

NECHAY, A.M.; MEL'NIKOV, D.A.

Studying reservoir characteristics of strata by the use of geophysical data in the northeastern regions of Ciscaucasia. Trudy VII no.29: 44-54 '60. (MIRA 13:10)

1. Groznenskiy nauchno-issledovatel'skiy neftyanoy institut.  
(Caucasus, Northern--Oil well logging)

NO. 100, 101, 102, 103.

use of micrologging is to form a series of sections. Razved. i prom. geofiz. no. 6: 12-20, 1953.

(MIRA 18:3)

NECHAY, A.M.; GUSAKOV, N.D.

Estimation of the oil- and gas-bearing capacity of clayey sandstones.  
Razved. profil. no.1:79-92 '64. (MIRA 18:7)

NECHAY, A.M.

Problems in the qualitative evaluation of the secondary  
porosity of fractured petroleum and gas collector. Prikl.  
geofiz. no. 3:201-12 1964.

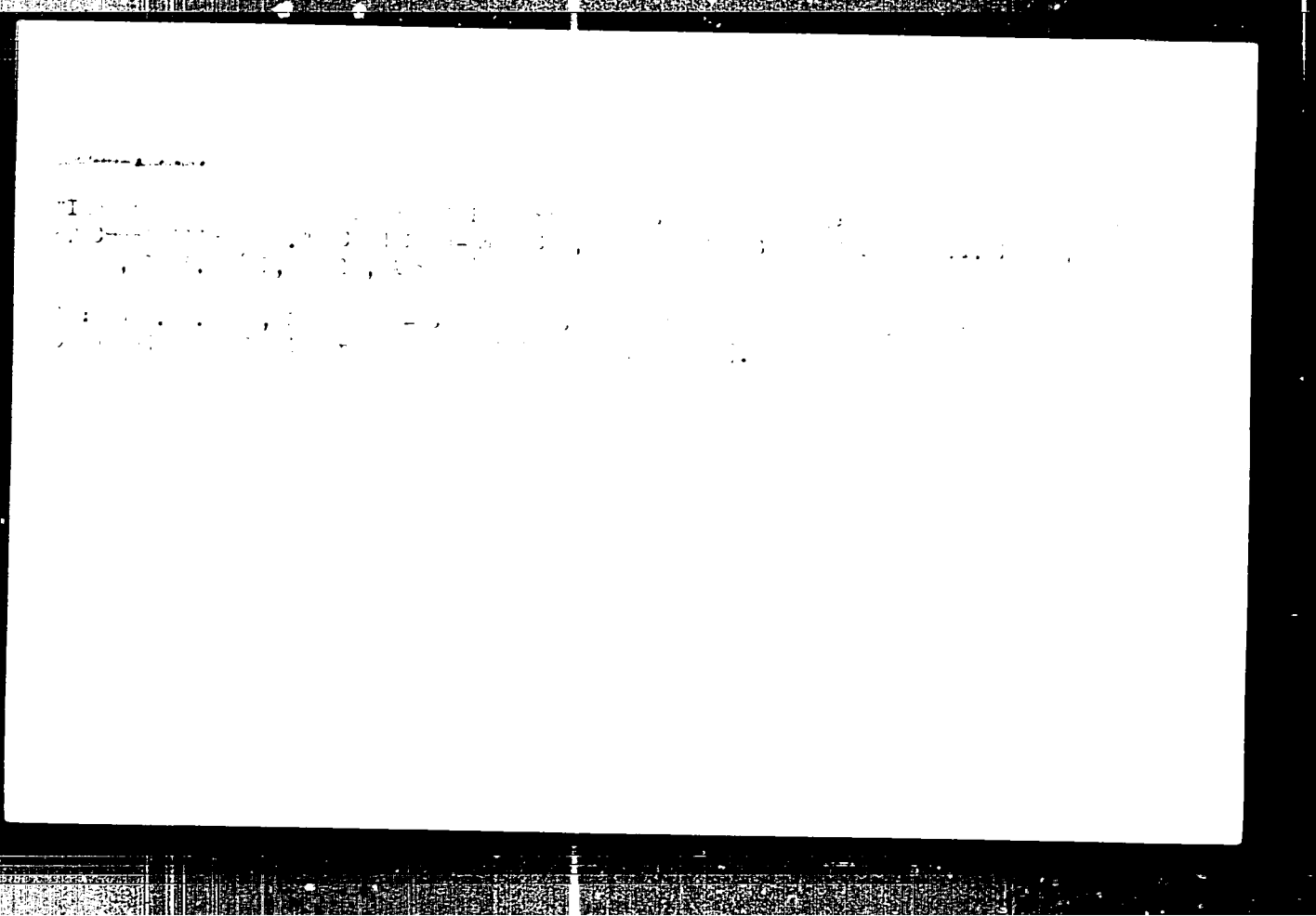
(MFA 13:11)

NECHAY F.A.

YEGOROV, K.P., laureat Stalinskoy premii, kandidat tekhnicheskikh nauk;  
VOSTOKOV, M.B.; NECHAY, F.A.; GURVITS, Sh.F.

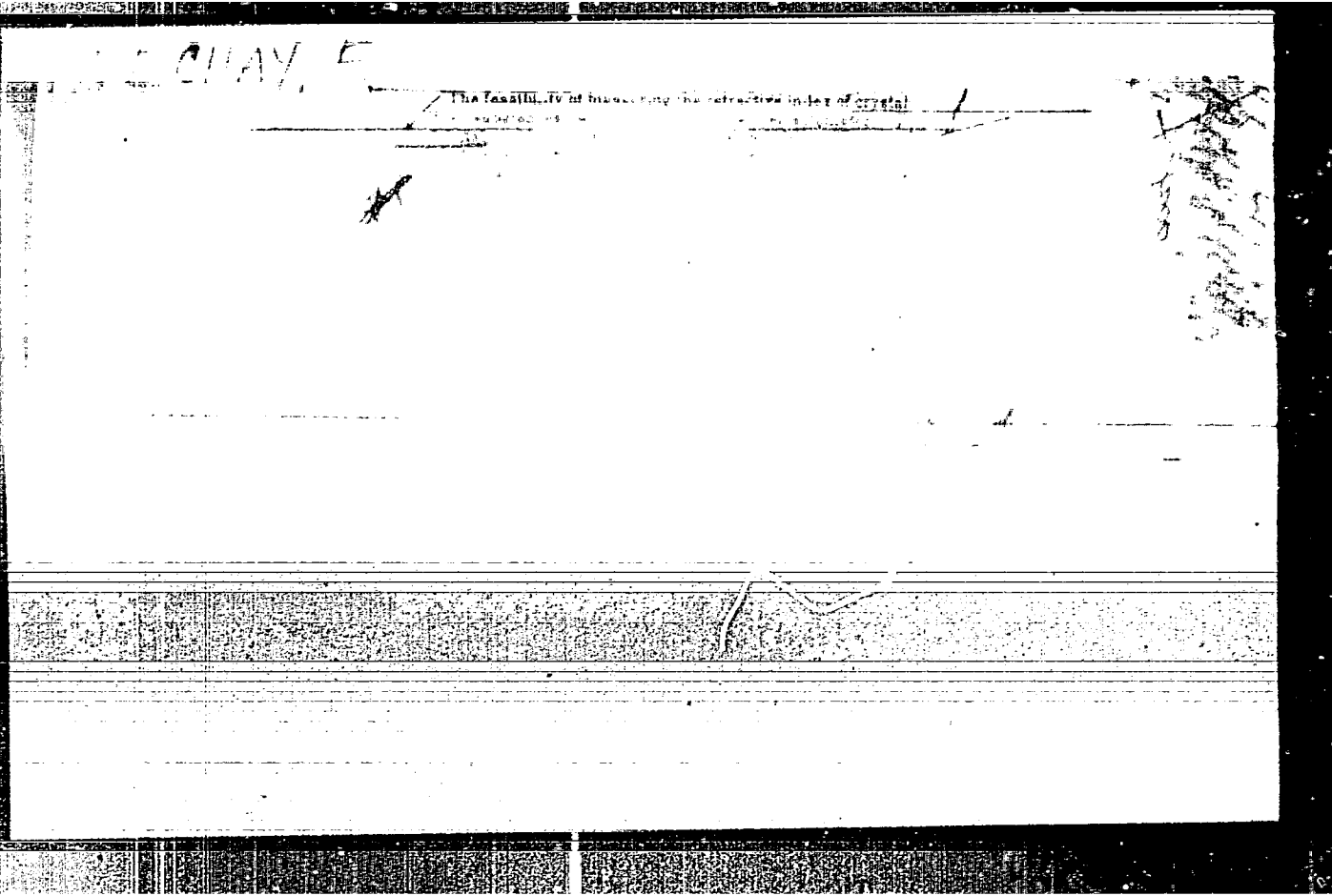
Remarks on IU.M.Korobov's article "What a telephone apparatus should  
be like." Vest.sviazi 14 no.2:30-31 F '54. (MLRA 7:5)

1. Zaveduyushchiy kafedroy LMIS (for Yegorov).
2. Glavnyy inzhener  
3-go Glavnogo upravleniya MESEF (for Vostokov).
3. Ispolnyayushchiy  
obyazannost' inzhenera Kiyevskoy gorodskoy telefonnoy seti (for Nechay).
4. Nachal'nik proizvodstvennoy laboratorii (for Gurvits).  
(Korobov, IU.M.) (Telephone--Apparatus and supplies)



NECHAY, F.

~~PLAT~~ The feasibility of measuring the relative index of crystal-  
line substances with the ~~ABX~~ type refractometer ~~ABX~~  
Nechal, *Soviet Phys., Tech. Phys.* 1, 423-4 (1954) (English  
translation).—See *C.A.B.* 51, 292. B. M. R.





57-9-39/40

**AUTHOR:** Nechay, F.

**TITLE:** On the Possibility of Measuring the Refractive Indices of Crystalline Bodies on the Abbe-Type Refractometer  
(O vozmozhnosti izmereniya pokazateley prelomleniya kristallicheskih tel na refraktometre tipa Abbe)

**PERIODICAL:** Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 9, pp. 2184 - 2185 (USSR)

**ABSTRACT:** The present paper contains a reply to the critical remarks made by G.M. Rautian and B.F. Ioffe ( Zhurn. Tekhn. Fiz., Vol. 26, Nr 7) concerning the author's work published in Zhurn. Tekhn. Fiz. 1956, Vol. 26, Nr 2. This criticism was caused by some inaccuracies and by the fact that several theses mentioned in the paper had not been dealt with completely. This is now done and / or corrected. The investigation method as such had not been intended for a thorough investigation of the refraction indices, but it is only recommended for the study of modifications occurring in the refraction indices of crystals and liquids within the domain of phase transition. The advantages offered by an investigation carried out according to the method of close prisms are described. There are 3 Slavic references.

Card 1/2

NECHAY, F T

Journal of Physical Chemistry

Vol XXXI, Nr 1, 1957 p.165-169

3

CONCERNING THE MEASUREMENT OF THE REFRACTIVITY INDEX OF CRYSTALS

*F. T. Nechay (Minsk)*

Summary

*Okon'ko*

In this communication it is reported that the refractivity index of thin crystal plates can be measured by means of an Abbe refractometer with a closed prismatic block. In this case the crystal is wetted with the contacting liquid and placed between the prisms of the refractometer. The method is used by the author to investigate in the region of phase transitions...

If the liquid is crystallized between the refractometer prisms and the crystal plate produced forms a good optical contact with the prism faces and there is no longer need of mechanical polishing or of applying a contacting liquid.

Having the crystal plate obtained in the above way allows one to investigate the temperature dependence of the index of refraction of the crystals up to the melting point and to measure the height of the crystal and the amount of substance of melting. The results...

In the report data are tabulated on the refractivity of crystals and of liquids for a number of substances at the moment of melting. Curves are given for the refractive indices of crystals and liquids in the neighborhood of the phase transition as a function of temperature and the ratios are determined between the refractive indices of the crystals and of the liquids at the moment of melting.

*Belorussian State Univ., im. V. I. Lenin*

*KLL* *Along*

NECHAY, F.T.

Investigation of the temperature dependence of density, viscosity and  
refractive index of salol in a liquid and a supercooled liquid state.  
Uch. zap. BGU no.41:231-240 '58. (MIRA 12:3)  
(Salol)

MARKOVA, L.L., NECHAY, I.Ya.

Hydrological characteristics of estuary regions of the Nevan and  
Pregel Rivers. Trudy GOIN no.49:118-188 '60. (MIRA 13:7)  
(Nevan Delta region--Hydrology)  
(Pregel Delta region--Hydrology)

NECHAY, I. Ya., Cand. Geogr. Sci. (diss) "Mouth Areas of the  
Nyamunas and Pregoli Rivers," Vil'nyus, 1961, 13 p. (Vil'nyus  
State Univ.) 250 copies (KL Supp 1.-61, 257).

GESHELIN, Abram Nikolaevich; NECHAY, I.Ya., doc. red.

[Hydraulic calculations of fish farm structures; a text-  
book] Gidravlicheskije rascheti strojenij rybovodnykh  
kh zivlatsi, uchebnoe posobie. Kaliningrad, Kaliningrad-  
skoe knizhnoe izdatel'stvo, 1966. 114 p. (MIRA 1P:6)

1. Kafedra gidrologii Kaliningrad'skogo tekhnicheskogo instituta  
rybn y promyslennosti i zhivotnovodstva.

SCHEM, 5 1971

beton w budownictwie mieszkaniowym; praktyczny poradnik dla inżynierów i techników.  
2. wyd. poprawione i rozszerzone. Warszawa, Instytut Inżynierii Budownictwa, Dział  
wydawn., 1971. 323 s. (Concrete in the apartment building industry; practical  
manual for engineers and technicians. Diagrams, tables)  
MB Not in LC

LC: Monthly list of East European acquisitions, Library of Congress, vol. 3, no. 1, June  
1964, incl.

*Other branches of building*  
9

*P.T.D.*

338 964 3 691

361  
 Nechaj J Eng New Building Materials in the Six-Year Plan.  
 "Materiały nowe w budownictwie w Planie Szescioletnim" In-  
 zynieria i Budownictwo No 7-8, 1949, pp 405-409. 1 fig  
 New materials in recent years. The duty of raising the level of  
 building technology as the most important argument for the neces-  
 sity to increase the number of varieties of building materials. The  
 production of new materials as a factor necessary for the lowering  
 of building costs. Changes in raw material resources as the most im-  
 portant transformation in this field. The problem of localising produ-  
 ction of new materials and use of industrial waste. The part played  
 by new materials in the Six-Year Plan. The modernization of the  
 building materials production programme is one of the basic elements  
 in material supply during the Six-Year Plan. The article submits gui-  
 ding principles in this important matter.



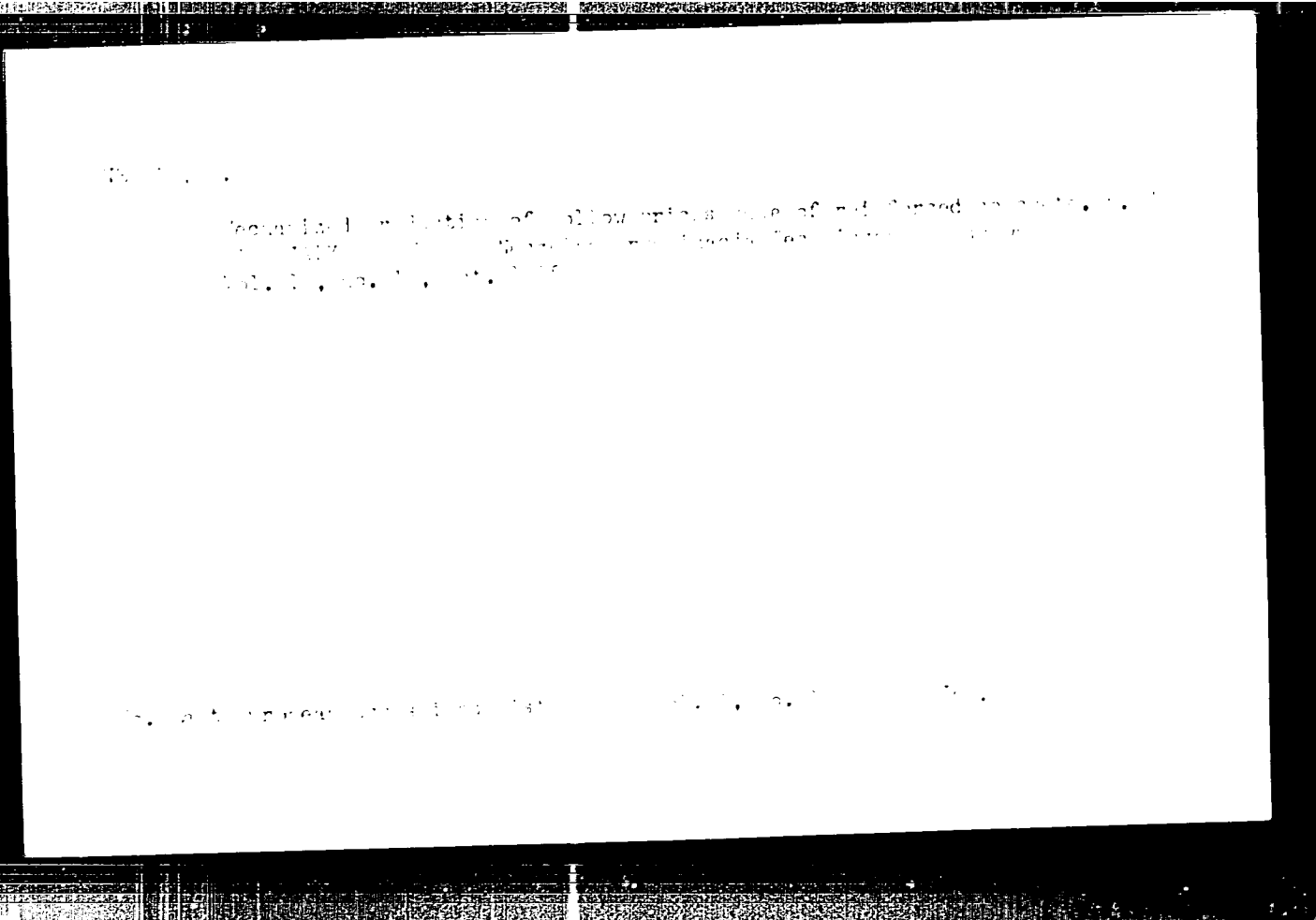
NECHAY, J.

Nechay, J.; Wisniewski, Z.

"Precast Reinforced Concrete Products." p. 368 (Inzynieria I Budownictwo, Vol. 10,  
No. 12, Dec. 1953, Warszawa)

SO: Monthly List of East European Accessions, Vol. 3, No. 6, Library of Congress, June,  
1954, incl.





POLAND/General Problems.

A-

Abs Jour : Ref Zhur - Khimiya, No 10, 1957, 333-33

Author : Nechay, J.

Inst :

Title : The History of Ferroconcrete in Poland.

Orig Pub : Studia i matry. dziejow nauki polsk. PAN, 1956, No 4,  
283-308.

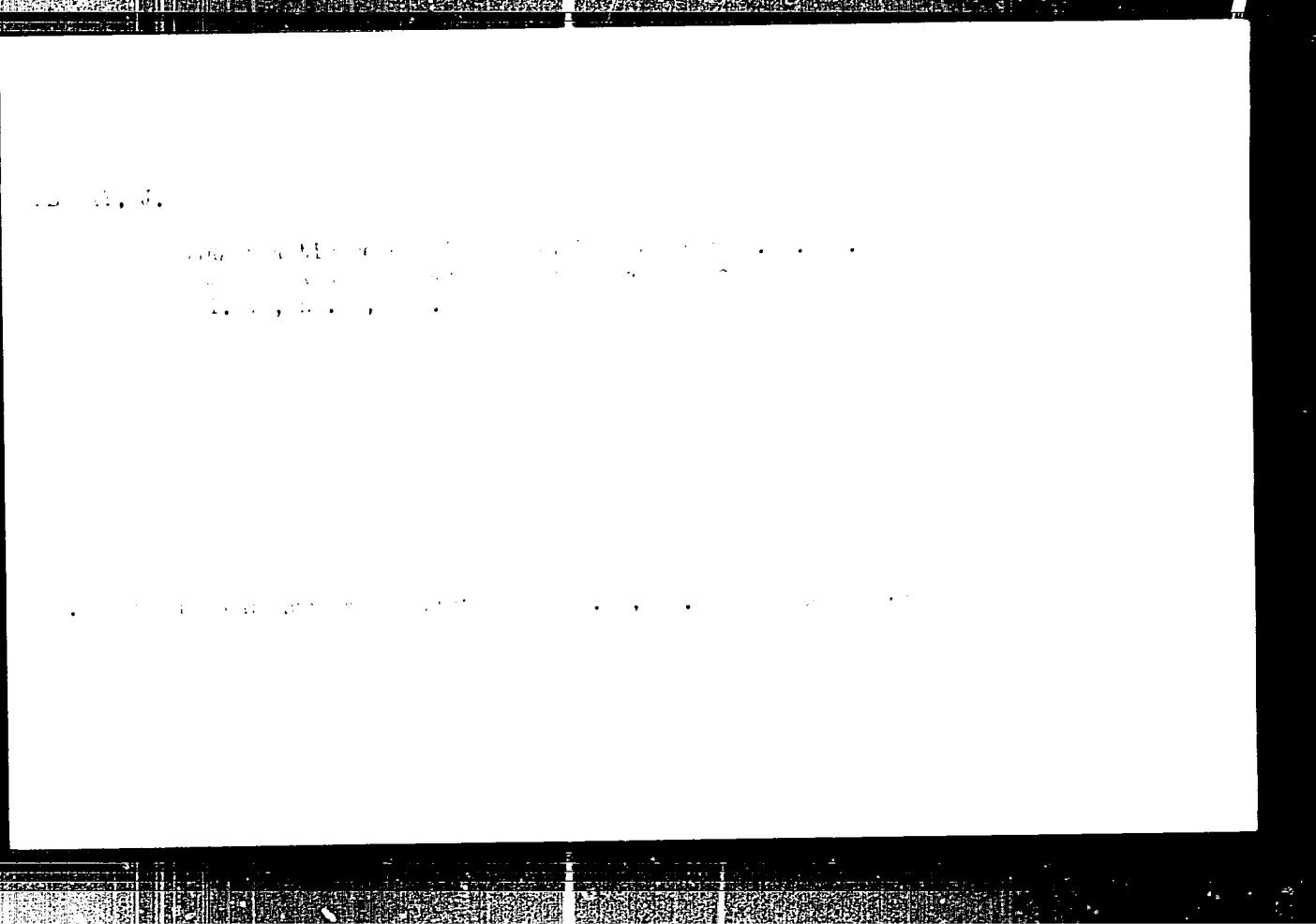
Abstract : A short outline on the history of the Polish cement  
industry.

Card 1/1

MECHAY, J.

Material basis of the building in the Five-Year Plan. p. 180  
(INZYNIERIA I WIRTSCHAFTSLEHRE, Vol. 13, No. 4, April 1956. Warsaw, Poland)

SO: Monthly List of East European Publications (SOAL) 13, Vol. 6, No. 2, Sept. 1957, p. 1.



SPC... J.

A reinforced-concrete...

... 36 (In... ..)

Port: Index of... ..  
February 1958

NECHAY, Jerzy, prof., mgr., inz., (Warszawa)

The periodical "Cement" between the wars. Cement wapno gips 16/26  
no.7:182-183 '61.

(Poland--Periodicals)



BOGDANOVA, Z.S.; GORJUNOVSKIY, G.I.; NECHAY, I.A.

Flotation of Chiaturn deposit manganese ores. *Stroitel'stvo* 5  
no.6:3-7 '60. (MIRA 1960)

(Chiaturn--Manganese ores) (Flotation)

NECHAY, L.N., kandidat meditsinskikh nauk

Achillodynia. Ortop.travm. i protez. 17 no.6:63-65 H-D '56.

(MIRA 10:2)

1. Iz kafedry gosпитаl'noy khirurgii (zav. - prof. N.Ye.Dudko)  
Kiyevskogo meditsinskogo instituta im. akad. A.A.Bogomol'tsa (dir.  
dotsent I.P.Alekseyenko)

(HEEL, dis.

achillodynia)

NECHAY, N.A.; ZVEREVA, M.N.; GREKOVICH, I.M.

Reducing properties of ion exchangers. Vest. LGU 19 n 1976  
'64. (MIRA 1976)

NECHAY, Oliver, dr.

Copper sulfate substitution: the new success of organic chemistry.  
Mesogazd techn 1 no.2:31 '61.

*Nechay, V.*  
USSR/ Electronics

Card 1/1      Pub. 89 - 30/40

Authors      : Freydlis, A.; Kotel'nikov, N.; Pavlenko, V.; Tyushnikov, E.; Trapeznikov, A.; Vorob'yev, V.; Tkachenko, L; and Nechay, V.  
Title        : Exchange of experiences

Periodical   : Radio 10, 42-43, Oct 1954

Abstract     : Several small articles, sent in by local radio operators, are featured under the above title. Each author offers, for the benefit of the others, the results of his experience in the field of electronics. The following equipment and subjects are dealt with: an automatic safety device for the protection of rural radio-center personnel against electric shock; a miniature signal generator; an "interference-free" receiving antenna; a radio-relay station of the Urozhay type; a piezoelectric pickup for an electric guitar, and others. Diagrams; drawings.

Institution:    .....

Submitted:     .....

S/126/60/010/006/007/022  
E201/E491

187530

AUTHORS: ~~Nachay, Ye. P.~~, Popov, K.V. and Panenkova, L.S.  
TITLE: The Effect of the Tempering Temperature on the Diffusion and Solubility of Hydrogen in Hardened Steel  
PERIODICAL: Fizika metallov i metallovedeniye 1960 Vol. 10, No. 6, pp. 838-840

TEXT: The rate of diffusion of hydrogen in steel and its solubility are known to be affected by the structure and internal stresses in steel but the published results are contradictory. The present paper reports a study of the effect of the tempering temperature on the diffusion and the solubility of hydrogen in hardened Y7A (U7A) steel at room temperature (hydrogen was introduced by cathodic polarization in an electrolyte). It is known that the structure becomes fine-grained and internal stresses are lowered in the  $\alpha$ -phase of steel on increasing the tempering temperature, consequently the tempering temperature should affect the diffusion and the solubility of hydrogen. The authors used steel strips of 0.7 mm thickness which were worked with emery paper, degreased and cleaned. The permeability of steel to

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S/126/60/010/006/007/022  
E201/E491

The Effect of the Tempering Temperature on the Diffusion and Solubility of Hydrogen in Hardened Steel

hydrogen gas was measured using Edwards' apparatus (Ref 14)  
A normal aqueous solution of sulphuric acid, containing 3 mg of arsenic in 1 litre of solution served as the electrolyte  
A steel plate was used as the cathode and a platinum spiral served as the anode. The current density was  $0.06 \text{ A/cm}^2$ . The amount of hydrogen (ml/100 g) which diffused through the steel plate was plotted against the duration of electrolysis (Fig.1).  
Electrolysis was continued until the rate of diffusion of hydrogen through steel became constant, as indicated by the rectilinearity of the plot in Fig.1. In parallel with these diffusion experiments, the amount of hydrogen absorbed in steel was measured. This was done by saturating steel with hydrogen so that no more gas was absorbed and then outgassing the steel plate by heating it in vacuum at  $600^\circ\text{C}$ . The diffusion (permeability to hydrogen) and the absorption results are given in Columns 3 and 4 in a table on p.840: Col.2 of that table gives the Brinell hardness  $H$  ( $\text{kg/mm}^2$ ).  
With increase of the temper temperature (Col 1 in the table) the  
Card 2/3

S/126/60/010/001/007/021  
E201/E491

The Effect of the Tempering Temperature on the Diffusion and Solubility of Hydrogen in Hardened Steel

Brinell hardness fell and the rate of diffusion rose. The rate of diffusion was found to be proportional to the reciprocal of the steel hardness (Fig.2). In contrast to the diffusion rate the amount of hydrogen absorbed was practically independent of the steel hardness and microstructure. There are 2 figures, 1 table and 14 references. 4 Soviet and 10 non-Soviet

ASSOCIATION Vostochno-Sibirskiy filial Sibirskogo otdeleniya  
AN SSSR (East Siberian Branch Siberian Division  
AS USSR)

SUBMITTED: May 20, 1960

Card 3/3



S/126/61/011/002/007/025  
E111/E452

18 4200 114  
AUTHORS Nechay, Ye.P. and Popov K V  
TITLE Hydrogen Embrittlement of Austenitic Steel  
PERIODICAL Fizika metallov i metallovedeniye 1961, Vol.11, No.2,  
pp.224-228

TEXT: Published opinions differ on whether austenitic steels are subject to hydrogen embrittlement (Ref.1 2). The present authors describe their experiments to find the influence of hydrogen on the mechanical properties of austenitic stainless steel type 1X18M9T (1Kh18N9T). Cylindrical (5 mm diameter) tensile test-pieces in the as-rolled state were used after hydrogenation they were subjected to static extension at various deformation speeds (0.075 to 10.0 mm/minute) and the hydrogen content was determined by vacuum heating at 600°C. The brittleness was taken as the ratio of the difference between the reduction in cross sectional area of a test piece in the original and hydrogenated states to the original value. The following methods of hydrogenation were used 1) for 40 hours in gas at 500°C and 300 atm pressure (brittleness 28 to 60%, 30.8 to 35 ml hydrogen/100 g), 2) for 14 hours (giving limiting hydrogen content)

Card 1/3

20211

S/126/61/011/002/007/025  
E111/E452

Hydrogen Embrittlement

electrolytically (brittleness 0 to 2%, 18.5 to 20 ml hydrogen/100 g); 3) for 14 hours electrolytically, followed by copper plating and annealing at 450 to 500°C to cause hydrogen diffusion (10 to 12%, 9.3 to 10 ml/100 g); 4) 300 to 350 hours electrolytically (18 to 20%, 15 to 16.3 ml/100 g). 5) 800 hours electrolytically (50 to 54%, 29.7 to 30 ml/100 g). Decreases in plasticity are particularly marked at low deformation speeds. The tensile strength is hardly affected. Treatment 1 gave the highest brittleness; 2 had little effect, the hydrogen being confined to the surface. Treatment 3 allowed diffusion of hydrogen into the depth of the specimen but much hydrogen was lost in spite of the copper coating. With longer hydrogenation with periodical replacement of electrolyte (treatment 3) better hydrogen penetration was obtained and it was noticed that the resulting specimens became more sensitive to hydrogen embrittlement at a given deformation speed the higher their hydrogen content. To check this an even longer period, 800 hours, was used. Further tensile tests at 0.175 mm/min deformation speed were made at 20, 50, 70 and 100°C on specimens hydrogenated for Card 2/3

NECHAY, Ye.P.; POPOV, K.V.

Tendency of austenitic steel toward hydrogen embrittlement depending on hydrogen content, speed of deformation and temperature. Fiz. met. i metalloved. 14 no.2:271-274 Ag '62. (MIRA 15.12)

1. Institut nefte-i uglekhimicheskogo sinteza Sibirskogo otdeleniya AN SSSR.

(Steel--Hydrogen content)

ACCESSION NR: AR4041608

8/0137/64/000/005/1043/1043

SOURCE: Ref. zh. Metallurgiya, Abs. 51255

AUTHOR: Nechay, Ye. P.

TITLE: Influence of temperature and speed of deformation on ductility of metals with face-centered cubic lattice saturated with hydrogen

CITED SOURCE: Sb. Vliyaniye vodoroda na sluzhebn. svoystva stali. Irkutsk, 1963, 131-139

TOPIC TAGS: deformation, temperature, metal ductility, cubic lattice, lattice

TRANSLATION: Investigations of technical purity were conducted on samples of steel 1Kh18N9T and Ni. For tests 10-multiple rupture samples were used, saturated with H at a temperature from 4000 and above and pressure of 600 atmospheres. Speed of deformation was changed from 0.08 to 4 mm/min, temperature — from -196 to +100°. Temperature curves of ductility of hydrogenated samples have sharp "dip" of ductility, the depth and width of which depend on content of H in metal. Inclination of steel to hydrogen brittleness increases with deceleration of deformation

Card 1/2

L 13050-65 EWT(m)/EWP(w)/EWA(d)/EWP(t)/EWP(k)/EWP(b) Pf-4/Pad JD/HW/

MLK  
ACCESSION NR: AT4046846

S/0000/64/000/000/0227/0229

AUTHOR: Nechay, Ye. P., Popov, K. V.

B

TITLE: Effect of hydrogen on the plasticity and strength of nickel during stretching

SOURCE: AN SSSR. Nauchnyy sovet po probleme zharoprochnykh splavov.  
Issledovaniya staley i splavov (Studies on steels and alloys). Moscow, Izd-vo Nauka, 1964,  
227-229

TOPIC TAGS: nickel plasticity, nickel strength, hydrogen inclusion

ABSTRACT: Cylindrical (4 x 40 mm) nickel samples annealed at 760 C, were saturated with hydrogen at 400C and a pressure of 600 atm to a concentration of occluded hydrogen of 35 to 125 ml/g and stretched at a rate of 0.4 mm/sec. at temperatures from -196 to 95C. As can be seen from Figs. 1 and 2 of the Enclosure, the plasticity of hydrogenized samples, in contrast to that of control samples, is a nonmonotonic function of temperature, is lower at all temperatures than the plasticity of the control samples, and has a minimum between 0 and -40C. The brittle strength of samples with 125 ml/g H<sub>2</sub> remains essentially unchanged at all temperatures while the plasticity drops by about 80%. The strength of samples with a lower hydrogen content is 15% higher on the average throughout the

Card 1/8

L 13050-65

ACCESSION NR: AT4046846

temperature range than that of the control samples, but drops to about 40% of the control sample strength for samples with 125 ml/g H<sub>2</sub>. The theories suggested to explain this phenomenon hold greater amounts of the pore and microcavity-segregated hydrogen responsible for the irreversible brittleness occurring in the latter case. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: None

SUBMITTED: 16Jun64

NO REF SOV: 003

ENCL: 01

SUB CODE: MM

OTHER: 001

Card

2/3

L 13050-65

ACCESSION NR: AT4046846

ENCL: 01

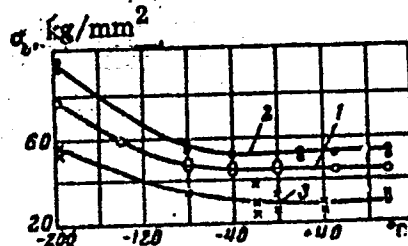
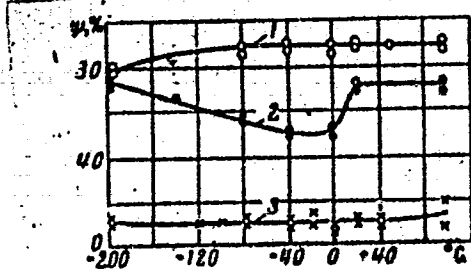


Fig. 1 - Temperature dependence of plasticity for nickel.  
1. without hydrogen  
2. 0.003% hydrogen  
3. 0.01% hydrogen

Fig. 2 - Temperature dependence of ultimate strength for nickel.  
1. without hydrogen  
2. 0.003% hydrogen  
3. 0.01% hydrogen

Card 3/8

B 01115-66 EWT(m)/EWP(w)/EPF(c)/EWA(d)/T/EWP(t)/EWP(e)/EWP(b)/EWA(c) IJP(c) JD  
 ACCESSION NR: AP5019652 <sup>40</sup> UR/0369/65/001/003/0289/0292  
<sup>36</sup>

AUTHOR: Grigor'yeva, G. M.; <sup>55</sup> Mamneva, O. G.; <sup>55</sup> Nechay, Ye. P.; <sup>55</sup> Popov, K. V.; Chip-  
 cheyeva, E. A.

TITLE: <sup>75</sup> Effect of temperature and straining speed on the mechanical properties of  
 iron that has absorbed hydrogen from air atmosphere <sup>78</sup>

SOURCE: <sup>55</sup> Fiziko-khimicheskaya mekhanika materialov, v. 1, no. 3, 1965, 289-292

TOPIC TAGS: hydrogen absorption, armco iron, hydrogen absorbing metal, mechanical strength tensile test, straining speed, yield point

ABSTRACT: Corrosionless penetration of hydrogen <sup>78</sup> into steel has been observed in steel equipment in contact with petroleum during drilling as well as in the equipment in contact with air during grinding. The source of hydrogen in such cases is presumably water vapors. In this connection, the authors observed a change in the hydrogen content of iron during its exposure to air following vacuum annealing. <sup>78</sup> A thorough investigation of this effect was carried out. The material investigated was armco iron in the form of flat specimens 50 mm long, 5 mm wide, die-stamped from a 1 mm thick sheet and vacuum-annealed at 930°C and cooled in a vacuum to room temperatures. The hydrogen content of the specimens was determined immediately after their removal from the vacuum furnace and at specific intervals of time following exposure to air. The findings (Fig. 1) show that in time the hydrogen content

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L 01115-66

ACCESSION NR: AP5019652

2

of the metal increases. The effect of the hydrogen absorbed from air on the mechanical properties of metal was investigated. To this end, tensile tests at strain rates of 60, 20, and 0.22 mm/min were performed in the temperature range of from +20 to -196°C. The hydrogen content of the tested specimens was approximately 3 ml/100 g. It was found that the position of the maximum yield point (i.e. the yield point higher than predicted by theory) depends on the rate of straining in the tensile tests: at rates of 20 and 60 mm/min it occurs at a temperature of about -120°C; as the speed decreases by two orders (0.22 mm/min) the maximum is displaced 20°C in the direction of low temperatures. The plasticity minimum shifts in the direction of low temperatures when the speeds of straining decrease, and thus it also changes nonmonotonically. In general, the mechanical properties of the metal that has absorbed hydrogen from the air atmosphere change in the same way as those of the metal that has absorbed hydrogen electrolytically, chemically, or through exposure in a hydrogen medium at high temperatures and pressures. However, in this case the stress-strain diagram has a certain distinguishing and previously not observed feature: double yield points, present for every investigated rate of straining, and attributable to the presence of hydrogen in the metal, which changes the normal course of dislocations. Orig. art. has: 4 figures, 1 table.

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L 01115-66

ACCESSION NR: AP5019652

2

ASSOCIATION: Institut nefte- i uglekhimicheskogo sinteza, Angarsk (Institute of Petro- and Coal-Chemical Synthesis)

SUBMITTED: 17Feb65

55

ENCL: 01

SUB CODE: MM

NR REF SOV: 006

OTHER: 007

Card 3/4

L 01115-66

ACCESSION NR: AP5019652

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ENCLOSURE: 01

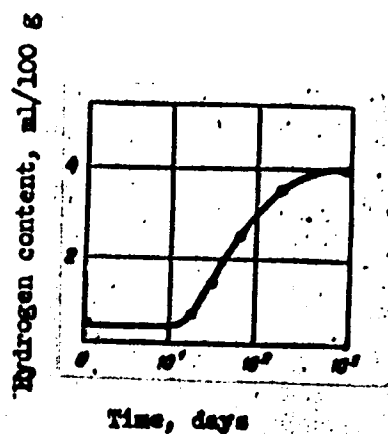


Fig. 1. Hydrogen content of iron as a function of the time of exposure to air atmosphere (circles on curve correspond to the arithmetic mean of 2-3 measurements).

Card

NECHAY, Ye.P.; POPOV, K.V.

Jumplike deformation of nickel with a high hydrogen content.  
Fiz. met. i metalloved. 19 no.4:612-618 Ap '65. (MIRA 18:5)

1. Institut nefte- i uglekhimicheskogo sinteza pri Irkutskom  
gosudarstvennom universitete imeni Zhdanova.

L 44306-66 ENT (T)/EMP (W)/I/EMP (t)/ETI LIP (L) JZ/BR  
ACC NR: AP6019840 SOURCE CODE: UR/0370/66/000/001/0172/0177

AUTHOR: Popov, K. V. (Angarsk); Nechay, Ye. P. (Angarsk)

ORG: none

TITLE: Hydrogen brittleness of metals with face-centered cubic lattice

SOURCE: AN SSSR. Izvestiya. Metally, no. 1, 1966, 172-177

TOPIC TAGS: austenitic steel, loop oscillograph, hydrogen, brittleness, crystal theory,  
crystal lattice vacancy / 1Kh18N9T austenitic steel, N700 loop oscillograph

ABSTRACT: The effect of hydrogen on the properties of metals with fcc lattice has so far been relatively uninvestigated and so there is no common consensus in the literature on the effect of hydrogen on, e. g. the plasticity of austenitic steels, or on the question of whether these steels are subject to hydrogen embrittlement at all. To resolve this question, the authors investigated the effect of hydrogen on the plasticity and strength of metals with fcc cubic lattice (such as 1Kh18N9T austenitic steel and technical nickel). To this end, specimens of the metals were exposed to  $H_2$  at 400-500°C and 600 atm so that the  $H_2$  concentration of the steel specimens reached 0.001-0.009% and that of Ni specimens, 0.003-0.01%. After this, the specimens were subjected to tensile tests in the temperature range of from -196 to +80°C at straining rates of  $1.67 \cdot 10^{-4} \text{ sec}^{-1}$  for Ni and  $1.33 \cdot 10^{-4}$  and  $4.1 \cdot 10^{-4} \text{ sec}^{-1}$  for 1Kh18N9T steel. The de

UDC: 669.018:620.098

Card 1/3

ACC NR: AP6019840

formation diagram was recorded with the aid of an N700 loop oscillograph connected to the circuit of a tensometric DC bridge. Findings: For Ni with H<sub>2</sub> concentrations of 0.003-0.005% and austenitic steel with H<sub>2</sub> concentration of 0.001-0.009% the temperature dependence of the plasticity of these metals displays an anomalous behavior within a specific temperature range (-160 to +40°C); this anomaly is similar to that observed for metals with bcc lattice. The specimens of both austenitic steel and Ni display considerable proneness to hydrogen brittleness, which is the more pronounced the higher the H<sub>2</sub> content of the metal (Fig. 1). These findings

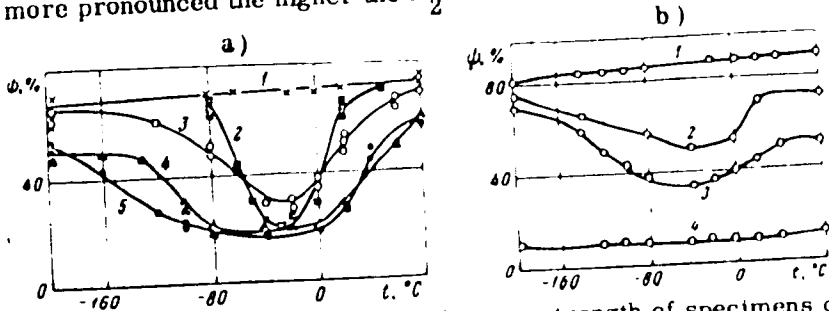


Fig. 1. Temperature dependence of the ultimate strength of specimens of:  
 a - Ni without H<sub>2</sub> (1) and Ni with various concentrations of H<sub>2</sub>: 2 - 0.003%, 3 - 0.005% and 4 - 0.01%; b - 1Kh18N9T austenitic steel without H<sub>2</sub> (1) and with 0.005% H<sub>2</sub> (curve 2).

Card 2/3

• L 44306-66

ACC NR: AP6019840

prove that the hydrogen brittleness of metals with fcc lattice is indeed an universal phenomenon  
Orig. art. has: 5 figures.

SUB CODE: 11,13/ SUBM DATE: 29Jun65/ ORIG REF: 009/ OTH REF: 007/

Card 3/3

NECHAY, Zinovy Stepanovich; STRONGIN, V.L., red.; BALASHOV, V.I., tekhn.  
red.

[Verification of the observance of commercial laws by commercial  
organizations] Proverka sobliudeniya pravil trgovli v trgovoi  
seti. Izd. 2-oe, dop. Moskva, Gos. izd-vo torg.lit-ry, 1957.  
26 p. (MIRA 11:5)

(Commerce)



MECHAY, Z.S.; GLAZUNOVA, V.V., red.; BALASHOV, V.I., tekhn.red.

[Preparation of inspection findings] Oformlenie i realizatsiya  
materialov proverki. Izd. 2-oe, dop. Moskva, Gos. izd-vo tovg.  
lit-ry, 1957. 29 p. (MIRA 11:5)  
(Russia—Commerce)

NECHAY, Zinovy Stepanovich

[Control over the observance of commercial regulations]  
Kontrol' za sobliudeniem pravil torgovli. Moskva, Gos-  
torgizdat, 1961. 54 p. (MIRA 15:8)  
(Russia--Commercial policy)

100-100000, K. W. W. 1000.

copy of the report of the subject hydrographer (cont. 1st)  
2100 100000 100000 (1000 1000)

NECHAYENKO, K.Yu.

Junction of the spillway face of the dam with the downstream apron.  
Sbor. dokl. po gidr. VNIIO no. 1 1974-1975 1974.

(MIRA 18:7)

NECHAYEV, A.A.; GRITSENYUK, N.A.

Conference of the permanent working group on veterinary problems  
of the member states of the Council of Mutual Economic Assistance.  
Veterinariia 38 no.6:22-28 Je '61. (MIRA 16:6)  
(Europe, Eastern—Veterinary medicine--Congresses)

NECHAYEV A.A.; ZAKAMYRDIN, I.A.; LOGVIN, F.

Information and brief news. Veterinaria 40 no.3:92-96  
Mr '63. (MIRA 17:1)

1. Zamestitel' nachal'nika Upravleniya veterinarii  
Ministerstva sel'skogo khozyaystva SSSR (for Nechayev).

NECHAYEV, A.A.; GOMBERG, V.S.; KUZNETSOV, V.F.

Technology of a system for the purification of drilling mud.  
Trudy KNII NP no.17:55-66 '62.

Experimental investigation of the hydrocyclone purification  
of drilling mud. Ibid.:67-87 (MIRA 17:8)

RYBAKOVA, V.M., kandidat tekhnicheskikh nauk.; NECHAYEV, A.G., inzhener.

Yarn stiffness tester. Tekst. prom. 17 no.4:41-43 Ap '57. (MLRA 10:4)  
(Yarn--Testing)



SOLOV'YEVA, L.N.; MUNIN, P.P.; NECHAYEV, A.G.; SHELKOVA, Ye.N.

We have set our course toward communism. Neftianik 8 no.1:8-9 Ja '63.  
(MIRA 16:3)

1. Sotrudniki Tsentral'noy normativno-issledovatel'skoy stantsii  
Glavnogo upravleniya po transportu i snabzheniyu neft'yu i  
nefteproduktami RSFSR.  
(Petroleum—Storage)

NECHAYEV, A.G.; LIKTICHOV, A...

Organizing work for increasing the economic efficiency of the USSR.  
Transp. i khran. nefti no.10:30-34 '63. (11.1.1.1)

1. Glavnoye upravleniye po transportu i skladskomu nefti, gazu i  
produktami NSFSR.

PROKOP'YEV, O.P.; NECHAYEV, A.G.

The petroleum pipeline administration is an enterprise of the Ministry of Fuel and Power of the USSR. (MIRA 10:1)  
labor. Neftianik 8 no.2:5-7 F '63.

1. Sotrudniki Glavnogo upravleniya po transportu i snabzheniyu neft'yu i nefteproduktami RSFSR.

NECHAYEV, A.G.

Table for determining the content of trioxides in petrol.  
Transp. i khran. nefli i nefteprod. no. 5:27-28. 1955.

(Min. 1955)

1. Central'naya normativno-issledovatel'skaya stantsiya  
glavnogo upravleniya po transportu i snabzheniyu nefliyu  
nefteproduktami pri Sovete ministrov RSFSR.

L 07921-67 EWT(1)/EWT(m) IJP(c)

ACC NR: AT6031762

SOURCE CODE: UR/3092/66/000/004/0123/0135

AUTHOR: Belyak, A. Ya.; Gusev, O. A.; Nechayev, A. G.; Rezchikova, N. S.

43  
8+1

ORG: none

TITLE: Controlling the magnetic field derivative during injection into a synchrotron

SOURCE: Moscow. Nauchno-issledovatel'skiy institut elektrofizicheskoy apparatury. Elektrofizicheskaya apparatura, no. 4, 1966, 123-135

TOPIC TAGS: synchrotron, magnetic field intensity, magnetic field stabilization

ABSTRACT: The physical basis for controlling the magnetic field derivative, the method for controlling this derivative, the variation in this derivative as a function of circuit parameters, the selection of circuit parameters, and the methods of stabilizing the derivative are established and verified experimentally by means of a model. The model consisted of a charging network, a discharging network and a system for stabilizing the voltage of the storage capacitor. The model was tested both in the stationary and transient state. The results of the experiment showed that in order to obtain a discharge current pulse with an amplitude of 210 amp, the maximum for the model, the storage capacitor must be charged to a voltage of 2500 v while the voltage of the charging transformer reaches a value of 220 v. A stable operation of the system was obtained by varying the damping resistance in the range from 40 to 400 ohms when the

Card 1/2

L 07921-67

ACC NR: AT6031762

Model was powered by line voltage. Oscillograms of the transient process show that after the circuit is turned on, a steady state is established after 7-8 periods. The stabilization system becomes active during the 6th period. The results of the investigation showed that the equations derived and used to compute the circuit parameters of the model are valid. Orig. art. has: 7 figures, 18 formulas.

SUB CODE: 20/    SUBM DATE: none/    ORIG REF: 003/    OTH REF: 004

Corn 2/2

vmb

MECHAYEV, A.M.

Transportation of patients with acute diseases of the abdominal  
organs. Sov.sdrav. 16 no.3:33-36 Mr '57. (MIRA 10:6)

1. Iz stantsii skoroy pomoshchi Moskovskogo gorodskogo otdela  
sdrevookhraneniya.

(ABDOMEN, ACUTE

transportation of patients)

(AMBULANCES

transportation of patients with acute abdomen)

86864

S/141/60/003/005/019/026

E140/E335

9,7000

AUTHOR: Nechayev, A.M.TITLE: Ferrite Impedance Circuits for Logical Operations  
and Their SynthesisPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy,  
Radiofizika, 1960, Vol. 3, No. 5, pp. 892 - 900

TEXT: The article discusses elements of the type  
**БИМАГ** (BIMAG) (Ref. 2). The basic circuit of the elements  
and the corresponding logical symbol are shown in Fig. 1.  
The system is excited by alternating current so that two-  
phase operation is obtained. The circuit is so arranged that  
in even half-periods current may flow through the diodes -  
is blocked in odd half-periods. Resistance R limits the  
magnitude of current which may flow. Elements X, Y  
indicate the impedances of output windings (W) of other such  
elements. The logical function carried out by this circuit  
is given by:

$$q_{t+1} = q(x_t, y_t) = \bar{x}_t y_t \quad (1)$$

Card 1/4



86864

S/141/60/003/005/019/026  
E140/E335

Ferrite Impedance Circuits for Logical Operations and Their Synthesis

Following the notation of Eq. (1), the element is termed "q-element". In para. 2 rules for the reduction of an arbitrary logical function to a function of q-functions are given (the notation employed is unfamiliar to the Western reader; a discussion may be found in the work of Tsetlin and Shekhtman on non-primitive circuits "Problems of Cybernetics" - Ref. 1). To illustrate the use of the rules presented a three-input eight-output octal decoder is discussed (Fig. 3). Other examples given are a trigger circuit, series adder, binary counter, shown in Figs. 4, 5 and 6, respectively.

Card 2/4

86864

S/141/60/003/005/019/026  
E140/E382

Ferrite Impedance Circuits for Logical Operations and Their  
Synthesis

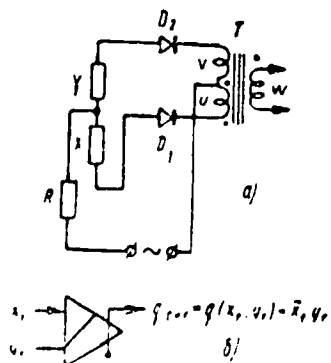


Fig. 1

С. 10 7/7

86864

S/141/60/003/005/019/026  
E140/E382

Ferrite Impedance Circuits for Logical Operations and Their  
Synthesis

There are 6 figures and 4 references: 3 Soviet and  
1 American.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet  
(Moscow State University)

SUBMITTED: December 29, 1959

Card 4/4



... N , kand, tekna, nauk

... physical and mechanical properties ...  
... relation to the mixing time ...  
... 50 ...

...  
...  
...

... Khatirnovskiy avtomatiline ...

NECHAYEV, A.P., aspirant

Low-temperature hydrogenation of vegetable oils on a nickel skeletal catalyst. Trudy MTIPP no.19:22-25 '62. (MIRA 17:4)

MECHAYEV, A.P.

Decisive ecological factor in the ontogenic development of arborescent plants on the Far Eastern bottom lands. Bot.zhur.41 no.7:1028-1035 J1 '56. (Soviet Far East--Forest ecology)(Alluvial lands) (MLBA 9:10)

NECHAYEV, A. P.

USER/ Biology - Botany

Card 1/1 Pub. 86 - 21/42

Authors : Nechayev, A. P., Cand. Geog. Sc. (Khabarovsk State Pedagog. Inst.)

Title : Amur cork tree

Periodical : Priroda 45/1, 105-107, Jan 56

Abstract : The Amur cork tree (*Phellodendron amurense*) is described. The description covers the texture of the trunk, its adaptability to dressing in making wood articles, the fruit and its chemical composition, cork production of the tree, data as to the natural habitat of the tree and its cultivation throughout the world. The need for preservation of the tree in the interest of public economy is urged. Illustration.

Institution : .....

Submitted : .....



USSR / Forestry. Forest Economy

K-3

Abs Jour: Ref Zhur-Biol., No 13, 1956, 50387

Author : Mechayev, A. P.

Inst : Not given

Title : Singularities of Wood Increment in Phellodendron  
Amurense After Removal of the Cork-Bark

Orig Pub: Lesn. k -vo, 1957, No 11, 22-26

Abstract: Studies were conducted on 70-year old trees felled in Khabarovsk in rayon in the summer of 1955. The bark had been removed in the summer of 1940 [correct date?]. It has been established that the removal of the cork has had an influence on the increment. The wood increment declines sharply during the year of cork removal for trees

Card 1/2

Nechayev, A.P.

USSR / Forestry. Forest Plants.

K-5

Abs Jour: Ref Zhur - Biologiya, No. 1, 1958, 1380

Author : Nechayev, A.P.

Inst : Dal'NIILKh /Far-Eastern Sci-Research Inst. of  
Forest Economy/

Title : On the Question of Restoring the Amur Velvet  
/marigold ? - Amurskiy barkhat/ By Injuring the  
Roots

Orig Pub: Botan. zh., 1957, 42, No. 5, 769-772

Abstract: This is a criticism of the new method of dissem-  
inating the Amur Velvet, by cutting through the  
roots of healthy trees, proposed by F.F. Mysh-  
kov and G.A. Tregubov of the Far-Eastern Sci  
Res Inst of Forest Economy. The insufficient  
research and failure to take the biology of the  
Velvet into account in developing the new method  
are pointed out, and its lack of promise and

Card 1/2

BECHAYEV, A.P. (Khabarovsk)

Role of lenticels in the formation of periderm in *Phellodendron*  
*amurense* Rupr. Bot.zhur. 43 no.10:1460-1462 0 '58. (MIRA 11:11)

(Lenticles)

(Amur cork tree)

NECHAYEV, A.P.

Some morphological features of leaf structure in the Amur cork tree (*Phellodendron amurense*). Bot.zhur. 44 no.6:824-830  
Ja '59. (MIRA 12:11)

1. Khabarovskiy pedagogicheskiy institut.  
(Amur cork tree) (Leaves--Morphology)

NECHAYEV, A.P.

Recapitulation of the leaf blade in the Amur cork tree. Nauch.  
dokl. vys. shkoly; biol. nauki no.1:103-107 '60.

(MIRA 13:2)

1.Rekomendovana kafedroy botaniki Khabarovskogo gosudarstvennogo  
pedagogicheskogo instituta.

(Amur cork tree) (Leaves--Morphology) (Plants--Evolution)

NECHAYEV, A.P., kand.geograficheskikh nauk

Alluvium and vegetation in the flood plains of mountain rivers of  
the middle and lower Amur Basin. Amur stor. no 2:168-176 '60.  
(MIRA 15:3)

1. Deystvitel'nyy chlen Geograficheskogo obshchestva SSSR.  
(Amur Province--Alluvial plains)  
(Khabarovsk Territory--Alluvial plains)

NECHAYEV, A.P.

Factors determining natural reproduction in the Amur cork  
tree (*Phellodendron amurense* Rupr.). Bot.zhur. 45 no.1:77-84.  
Ja '60. (MIRA 13:5)

1. Khabarovskiy gosudarstvennyy pedagogicheskiy institut.  
(Amur cork tree) (Afforestation)

NECHAYEV, A.F. (Khabarovsk)

Northern limit of the Amur cork tree. Bot. zhur. 46 no. 12: 1956-  
1959 D '61. (MIRA 1961)

(Soviet Far East—Amur cork tree)



1951 V, A.P.

Ice alluvium in the USSR. Izv. Vses. geogr. o-tdel. 3 no. 1:76-  
78 Jan '61. (U.S.S.R.)

(Soviet ice alluvium on rivers, lakes, etc.)  
(Alluvium)

NECHAYEV, A.P.; DENISENKO, Ya.I.

Kinetics of corn oil hydrogenation with the use of a skeletal  
nickel catalyst. Izv.vys.ucheb.zav.; pishch.tekh. 2:72-75  
'62. (MIRA 15:5)

1. Moskovskiy tekhnologicheskoy institut pishchevoy promyshlennosti,  
kafedra organicheskoy khimii.  
(Corn oil) (Nickel catalysts)

NECHAYEV, AP. (Khabarovsk)

Phellem formation on the perennial superterranean axial organs  
of the Amur cork tree (*Phellodendron amurense* Rupr.) Bot.zhur.  
47 no.11:1630-1640 N '62. (MIRA 16:1)  
(Soviet Far East—Amur cork tree) (Bark)

NECHAYEV, A.P.; NECHAYEV, V.A.

Role of birds in spreading seeds of the Amur cork tree. Izv.  
SO AN SSSR no.8. Ser. biol.-med. nauk no.2:56-61 '63.  
(MIRA 16:11)

1. Khabarovskiy gosudarstvennyy pedagogicheskiy institut i  
Dal'nevostochnyy filial Sibirskogo Otdeleniya Ak SSSR, Vladi-  
vostok.

\*

NECHAYEV, A.P., aspirant

Analysis of the hydrogenation process of sunflower seed and castor  
oils by means of a skeletal nickel catalyst. Trudy MTIPP no. 20:  
8-12 '63. (MIRA 17:4)

V. Joffe, A. I.

Factors of the natural refraction of light in the atmosphere.  
AM U.S.R. Ser. biol. no. 4: 74, 5-1968.

1. Khabarovskiy gosudarstvennyy ped. universitet.

NECHAYEV, A.P.; TEL'NEISEN, I.S.

Significance of the ...  
no. 31.19-423 ...

1. Khabarovskiy gos. det. ...

MECHAYEV, A.P.

Regions of the introduction of Amur cork tree in the  
U.S.S.R. Rest. res. 1 no. 4: 12-520 '65 (MIRA 1961)

1. Khabarovskiy gosudarstvennyy pedagogicheskiy institut.  
Submitted November 16, 1964.



NECHAYEV, Avenir Sergeyevich; DEGTYAREV, Lev Mikhaylovich; IVANOV, Vasily Alekseyevich; CHUMAKOV, Yuriy Viktorovich; SVET, Ye.S., red.; KOLBICHEV, V.I., tekhn. red.

[Mill for the production of spirally welded tubes] Stan dlia proizvodstva spiral'no-svarnykh trub. Cheliabinsk, Cheliabinskoe knizhnoe izd-vo, 1961. 50 p. (MIRA 15:12)  
(Tubes--Welding) (Welding--Equipment and supplies)

NECHAYEV, A.S., inst.

Calculating the flow rate of permanent data sources with a  
given increase possibility by means of electronic digital com-  
puters. Trudy MII" no.181:114-128 '64.

(MIRA 18:1)

NECHAYEV, A.V., mayor meditsinskoy sluzhby

Skin sensitivity in northern people as related to lack of daylight.  
Voen.-med.zhur. no.4:89 Ap '60. (MIRA 14:1)  
(SKIN) (ULTRAVIOLET RAYS—PHYSIOLOGICAL EFFECT)

NECHAYEV, A.V.

Fluorescence as an index of the condition of the skin deposit in  
thiocaine electrophoresis. Vop. kur. fizioter. i lech. fiz.  
kul't. 25 no. 5:404-408 9-0 '60. (MIRA 13:10)

1. Iz kafedry obshchey fizioterapii i kurortologii (nachal'nik-  
prof. A.P. Parfenov) Voenno-morskoy meditsinskoy akademii.  
(ELECTROPHORESIS) (THIOCAINE) (SKIN) (FLUORESCENCE)

NECHAYEV, A.V., vrach-fizioterapevt (Baltiysk)

Some problems in the technic and method of applying a galvanic  
collar. Med. sestra no.5:50-52 My '61. (MIRA 14:6)  
(ELECTROTHERAPEUTICS)

NECHAYEV, B.A.

3299 CURRENT TRANSFORMERS WITH SMALL CORE IN DIFFERENTIAL PROTECTION CIRCUITS OF GENERATORS B.A. Nechayev  
 Report State Inst. Elect. Eng. 1956

W  
W

The use of current transformers with small cores in differential protection circuits of generators with an increased burden of the secondary winding of the current transformer reduces the resistance of the secondary circuit provided that they are made of the same material. Diagrams are shown of tests confirming the theoretical calculations.

F. Busemann

B5

SOV/112-58-2-2140

Translation from: Referativnyi zhurnal: Elektrotehnika, 1958, Nr 2, p 56 (USSR)

AUTHOR: Nechayev, B. A.

TITLE: Investigation of a Generator Differential Protector System Under Through Short Circuit Conditions. (Issledovaniye skhem differentsial'noy zashchity generatorov pri vneshnikh korotkikh замыkaniyakh)

PERIODICAL: Sb. nauch. tr. Ivanovsk. energ. inst. 1958, Nr 2, pp 200-208

ABSTRACT: The value and phase of the unbalanced currents flowing in the event of a through fault are investigated. Some equivalent circuit design formulae, curves, and oscillograms are presented.

Card 1,1

I. 42068-65 EWT(m)/ENP(t)/ENP(b) IJP(c) JD

ACCESSION NR: AP5010908

TR/0286/55/000/007/0096/0096

AUTHORS: Alekseyevskaya, Ye. K.; Nechayev, B. A.; Golovanov, N. N.; Shub, I. Ye.; Novikov, A. N.; Kravets, L. V.

TITLE: A ceramic coating for making casting molds by melting patterns of chemically active metals. Class 31, No. 169762

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 7, 1965, 96

TOPIC TAGS: ceramic coating, casting, molding material, magnesite, olivine, forsterite

ABSTRACT: This Author Certificate presents a ceramic coating for making casting molds by melting patterns of chemically active metals. To obtain castings without sand burning pickup, the filler is made up of materials with basic properties, such as magnesite, olivine, foreterite, and 15-30% of binder for the casting sand.

ASSOCIATION: none

SUBMITTED: 01Jul63

ENCL: 00

SUB CODE: MT, MM

NO REF SOV: 000

OTHER: 000

*am*  
Card 1/1



BECHAYEV, B.I., inzhener.

The effect of petroleum products on the stability of clayey  
rocks. Trudy TSNII MPS no.89:26-41 '54. (MIRA 8:2)  
(Railroad engineering)(Soil stabilisation)(Petroleum  
products)

NECHAYEV, B. I.

"Study of Deformations of Clayey Rocks in Slide Prevention  
Tunnels." Min Land Transportation USSR, All-Union Sci Res Inst of  
Railroad Transportation, Moscow, 1955. (Dissertation for the Degree  
of Candidate in Technical Sciences)

SO: M-955, 16 Feb 56

NECHAYEV, Boris Ivanovich, kandidat tekhnicheskikh nauk; BOBROVA, Ye.N.,  
tekhnicheskii redaktor.

[Deformations in clayey soils of antilandslide earthworks] Deformatsii  
glinistykh porod v protivopolsnevnykh vyrabotkakh. Moskva, Gos.transp.  
zhel-dor.isd-vo, 1957. 150 p. (Moscow. Vsesoiuznyi nauchno-issledovatel'-  
skii institut zheleznodorozhnogo transporta. Trudy, no.121) (MLRA 10:4)  
(Soil mechanics)  
(Railroads--Earthwork)

SHAKHUNYANTS, G.M., doktor tekhn.nauk, prof.; NECHAYEV, B.I., kand.  
tekhn.nauk; KLEVTSOV, I.A., kand.tekhn.nauk; PASHCHENCO,  
B.V., inzh.; PETUSHEVA, I.P., inzh., red.; BOBKOVA, Ye.,  
tekhn.red.

[Landslide protection on railroads of the U.S.S.R.] Opytbor'by  
opolzniama zheleznikh dorogakh SSSR. Moskva, Vses. izdatel'sko-  
poligr. ob"edinenie M-va putei soobshchenia, 1961. 183 p.  
(Moscow. Moskovskii institut inzhenerov zheleznodorozhnogo  
transporta. Trudy, no.211.) (MIRA 14:1)  
(Landslides) (Railroads--earthwork)