current density of 0.20 to 0.25 A/cm^2. The influence is discussed of the anode material, of the bath temperature, of the process of duration and of the chemical composition of the steel on the depth of the borated layer. The structure and the hardness of the borated layer are also discussed. The authors conclude that the quality of the borated layer forming on the investigated steels depends on the temperature of the electrolytic bath during the process and on the duration of the process; if the duration exceeds six hours and the bath temperature exceeds 950 C, the borated layer will become brittle. On the basis of microstructural analysis the optimum technological regime of electrolytic borating of the investigated steels is 950 C with a duration of six hours. The hardness of the borated layer is higher for the investigated low alloy steels than it is for the carbon Steel 35. The microhardness of the surface phase of some of the investigated borated low alloy steel specimens reached up to 2500 kg/mm^2. Fig.1 shows the general arrangement of the test set-up; the graph, Fig.2, shows the dependence of the thickness of the borated layer on the bath temperature for a process duration of four hours; microphotos, Figs.3-6 show the structure of the borated layer of three low

Surface borating of low alloys steels. (Cont.)

alloy steels and of one carbon steel. 6 figures, 2 tables and 6 Slavic references.

ASSOCIATION: Moscow Oil Institute imeni I. M. Gubkin. (Moskovskiy Neftyanoy Institut imeni I.M.Gubkina).

AVAILABLE:

Card 3/3

TARAN, V.D., prof., doktor tekhn.nauk; SKUGOROVA, L.P., kand.tekhn.nauk

Behavior of borated surfaces under cone bit impact loads. Trudy MNI no.20:146-153 '57. (MIRA 13:5)
(Boring machinery)

SKUGOROVA, L. P.

18 18 4E2c

Boriding rubbing surfaces of alloy steels. V. D. Turan and L. P. Skugorova. *Vestnik Mashinostroeniya* 37, No. 5, 62-5(1957).—Specimens immersed as cathodes in molten $Na_2B_4O_7$ are subjected to 20–25 amp./sq.dm. Sodium ppts. on the cathode and reduces borax to metal, which alloys with the steel forming Fe borides and resulting in a very hard case, the hardness of which depends to some extent on the compn. of the base. Optimum boriding temp. is 920–50° and optimum time 6 hrs. Higher temp. decreases wear resistance and longer treatment time increases brittleness of the case. I. D. Get

RB MT

TARAN, V.D.; SKUGOROVA, L.P.

Testing the durability of borated race ways of roller bit supporting shanks. Izv. vys. uchab. zav.; neft' i gaz no.2:113-118 '58. (MIRA 11:8)

1. Moskovskiy neftyanoy institut im. akad. I.M. Gubkina.
(Boring machinery)

SOV/137-58-9-19411

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 9, p 181 (USSR)

AUTHORS: Taran, V.D., Skugorova, L.P.

TITLE: Boriding as a Method for Toughening the Bearings of Milling-machine Cutters (Borirovaniye kak sposob uprochneniya opory sharoshechnykh dolot)

PERIODICAL: Materialy Mezhvuz. nauchn. soveshchaniya po vopr. novoy tekhn. v neft. prom-sti, 1958, Vol 3, pp 156-163

ABSTRACT: Investigation of the effect of the fundamental factors of the process of boriding (B) (anode material, composition of the bath, temperature, duration of B. and chemical composition of the material) on the thickness and quality of the borided layer (BL) and also of the microstructure and hardness of BL was conducted on 12KhN2A, 12KhN3A, 30KhGSA, 40Kh, 55S2A, and St. 35 grades of steel. B was carried out at 850, 950, 1000, and 1100°C for durations of 4, 6, 8, and 12 hours. It was discovered that BL increases considerably upon an increase of temperature only up to 950-1000°; at more elevated temperatures BL becomes brittle. The BL of 30KhGSA-grade

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Boriding as a Method for Toughening the Bearings of Milling-machine (cont.)

steel is the thickest, that of 40Kh-grade steel the thinnest. The typical structure of the BL of the structural steels investigated (B at 950° for 4 hours) consists of acicular dendrite crystals oriented perpendicularly to the surface of the specimen. By means of testing on the stand of the working properties of BL on specimen-models applicable to the working conditions of a large roller race of the bearing for a triple milling cutter, the optimum conditions for B were established: Temperature 920-950°, soaking 6 hours. The wear resistance of borided specimens is 60% higher than that of the carburized ones and 12 times higher than the wear resistance of quenched specimens. It is recommended that the bearings of drilling cutters be borided to increase the strength of the friction surfaces.

A.B.

1. Machine tools--Equipment 2. Bearings--Processing 3. Metal coatings --Applications 4. Borides

TARAN, V.D., prof., doktor tekhn.nauk; SHREYBER, G.K., dotsent, kand. tekhn.nauk; SKUGOROVA, L.P., kand.tekhn.nauk; SAAKIYAN, L.S., assistent, kand.tekhn.nauk; DUDA-ZAKSON, R.I., kand.tekhn.nauk; POLFEROV, A.P., inzh., starshiy prepodavatel'.

[Studying the materials used in the petroleum industry] Neftianoe materialovedenie. Pod obshchei red. V.D.Tarana. Moskva, Mosk. in-t neftekhim. i gazovoi promyshl. Pt.1. [Steel and cast iron] Stali i chuguny. 1959. 179 p. (MIRA 13:1)
(Steel) (Cast iron)

SKUGOROVA, L. P.

18.7400

77153
SOV/129-60-1-1/22

AUTHORS: Taran, V. D. (Doctor of Technical Sciences, Professor), Skugorova, L. P. (Candidate of Technical Sciences)

TITLE: Boronating Steel With Galvanic Coating

PERIODICAL: Metallovedeniye i termicheskaya obrabotka metallov, 1960, Nr 1, pp 2-5 (USSR)

ABSTRACT: The authors investigate the effects of boronating nickel- and copper-coated steel. It is known that boron does not dissolve in nickel and merely forms borides, while no data are available on the interaction of boron and copper. Sequence of tests: 15 mm high steel 35 and 50 specimens (0.35 and 0.50% C, respectively) with 10 and 15 mm diam were used. (1) Nickel-plated specimens were boronated at 950 to 960° C for 60, 90, and 120 min, as well as for 4 hours. Microstructural analysis revealed that the nickel layer did not impede the penetration of boron. The boronated layer of nickel-plated specimens was found to have the same structure as in regular steel specimens. The authors assume this to be a result of

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the reaction between elementary boron and nickel, which leads to the formation of an integral diffusion layer. Microhardness of the boronated layer measured with a 100 g load exceeded 1,500 kg/mm^2. The wide range of changes in the microhardness of tested specimens testifies to the inhomogeneity of the boronated layer. Increases in the thickness of the nickel layer (0.008 to 0.036 mm) failed to produce a heavier boronating layer. (2) Copper-plating was carried out in H_2SO_4 electrolyte. Microstructural analysis revealed the absence of any reaction between elementary boron and the copper layer. The latter impedes the penetration of boron. Occasional penetration is due to inadequate Cu-layer thickness or the presence of cracking and other imperfections. The authors found that a copper layer with maximum thickness of 0.10 mm leads to the formation of a considerably thinner boron sublayer. Microhardness of the sublayer varied from 1,000 to 1,600 kg/mm^2, and that of the copper layer from 80 to 140 kg/mm^2. Boronating had no effect on the hardness of

the copper layer. The depth of penetration of boron into steel 50, as it depends on the thickness of the copper layer during boronating for 2 hours at 950 to 960° C, is shown in Fig. 5.

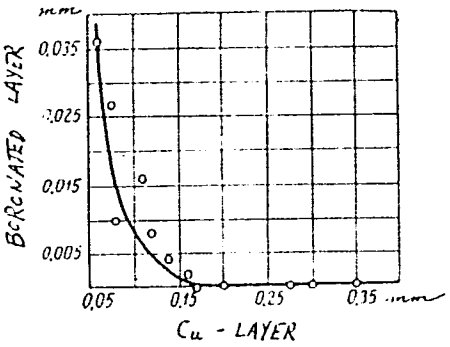

Fig. 5. Relationship curve of the depth of B penetration into steel 50 on the thickness of Cu—layer.

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Boronating Steel With Galvanic Coating

77153
SOV/129-60-1-1/22

Boron diffusion was completely arrested by increases in the thickness of the copper layer (over 0.1 mm). In recommending the use of galvanic copper-plating as a local protection during boronating, the authors emphasize the importance of having an adequately heavy sound copper layer. The boronating of Cu-Zn and Cu-Sn alloys revealed neither brass nor bronze to be susceptible to boronating. There are 7 figures; 1 table; and 6 Soviet references.

ASSOCIATION: Moscow Petroleum Institute imeni I. M. Gubkin, Academician (Moskovskiy neftyanoy institut imeni Akad. I. M. Gubkina)

Card 4/4

S/135/61/000/002/004/012
A006/A001

AUTHORS: Taran, V. D., Professor, Doctor of Technical Sciences, Slugorova, L.P., Candidate of Technical Sciences

TITLE: Electron-Microscopic Investigation of Ferrite Streaks in Main Pipeline Butts

PERIODICAL: Svarochnoye proizvodstvo, 1961, No. 2, pp. 12-15

TEXT: The presence of a ferrite streak located at the border of the joint is characteristic of press-welded main pipeline butts. Opinions in literature are contradictory on the property and formation conditions of the ferrite streak. A spectral analysis has shown (Ref. 5) that joints produced by resistance fusion welding are characterized by a homogeneous chemical composition of the base and weld metals. The joint is formed by connecting heated pipe butts by a pressure of 600 kg/cm^2 and higher. It is assumed that the ferrite streak appears as a result of pressure. A study of the nature and formation conditions of this ferrite streak will permit the determination of factors affecting the evaluation of the property of weld joints in resistance welding. In this connection the authors investigated the fine structure of the ferrite streak by the electron-microscopic method using

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S/135/61/000/002/004/012
A006/A001

Electron-Microscopic Investigation of Ferrite Streaks in Main Pipeline Butts

the ЭМ-3 (EM-3) electron microscope at 5,000 - 10,000 magnification. The structure of welds was studied on the МИМ-8 (MIM-8) microscope and ferrite microhardness was measured on the ПМТ-3 (PMT-3) device under 100 and 50 g load. Specimens were cut out of large diameter pipes resistance fusion-welded on a portable КТСА-1 (KTSA-1) machine. The pipes were made of 10Г2СД(10G2SD) steel, their diameter was 529 mm; their walls were 7 mm thick. Welding conditions were: specific power 2 kw/cm^2; upsetting pressure - 4 kg/mm^2; fusion - 25 mm; upsetting - 11 mm. Butts made with disalignment and with alignment of edges were examined (Fig. 1). The investigation has shown that recrystallization of the metal in the plastic zone of the weld joint is accomplished during resistance welding in the whole temperature range (from solidus temperature 200 - 400°C) under the external upsetting pressure which practically does not change in the course of the process. The formation of the weld structure is noticeably affected by pressure which is usually not taken into account when investigating structural processes (external independent condition). Therefore the ferrite streak forming under the effect of external pressure, is different from conventional ferrite forming during heat treatment. The ferrite in the streak is stronger than that in the base metal, whereas the ferrite grains of the base metal show a greater capacity of being

Card 2/4

Electron-Microscopic Investigation of Ferrite Streaks in Main Pipeline Butts

etched than the ferrite streak grains.

Figure 1
Macrostructure of butts produced by resistance welding with disalignment of edges

Figure 1:

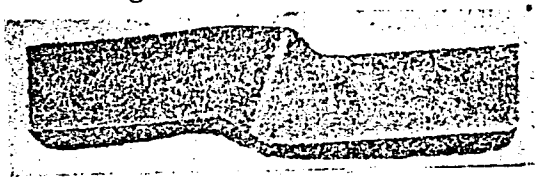


Figure 5
Electron-microscopic ferrite structure of the streak (butt produced with alignment of edges) x 10,000

Figure 5:

S/135/61/000/002/004/012
A006/A001

Electron-Microscopic Investigation of Ferrite Streaks in Main Pipeline Butts

Table
Microhardness of ferrite in kg/mm^2

Load in g	Microhardness of ferrite streak	Microhardness of base metal ferrite of the pipe at a distance from the streak in mm	
		5	10
100	206 - 254 / 221	181 - 206 / 198	-
50	192 - 232 / 224	161 - 192 / 173	137 - 175 / 156

There are 1 table, 6 figures and 11 references: 9 Soviet and 2 English.

ASSOCIATION: Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni Gubkina (Moskow Institute of Petroleum Chemistry and Gas Industry imeni Gubkin)

Card 4/4

TARAN, V.D.; SKUGOROVA, L.P.

Choice of material for three roller bits. Izv. vys. ucheb. zav.; neft' i gaz 4 no.4:109-116 '61. (MIRA 15:5)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika Gubkina.
(Oil well drilling--Equipment and supplies)

TARAN, V.D.; SKUGOROVA, L.P.

Choosing tool steels for roller bits. Trudy MINKHiGP no.34:20-30 '61. (MIRA 14:12)

(Tool steel--Testing)
(Boring machinery)

TARAN, V.D.; SKUGOROVA, L.P.

Bits having cones made from quick-cutting steel. Izv. vys. ucheb. zav.; neft' i gaz 6 no.4:105-110 '63.
(MIRA 16:7)

1. Moskovskiy institut neftekhimicheskoy i gazovoy promyshlennosti imeni akademika Gubkina.
(Oil well drilling--Equipment and supplies)

SKUGRAVI, V.

Ground traps. Vop. ekol. 4:144-146 '62. (MIRA 15:11)

1. Akademiya nauk Chekhoslovakii, Praga.
(Insect traps)

SKUGRAVY, V.

LANDA, V.; GRDY, I.; NOVAK, K.; SKUGRAVY, V.

Results of research on cockchafer control in Czechoslovakia [with summary in English]. Zool. zhur. 37 no.3:394-402 Mr '58. (MIRA 11:4)

1. Entomologicheskaya laboratoriya Chekhoslovatskoy AN, Praga.
(Czechoslovakia--Cockchafers)

SKUGRAVY, V. [Skuhravy, V.]; NOVAK, K.

Studying insect associations of field crops. Ent. oboz. 40 no.4:807-814 '61. (MIRA 17:1)

1. Entomologicheskaya laboratoriya AN Chekhoslovatskoy Sotsialisticheskoy Respubliki, Praga.

TIHON, E.; BARTEK, J.; SKUHERSKY, K.

Hormonal therapy of exudative pleurisy. Cas. lek. cesk. 98 no.36: 1123-1130 4 Sept 59

1. Tuberkulozni oddeleni Okresniho ustava narodniho zdravi v Uh. Hradisti, prednosta primar MUDr. Emanual Tibon . Centralni laboratori Okresniho ustavu narodniho zdravi v Uh. Hradisti, prednosta primar MUDr. Josef Bartek.
(HORMONES, ther.)
(PLEURISY, ther.)

SKUHRAVA, Marcela, Dr. (Vinicna 7, Praha 2)

Geographical location of certain gall gnats in northwestern Moravia (Dipt., Itonididae). Cas entom 58 no.2:184-192 '61.
(EEAI 10:9)

1. Ceskoslovenska spolecnost entomologicka, Praha.

(Gall-gnats)

SKUHRAVY, Vaclav, dr., C.Sc. (Vinicna 7, Praha 2); SKUHRAVA, Marcela, dr. (Vinicna 7, Praha 2)

Bionomics and distribution of poppy gall midges Clinodiplosis papaveris (Kjell.) (Diptera, Itonididae). Cas entom 59 no.3:221-233 '62.

1. Entomologisches Institut der Tschechoslowakischen Akademie der Wissenschaften (for Skuhravy). 2. Tschechoslowakische entomologische Gesellschaft, Praha (for Skuhrava).

SKUHRAVA, Marcela, dr. (Prague 2, Viniena 7)

On the morphology and ecology of Taxomyia taxi (Inchbald) (Diptera, Itonididae). Cas entom 61 no.2:106-112 '64.

1. Czechoslovak Entomological Society affiliated with the Czechoslovak Academy of Sciences, Prague.

SKUHRAVA, Marcela, prom. biol.

Spreading of Taxomyia taxi (Inchbald) in Czechoslovakia and the damage caused by it. Lesn cas 11 no.1:71-78 Ja '65.

1. Czechoslovak Entomological Society affiliated with the Czechoslovak Academy of Sciences, Prague 1, Vinicna 7. Submitted April 28, 1964.

I-5

COUNTRY : Czechoslovakia
CATEGORY :
ABS. JOUR. : RZBiol., No. 19, 1958, No. 87700
AUTHOR : Skuhrava-Hellerova, M.
INST. :
TITLE : Gall Midges of Hlucinska Region.

ORIG. PUB. : Prirodoved. sbor. Ostravskeho kraje, 1957, 18, No 1, 83-94

ABSTRACT : A list of 69 species of gall midges collected in 17 places north of Ostrava. Information on ecology of individual species.

CARD:

SKUHRAVÝ, V., and others.

"Fight Against Cockchafers (Melolontha Melolontha L.) by Spraying With Hexachlorocyclohexane in 1952." p. 111.
(Zoologicke A Entomologicke Listy. Vol. 2, no. 2, June 1953. Praha).

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

CZECHOSLOVAKIA / General and Specialized Zoology. Insects. P

Abs Jour: Ref Zhur-Biol., No 2, 1958, 6754.

Author : Landa, V., Novak, K., Skuhravy, V.
Inst : Not given.
Title : A Contribution to the Problem of Controlling the May Beetle Larvae. (Melolontha melolontha L.).

Orig Pub: Zool. listy, 1956, 5, No 2, 125-134.

Abstract: All the larvae of the May beetle perished in the upper surface of the soil when a disc cultivator was used in the treatment of the field. The larvae which were lying deeper than 5 cm were not hurt by the cultivator. The total mortality rate of the larvae was 37%. Shallow plowing immediately after harvesting the beets greatly damaged by the beetles, led to the destruction in the first

Card 1/2

SKUHRAVY, Vaclav

Entomofauna bramboriste a jeji vyvoj. (Insects in the Potato Fields and Their Evolution. German summaries. illus., bibl.) Authors: Vaclav Skuhravy, Karel Novak. Prague, CSAV, 1957. 50 p. Vol. 67/1957, No. 7 of the series Rozpravy Cs. akademie ved. R. matematickych a prirodnich ved. (Transactions of the Czechoslovak Academy of Sciences. Series on Mathematics and Natural Sciences)

Types and evolution of insects in potato fields. The study is based on authors' research made in Luzany in 1954. The special part contains quantitative date on the individual families identified in various seasona; the results are summarized in tables.

Bibliograficky katalog, CSR, Ceske knihy, No. 32. 17 Sept 57. p. 679.

CZECHOSLOVAKIA / General and Special Zoology. P
Insects.

Abs Jour: Ref Zhur-Biol., No 3, 1958, 11738

Author : Novak K., Skuhravy V.
Inst : Not given
Title : The Influence of DDT Aerosols on Some Insect Species of the Potato Field.

Orig Pub: Zool. listy, 1957, 6, No 1, 41-51

Abstract: DDT aerosol as a 10% oil solution was used against the potato beetle. The insect population was counted 11 times in June-September every 7-14 hours. The insects were caught by the use of rotten meat bait, in gauze fibers; simultaneously a count of aphids on 600 leaves and a computation by the square method (6 per 1 m^2) were made. Six hours after treatment with insecticide the majority of insects

Card 1/3 19

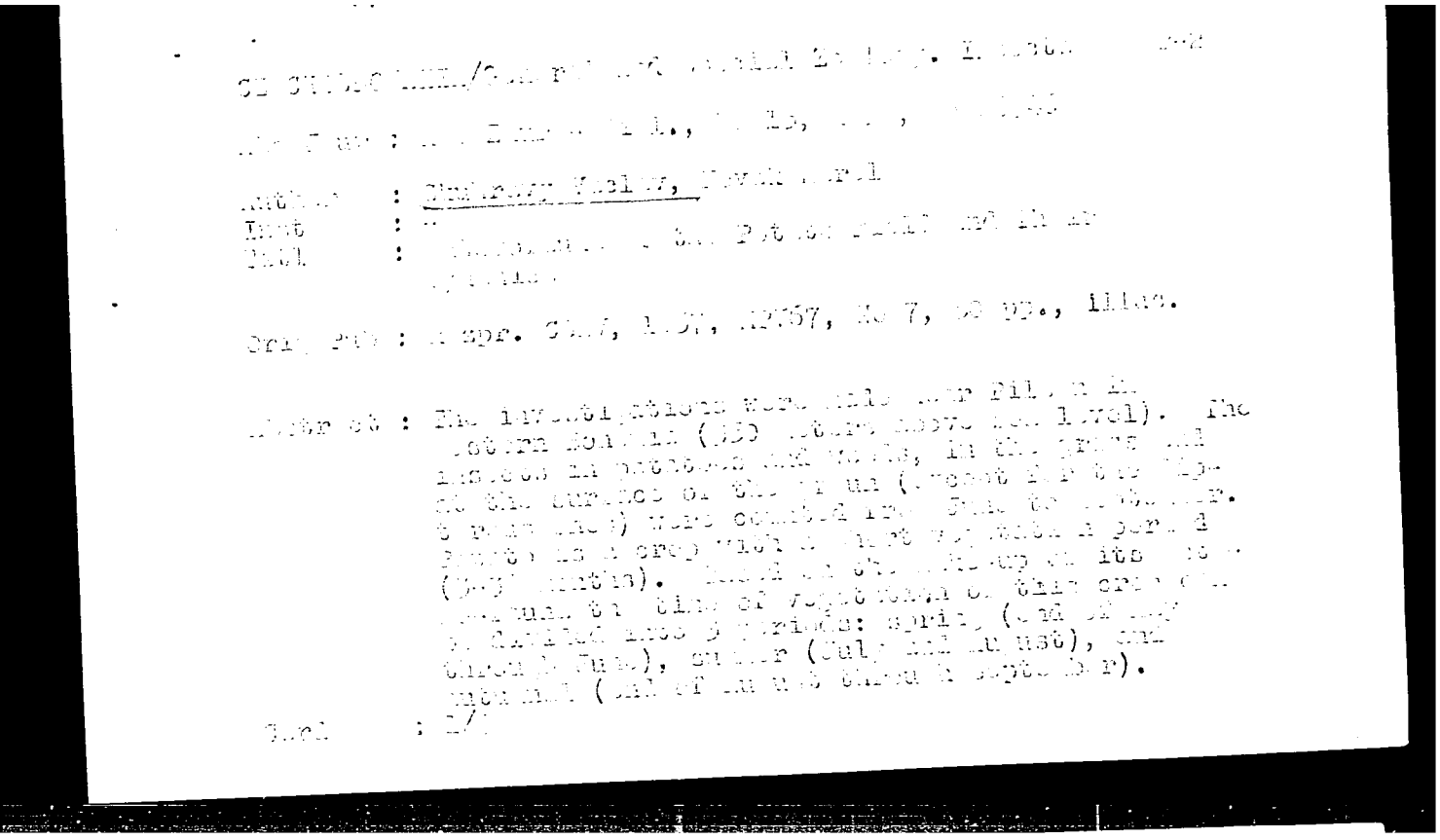
Abs Jour: Ref Zhur., Biol., No 3, 1958, 11738

Abstract: perished. For three days after the DDT treatment almost no insects were found on the plot. Towards the entomological fauna was gradually established by the insect population of the adjacent untreated sections. At first the diptera and hymenoptera insects appeared. The restoration of the numbers of different species occurred with various speed depending on the migrating ability of the insect and its stage of development during the insecticide treatment. Insects treated immediately after copulation and egg-laying disappeared almost totally because of their natural mortality during this period (Pterosticus cupreus and Brachynus crepitans), while slow moving insects (aphids Doralis rhamni and Myzodes persicae) and

Card 2/3

CZECHOSLOVAKIA / General and Special Zoology. P
Insects.

Abs Jour: Ref Zhur-Biol., No 3, 1958, 11738



Skuhravy, V.; Novak, K.; Stary, P.

Entomofauna of the clover and its development. p. 3.

ROZPRAVY. RADA MATEMATICKO-PRIRODOVEDECKA. Praha, Czechoslovakia. Vol. 69, no. 7, 1959.

Monthly List of East European Accessions, (EEAI) LC, Vol. 8, no. 10, 1959 -Oct. Uncl.

SKUGRAVY, Vatslav [Skuhravy, Vaclav]

Methods of collecting and estimating the number of insects in studying the insect associations of field crops. Zashch. rast. ot vred. i bol. 6 no.7:54-55 Jl '61. (MIRA 16:5)

1. Entomologicheskaya laboratoriya Chekhoslovatskoy akademii nauk, Praga.

(Insects--Collection and preservation)

SKUGRAVY, V. [Skuhravy, V.]; NOVAK, K.

Studying the entomofauna of weeds as an integral part of the entomofauna of fields. Vop. ekol. 7:168-169 '62. (MIRA 16:5)

1. Akademiya nauk Chekhoslovatskoy Sotsialisticheskoy Respubliki, Praga.

(Czechoslovakia—Weeds)
(Czechoslovakia--Insects, Injurious and beneficial)

SKUHRAVY, Vaclav, dr., C.Sc. (Vinicna 7, Praha 2); SKUHRAVA, Marcela, dr. (Vinicna 7, Praha 2)

Bionomics and distribution of poppy gall midges Clinodiplosis papaveris (Kjell.) (Diptera, Itonididae). Cas entom 59 no.3:221-233 '62.

1. Entomologisches Institut der Tschechoslowakischen Akademie der Wissenschaften (for Skuhravy). 2. Tschechoslowakische entomologische Gesellschaft, Praha (for Skuhrava).

SKUHRAVY, V.

"Forest protection" by A. Pfeffer and others. Reviewed by V. Skuhravy. Cas entom 60 no.1/2:173-174 '63.

SKUHRAVY, Vaclav

Leaf bugs on sugar beet. Listy cukrovar. 79 no.3:52-56 Mr '63.

1. KORGANOVA, A. N.; SKUIN', E. YA.

2. USSR (600)

4. Penicillin - Therapeutic Use

7. Use of penicillin in a children's psychiatric clinic. Zhur. nevr. i psikh. 52 no.10, 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

SKUIN', Ye.Ya.

KIRILLOVA, Z.A., nauchnyy sotrudnik; KORGANOVA, A.N., kandidat meditsinskikh nauk; SKUIN', E.Ya., kandidat meditsinskikh nauk; FEDOTOV, D.D., dotsent, direktor; SIMSON, T.P., professor, zaveduyushchiy detskim otdelom Gilyarovskiy, V.A., deystvitel'nyy chlen Akademii meditsinskikh nauk, SSSR nauchnyy rukovoditel'.

Results of electric sleep therapy in a children's psychiatric clinic. Vop. pediat. 21 no.2:18-21 Mr-Ap '53. (MLRA 6:6)

1. Akademiya meditsinskikh nauk SSSR (for Gilyarovskiy). 2. Nauchno-issledovatel'skiy institut psikhiatrii Ministerstva zdravookhraneniya SSSR. (Sleep) (Psychoses)

SKUIN, E. YA.

The use of glutamic acid in the psychiatric clinic. V. E. Galenko, N. A. Gavrilova, E. Ya. Skuin, and O. A. Shishova. *Zhur. Nevropatol. i Psikhiatrii im. Korsakova* 55, 851-6(1955).—A favorable effect of glutamic acid (I) administration to patients having symptoms of astheno-depression and of hypochondria of schizophrenic and somatic characte was observed, but was more pronounced when I was used as a supplement to vitamin therapy, or to therapeutic doses of insulin, or to hemotransfusions. When I was used as a supplement to pharmacologic sleep, the sleep was considerably deeper and the usual toxic effects were markedly reduced. Where therapeutic effect of I was considerable, there was an evident improvement in the indices of N and P metabolism: a lowering in the blood NH_4OH and amino-N, an increase in the protein-lipide and acid-sol. P ratio and a lowering in the inorg. P and P-esters of the blood.

B. S. Levine

4

SKUIN', E. YA.

GALENKO, V.Ye.; GAVRILOVA, N.A.; SKUIN', E.Ya.; SHISHOVA, O.A.

Using glutamic acid in psychiatric practice. Zhur.nevr. i psikh.55 no.11:856-861 '55 (MLRa 8:11)

1. Institut psikhiatrii Ministerstva zdravookhraneniya SSSR (dir.--dotsent D.D.Fedotov)

(GLUTAMATES, therapeutic use
ment. disord.)
(MENTAL DISORDERS, therapy
getamic acid)

GILYAROVSKIY, V.A., redaktor; BELETSKIY, V.K., redaktor; SEGAL', Yu.E., redaktor; SKUIN', E.Ya., redaktor; SIMSON, T.P., redaktor; FEDOTOV, D.D., redaktor; KHACHATURYAN, A.A., redaktor; GUREVICH, L.A., redaktor.

[Problems in psychiatry; abstracts of scientific works by the Psychiatry Institute of the Ministry of Health of the U.S.S.R. (1945-1953)] Voprosy psikhiatrii; avtoreferaty nauchnykh rabot Instituta psikhiatrii Ministerstva zdravookhraneniia SSSR (1945-1953 gg). Pod red. V.A.Giliarovskogo i dr. Moskva, 1956. 453 p. (MIRA 10:11)

1. Russia (1923- U.S.S.R.) Ministerstvo zdravookhraneniya. Institut psikhiatrii. 2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Gilyarovskiy).
(Psychiatry)

SKUIN', E. YA.

USSR/Pharmacology - Toxicology, Aminoacid Compounds. U-7

Abs Jour : Ref Zhur - Biol., No 3, 1958, 13061

Author : Brayness, S.N., Skuin', E.Ya., Stanishevskaya, N.N.
Inst : -
Title : A Trial of Methionine in the Treatment of Schizophrenia

Orig Pub : V kn.: Tr. Konferentsii po prouzvodstvu i ispol'zovaniyu aminokislot v med. M., MGU, 1956, 79-88.

Abstract : No abstract.

Card 1/1

V

USSR/Pharmacology. Toxicology. Tranquilizers

Abs Jour : Ref Zhur - Biol., No II, 1958, No 51916

Author : Skuin E.Ya.
Inst : -
Title : Comparative Data of Changes of Indices of the Nitrogen Metabolism and Oxidative Processes in the Therapy of Schizophrenia with Aminazine, Serpasil and Neurotoxic Serum

Orig Pub : V. sb. Vopr. psikhiatrii, Vyp 2, M., 1957, 118-122

Abstract : Biochemical investigation have demonstrated that following administration of aminazine (I) and serpasil (II) to schizophrenic patients, an increase of the peroxydase phase prevails, as well as an increase of free oxygen content of the blood, which, according to the opinion of the author, is due to inhibition of oxydative processes. The general effect of II, as judged from all the biochemical indices, differ from the action of I by less pronounced biochemical shifts, which is proof of a milder and

Card : 1/2

SIMSON, T.P.; SKUIN', E.Ya.; DEGLIN, V.Ya.

Psychotic disturbances and some pathophysiological and biochemical data in virus influenza (A_2) in children and adolescents. Vop. psikh. no. 3:446-455 '59. (MIRA 13:10)
(METAL ILLNESS) (INFLUENZA)

G/029/62/000/002/003/003
I014/I252

AUTHORS: Kiesel, K.L., Skuin, K., Liebscher, O., and Rockstroh, K.

TITLE: A study of the cast structure of heavy forging ingots

PERIODICAL: Neue Hütte, no.2, 1962, 111-123

TEXT: The study aimed at determining the extent and location of defects in forging ingots and the effect of top heating on ingot structure. To date, eight ingots of 7.5 to 45 tons have been studied by means of Baumann imprints and macro-etching on the longitudinal section. Two specimens were heated electrically and two exothermically. In all ingots a heterogeneous core with secondary pipes and cracks was observed, as well as segregation strips of 5-6 mm width down to the bottom third of the ingot. Their content increased with increasing dimensions of the ingots. The number of specimens studied to-date is too small to determine the influence of casting conditions and mold dimensions on ingot structure. Top

Card 1/2

G/029/62/000/002/003/003
I014/I252

A study of the cast structure...

heating affected solidification inside the core. All top-heated specimens showed flattened primary pipes underlaid with zones of pure dense metal, while the core showed secondary pipes and cracks. Further tests are in progress with a view to determining the influence of mold form and dimensions. There are 19 figures and 4 tables.

SUBMITTED: November 10, 1961

Card 2/2

USSR/Cultivated Plants - Fruits, Berries.

Abs Jour : [illegible] - Biol., No 9, [illegible], 33527

Author : Shalin', K.F.
Inst : -
Title : Half Fan-Training.

Orig Pub : Vinodeliye i vinogradarstvo, USSR, 1957, No 3, 22-26.

Abstract : A half fan training which provides for mechanized soil treatment and the maintenance of the vineyard is recommended. It creates better conditions of growth and development for the sprouts and presents greater facilities with regard to the regulation of the load of the shrubs and of the density of planting. The half fan training differs from fan training in that it permits the replacement and the replenishment of branches due to the regenerating knot. The author explains that this knot is situated at the base of the stem of the shrub. Thus, the

Card 1/2

USSR/Cultivated Plants - Fruits, Berries. M-3

Abs Jour : Ref Zhur - Biol., No. 1, 1958, 39527

sprouts can be distributed regularly on the trellis. --
Ye. A. Ukhanevskaya.

Card 2/2

- 104 -

BLAGONRAVOV, Petr Porfir'yevich, kand.sel'skokhozyaystvennykh nauk; NEGRUL', A.M., prof., retsenzent; SKUIN', K.P., kand.sel'skokhozyaystvennykh nauk, spetsredaktor; PRITYKINA, L.A., red.; SOKOLOVA, I.A., tekhn. red.

[Choice of location for vineyards and the selection of varieties] Vybor uchastka dlia zakladki vinogradnika i podbor sortov. Moskva, Pishchepromizdat, 1958. 164 p. (MIRA 11:7)
(Viticulture)

SKUJANS, R.

An abbriviated identifer for Latvian soils.

P. 12. (PADOMJU LATVIJAS KOLCHOZNIEKS) (Riga, Latvia) Vol 1, No. 12, Dec. 1957

SO: Monthly Index of East European Accession (EEAI) LC. Vol. 7, No. 5, 1958

SKUJANE, , dots., kand. sel'khoz.nauk; [illegible], S., kand. sel'khoz. nauk, izpolnyayushchiy obyazannosti dots.; NEILANDE, A., red.

[Soil research] Augsnu petījumi. 2. papildinātais izdevums. Riga, Latvijas Valsts izdevn., 1954. 312 p. [In Latvian]

SKUKALEK, R.

The countryside with a castle; a poem. p. 263. KRASY SLOVENSKY. Bratislava. Vol. 31, no. 9, Sept. 1954.

SOURCE: East European Accessions List. (EEAL) Library of Congress. Vol. 5, No. 8, August 1956.

GRISHAYEV, I.A.; KONDRATENKO, V.V.; PETRENKO, V.V.; POPOV, A.T.; SKUKBKO, V.A.

Output unit of a linear electron accelerator up to an energy of 90 Mev. Prib. i tekh. eksp. 8 no.2:26-28 Mr-Ap '63. (MIRA 16:4)

1. Fiziko-tekhnicheskiy institut AN UkrSSR.
(Particle accelerators)

SKUKINA, E.M.; LIMBERG, A.A., professor, chlen-korrespondent Akademii meditsinskikh nauk SSSR, laureat Stalinskoy premii, zaveduyushchiy; GAVRILOV, R.I., professor, direktor.

Application of plastic material AKR-7 in replacement of facial bone defects. Stomatologiia no.3:43-46 '53. (MLRA 6:7)

1. Kafedra khirurgicheskoy stomatologii Leningradskogo meditsinskogo stomatologicheskogo instituta (for Skukina and Limberg). 2. Leningradskiy meditsinskiy stomatologicheskiy institut (for Gavrilov). 3. Akademiya meditsinskikh nauk SSSR (for Limberg).
(Face--Wounds and injuries) (Surgery, Plastic)

SKULA,E.; JEZDINSKY,J.

Our experiences with the treatment of diseases of the dd age with procaine. Cesk. fysiol. 9 no.4:378-379 Jl '60.

1. Osetrovaci ustav OUNZ,Prostejov a Farmakologicky ustav lek. fak. PU, Olomouc.
(PROCAINE ther.)
(GERIATRICS ther.)

SKULA, E.; NOVOTNY, F.

The Hospital of the Holy Ghost in Olomouc and the care of the mentally sick. Cesk. psychiat. 61 no.3:210-213 Je '65.

1. Psychiatricka klinika lekarske fakulty Palackeho University v Olomouci.

SKULA, Eugen; JEZDINSKY, Jaroslav

Our experiences with treatment of diseases of aging with procaine by the Parhon and Aslanova method. Cas.lek.cesk 101 no.4:117-123 26 Ja '62.

1. Osetrovaci ustav OUNZ v Prostejove, reditel MUDr. Eugen Skula; Katedra farmakologie lekarske fakulty PU v Olomouci, prednosta doc. MUDr. Jiri Lenfeld.

(PROCAINE therapy) (AGING)
(ARTERIOSCLEROSIS in old age)

BANKOWSKI, Czeslaw; SKULA, Zofia

"Artemizol", preparation used against pediculosis. Przegl.epidem. 15 no.2:199-201 '61.

1. Z Zakladu Botaniki Farmaceutycznej AM we Wroclawiu Kierownik: prof. dr J. Madalski i Wojewodzkiej Stacji Sanitarno-Epidemiologicznej we Wroclawiu Dyrektor: lek. med. S. Przylecki.

(PEDICULOSIS) (PLANTS MEDICINAL)
(INSECT REPELLENTS)

L 1848-66 EWT(l)/EWT(m)/EPF(n)-2/EWA(d)/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) IJP(c) GG/JD/WW/HW/JG

ACCESSION NR: AT5022418 UR/3136/64/000/675/0001/0018

AUTHOR: Kremlev, M.G.; Samoylov, B.N.; Skulachenko, S.S.

TITLE: Device for studying local critical parameters of long sections of superconducting wire

SOURCE: Moscow. Institut atomnoy energii. Doklady, IAE-675, 1964. Ustanovka dlya issledovaniya lokal'nykh kriticheskikh parametrov bol'shikh dlin sverkhprovodyashchey provoloki, 1-18

TOPIC TAGS: superconducting alloy, niobium alloy, zirconium alloy, external magnetic field, induced current

ABSTRACT: The device described is designed for studying the uniformity of values of the critical currents in long (up to 15 m) sections of superconducting wire, measured upon application of a local external magnetic field of up to 40 kOe to a small part of the wire. A detailed description of the parts and operation of the device is given. The device was used to study several sections of a superconducting wire composed essentially of a 50:50 Nb-Zr alloy, which after cold drawing was subjected to an additional vacuum heat tratment. The critical current was found to change by a factor of 2 over distances of a few meters. Besides these comparatively slow

Card 1/2

SKULACHEV, V.P. (Moskva)

Recent developments in studying oxidative phosphorylation in mitochondria. Usp.sovr.biol. 46 no.3:241-258 N-D '58 (MIRA 11:12)
(MITOCHONDRIA)
(PHOSPHORYLATION)

17(3) SOV/20-128-3-54/78

AUTHORS: Severin, S. Ye., Corresponding Member AS USSR, Skulachev, V. P., Kiselev, L. L.

TITLE: Regulation of Phosphorylating and Nonphosphorylating Oxidation by Hexokinase

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 3, pp 628-631 (USSR)

ABSTRACT: Two types of biological oxidation reactions as mentioned in the title are distinguished (Refs 1-4). This phenomenon - generally called phenomenon of two oxidation ways in the respiratory chain - enforces the revision of several experiments, particularly the application of hexokinase and glucose - a system accepting the powerful phosphate (~P) which is formed in phosphorylating oxidation. The present paper investigates the effect of hexokinase and glucose on the interrelation of the two oxidation ways mentioned in the title. The paper is divided into 2 sections: (1) C h a n g e - o v e r t o p h o s p h o r y l a t i n g o x i d a t i o n . The oxidation and phosphorylation of mitochondria in the liver of pigeon were

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measured according to the method of reference 5. The dependence of oxidation and phosphorylation on the quantity of hexokinase in the reaction mixture is shown in figure 1. Hence it appears that hexokinase stimulates both processes. This respiratory stimulation (first proved by V. A. Engel'gardt and V. A. Belitser) disappears completely if the phosphorus and the adenyl system are excluded from the incubation mixture. Figure 2 shows the dynamics of ΔP and ΔO at the change in the hexokinase quantity from 0 to 0.2 units, i.e. the initiation of phosphorylating oxidation as a complement to the nonphosphorylating one. (2) Change - over to nonphosphorylating oxidation. The results compiled in table 1 show that a preincubation with hexokinase and glucose without oxidation substratum makes possible the determination of the ability of a hexokinase excess of initiating nonphosphorylating oxidation. Table 2 shows the interrelation of phosphorylating and nonphosphorylating oxidation in dependence on the activity of the system accepting $\sim$P. The results obtained lead to the conclusion that the acceptor system hexokinase-glucose cannot be regarded as a

"passive trap of macroerga" (powerful compounds). On the other hand, it is a regulator for the ratio of the two oxidation types mentioned. According to the concentration, it exerts 2 opposite kinds of effect on the coupling degree of oxidation and phosphorylation. The "switching" capacity of hexokinase, appearing under certain conditions, might play a part in the regulation of glycolysis and oxidative phosphorylation by this ferment in vivo (according to V. S. Il'in and co-worker, Refs 9, 10). There are 3 figures, 2 tables, and 10 references, 5 of which are Soviet.

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

SUBMITTED: June 23, 1959

S

CKULACHEV, V.P.; KISELEV, L.L.

Phosphorylating and nonphosphorylating pathways of oxidation; multiple change-over. Biokhimiia 25 no.1:90-95 Ja-F '60. (MIRA 13:6)

1. Chair of Animal Biochemistry, the State University, Moscow.
(LIVER metab.)
(ADENYLPYROPHOSPHATE metab.)
(TISSUE METABOLISM)

SKULACHEV, V.P.; KISELEV, L.L.

Variability of the P/O ratio in oxidative processes. Biokhimiia 25 no. 3:452-458 My-Je '60. (MIRA 14:4)

1. Chair of Animal Biochemistry, State University, Moscow.
(OXIDATION, PHYSIOLOGICAL) (PHOSPHORYLATION)

SKULACHEV, V.P.; MASLOV, S.P.

Role of nonphosphorylating oxidation in thermoregulation. Biokhimiia 25 no.6:1055-1064 N-D '60. (MIRA 14:5)

1. Chair of Biochemistry, the State University, Moscow.
(BODY TEMPERATURE--REGULATION) (OXIDATION, PHYSIOLOGICAL)

S/020/60/131/06/62/071
B011/B005

AUTHORS: Severin, S. Ye., Corresponding Member AS USSR, Skulachev, V. P., Maslov, S. P., Benediktov, I. I., Shestakov, V. G.

TITLE: A Thermoregulatory Separation Between Respiration and Phosphorylation

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 6, pp. 1447 - 1450

TEXT: There are 2 ways of oxidation in the respiratory system: a) a phosphorylating way, and b) a way independent of phosphorylation. The functional role of the way which is not connected with the formation of energy-rich phosphates has not yet been clarified. In their paper, the authors studied the oxidative mechanism of the maintenance of a constant body temperature of a warm-blooded animal (pigeon) under a short action of cold. The oxidative phosphorylation was measured on mitochondria of the musculus pectoralis and the liver by the methods of Ref. 9 (with the cooperation of L. L. Kiseleva). The intensity of oxidation in vivo was determined by the oxygen consumption of the pigeon (for methods see Ref. 18). The feathers of the test pigeons were removed and kept for 10-180 min in a cooling chamber at -15°. If the pigeon was kept for a while at about 15° before the

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test, a progressive hypothermia of the body occurred after 10-20 min already. Pigeons coming from an unheated room in winter endured - even without feathers - the cooling for many hours maintaining their body temperature at 40°. With pigeons kept in the warm, this ability could be developed artificially. This was possible by cooling a pigeon down to +30-35°, then interrupting the further cooling. A pigeon treated in this way kept its temperature of 40° for several hours in the cooling chamber after 1-2 days. Fig. 1 shows a typical experiment. The investigation of such pigeons showed a rapid stimulation of oxygen consumption in cooling. The coefficient P/O (ratio between phosphorylating and nonphosphorylating oxidation), measured on mitochondria of pigeons cooled once more (Table 1), showed that the first cooling of about 15-25 min led to hypothermia, whereas in the second cooling of 2.5 hours (2 days after the first one) the pigeon remained at about 40°. Table 1 shows that oxidation in the muscle is directed in such a manner that it takes place in the nonphosphorylating way: P/O is reduced to 10/57. This investigation was carried out by Yan Fu-yuy in the authors' laboratory. Table 2 shows that oxidation was nearly fully separated from phosphorylation in a cold-trained pigeon which was cooled once more. In a pigeon cooled for the first time, the coupling of oxidation to phosphorylation is widely maintained while the body temperature decreases. Such birds die of

SEVERIN, S.Ye.; SKULACHEV, V.P.; KISELEV, L.L.; MASLOV, S.P.

Phosphorylating and nonphosphorylating oxidation in growing muscles. Dokl. AN SSSR 134 no.6:1468-1471 O '60. (MIRA 13:10)

1. Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova. Chlen-korrespondent AN SSSR (for Severin).
(OXIDATION, PHYSIOLOGICAL) (PHOSPHORYLATION)
(MUSCLE)

SKULACHEV, V. P. (USSR)

"Regulation of the Coupling Oxidation and Phosphorylation."

Report presented at the 5th Int'l. Biochemistry Congress, Moscow, 10-16 Aug 1961

SKULACHEV, V. P.

Cand Biol Sci - (diss) "Relationship of oxidation and phosphorylation in the respiratory circuit." Moscow, 1961. 16 pp; (Moscow State Univ imeni M. V. Lomonosov, Biology-Soils Faculty, Chair of Animal Biochemistry); 200 copies; price not given; list of author's works on pp 15-16 (11 entries); (KL, 6-61 sup, 209)

Skulachev, V. P.

PHASE I BOOK EXPLOITATION SOV/6258

Skulachev, Vladimir Petrovich

Sootnosheniye okisleniya i fosforilirovaniya v dykhatel'noy tsepi (The Relationship Between Oxidation and Phosphorylation in the Respiratory Circuit) Moscow, Izd-vo AN SSSR, 1962. 155 p. Errata printed on inside of back cover.

Sponsoring Agency: Akademiya nauk SSSR. Institut biokhimii imeni A. N. Bakha.

Resp. Ed.: S. Ye. Severin, Corresponding Member, Academy of Sciences USSR, Professor; Ed. of Publishing House: N. B. Levanova; Tech. Ed.: A. P. Guseva.

PURPOSE: This book is intended for biochemists and researchers concerned with problems of the interrelation between oxidation and phosphorylation in the respiratory chain.

Card ~~1/6~~ 1/2

COVERAGE: The book reviews contemporary literature on the problem of oxidation and phosphorylation in the respiratory circuit and describes experimental results obtained by the author in this field. No personalities are mentioned. There are 512 references: 322 English, 98 German, and 92 Soviet.

TABLE OF CONTENTS:

44547

S/020/62/147/006/034/034
B144/B186

AUTHORS: Severin, S. Ye, Corresponding Member AS USSR, Skulachev, V. P., Sivkova, V. G., Maslov, S. P.

TITLE: Separation of oxidation and phosphorylation in the warming-up period after hypothermia

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 147, no. 6, 1962, 1489 - 1492

TEXT: Oxidation and phosphorylation were studied in the mitochondria of the pectoralis muscle of doves. The doves were cooled for 1.5 hr to -17°C, then left at room temperature to warm up to 38°C, and killed. The methods of separating mitochondria and measuring the oxidation and phosphorylation were described earlier (Sootnosheniye okisleniya i fosforilirovaniya v dykhatel'noy tsepi (Interrelations of oxidation and phosphorylation in the respiratory chain), Izd. AN SSSR, 1962; Biokhimiya, 25, 1058 (1960)). The tests showed that exclusion of phosphorylation does not affect the oxidation rate of succinic acid, but reduces markedly that of maleic acid owing to the loss in DNP in the mitochondria. The reduction in optical density from 6.9 to 5.2 and of the oxidation rate ratio between maleic and succinic acids from 0.88 to 0.21 indicate the structural change occurring

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SKULACHEV, V.P.; Prinimali uchastiye:BRAYNES, A.S.; DZHUNEDA, Kh.; SIVKOVA, B.G.

ATP and ADP as possible hydrogen carriers in the respiratory chain. Vop. med. khim. 9 no.1:99-102 Ja-F '63. (MIRA 17:6)

1. Kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta imeni M.V. Lomonosova, Moskva.

SKULACHEV, V.P.; MASLOV, S.P.; SIVKOVA, V.G.; KALINICHENKO, L.P.; MASLOVA, G.M.

Cold uncoupling of oxidation and phosphorylation in the muscles of albino mice. Biokhimiia 28 no.1:70-79 Ja-F '63. (MIRA 16:4)

1. Chair of Animal Biochemistry, State University, Moscow.
(PHOSPHORYLATION) (OXIDATION, PHYSIOLOGICAL)
(COLD--PHYSIOLOGICAL EFFECT)

SKULACHEV, V. P.

Role of adenine nucleotides in phosphorylating respiration and the physiological functions of the oxidative processes. Usp. sovr. biol. khim. 61:180-198 '64. (MIRA 18:3)

1. Kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta imeni M. V. Lomonosova.

SKULACHEV, V.P.; DZHUNED, Kh.; BRAYNES, A.S.; Prinimali uchastiye: SIVKOVA, V.; PROKHINA, T.; YEVTODIYENKO, Yu.; MIKHIN, V.; GOL'DMAN, A.

Oxidation and phosphorylation in mitochondria fo the embryonic muscle. Biokhimiia 29 no.4:653-661 Jl-Ag '64. (MIRA 18:6)

1. Kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta imeni Lomonosova.

SKULACHEV, V.P.

Brief news. Vop. med. khim. 11 no.2:102-106 Mr-Ap '65. (MIRA 18:10)

1. Kafedra biokhimii zhivotnykh Moskovskogo gosudarstvennogo universiteta.

LEVACHEV, M.M.; MISHUKOVA, Ye.A.; SIVKOVA, V.G.; SKULACHEV, V.P.

Energy metabolism in a pigeon under self-heating after hypothermia.
Biokhimiia 30 no.4:864-874 Jl-Ag '65. (MIRA 18:8)

1. Kafedra biokhimii zhovitnykh Gosudarstvennogo universiteta imeni M.V. Lomonosova, Moskva.

L 31096-66 EWT(d)

ACC NR: AP6022781 SOURCE CODE: UR/0301/66/012/002/0147/0150

AUTHOR: Kakushkina, M. L.; Kudryashov, Yu. B.; Sivkova, V. G.; Skulachev, V. P.

ORG: Biological-Soil Faculty, Moscow State University im. M. V. Lomonosov (Biologo-pochvennyy fakul'tet Moskovskogo gosudarstvennogo universiteta)

TITLE: Mechanism of disturbance of oxidative phosphorylation in irradiated animal tissues

SOURCE: Voprosy meditsinskoy khimii, v. 12, no. 2, 1966, 147-150

TOPIC TAGS: radiation biologic effect, phosphorylation, rabbit, oxidation, fatty acid, oxidation, kinetics, oleic acid, cell physiology, biologic respiration, reaction mechanism

ABSTRACT: Experimental evidence previously presented indicated that the oxidation products of fatty acids possess radiomimetic properties and are highly reactive compounds which cause the development of pathologic processes in an irradiated organism. It may be assumed that the formation of these active compound have a definite effect on the energy mechanisms of the cells. The functional activity of mitochondria in the presense of the oxidation products of fatty acids and lipids isolated from the tissues of irradiated animals was studied. The functional activity of the mitochondria was determined by measuring the ratio of phosphorylated to free oxidation in them, the P/O ratio. Upon adding oleic acid to mitochondria, the P/O ratio dropped with an increase in acid

UDC: 617-001.28-008.921.8-092

Card 1/2

concentration. Analysis of the results of individual measurements of the rates of oxidation and phosphorylation indicated that when the oleic acid content in the reaction mixture is increased, the phosphorylation process is suppressed. The respiration rate of mitochondria remained constant in a wide range of concentrations but decreased with very high contents of oleic acid.

The inhibition of phosphorylation in conjunction with respiration was also observed in the acetone fraction of lipids from rabbit liver irradiated with a dose of 1,000 roentgens. Thus, in the tissues of the irradiated animals, compounds of the lipid nature are present which inhibit the oxidative phosphorylation process. The addition of serum albumin considerably activates oxidative phosphorylation. The conjugating effect of albumin confirms the fact that the disruption of phosphorylation caused by the lipids in the liver of irradiated animals depends on the presence of free unsaturated fatty acids. Orig. art. has: 3 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: 30Aug64 / ORIG REF: 008 / OTH REF: 006

ACC NR: AP6032537 SOURCE CODE: UR/0413/66/000/017/0145/0145

INVENTOR: Tkachev, F. C.; Skulanov, B. S.; Shchuplyakov, Yu. N.; Chernyshev, L. N.

ORG: none

TITLE: Parachute. Class 62, No. 185708

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 17, 1966, 145

TOPIC TAGS: parachute, airdrop equipment, aircraft escape equipment

ABSTRACT: An Author Certificate has been issued for a parachute which has better aerodynamic characteristics and greater safety due to the fact that it combines such well-know features as the x-shaped canopy, a conical spring mechanism the built into the polar section of the canopy, and a central shroud line passing through the spring mechanism. Orig. art. has: 1 figure.

SUB CODE: 01/ SUBM DATE: 23Feb65/

UDC: 629.13.01/06

Card 1/1

ACC NR: AP7005686 SOURCE CODE: UR/0413/67/000/002/0158/0158

INVENTOR: Skulanov, B. S.; Pantsev, V. A.; Modin, P. I.

ORG: None

TITLE: Catch for the pilot chute in an airdrop system. Class 62, No. 190794

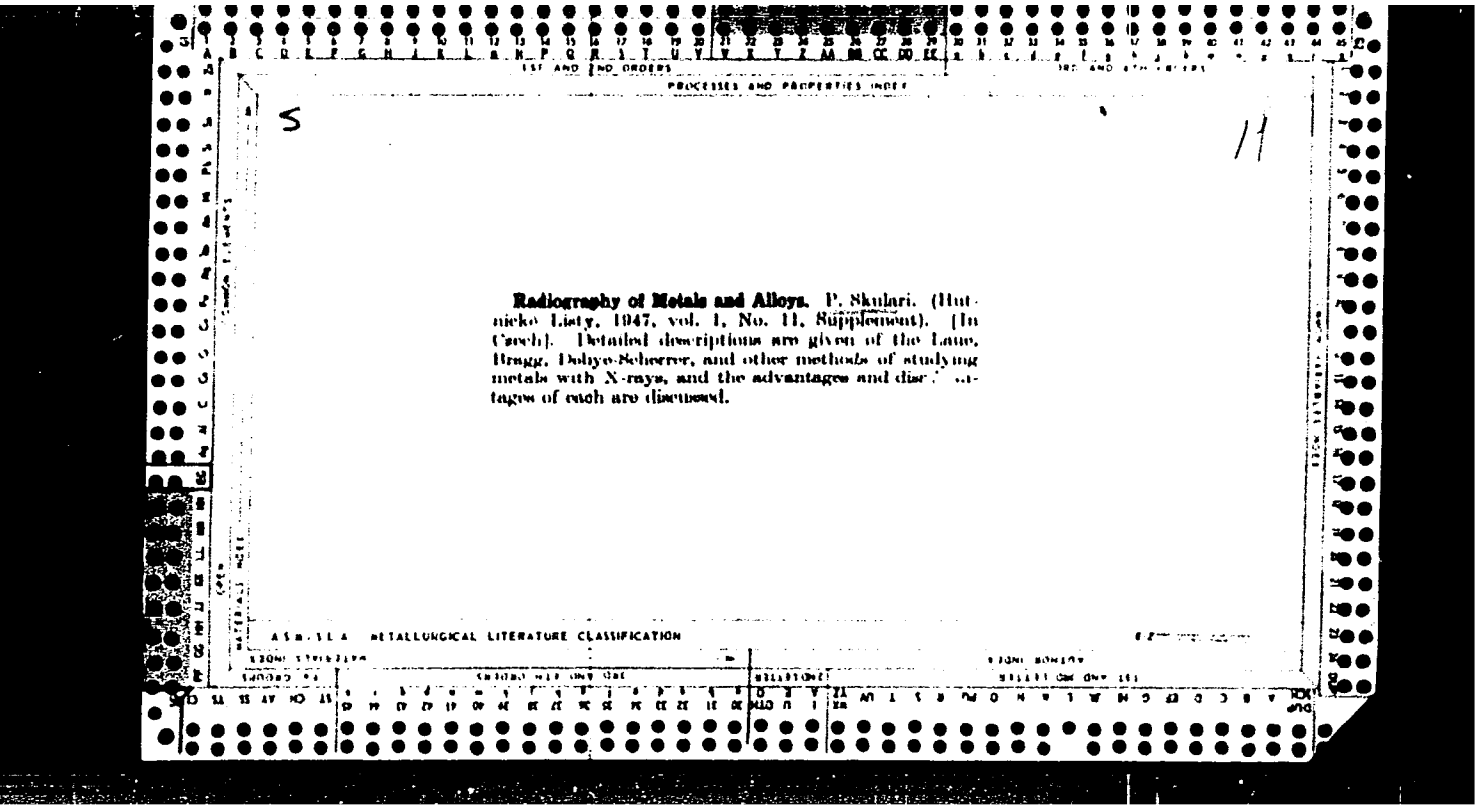
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 158

TOPIC TAGS: cargo parachute, airdrop equipment

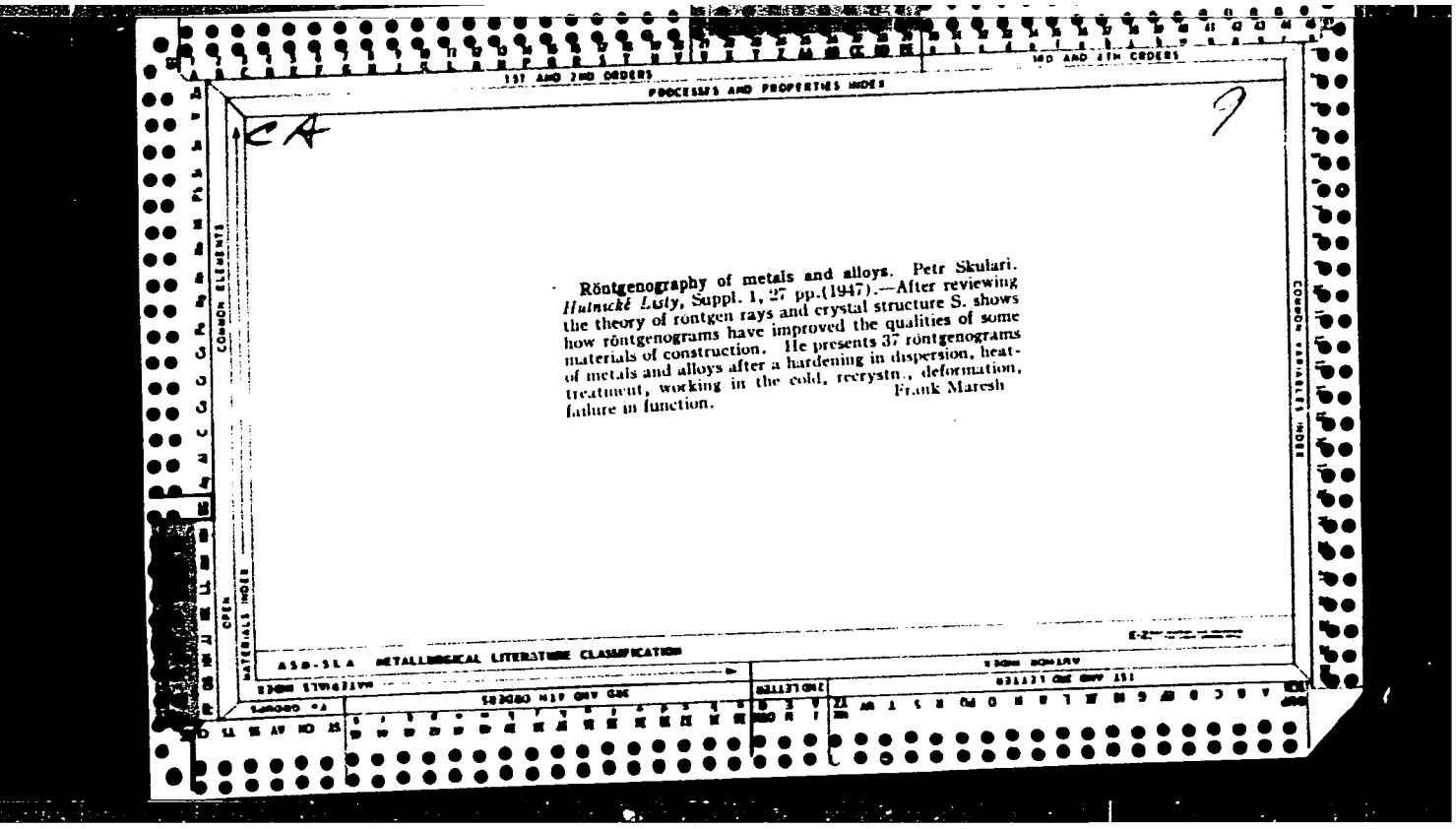
ABSTRACT: This Author's Certificate introduces a catch for the pilot chute in an airdrop system. The unit contains a frame mounted on the cargo platform, a rod which fastens the cargo platform to the deck of the aircraft, a lever which raises the rod, two pull rods connected to the ripcord and equipped with rockers which rotate a specially shaped shaft supporting a locking hook, and a harness clasp to which the shroud lines of the parachute system are fastened. The catch is designed for repeated use. The lever for raising the rod is mounted on an axle rigidly fastened to the frame at the ends. This lever is activated by the harness clasp which holds the parachute shroud lines.

Card 1/2 UDC: 629.13.01/.06

Card 2/2

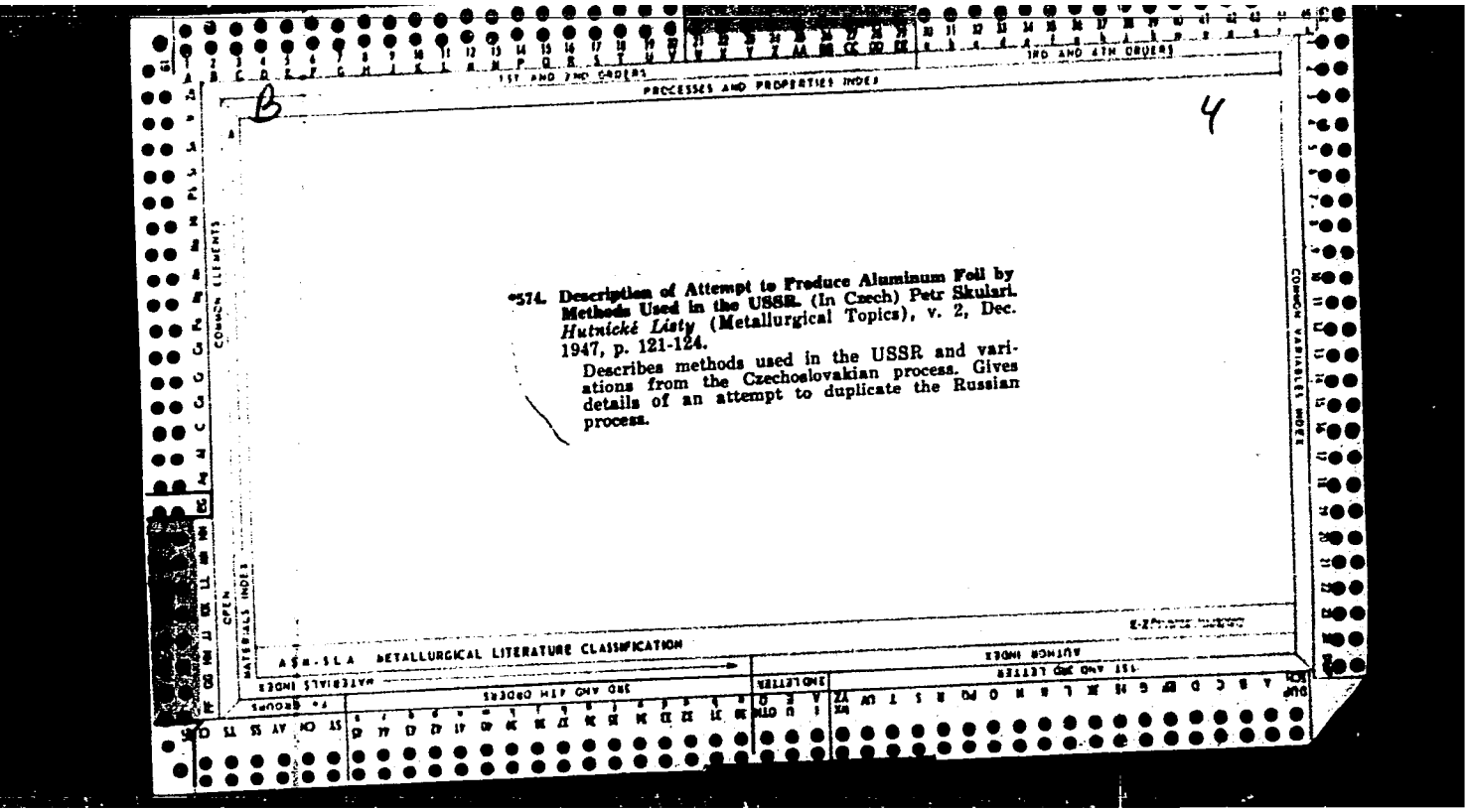


Radiography of Metals and Alloys. P. Skalari. (Hutnicke Listy, 1947, vol. I, No. II, Supplement). (In Czech). Detailed descriptions are given of the Laue, Bragg, Debye-Scherrer, and other methods of studying metals with X-rays, and the advantages and disadvantages of each are discussed.



Röntgenography of metals and alloys. Petr Skulari. *Hutnické Listy*, Suppl. 1, 27 pp.(1947).—After reviewing the theory of röntgen rays and crystal structure S. shows how röntgenograms have improved the qualities of some materials of construction. He presents 37 röntgenograms of metals and alloys after a hardening in dispersion, heat-treatment, working in the cold, recrystn., deformation, failure in function.

Frank Maresh



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*574. **Description of Attempt to Produce Aluminum Foil by Methods Used in the USSR.** (In Czech) Petr Skulari. *Hutnické Listy* (Metallurgical Topics), v. 2, Dec. 1947, p. 121-124.

Describes methods used in the USSR and variations from the Czechoslovakian process. Gives details of an attempt to duplicate the Russian process.

M

•**Determination of Internal Stresses of the Second Kind [by Means of X-Rays].** Petr Skulari (*Druhý Pracovní Sjezd Hornich a Hutnich Inženýrů*, 1947, **2**, 127–144; *C. Abs.*, 1950, **44**, 4743).—[In Czech]. Internal stresses are divided into three types: (1) those within the individual crystals; (2) those occurring between individual crystals owing to their non-uniform size; and (3) those between individual crystallites (crystal clusters), which are directional. A method is described by which the second kind of internal stresses can be determined quantitatively in kg./mm.² from X-ray exposures. This method is based on the relation between the width of the interference lines $K\alpha_2\alpha_1$, the change of the Bragg diffraction angle, and the change of the lattice constant resulting from internal stresses of the second type. For the numerical calculation of these stresses, the Caglioti-Sachs equation (*Z. Physik*, 1932, **74**, 647; *Met. Abs.* (*J. Inst. Metals*), 1932, **50**, 201), which defines the relation between the change of the lattice constant and the internal stresses, is modified.

January 1951

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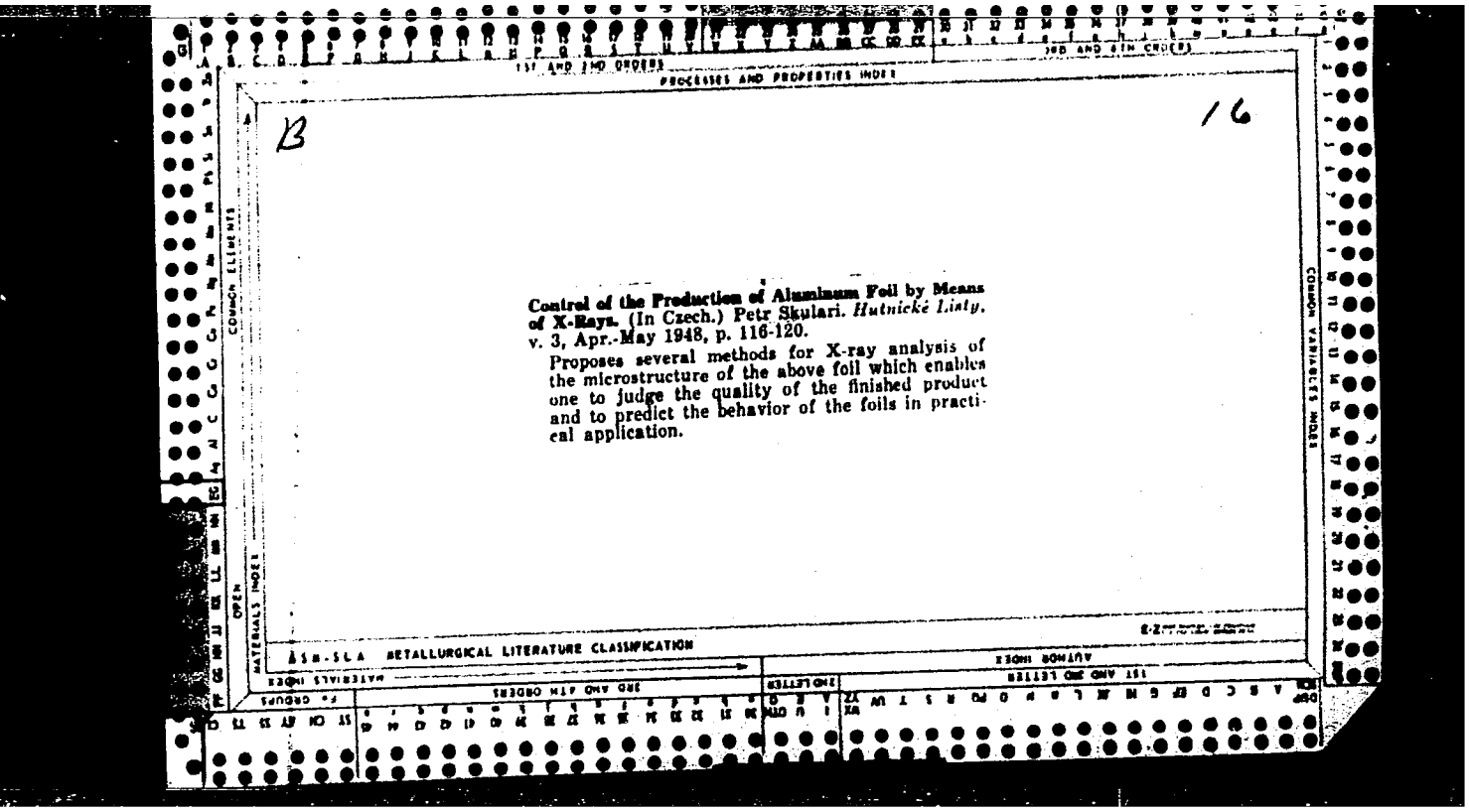
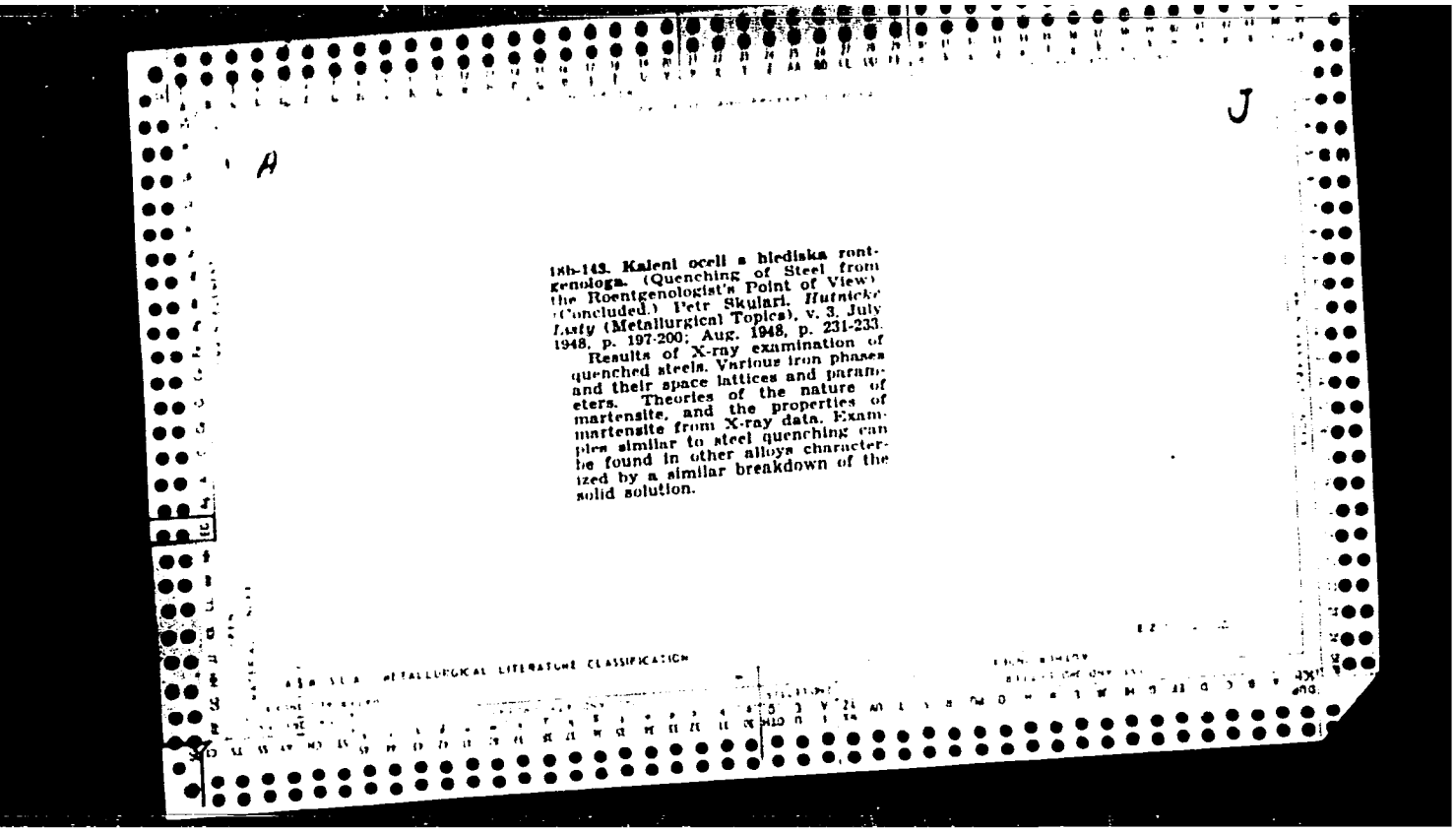
Low-alloy steels suitable for high-pressure boilers operating at temperatures of 575–600°. Petr Skulari. *Druhý Pracovní Sjezd Hutnických a Hutních Inženýrů* (Czech Mining & Met. Engrs. Conv.) 2, 145–9 (May, 1947).—Five Cr steels with addns. of V, Mo, Si (up to 1.2%), and Cb were examd. for microstructure, vol. change, strength, creep, heat resistance, and weldability. Cb has a favorable influence on the properties of the steel; a steel contg Cr, Mo, V, and Cb is most suitable for high-pressure boilers Cb_4C_3 forms cubic face-centered crystals. Eugene Gros



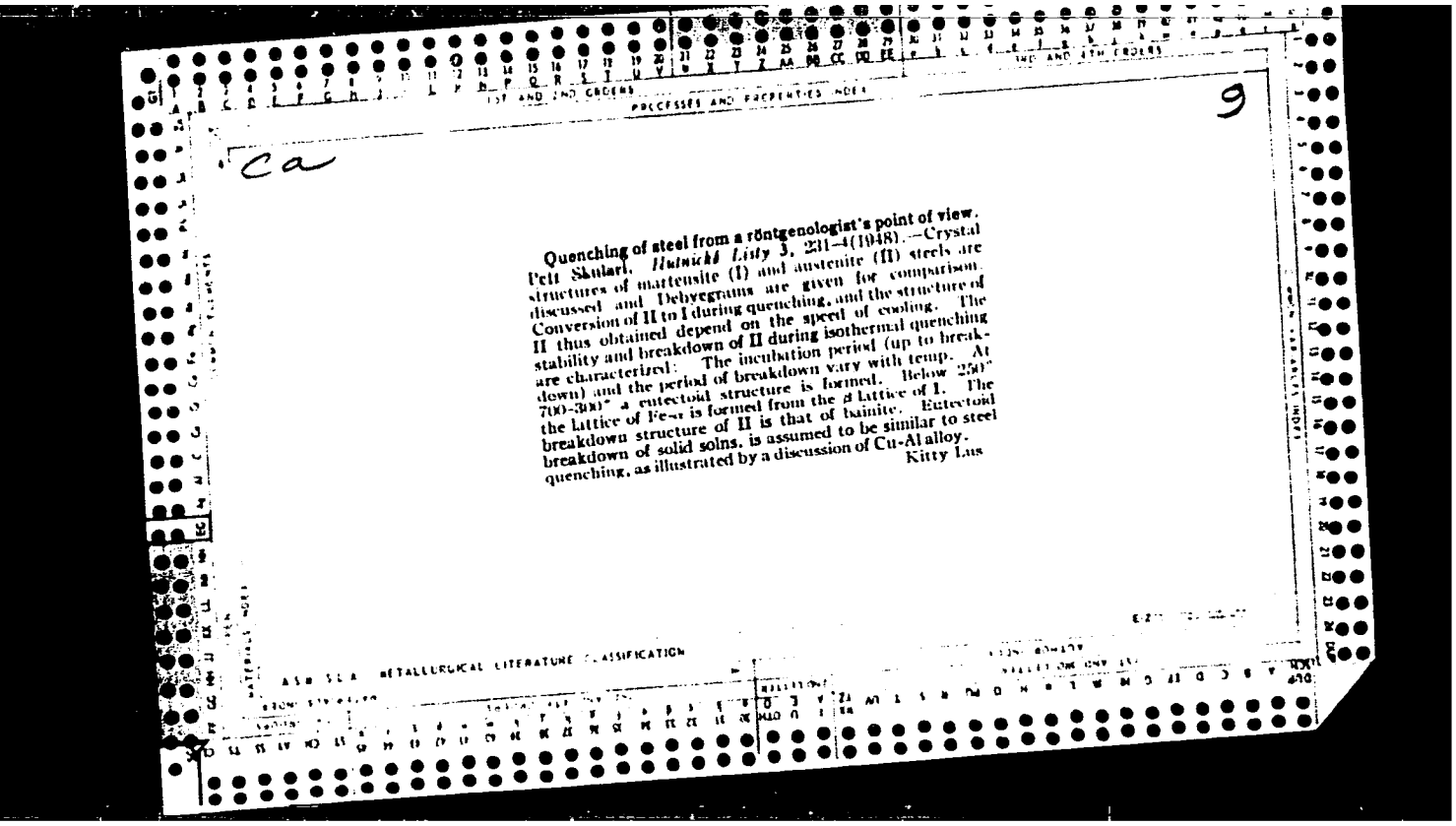
Control of the Production of Aluminum Foil by Means of X-Rays. (In Czech.) Petr Skulari. *Hutnické Listy*, v. 3, Apr.-May 1948, p. 116-120.

Proposes several methods for X-ray analysis of the microstructure of the above foil which enables one to judge the quality of the finished product and to predict the behavior of the foils in practical application.



18b-143. **Kaleni ocell a hledisko rontgenologa.** (Quenching of Steel from the Roentgenologist's Point of View) (Concluded.) Petr Skulari. *Hutnicke Listy* (Metallurgical Topics), v. 3, July 1948, p. 197-200; Aug. 1948, p. 231-233.

Results of X-ray examination of quenched steels. Various iron phases and their space lattices and parameters. Theories of the nature of martensite, and the properties of martensite from X-ray data. Examples similar to steel quenching can be found in other alloys characterized by a similar breakdown of the solid solution.



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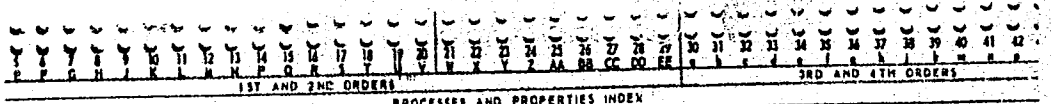
Quenching of steel from a röntgenologist's point of view. Pelt Skulari. *Hutnické Listy* 3, 231–4(1948).—Crystal structures of martensite (I) and austenite (II) steels are discussed and Debyegrams are given for comparison. Conversion of II to I during quenching, and the structure of II thus obtained depend on the speed of cooling. The stability and breakdown of II during isothermal quenching are characterized: The incubation period (up to breakdown) and the period of breakdown vary with temp. At 700–300° a eutectoid structure is formed from the β lattice of I. The lattice of Fe_{α} is formed from the α lattice of I. The breakdown structure of II is that of bainite. Eutectoid breakdown of solid solns. is assumed to be similar to steel quenching, as illustrated by a discussion of Cu-Al alloy.
Kitty Lus

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

SKULARI, PETR

Internal stresses in semifinished and finished brass products. Petr Skulari. *Hutnické Listy* 5, 265-73 (1950)(in Czech).—Applying his own conception on the cause of internal stresses in materials to the internal stresses of brasses of various compns, after various degrees of shaping S. proves that the cause of cracking of brass, whether spontaneous or during working it, are internal stresses of the second order originating between individual crystals as a result of difference in their sizes. Conclusion: The only way to remove dangerous internal stresses in such parts is annealing, and the appropriate annealing method depends on the type of brass and the reduction. The practical application of methods of stress removal recommended is illustrated by several examples. E. Gros

SKULARI P.



PROCESSES AND PROPERTIES INDEX

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The Measurement of Internal Stresses of the Second Type. P. Skulari. (Iron and Steel Institute, 1951, Translation Series, No. 413). This is an English translation of a paper which appeared in the Czech journal Druhý Pracovní Sjezd Hornich a Hutních Inženyrů, 1940, May, pp. 127–144. *See* Journ. I. and S.I., 1950, vol. 166, Oct., p. 163.

Met. Rev
1952

M. Metallography, constitution
And Binary Structures

/42-M. Examples of Practical Use of X-Ray Diffraction Apparatus in Metallurgy, (In Czech.) F. Skaupy. *Hutnicke Listy*, v. 6, Oct. 1951. p. 489-494.

Some characteristic examples.
(M22, B13)

Skulari, Petr.
S

2869* Examination of Internal Stresses With X-Rays. Sledování vnitřního pnutí rocntgenovými paprsky. (Czech.) Petr Skulari. *Hutnické Listy*, v. 9, no. 9, 1954, p. 529-537. Origin of internal stresses. X-ray techniques. Diagrams, diffractograms. 29 ref.

6-15-55

SKULARI, PETR

4207* Examination of Mechanical Properties of Wrought Al-Zn6-Mg-Cu Alloy. Studium mechanických vlastností tvářené slitiny Al-Zn 6-Mg-Cu. (Czech.) Petr Skulari and Vladivoj Očenášek. *Hutnické Listy*, v. 9, no. 11, Nov. 1954, p. 655-668.

Test data for high and low temperatures. Structural changes during heat treatment. Tables, graphs, refractogrdins, diagram. 10 ref.

MBI