect of aridity on the structure of mechanical elements of the secondary xylem of some woody plants. Dokl. AN Azerb. SSR 18 no.12:59-62 '62. (MIRA 16:11)

1. Institut botaniki AN AzerSSR. Predstavleno akademikom AN AzerSSR I.K. Abdullayevym.

NOVRUZOVA, Z.A.

Wood of Azerbaijanian forest elms (Ulmus) in connection with
their ecology. Izv. AN AZerb. SSR. Ser. biol. i med. nauk no.2:9-
15 '62. (MIRA 17:6)

NOVPUZOVA, Z.A.

Structure of wood of the forest-forming species of oak in
Azerbaijan as related to their ecology. Bot. zhur. 49 no. 2:
1160-1167 fig '64. (MIRA 17:11)

1. Institut botaniki AN Az.SSR, Baku.

NOVRUZOVA, Z.A.

Effect of ecologic conditions on the heartwood rays in trees
and shrubs. Dokl. AN Azerb. SSR 21 no.1:45-47 1965.

(MIRA 18:5.

NOVRUZOVA, Z.A.

Comparative anatomic study of the wood of *Cerasus* Juss species
in relation to their ecology. Izv. AN Azerb. SSR. Ser. biol.
no.4:19-23 '64. (MIRA 17:12)

NOVRUZOVA, Z.A.; SHAMSIYeva, T.A.

Endomorphy of Caucasian species of the genus *Berberis* L. as related to the ecology. *Izv.AN Azerb.BSR.Ser.biol.nauk* no.5:11-17 '64. (MIRA 18:4)

NOVRUZOVA, Z.A.; SAFAROV, I.S., doktor sel'khoz. nauk, red.

[Structure and properties of wood of the most important forest trees of Azerbaijan in connection with the conditions of their growth] Stroenie i svoistva drevesiny glavneishikh lesnykh porod Azerbaidzhana v sviazi s usloviami proizrastania. Baku, Akad. nauk Azerbaidzhanskoj SSR, 1965. 207 p. (MIRA 18:12)

5(2)

PHASE I BOOK EXPLOITATION

SOV/2252

Akademiya nauk SSSR. Institut obshchey i neorganicheskoy khimii

Khimiya redkikh elementov, vyp. 3 (Chemistry of Rare Elements, Nr 3) Moscow, Izd-vo AN SSSR, 1957. 135 p. 4,500 copies printed. Errata slip inserted.

Ed. of Publishing House: Yu. S. Sklyarenko; Tech. Ed.: A. A. Pavlovskiy;
Editorial Board: I. V. Tananayev (Resp. Ed.), S. A. Pogodin, Ye. Ya. Rode, V. G. Tronev, and O. F. Bogush (Secretary).

PURPOSE: The book is intended for scientists and engineers concerned with the study and utilization of rare elements.

COVERAGE: The book is a collection of papers on investigations in the chemistry of rare elements conducted at the Institut obshchey i neorganicheskoy khimii imeni N. S. Kurnakova (Institute of General and Inorganic Chemistry imeni N. S. Kurnakov). No personalities are mentioned. There are 143 references: 59 Soviet, 23 English, 41 German, 15 French, 4 Italian, and 1 Japanese.

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Chemistry of Rare Elements, Nr 3

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AVAILABLE: Library of Congress

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TM/mg
10-1-59

AKSARINA, Ye.A.; KOVSKAYA, A.I.

Characteristics of mean monthly air temperature anomalies in the
Maritime Territory. Trudy Dal'nevost.NIGMI no.7:138-148 '59.
(MIRA 13:6)
(Maritime Territory--Atmospheric temperature)

NOVSKAYA, A. I.

Characteristics of monthly temperature anomalies in Sakhalin,
Kamchatka, and the northwestern and northern shore areas of
the Sea of Okhotsk. Trudy Dal'nevost.NIGMI no.10:93-101
'60. (MIRA 13:8)

(Soviet Far East--Atmospheric temperature)

ACCESSION NR: AT4026438

S/3082/63/000/008/0027/0033

AUTHOR: Bykovskaya, K. E.; Novskaya, A. I.; Trostnikov, M. V.

TITLE: Recurrence of natural synoptic periods in Siberia and the Far East

SOURCE: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby*. Sbornik rabot po regional'noy sinoptike (Collection of works on regional forecasting), no. 8, 1963, 27-33

TOPIC TAGS: meteorology, natural synoptic period, weather forecasting, long-range weather forecasting

ABSTRACT: V. G. Shishkov (Meteorologiya i Gidrologiya, No. 4, 1957) studied synoptic macroprocesses in the area from the west coast of North America to the Yenisei, defined the recurrence of synoptic macroprocesses associated with quasi-periodic waves in the atmosphere, and on this basis proposed a method for weather forecasting one month in advance. Two prognostic schemes were proposed. No investigations had previously been made to improve the method for preparing monthly weather forecasts for the territory of the second natural synoptic period; this has now been done, and an investigation has been made of the applicability of Shishkov's prognostic schemes to the territory of the second natural synoptic period, specifically, Siberia and the Soviet Far East. The study was based on daily synoptic charts and

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ACCESSION NR: AT4026438

pressure pattern charts of the northern hemisphere for 0300 hours Moscow time for the period from December 1956 through August 1958. During this period there were 115 natural synoptic periods. A study was made of synoptic processes for 45, 75, 90 and 150 days before each of the initial natural synoptic periods from the eastern regions of the Atlantic and 45, 75, 90 and 150 days after the initial periods in the territory of the second natural synoptic period. It was found that in long-range weather forecasting it is possible to use Shishkov's scheme 1, 1a with considerable success, while scheme 2, 2a gives unsatisfactory results. Full comprehension of this analysis requires familiarity with Shishkov's paper cited above and its further development (Trudy Tsipa, No. 71, 1958). Orig. art. has: 1 table.

ASSOCIATION: Glavnoye upravleniye gidrometeorologicheskoy sluzhby* (Main Administration of the Hydrometeorological Service)

SUBMITTED: 00	DATE ACQ: 16Apr64	ENCL: 00
SUB CODE: AS	NO REF SOV: 004	OTHER: 000

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L 12128-66 EWT(1)/FCC GW

ACC NR: AT5028661

SOURCE CODE: UR/2633/65/000/019/0138/0153

AUTHOR: Novskaya, A. I.

25

ORG: Far Eastern Scientific Research Hydrometeorological Institute, Vladivostok
(Dal'nevostochnyy nauchno-issledovatel'skiy gidrometeorologicheskii institut)

4/55

B-1

TITLE: A synoptic-climatological study of anomalies in the mean monthly air temperature in April and October over eastern Asia

SOURCE: Vladivostok. Dal'nevostochnyy nauchno-issledovatel'skiy gidrometeorologicheskii institut. Trudy, no. 19, 1965. Voprosy aerologii i sinopticheskoy meteorologii (Problems in aerology and synoptic meteorology), 138-153

TOPIC TAGS: synoptic meteorology, air temperature, anticyclones, cyclons, long range weather forecasting, weather chart, CLIMATOLOGY

ABSTRACT: The characteristics of the distribution of the temperature anomalies in April and October over Eastern Asia were studied, and indications for predicting anomalies for these months were obtained. Maps of the monthly temperature deviations from 1927 through 1959, maps of the mean monthly values of H₅₀₀ from 1948 through 1959, and composite kinematic maps of the synoptic periods from 1938 through 1957 are used. Seven types of synoptic processes are distinguished (see Fig. 1).

UDC: 551.515:551.524(571.5/.6)

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L 12128-66

ACC NR: AT5028661

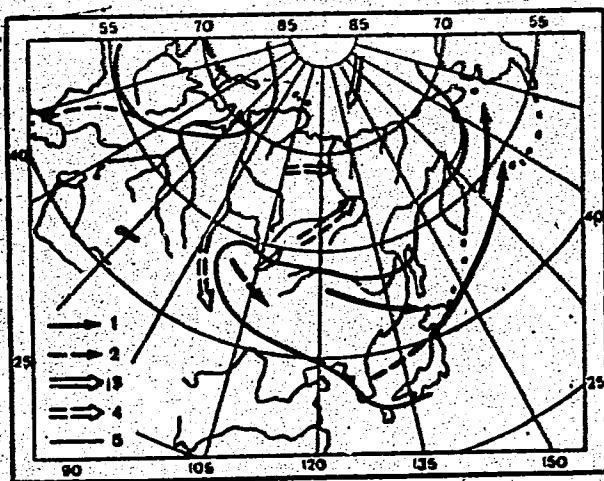


Fig. 1. Synoptic processes of type I. 1 - trajectory of cyclones; 2 - trajectory of frequent cyclones; 3 - trajectory of anti-cyclones; 4 - trajectories of nuclei and ridges; 5 - line of demarcation.

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L 12128-66

ACC NR: AT5028661

Over the continental regions temperature anomalies of up to 2° are predominant. The centers of the positive and negative anomalies are formed chiefly only over Yakut ASSR and Magadanskaya Oblast. The presence of a well-developed polar anticyclone over the eastern sector of the Soviet Arctic or a well-developed Siberian anticyclone is characteristic for a cold April and October. A warm April and October are characterized by active cyclonic activity over the central and northern regions of eastern Asia. The relationship between the anomalies of the first pentad of April and October and the anomalies of the mean monthly temperature of these months can be used to make forecasts more precise. Orig. art. has: 6 maps and 3 tables.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 024

Card 3/31

NOVSKIY, I.S.; MOROZOVA, N.A.

Rapid sinking of skip shafts in the "Novo-Butovka" mine. Ugol'
34 no.8:22-24 Ag '59. (MIRA 12:12)

1. Glavnyye konstruktory proyektov Tsentral'nogo nauchno-issledovatel'sko-
go instituta Podzemshakhtostroy.
(Donets Basin--Shaft sinking)

LEVENETS, N.P.; SAMARIN, A.M.; SEMIKIN, I.D.; KAZAKOV, V.E.; BEMBINEK, Ye.I.;
PANYUKHNO, L.G.; SWINOLOBOV, N.P.; AVERIN, S.I.; SMIRNOV, V.M.;
ZELENSKIY, V.D.; LAYKO, B.G.; TISHCHENKO, O.I.; OKHRIMOVICH, B.P.;
DANILOV, A.M.; TISHKOV, Yu.Ya.; PANOV, M.A.; MARKELOV, A.I.;
PETROV, A.K.; VASILEVSKIY, P.A.; PASYUK, K.I.; NESTEROV, V.I.;
KHRUSTAL'KOV, L.A.; GLAZKOV, V.S.; MAKAGON, V.G.; FOMIN, G.G.;
TRISHCHENKO, V.D.; KORZH, V.P.; SUYAROV, D.I.; ARSEYEV, A.V.;
PAVLYUCHENKO, A.A.; ZHADAYEV, V.G.; KONDORSKIY, R.I.; MORZOVA,
I.A.; KOCHETOV, V.V.; PRUZHINER, V.L.; MALEVICH, I.A.;
MALIOVANOV, D.I.; ZAKOVRYASHIN, I.I.; NOVSKIY, I.S.; NOVIKOVA,
V.P.; GRISHIN, K.N.; MOSKOVSKAYA, M.L.; KORNEYEV, B.M.

Inventions. Met. i gornorud. prom. no.3:75-76 My-Je '64.
(MIRA 17:10)

15-1957-12-17057

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 12,
p 51 (USSR)

AUTHORS: Ivanov, A. N., Novskiy, V. A.

TITLE: Characteristics of Jurassic Deposits in the Yaroslavl'
Oblast (O kharaktere zaleganiya yurskikh otlozheniy
v Yaroslavskoy oblasti)

PERIODICAL: Krayevedch. zap. Yaroslavsk. obl. krayevedch. muzey,
1956, vol 1, pp 49-66

ABSTRACT: Callovian sands with pebbles of varicolored Triassic
marls lie in some parts of the Jurassic foundation.
Dark gray carbonate clays (Upper Callovian, Lower Ox-
fordian) with pyrite, oolites of limonite and marl
phosphorites (16 m) lie above these sands. Still higher
occur black clays of Upper Oxfordian (11 m), ~~Kimmeridgian~~
sands with phosphorite inclusions (1 m), and sands of
the Lower and Upper Volga strata (10 to 30 m). Jur-
assic deposits are subdivided, according to their lithol-
ogical features, into a lower-argillaceous layer (Callo-

Card 1/2

BORLOVA, R.N.; METEL'TSEVA, Ye.P.; NOVSKIY, V.A.; SUKACHEV, V.N., akademik

Interglacial deposits in the environs of Rybinsk in Yaroslavl
Province. Dokl. AN SSSR 140 no.6:1427-1430 0 '61. (MIRA 14:11)

1. Laboratoriya lesovedeniya AN SSSR.
(Rybinsk region--Paleobotany, Stratigraphic)

NOVTCROY, N.F.

✓ Determination of activity of organic compounds contain-
 ing radioactive carbon-14. I. A. Kozhukov, R. V. Anant-
 skaya, and N. P. Stetsko (State Univ. Leningrad, Zvez-
 detskiy X-ray 27, 504, 1976). *Trudy* 1976, 1, 11.
 activity is possible in compounds such as MeCO, MeCOAc,
 EtOAc, EtCOEt, and PrCOEt. The filling gas for the
 counter tube can be CO₂ or Ar. The substances are handled
 in a vacuum train, a diagram of which is shown. Standard
 counting tubes with Cs cathode and W anode are used,
 these are sealed in the vacuum train and are enclosed in Pb
 shells. If the quenching ability of the org. substance is
 insufficient, some 10-20% EtOH can be introduced into the
 system. The accuracy of determination is ±2%.

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~~NOVTSEY, A. Ev.~~ "elektromekhanik.

Lighten the work of servicing personnel. Avtom., telem. i svyaz'
2 no.6:40 Je '58. (MIRA 11:6)

1. Navlinskaya distantziya signalizatsii i svyazi Moskovsko-Kiyevskoy
dorogi.

(Railroads---Signaling---Block system)

Novy, P.

Determining terminal points of three-phase windings. p. 232.
ELEKTROTECHNIK. (Ministerstvo strojirenstvi) Praha. Vol. 11,
no. 7, July 1956.

Source: EEAL LC Vol. 5, no. 10 Oct. 1956

NOVY, F.

NOVY, F. Use of glass insulation in electric motors of mining machinery.
(Supplement) p. T46

Vol. 45, No. 9, Sept. 1956
ELEKTROTECHNICKY OBZOR
TECHNOLOGY
Praha, Czechoslovakia

So: East European Accession Vol. 6, No. 2, 1957

81381

Z/038/60/000/03/02/007

21.2200

AUTHORS: Chochlovský, Igor; Kufner, Vladimír and Nový, František

TITLE: Laboratories for the Van de Graaff Accelerator at the Institute of Nuclear Research, ČSAV 79

PERIODICAL: Jaderná energie, 1960, No. 3, pp. 80 - 82

TEXT: In addition to a nuclear reactor and a cyclotron, the Ústav jaderného výzkumu ČSAV (Institute of Nuclear Research, ČSAV) in Řež near Prague will receive a vertical-type, 5Mev Van de Graaff accelerator, contained in a pressure vessel (Ref. 1, 2). The building for the accelerator and its laboratories is nearing completion. A sectional diagram of the accelerator with several technical data is shown in Figure 5 with the following legend: 1. Accelerator proper (5 Mev, 100 μ A), contained in a pressure vessel (volume 23.5 m³, height 8,000 mm, diameter 2,000 mm, pressure 15 atm); 2. High-voltage electrode; 3. Ion accelerating tube; 4. electron tube for voltage stabilization; 5. Evacuating system for the ion tube with a diffusion vacuum pump (4,000 liters/second); 6. Evacuating system for the electron tube with a diffusion pump 2,000 liters/second (used also for uninterrupted evacuation of both tubes); 7. Mobile auxiliary evacuating station; 8. Target; 9. Magnet for the deflection and separation of the accelerated beam of particles,

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Laboratories for the Van de Graaff Accelerator at the Institute of Nuclear Research, ČSAV

10. Tank for pressurized insulating gas; 11. Equipment for filling and drying the insulating gas (a mixture of N and CO₂), pressure 15 atm; 12. High-voltage source for charging the conveyor belt of the generator; 13. Electron source for stabilization of the accelerating voltage level. The entire equipment was designed and produced in the ČSR, with the ÚJV, Chemoprojekt, Závody V.I. Lenina (V.I. Lenin Works) in Plzeň participating in the project. The accelerator building is located at a considerable distance from other installations of the Institute and consists of 2 main sections: one housing the accelerator and the other housing the laboratories. The entire building has a total volume of about 9,000 m³. A drawing of the building is shown in Figure 1, a longitudinal vertical section through the building is shown in Figure 2, a floor plan is shown in Figure 3 and a transversal vertical section of the laboratory wing is shown in Figure 4. The accelerator room has external dimensions of 16x13 m, 2 floors (ground floor and basement) with a total height of 26 m. Up to a height of 8 m the walls are of concrete, 100 cm thick, furnishing a reliable protection against radiation. The partition wall between the accelerator room and the laboratory wing is of 60-cm thick limonite concrete. The ground floor is divided by a concrete wall into a

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Laboratories for the Van de Graaff Accelerator at the Institute of Nuclear Research CSAV

room in which the accelerator is installed, and into an engine room with an elevated platform onto which the accelerator electrodes and pressure vessel can be deposited during repairs. For handling the heavy parts of the accelerator, the room is equipped with a 16 ton bridge crane. The basement contains a large, partially partitioned target room. For better work with direct targets, a 4x4 m section of the floor located immediately below the accelerator has been lowered by 2 m. An experimental channel, 3.2 m high, 1.5 m wide, leads out of the target room in the direction of the axis of the accelerating tube. The channel proceeds below the laboratory wing, ending outside of the building. The accelerator room is connected with the basement and the ground floor of the laboratory wing with sliding double-wall steel doors filled with limonite concrete. The laboratory wing has a combined brick and concrete frame with prefabricated ceilings. Its external dimensions are 18x15m, the overall height being 13 m. It has 3 floors containing a control room, switch rooms, a workshop, laboratories and offices of the operating and scientific personnel. Water and sewage pipes, compressed air pipes, electric and communication

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Laboratories for the Van de Graaff Accelerator at the Institute of Nuclear Research ČSAV

wiring are installed in accessible horizontal and vertical channels interconnecting all rooms of the building. (Editor: M. Weber) There are 2 photographs, 5 diagrams and 2 Czech. references.

ASSOCIATION: Chemoprojekt, Prague (Chochlovský, Igor; Kufner, Vladimír); ÚJV ČSAV, Prague (Nový, František).

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80578

CZ/4-60-5-12/35

9.6000

AUTHORS: Chochlovský, Igor, Engineer; Nový, Frant., Engineer

TITLE: Laboratory for the Van de Graaf Accelerator at the ÚJV-Institute in Řež

PERIODICAL: Nová Technika, 1960, No. 5, pp. 221 - 223

TEXT: The authors report on the construction of the van de Graaf electrostatic accelerator in Řež near Prague [Ref. 1]; the erection of the laboratory, shown in Figure 1, is carried out by the Ústav jaderného výzkumu Československé akademie věd (Nuclear Research Institute of the Czechoslovak Academy of Sciences). After test with a smaller van de Graaf type accelerator of 1 Mev energy [Ref. 2], the construction of a 5 mev capacity accelerator was started, operating at a voltage of about 100μ A at the target; the accelerator is arranged vertically. The high-voltage equipment has been supplied by the Závod V. I. Lenina (V. I. Lenin Plant) at Plzeň. The accelerator is placed in a vertical pressure vessel of 2 m interior height and 8 m total height. The insulating gas has an operating pressure of 15 at. The generator column is 468 cm high, it is subdivided by means of 172 equipotential boards into three parts with reducing diameters, ending in a high-voltage electrode

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80578

CZ/4-60-5-12/35

Laboratory for the Van de Graaf Accelerator at the ÚJV-Institute in Řež

of 83 cm diameter. In order to utilize better the gas dielectric, the space between the high-voltage electrode and the mantling of 193 cm in diameter was separated by two equipotential surfaces of 113 and 149 cm diameter. The 50 cm wide rubberized Kapron type belt is driven by an asynchronous motor, the speed of which is variable by 0 - 20 m/sec. The insulating medium is a nitrogen and carbon dioxide mixture dried to -40°C . The accelerator will be equipped with an accelerating tube for ions and a regulating electron tube. A high-frequency ion gun will be used. An energy stabilizing of 10^{-4} will be achieved by the installation of a separator and a control equipment. The accelerator building of $3,000\text{ m}^3$ and the laboratory are described in detail, the building's vertical section is shown in Figure 2. Figure 3 shows a schematic of the van de Graaf generator and gives additional technical data. There are 2 diagrams, 1 photograph and 2 Czech references.

ASSOCIATION: Chemoprojekt - Ústav jaderného výzkumu (Chemoprojekt - Nuclear Research Institute)

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D/291/D301

24.6000

AUTHORS: Habanec, Josef; Šafrata, Stanislav; Nový, František;
Franc, Pavel, and Němec, Jan

TITLE: Tasks of nuclear physics and some major equipment
of the Nuclear Research Institute

PERIODICAL: Jaderná energie, No. 10, 1961, 330-337

TEXT: The article describes certain equipment of the Czechoslovak Nuclear Research Institute, namely the Soviet-procured cyclotron, a small electrostatic accelerator, the Czech GS-2 hydrogen and helium liquefier and the Soviet HCAK-80 (ZhAK-80) liquefier, and lists some research fields of the institute. The cyclotron can accelerate deuterium ions to 13 mev and alpha-particles to 26 mev. The ion source is a discharge tube for deuterium or helium ionization. The voltage on the dees reaches up to -150 kv the voltage of the deflector is -70 kv. The 120 cm gap between the pole shoes is made with an accuracy of ± 0.2 mm. A quarter-wave coaxial line for the 10 Mc voltage on the dees eliminates the need for insulators. The rf generator supplying the dees has
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an output of 120 kW; the frequency and the intensity of the magnetic field are maintained with an accuracy of 10^{-4} . The cyclotron has an input of 1 Mw, approximately 500,000 kcal/hr are dissipated by the water-cooling system. The accelerator operates in a vacuum of 10^{-5} mm Hg, the total pumped volume is 5 m³ and the pumps have a capacity of 3,000 l/sec (at 10^{-5} mm Hg). The accelerated beam is vertically and horizontally focused by two quadrupole lenses and is deflected to weaken the cyclotron background. The target chamber at the end of the beam-extraction tube has a separate vacuum system and remotely controlled manipulators. The cyclotron can also be used to produce some radio-isotopes, especially short-lived and pure isotopes without carriers. Tests are being made to obtain polarized beams directly from the cyclotron. A small electrostatic van de Graaff accelerator (1 meV) was designed and built by the institute, under the supervision of Engineer Simán, for research purposes and as a test model for constructing a larger accelerator (4-5 meV). The small accelerator for electrons and ions is situated in a pressure container 850 mm in diameter and 2,500 mm high, filled with a mixture of

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Tasks of nuclear physics ...

nitrogen and carbon dioxide under a pressure of 15-25 atm. The 48 cm wide conveyor moves with a speed of 21 m/sec. The accelerator tube is 84 cm long and the tension achieved at a pressure of 15 atm. is 1 mv. The larger accelerator was developed and is being produced by the ZVIL National Enterprise in Plzeň. The generator is also situated in a pressure container 200 cm inner diameter and 800 cm high. The space between the hv electrode (820 mm in diameter) and the wall is separated by two jackets, 1,140 and 1,500 mm in diameter, for better utilization of the dielectric. The entire column is 4,500 cm high. The conveyor, made of laminated, rubber-coated silk, is 50 cm wide and moves with a speed of 12 - 20 m/sec. Preliminary verification tests produced a tension of 3.5 mv. The cryogenic laboratory of the Czechoslovak Nuclear Research Institute is equipped with liquefiers for hydrogen, helium and nitrogen, strong magnets, and magnets with high magnetic-field homogeneity. The GS-2 helium and hydrogen liquefier was produced by the Kralovopolská strojírna, n.p., závod Děčín (Kralovopole Machine Plant, National Enterprise, subsidiary in Děčín), according to documentation supplied by the Institute

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for Physical Problems of the AS USSR in Moscow, and was put into test operation on April 13, 1960. It applies the Joule-Thomson effect and has a capacity of 11 l/hr. The output of the hydrogen compressor is 50 Nm³/hr, that of the helium compressor 80 Nm³/hr. Individual parts (i.e. the liquefier itself, compressors and pumps, gas containers, etc.) are installed in separate rooms which are ventilated and equipped with electro-conducting rubber floors. The Soviet ZhAK-80 nitrogen liquefier has a capacity of approximately 15 l/hr. An 80-kW magnet for very low temperatures produced by adiabatic demagnetization has pole shoes 220 mm in diameter and develops a magnetic field of 24 kG in the 55 mm gap. The magnet can be lowered 550 mm and turned 180°. Resonance experiments can be performed with a 2.5 kW magnet which has pole shoes 300 mm in diameter and develops a magnetic field of 18 kG in the 25 mm gap. For very strong magnetic fields (up to 50 kG), special iron-coreless, water-cooled coils are being developed which will be fed from a 1 Mw d-c generator. The cryogenic section is expected to become one of the most modern equipped laboratories in Europe. The article lists now some of the research

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Tasks of nuclear physics ...

tasks of the Czechoslovak Nuclear Research Institute. Studies will concentrate mainly on the characteristics of the nucleus, nuclear spectroscopy, the mechanism of nuclear reactions, the construction of fission products, and the behavior of aligned nuclei. For these purposes, new equipment is being developed and/or installed at the Institute. A Litvinov magnetic analyzer is being built for measuring the energy spectra and angle distribution of fission products. The instrument is basically a 12-channel spectrograph. A special apparatus prepared at the Institute measures the p- γ correlation during nonelastic proton scattering. The γ -detector consists of a NaI crystal and a FEU-33 photomultiplier; the proton detector consists of a thin Cs crystal and a FEU-33 photomultiplier. The discrimination for γ is 10%, for 6.5 mev protons 4%; the discrimination period for rapid coincidence is $4 \cdot 10^{-9}$ sec. The polarization of protons during scattering on nuclei with zero spin is measured by the standard method of double scattering. Studies on aligned nuclei will be performed in the cryogenic laboratory and are still in the preparatory stage. It is expected that experiments at the

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D291/D301

Tasks of nuclear physics ...

temperature of liquid helium can be started late in 1961. There are 14 figures and 15 Soviet-bloc references.

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

Card 6/6

NOVY, Frantisek, inz.

Experience with the production and testing of hydroalternators in
Lenin Works, Plzen. El tech obzor 50 no.10:572-577 0 '61.

1. Zavody V. I. Lenina Plzen, n.p.

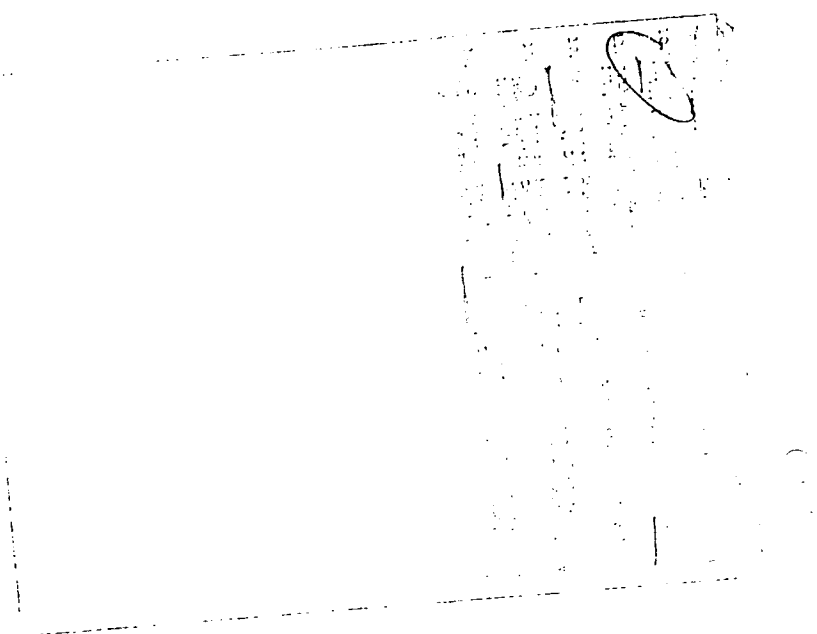
(Dynamos)

NOVY, Julius, MVDr. (Vyskov)

An economic analysis of the cattle tuberculosis in a district.
Veterinarni medicina 6 no.11:817-824 N '61.

1. Okresni veterinarni sarizeni Vyskov.

Novy, J.



NOVY, A.; ZVONAR, V.

Working laminated plastics reinforced with Fiberglas. p. 337. (STROJIRENSTVI,
Vol. 6, No. 12, Dec 1956, Praha, Czechoslovakia)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 12, Dec 1957. Uncl.

NOVY, KAREL

F.

CZECHOSLOVAKIA/Laboratory Equipment, Apparatus, Their Theory, Construction and Application.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 46514

Author : Antonin Koukal, Frantisek Eesek, Karel Novy

Inst : -
Title : Experiments with Electric Rotational Viscosimeter.

Orig Pub : Chem. prumysl, 1957, 7, No 6, 304-305

Abstract : The described instrument is suitable for liquids with rapidly changing viscosity. It is based on the measurement of braking force acting on a feeler submerged in the liquid under study and rotated by a synchronous motor. The measuring device consists of two Selsyn motors and a compensation arrangement connected to a micro- or a milliammeter. The viscosity η is determined in cpoises by readings I on that instrument. Graphs of the dependence of η on I of various liquids are presented.

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NOVY, L., inz.; PACOVSKY, J., inz.; SIMON, J., inz.

Proposal of a complex use of raw materials from the gravel and sand pit in Chcovice near Cheb. Stavivo 41 no.6:214-216 Je '63.

1. UGSKS, Karlovy Vary (for Novy and Simon).
2. Zapadocesky prumysl kamene, n.p., Karlovy Vary (for Pacovsky).

NOVY, Ladislav, inz.

Holes for anchor belts in constructing industrial buildings. Poz
stavby ll no.2:99-102 '63.

1. Pozemni stavby, Plzeň.