SINAYSKIY, M. M., Cand Tech Sci (diss) -- "Aspects of the selection of electric motors for moving the shut-off devices of hydraulic structures". Moscow, 1960. 16 pp (Min Higher and Inter Spec Educ RSFSR, Moscow Order of Lenin Power Engineering Inst), 250 copies (KL, No 15, 1960, 136)

SINAYSKIY, Mikhail Mikhaylovich; YEZERSKIY, M.Ye., red.; LAPIONOV, G.Ye., tekhn.red.

[Start regulating resistances for electric motors of cranes] Puskoreguliruiushchie soprotivleniia dlia kranovykh elektrodvigatelei. Moskva, Gos.energ.izd-vo, 1960. 19 p. (Kranovoe elektrooborudovanie, no.5). (MIRA 13:8)
(Cranes, derricks, etc.) (Electric motors--Starting devices)

KALINKIN, Vladimir Sergeyevich; FEYLER, Georgiy Oskarovich; SINAYSKIY, M.M., red.; SHIKIN, S.T., tekhn.red.; BORUNOV, N.I., tekhn.red.

[Hoisting electromagnets] Gruzopod"emnye elektromagnity. Moskva, Gos.energ.izd-vo, 1960. 31 p. (MIRA 14:1)
(Hoisting machinery) (Electromagnets)

IVANOV, Viktor Mikhaylovich; KOZHUSHKEVICH, Vladimir Georgiyevich; SIMAYSKIY, M.M., red.; BORUNOV, N.I., tekhn.red.

[Direct current motors for crane hoists; regulations on installation, maintenance, and repair] Kranovye elektrodvigateli postoiannogo toka; rukovodstvo po ustanovke, ukhodu i remontu. Moskva, Gos.energ.izd-vo, 1960. 62 p. (Kranovoe elektrooborudovanie, no.4). (MIRA 13:7)
(Electric cranes) (Electric motors, Direct current)

BREYTER, Mikhail Yefimovich; KRICHEVSKIY, Aron Samuilovich; SINAYSKIY, M.M., red.; BORUNOV, N.I., tekhn.red.

[A.c. and d.c. brake electromagnets] Tormoznye elektromagnity postoiannogo i peremennogo toka. Moskva, Gos.energ.izd-vo, 1960. 63 p. (Kranovoe elektrooborudovanie, no.7). (MIRA 14:2)

(Cranes, derricks, etc.--Brakes) (Electromagnets)

SINAYSKIY, M.M., inzh.

All-Union conference on electric crane installations. Elektrichestvo no.3:91-92 Mr '60. (MIRA 13:6)
(Electric cranes--Congresses)

BELEN'KIY, G.I.; BREYTER, M.Ye.; IVANOV, V.M.; KALINKIN, V.S.; KOZHUSHKEVICH, V.G.; PETRAKOVSKIY, V.M.; RABINOVICH, A.A.; RUBINSKIY, I.A.; SHNAYSKIY, M.M.; FEYLER, G.O.; KHOROSHILKIN, L.L.; KOMAR, M.A., red.; BUL'DYAYEV, N.A., tekhn. red.

[Electrical equipment of cranes] Elektricheskoe oborudovanie kranov. Moskva, Gosenergoizdat, 1963. 399 p. (MIRA 16:12)

1. Kollektiv inzhenerov moskovskogo zavoda "Dinamo" imeni S.M.Kirova (for all exept Komar, Bul'dyayev).

(Cranes, derricks, etc.—Electric equipment)

SINAYSKIY, N.A., inzh.; MERKULOV, A.G., inzh.; SHARLOVSKAYA, M.S., kand. tekhn. nauk

Results of a roentgenographic analysis of power fuel ashes. Teploenergetika 11 no.12:65 D '64 (MIRA 18:2)

1. Khimiko-metallurgicheskiy institut Sibirskogo otdeleniya AN SSSR.

7(6)
AUTHORS: Rovinskiy, B. M., Sinayskiy, V. M. SOV/32-24-11-16/37

TITLE: Preparation of the Plot "Load-Deformation of the Crystal Lattice" by the Method of Continuous Registration (Polucheniye diagramm "nagruzka-deformatsiya kristallicheskoy reshetki" metodom nepreryvnoy registratsii)

PERIODICAL: Zavodskaya Laboratoriya, 1958, Vol 24, Nr 11, pp 1367 - 1370 (USSR)

ABSTRACT: In contrast to the usual method, by which the deformation of the sample takes place stepwise and with each change of the load the sample is X-rayed, the method reported here employs continuous X-raying on a moving film. The corresponding deforming load is recorded simultaneously and automatically on the X-ray film. The film holder with its film is turned by two SD-2 synchronous motors. The steel case with the film holder is attached to the columns of the DM -12A machine, to which the X-ray tube is also conveyed (Diagram, Figure). When a BSVL tube is used an exposure time of about one hour is needed.

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Correspondingly, the velocity at which the film turns and the velocity of deformation must be regulated to this period. From an X-ray picture of a finely granulated, cylindrical (diameter 1½ mm) duraluminum sample which had been distended 0,3% and of layers of lines (511)(333) in the absorption of the K_α radiation of copper it is apparent that on the two symmetrical fields of the X-ray plate the K_{α_1} and K_{α_2} doublet forms two curves which can be divided into four parts. The first section corresponds to the condition of the load, the second to the elastic distension, the third to the transition of the deformation into the plastic region, and the fourth part to the decomposition of the sample. In this last section the lattice parameter shows a greater value than in the initial condition, which points to a residual deformation of inverse sign. Among the advantages of the method described is the possibility to observe single crystals by X-raying coarsely crystalline samples.

Preparation of the Plot "Load-Deformation of t e SOV/ 3-34-11-19/37
Crystal Lattice" by the Method of Continuous M nitration

There are 5 figures and 4 ref rences, 1 of which is Soviet.

ASSOCIATION: Institut mashinovedeniya Akademii nauk SSSR (Institute for Machine Science, AS USSR)

Card 3/3

24(6) PHASE I BOOK EXPLOITATION SOV/2385

Akademiya nauk SSSR

Nekotoryye problemy prochnosti tverdogo tela; sbornik statey (Some Problems in the Strength of Solids; Collection of Articles) Moscow, Izd-vo AN SSSR, 1959. 386 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V. I. Aver'yanov; Tech. Ed.: R. S. Pevzner; Editorial Board: A.F. Ioffe, Academician; G. V. Kurdyumov, Academician; S. N. Zhurkov, Corresponding Member, USSR Academy of Sciences; B. P. Konstantinov, Corresponding Member, USSR Academy of Sciences; F. F. Vitman, Doctor of Physical and Mathematical Sciences, Professor (Resp. Ed.); L. A. Glikman, Doctor of Technical Sciences, Professor; N. A. Zlatin, Doctor of Physical and Mathematical Sciences; V. A. Stepanov, Doctor of Technical Sciences; Ya.B. Fridman, Doctor of Technical Sciences, Professor; B. S. Ioffe, Candidate of Technical Sciences (Deputy Resp. Ed.).

PURPOSE: This book is intended for construction engineers, technologists, physicists and other persons interested in the strength of materials.

COVERAGE: This collection of articles was compiled by the Otdeleniye fiziko-matematicheskikh nauk AN SSSR(Department of Physical and Mathematical Sciences) and the Fiziko-tekhnicheskiy institut AN SSSR (Institute of Applied Physics,

Card 1/10

Some Problems in the Strength (Cont.)

Some Problems in the Strength (Cont.)

Some Problems in the Strength (Cont.)

AVAILABLE: Library of Congress

Card 10/10

TM/fal
10-15-59

SINAYSKIY, V. M., Cand Tech Sci -- (diss) "Research into residual oriented micro-stresses and their effect on mechanical properties of metals." Moscow, 1960. 15 pp; (Academy of Sciences USSR, Inst of Machine Practices); 150 copies; price not given; (KL, 17-60, 159)

82624
S/180/60/000/004/019/027
E193/E483

18 8200

AUTHORS: Lyuttsau, V.G. and Sinayskiy, V.M. (Moscow)

TITLE: The Effect of Oriented Microstresses on the Relaxation Stability of Aluminium Under Repeated Loading

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1960, No.4, pp.120-123

TEXT: In one series of the experiments reported in the present paper, specimens of aluminium grade AV000 (annealed in vacuum at 200°C for 90 min and consisting of grains of average size approximately 0.05 mm) were loaded in the elastic range, held under load at a constant strain for 200 h to allow relaxation to take place, unloaded and held in this condition for some time, after which the loading-relaxation-unloading cycle was repeated several times. From the data on the variation of the cross-section of the specimens (whose total initial elongation during the entire course of tests remained constant), relaxation curves for the elastic deformation in the direction of the applied load were constructed; these are reproduced in Fig.1. The second series of experiments was identical except that the process of relaxation was studied by accurate determination of the variation

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E193/E483

The Effect of Oriented Microstresses on the Relaxation Stability of Aluminium Under Repeated Loading

of the lattice parameters by the X-ray back-reflection technique; the relaxation curves based on these data are reproduced in Fig.2. It was inferred from the results obtained that during relaxation of macrostresses elementary slips, taking place in the crystallites, produce plastically deformed micro-volumes. Interaction between the elastically and plastically deformed micro-volumes leads to the formation of oriented micro-stresses, the existence of which is easily revealed by X-ray examination. On unloading, partial relaxation of the microstresses, revealed by a decrease in the residual strain of the specimens, takes place. On reloading, the presence of oriented microstresses results in the relaxation of macrostresses proceeding at a slower rate, i.e. in a decrease of the magnitude of k_1. Acknowledgments are made to Professor B.M.Rovinskiy for directing the work.
There are 3 figures and 4 References: 2 Soviet and 2 English.

SUBMITTED: December 1, 1959

Card 2/2

24547

S/179/61/000/002/015/017
E073/E535

18 8200 also 2807

AUTHORS: Rovinskiy, B.M. and Sinayskiy, V.M. (Moscow)

TITLE: The relation between oriented micro-stresses and residual irreversible deformation in metals

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Mekhanika i mashinostroyeniye, 1961, No.2, pp.146-147

TEXT: The results are described of experimental investigation of the residual deformation of the lattice, and consequently of the oriented micro-stresses, on the magnitude of residual irreversible deformation of specimens made of steel 45 in pure compression and tension. After machining, the specimens were annealed in a vacuum furnace at 780°C and then deformed by means of the test machine ИМ-12А (IM-12A). One series of specimens was subjected to pure compression, the other to pure tension. The rate of deformation was 2 mm/min. The residual deformation of the lattice was measured by X-ray diffraction and is shown graphically as a function of the residual irreversible deformation of the specimens. The residual deformation of the lattice is taken as a measure of the

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oriented micro-stresses; it shows a maximum value at about 1% residual (plastic) deformation of the specimens. On further increase of the plastic deformation of the specimens, the residual deformation of the lattice falls continuously. The oriented micro-stresses are therefore at a maximum at plastic deformations of about 1%. Therefore, plastic deformations approaching 1% should be avoided if oriented micro-stresses have an adverse effect. There are 1 figure and 6 references: 3 Soviet and 3 non-Soviet.

ASSOCIATION: Institut mashinovedeniya Akademii nauk SSSR (Institute of Science of Machines. Academy of Science. USSR)

SUBMITTED: December 9, 1960

28971
S/179/61/000/003/014/016
E073/E535

10 7400

AUTHORS: Gal'perin, M.Ya., Rovinskiy, B.M. and Sinayskiy, V.M. (Moscow)

TITLE: On the influence of preliminary tensile plastic deformation on the fatigue strength of steel

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, 1961, No.3, pp.161-162

TEXT: Most authors mention only an increase in the fatigue strength as a result of increasing work hardening produced by applying tension. N. I. Chernyak (Ref.1: "Fatigue strength of preliminarily stretched steel". Symposium Tr. In-ta stroitel'noy mekhaniki AN UkrSSR, 1953) found that a small amount of plastic deformation by tension does not increase but lowers the fatigue of steel. For ε^p = 1.0-2.0% a minimum fatigue strength is reached, then the fatigue strength increases and for ε^p = 12% it reaches a value corresponding to that of undeformed steel. The work described in this paper was carried out for the purpose of

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determining the relation between the magnitude of oriented residual microstresses occurring during plastic deformation in tension and the drop in the fatigue limit. Medium carbon steel, Steel 45, of 25 mm diameter was used in the tests, the mechanical characteristics of which were as follows:

$$\sigma_s = 39.8 \text{ kg/mm}^2, \quad \sigma_B = 66.0 \text{ kg/mm}^2$$

$$\delta_5 = 22.2\%, \quad \Psi = 4.89\%, \quad a_k = 9.1 \text{ kgM/cm}^2, \quad H_B = 152$$

Several batches of specimens, 12 in each batch, were produced. The shape of the specimens was such that the same specimens could be used, without further machining, for the fatigue tests. The gauge length was 226 mm, the 20 mm long central section of which had a diameter of 8 mm, Fig.1. After machining to the desired size and surface quality the specimens were annealed in vacuo at 780°C for two hours and then allowed to cool together with the furnace. Following that, they were stretched at a rate of 2 mm/min within a range of 0 to 10%. For the gauge length the

error in measuring the length did not exceed 0.03%. The fatigue tests were carried out with a loading frequency of 3000/min for a total duration of 10^7 cycles. Prior to the fatigue tests, the oriented microstresses were determined by X-ray methods; two X-ray diffraction patterns were taken from the same spot, one before and one after loading. The obtained results are plotted in Fig.2 and it can be seen that the maximum drop in the fatigue strength was achieved in the range of preliminary deformations of 1 to 2%, which is in good agreement with the results obtained by Chernyak (curve 3). The deviation between his results and the results of the authors of this paper (curve 1) is attributed to the fact that Chernyak did not anneal his specimens after machining. Fig.2 also gives the relation between the magnitude of the oriented microstresses σ_R (kg/mm^2) and the magnitude of preliminary deformation (curve 2). It can be seen that this curve has a minimum approximately for the same range of plastic deformation as was observed for curve 1. The curves 1 and 2 show similarity for small plastic deformations; the influence of work hardening starts to manifest itself at ε^p = 2% which leads

to an increase in the fatigue strength. The obtained results confirm the assumption of the decisive role of residual oriented microstresses on the fatigue strength. This is in good agreement with data published earlier by the authors (Ref.6: Izv.AN SSSR. OTN. Mekhanika i mashinostroyeniye, 1961, No.2) on the relation between oriented microstresses and the residual plastic deformation. However, it is not as yet possible to propose a simple mechanical model of the phenomenon since the magnitude of the oriented microstresses is much greater than the drop in the fatigue limit. There are 2 figures and 6 Soviet references.

ASSOCIATION: Institut mashinovedeniya AN SSSR
(Institute of Machine Science AS USSR)

SUBMITTED: January 18, 1961

S/179/62/000/003/010/015
E191/E435

AUTHORS: Rovinskiy, B.M., Sinayskiy, V.M. (Moscow)

TITLE: On the effect of the rate of deformation on the magnitude of the residual oriented microstresses

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Otdeleniye tekhnicheskikh nauk. Mekhanika i mashinostroyeniye, no.3, 1962, 159-160

TEXT: The magnitude of oriented microstresses has been previously related to the equivalent yield stress under reversed loading. Oriented microstresses have been shown to be mainly responsible for the reduction of the fatigue strength due to even a small prior plastic deformation. Standard cylindrical 0.45% carbon steel test pieces, provided with precisely machined longitudinal flat lands, to facilitate X-ray investigation, were examined. Carefully conducted tests in tensile testing machines covered a range of plastic deformation between 1.2 and 1.5% and a range of rates of deformation up to 30 mm/min. The magnitude or oriented microstresses increases several times within this range of speeds. To avoid oriented microstresses, which always have an adverse

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E191/E435

On the effect of the rate ...

effect, minimum rates of deformation and materials with the least non-uniformity of structure should be used. There is 1 figure.

SUBMITTED: February 16, 1962

Card 2/2

SINAYSKIY, V.M. (Moskva); ROVINSKIY, B.M. (Moskva)

Residual stresses occuring during metal grinding. Izv.AN SSSR.-Otd.tekh.nauk.Mekh.i mashinostr. no.3:142-145 My-Je '63.
(MIRA 16:8)

(Strains and stresses) (Grinding and polishing)

L 04290-67 EWT(m)/T/EWP(t)/ETI IJP(c) JD
ACC NR: AP6018949 (N) SOURCE CODE: UR/0126/66/021/006/0929/0934

AUTHORS: Rovinskiy, B. M.; Sinayskiy, V. M.; Gal'perin, M. Ya.

ORG: NII for Machine Design (NII mashinovedeniya)

TITLE: Investigation of the stability of defects arising in metals due to metal fatigue

SOURCE: Fizika metallov i metallovedeniye, v. 21, no. 6, 1966, 929-934

TOPIC TAGS: aluminum metallurgy, copper, x ray diffraction study, x ray scattering, metal crystal

ABSTRACT: The stability of fatigue defects in metals was studied on both aluminum and copper specimens. The study supplements the results of an earlier investigation by B. M. Rovinskiy and V. G. Lyutsau (FMM, 1961, 12, 305). The work was carried out by measuring the change in x-ray scattering by the metal specimens in the fatigued and relaxed state. The effect of aging on the plasticity and durability of cyclically deformed copper was also studied. The experimental data obtained in this part of the investigation were treated after the method of N. N. Davidenkov and G. T. Nazarenko (ZhTF, 1953, 23, 741). The experimental results are presented graphically (see Fig. 1). It was found that the intensity of scattered x-rays is notably dependent on deformation of the crystal lattice (caused by the cyclical deformations) and on aging (connected with the relaxation of the deformed crystal

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UDC: 539.43:539.292

ACC NR: AP6018949

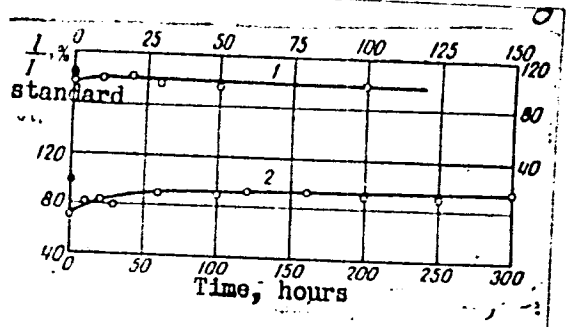


Fig. 1. Integral intensity of the Debye line (400) of cyclically deformed copper as a function of aging period. Solid dots represent the relative scattered intensity for the specimens in the initial state. 1 - 10^7 cycles σ_{max} = 10 kg/mm^2; 2 - 10^6 cycles σ_{max} = 16 kg/mm^2; aging temperature - 80C.

lattice). The authors conclude that the vacancy and micropore defects heal with time, provided that the latter are smaller than λ (critical), that vacancies are precipitated on pores and cracks in excess of λ (critical), and that a general coagulation of micropores smaller than λ (critical) takes place in the aged specimens. Orig. art. has: 4 graphs.

SUB CODE: 11/ SUBM DATE: 02Jul65/ ORIG REF: 005/ OTH REF: 002

Card 2/2

ACC NR: AP7003635 SOURCE CODE: UR/0360/67/000/001/0098/0101

AUTHORS: Rabotnov, Yu. N. (Moscow); Sinayskiy, V. M. (Moscow); Stepanychev, Yo. I. (Moscow)

ORG: none

TITLE: A study of kinetics of the disintegration process of glass-reinforced plastic

SOURCE: Mashinovedeniye, no. 1, 1967, 98-101

TOPIC TAGS: GLASS FIBER, solid kinetics, reinforced plastic, resin, tube, film, lens objective, photoapparatus, polyester plastic, plastic deformation, performance test / No. 21 resin, PN-3 polyester, Zenit photoapparatus, Industar 22 lens objective, BSV-2 radiation tube, RT-5 x-ray film

ABSTRACT: Kinetics of the disintegration process of glass-reinforced plastics based on resin No. 21 and on unsaturated polyester PN-3 (cold set) has been studied using transmitted light photography and absorption microroentgenography. The specimens (30-mm wide rectangular strips) were cut from a sheet (0.6 mm thick) prepared from a single layer of fiber. The first study method, employing photoapparatus "Zenit" with objective "Industar 22," was used to investigate the development of cracks in the binder. The photographs were taken of specimens stretched at known load increments. X-ray diffraction study of the same specimen after removal of the load was conducted in the characteristic radiation of a copper anode at 8--9 kv issuing

Card 1/2 UDC: 666.678.023

ACC NR: AP7003635

from a BSV-2 tube, using domestic fine-grain x-ray film RT-5. It was established that, while increased load causes the appearance of a whole system of cracks (mainly perpendicular to the direction of the stretching) the microstructure of the filler is hardly affected by stretching up to the point of actual destruction of the specimen. The specimens of the materials were obtained from R. Ya. Ivanova (Leningrad). Orig. art. has: 3 figures.

SUB CODE: 11/ SUBM DATE: none

Card 2/2

PARUSIMOV, V.F.; BUTKEVICH, R.V.; SINAYSKIY, V.F.

Rock pressure in short wall mining of flat seams in Kuznetsk Basin mines. Vop. gor. davl. no.7:52-65 '61. (MIRA 18:7)

Institut gornogo dela AN SSSR im. A.A.Skochinskogo.

BUTKEVICH, Roman Veniaminovich; BRAYTSEV, Andrey Vasil'yevich; BAYKOV, Mikhail Aleksandrovich; SINAYSKIY, Viktor Pavlovich; PEREVERZEV, Narel' Petrovich; VESKOV, M.I., otv. red.

[Experience in short face mining of medium thickness flat seams] Opyt razrabotki pologikh plastov srednei moshchnosti korotkimi zaboiami. Moskva, TSentr. in-t tekhn. informatsii ugol'noi promyshl., 1962. 78 p.
(MIRA 17:7)

SINAYUK, David Aronovich; GONIKMAN, M.Ye., retsenzent; GRACHEVA, A.V., red.

[Ways to improve welted footwear; quality, material expenditure, and production methods] Puti sovershenstvovaniia rantovoi obuvi; kachestvo, materialoemkost', sposob proizvodstva. Moskva, Legakaia industriia, 1965. 179 p. (MIRA 18:10)

1. Zamestitel' direktora po nauchnoy rabote Latviyskogo kompleksnogo nauchno-issledovatel'skogo instituta Gosudarstvennogo komiteta legkoy promyshlennosti pri Gosplane SSSR (for Gonikman).

SINAYSKIY, V.P., inzh.; SHIROKOV, A.P., inzh.

Using anchor bolts in mines of the Kuznetsk Basin. Bezop.truda v prom. 1 no.10:7-8 O '57. (MIRA 10:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy ugol'nyy institut.
(Kuznetsk Basin--Mine timbering)

SINAYSKIY, V. P., Cand Tech Sci -- (diss) "A Study of the Possibility of Reinforcing the Foundation Layer in the Exploitation of the Thick Steep Formations in the Kuzbass," Moscow, 1960; 15 pages. (Academy of Sciences USSR. Institute of Mining); 150 copies; price not given. (KL, 22-60, 139)

BUTKEVICH, R.V., kand.tekhn.nauk; BRAYTSEV, A.V., kand.tekhn.nauk; BAYKOV, M.A., kand.tekhn.nauk; PEREVERZEV, M.P., inzh.; SINAYSKIY, V.P., inzh.

Using short working faces in medium-thick flat seams in the Kuznetsk Basin. Nauch. soob. IGD 17:64-71 '62. (MIRA 16:7)
(Kuznetsk Basin--Coal mines and mining)

SINAYSKIY, Ye.S.

Some properties of a special operator with applications in the theory of creep. Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 17 no.6: 117-122 '64. (MIRA 18:3)

1. Dnepropetrovskiy gornyy institut.

1. SINAYUK, D. A.; ZAKATOVA, M. D.; MIKHEYEVA, Ye. Ya.
2. USSR (600)
4. Shoe Industry
7. Hole of middlesole in shoes, Leg. prom., 12, No. 11, 1952.

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

[illegible]Y[illegible], [illegible].A

[illegible]in, [illegible].; Gruber, [illegible]. [illegible]xtending the life of [illegible] by creating new [illegible]. Tr. from the Russian. p. [illegible].
[illegible], Sofiya, Vol. [illegible], no. 1, 1955.

[illegible] ly List of East European Accessions, ([illegible]), LC, Vol. [illegible], no. 1[illegible], Oct. 1955, Uncl.

L 7017-66 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(l)

ACC NR: AP5026786 SOURCE CODE: UR/0286/65/000/017/0071/0071

AUTHOR: Orlov, V. A.; Sinayuk, M. S.

ORG: none

TITLE: A protractor for measuring bevels. Class 42, No. 174372

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 71

TOPIC TAGS: mechanical measuring tool, angle measurement instrument

ABSTRACT: This Author's Certificate introduces a protractor for measuring bevels, especially for aircraft parts and shipbuilding equipment. The instrument contains a basic component with a reference plane and a sector scale, and also a rotating component with a vernier and a reference plane. The device is designed for automatic alignment on the surface of the component being measured. A variable bevel is measured without resetting the protractor by fitting out the rotating component with a spring which holds the instrument in the extreme position. The reference plane of the rotating member is mounted on a rocker.

UDC: 531.741 : 62—432.2

SUB CODE: IE/ SUBM DATE: 25Feb64/ ORIG REF: 000/ OTH REF: 000

Card 1/1

B-5

USSR/General Biology - Genetics

Abs Jour : Ref Zhur - Biol., No 3, 1958, No 9569

Author : Belik, V.F., Sincha, K.P.

Inst : Not Given

Title : Effect of Paternal Forms on Inherited Properties of Hybrid Melon Plants

Orig Pub : Nauchn. tr. Bykovsk. bakhchevoy opytn. st., 1957, No 4, 125-133

Abstract : A number of cases are given in which, in crossing of different types of melons, the maternal line is followed. Among features inherited mainly from the maternal line these are indicated: length of vegetative period, relative content of solids in the fruit, degree of infection by fusariosis, Coloration of fruit rind, coloration of fruit meat and its consistency, seed types. The same instances of the maternal line were noted also in squash hybridization.

Card : 1/1

SINCHENKO, G.Z.

Combining electric communication and radio reception facilities leads to raised labor productivity. Vest.sviazi 15 no.10:14-16 O '55. (MLRA 9:2)

1. Nachal'nik L'vovskogo oblastnogo upravleniya svyazi.
(Telecommunication) (Radio)

SINCHENKO, G.Z.

Efficiency innovators' work in the communication enterprises of Ukraine. Vest. sviazi 16 no.12:26-27 D '56. (MLRA 10:2)

1. Zamestitel' ministra svyazi USSR.
(Ukraine--Telecommunication)

SINCHENKO, G.Z.; GERCHIKOV, Ye.Ya.; SERGEYEV, I.V., inzh.

Provide model telephone and telegraph communication between cities for the National Economy Councils (Sovnarkhoz). Vest. sviazi 17 no.11:17-18 N '57. (MIRA 10:12)

1. Zamestitel' ministra svyazi USSR (for Sinchenko). 2. Nachal'nik upravleniya elektrosvyazi i radiofikatsii Ministerstva svyazi USSR (for Gerchikov). 3. Arkhangel'skoye oblastnoye upravleniye svyazi (for Sergeyev).

(Telephone) (Telegraph)

SINCHENKO, G.Z.

Upsurge of efficiency innovators' work in communication enterprises of the Ukraine. Vest. sviazi 17 no.12:23-24 D '57. (MIRA 10:12)

1. Zamestitel' ministra svyazi USSR.
(Ukraine--Telecommunication)

SINCHENKO, G.Z. [Sinohenko, H.Z.]

New developments in the technology of communication. Nauka i zhyttia 8 no.5:6-10 My '58. (MIRA 13:4)

1. Zamestitel' ministra svyazi USSR.
(Radio relay systems) (Coaxial cables)

6(7) SOV/111-59-5-25/32

AUTHOR: Sinchenko, G.Z., Deputy Minister of Communications of the Ukrainian SSR

TITLE: The Experience of Communication Workers and Rationalizers of the Ukraine

PERIODICAL: Vestnik svyazi, 1959, Nr 5, pp 29 - 30 (USSR)

ABSTRACT: In 1958, the communication workers of the Ukraine submitted 11,318 improvement suggestions (those suggestions which were not processed in 1957 are included in this figure) and 9677 suggestions were accepted, of which 8755 suggestions found practical application. The Ukrainian Ministry of Communications is presently working on a plan of technical training subjects for communications employees. The training is to be conducted in a large technical workshop equipped with all types of communication equipment. The author cites a number of examples of suggestions made: 1) telephone booths with

Card 1/2

The Experience of Communication Workers and Rationalizers of the Ukraine

automatic long-distance telephones were introduced at Yalta: 2) in Kiyev, an automat was designed for selling newspaper: 3) a portable device for measuring the attenuation of wire broadcast lines; 4) a transistorized underground cable locator and a transistorized wire broadcast relay transmitter with an output of 1.5-2 watts at 15 volts. The author points out that the rationalization work is still on a low level at a number of communication enterprises of the Ukrainian Ministry of Communications. Appropriate measures will be taken to improve the rationalization work at these enterprises. There is 1 photograph.

SINCHENKO, G.Z. [Sinchenko, H.Z.]

Telecommunication in the seven-year plan. Nauka i zhyttia 9 no.7:12-15 Jl '59. (MIRA 12:11)

1. Zamestitel' ministra svyazi USSR.
(Telecommunication)

SIICHENKO, G.Z.

Use of reinforced concrete on Ukrainian communication lines. Vest. sviazi 20 no.4:23-25 Ap '60. (MIRA 13:7)

1. Zamestitel' ministra svyazi USSR.
(Ukraine--Electric lines--Poles)
(Ukraine--Reinforced concrete construction)

SINCHENKO, G.Z.

Mechanization of the Ukrainian postal enterprises. Vest. sviazi 21 no.4:24-26 Ap '61. (MIRA 14:6)

1. Ministr svyazi USSR.
(Ukraine—Postal service)

SINCHENKO, G. [Sinchenko, H.]

With a speed of light. Nauka i zhyttia 11 no.2:1-3 F '62. (MIRA 15:3)

1. Minstr svyazi USSR.

(Communication)

SINCHENKO, G.Z.

Regional agricultural administration centers should be provided with good telecommunication services. Vest. sviazi 22 no.9: 16-17 S '62. (MIRA 15:9)

1. Ministr svyazi UkrSSR. (Telephone)

20-3-24/59

AUTHORS: Kukhtin, V. A., Kamay, Gil'm, Sinchenko, L. A.

TITLE: Telomerization of Metacrylic Acid With Trialkylphosphites (Telomerizatsiya metakrilovoy kisloty s trialkilfosfitami).

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 3, pp. 505-508 (USSR)

ABSTRACT: The first two mentioned authors proved that (ref. 1) trialkylphosphites under the action α, β-unsaturated aldehydes and acids can be subjected to a regrouping according to Azbuzov. The authors continued research in this line and stated that on certain conditions not one but several molecules of metacrylic acid can be combined with one molecule of trialkylphosphite, so that reaction in this case becomes telomerization. The reaction takes place without catalyst and at room temperature; triethylphosphite must be carefully purified (with sodium) and must have been subjected to fractioned distillation. The amount of the telomer however, also in this case is very small. Therefore a suitable catalyst had to be found. Benzoylperoxide proved to be the best catalyst. Depending on the quantitative ratio between initial component and catalyst telomers of different mean

Card 1/3

molecular weight were formed. All telomers are white powders without significant melting point. They can be softened and carbonized when heated. When heated the telomers are soluble in methanol and acetic acid. The experimental results are collected in table 1. A diagram of the telomerization based on earlier works is given (ref. 1), although also another structure of the telomer is possible, It was not investigated here. In order to prove the diagram suggested an equimolar mixture of triethylphosphite and metacrylic acid was stored at room temperature until triethylphosphite had disappeared completely. In this an intermediate product of the regrouping according to Arbuzov which corresponds to the first stage of reaction was suggested. Only then a 4-fold excess of metacrylic acid plus catalyst was added. An intensive formation of telomers with a good yield set in immediately. This result proves: 1.- The formation of an intermediate product, and 2.- The probability of the telomerization mechanism suggested. Unexplained, however, remains the part of the catalyst as well as that of the mechanism of its influence on telomerization. With the increasing concentration of metacrylic acid the mean molecular

Telomerization of Metacrylic Acid With Trialkylphosphites 20-3-24/59

weight of the telomer increases. This is also the case with the increasing concentration of benzoylperoxide. The capability of the intermediate product to enter telomerization makes possible the assumption that the binding P-O is of ion character. From this is deduced a presumable scheme of the structure of this intermediate product.
There are 2 references, 1 of which is Slavic.

ASSOCIATION: Kazan' Chemical and Technological Institute imeni S..M. Kirov, .. (Kazanskiy khimiko-tekhnologicheskiy institut im. S. M. Kirova).
Kazan' Br.of the Scientific Research Institute for Cinema and Photography (Kazanskiy filial Nauchno-issledovatel'skogo kinofotoinstituta).

PRESENTED: November 13, 1957, by B. A. Arbuzov, Academician
SUBMITTED: June 28, 1957
AVAILABLE: Library of Congress

Card 3/3

AUTHORS: Kukhtin, V. A., Gil'm Kamay, Sinchenko, L. A., Orekhova, K. N. SOV/79-29-2-72/71

TITLE: Affiliation of the Complete Esters of Phosphorous Acid and Phosphinic Acids to Conjugated Systems (Prisoyedineniye polnykh efirov fosforistoy i fosfinistykh kislot k sopryazhennym sistemam). VII. Telomerization of the Methacrylic Acid With Trialkyl Phosphites (VII. Telomerizatsiya metakrilovoy kisloty s trialkilfosfitami)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 2, pp 510-515 (USSR)

ABSTRACT: In continuation of the common reaction of α,β-unsaturated acids and alkyl halides with trialkyl phosphites (Refs 1,2) the authors intended to find the catalyst most suitable for telomerization, to determine the factors which exercise influence upon this reaction and to determine the structure of the telomers obtained. They found that carefully purified triethyl phosphite can telomerize with methacrylic acid also without a catalyst. Temperature does not matter in this connection. The yield is small in this case (Table 1, Experiment 13). However, if a methacrylic acid is used for a while that is not stabilized with hydroquinone, the reaction takes place in

Card 1/3

a very violent manner under intense selfheating and with a high yield of telomers (Table 1, Experiment 12). The trialkyl phosphite that is purified only by separation through distillation does not telomerize with a methacrylic acid that was liberated from the inhibitor immediately before the experiment. It was interesting to know the way in which this telomerization would take place in the presence of triethyl amine and sodium methylate tested by R. M. Connel and H. W. Coover (Ref 3) as catalysts. Yet only small yields were offered by these experiments (Table 1, Experiments 1,2). Also the application of alkyl iodides for telomerization did not quite meet expectations. Benzoyl hydrogen peroxide turned out to be the most favourable catalyst for telomerization. In dependence of the molar ratio of the initial components, on the concentration of the catalyst and the phosphite radical telomers with various average molecular weights were obtained in this telomerization (Table 1). According to previous and the present results it may be assumed that the above-mentioned telomerization takes place according to the scheme mentioned in conclusion

Affiliation of the Complete Esters of Phosphorous Acid and Phosphinic Acids to Conjugated Systems. VII. Telomerization of the Methacrylic Acid With Trialkyl Phosphites SOV/79-29-2-32/71

Thus, the structure of telomers resulting from the telomerization of methacrylic acid with trialkyl phosphites was investigated and a scheme of reaction was suggested in addition. There are 2 tables and 3 references, 2 of which are Soviet.

ASSOCIATION: Kazanskiy khimiko-tekhnologicheskiy institut (Kazan' Institute of Chemical Technology)

SUBMITTED: December 26, 1957

Card 3/3

L 11557-66 EWT(d)/EWT(l)/EWP(m)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/EWP(k)/FCS(k)/EWA(h)/ETC(m)-6
ACC NR: AP6005011 EWA(l) LJP(c) SOURCE CODE: UR/0208/66/006/001/0121/0129
WW/EM/RM

AUTHOR: Lunev, V. V. (Moscow); Pavlov, V. G. (Moscow); Sinchenko, S. G. (Moscow) 90 B

ORG: none

TITLE: Hypersonic, equilibrium dissociating air flow past a sphere 24

SOURCE: Zhurnal vychislitel'noy matematiki i matematicheskoy fiziki, v. 6, no. 1, 1966, 121-129

TOPIC TAGS: aerodynamics, hypersonic flow, equilibrium flow, dissociated gas, difference method, shock wave, sonic line

ABSTRACT: A method is described for calculating a hypersonic flow of equilibrium dissociating air past a sphere which includes separate analysis of different flow regions. A numerical difference method for obtaining the solution to the inverse problem used by Vaglio-Laurin and Ferri is applied to the analysis of the subsonic and transonic portions of the flow field. This method consists in solving an arbitrary equation of state with given parameters with a given shock wave, axis of symmetry, and sonic line. The supersonic region of the flow was calculated by the method of characteristics with variables taken from [7], developed for the case of a flow with arbitrary equation of state. Calculations of the hypersonic flow of equilibrium dissociating air past a sphere in the range of velocities V_∞ from 3000 to 7500 m/sec and density ρ_∞ from 4×10^{-4} to 3×10^{-7} gr/cm^3 (which corresponds to altitudes from 10 to

1,55

UDC: 517.9:533.7

Card 1/2

L 11557-66
ACC NR: AP6005011

60 km) with T_∞ about 230°K. The results presented in graphs and in simple and sufficiently precise formulas are compared with existing approximate hypersonic theories and found to be in good agreement. Orig. art. has: 9 figures and 13 formulas. [AB]

SUB CODE: 20/ SUBM DATE: 17Dec64/ ORIG REF: 009/ OTH REF: 001/ ATD PRESS: 4189

TS

Card 2/2

SINCHENKO, Ye. A.

Obtaining high purity magnesium as by-product in the production of titanium. Biul. TSIIN tsvet. met. no. 7:18-20 '58. (MIRA 11:7)
(Titanium--Metallurgy)
(Magnesium)

PLUZHNIKOV, V.Kh.; SINCHESKUL, B.F.; CHAYKOVSKIY, E.F.

Determining the individual error of the observer in evaluating the passing of an artificial earth satellite through the AT thread. TSir.Astron.obser.Khar.un. no.24:33-35 no.24:33-35 '61. (MIRA 15:3)

(Artificial satellites--Tracking)

RUMANIA

Ar. POPESCU, V. TICAN and B. SINCHIEVICI. Institute of Inframicrobiology and Institute for Veterinary Research and Vaccines (Institutul de cercetari veterinare si biopreparate) "Pasteur," [Bucharest.]

"Immunizing Value of Vaccine Against Rubarth Disease at Various Times Following Its Manufacture."

Bucharest, Studii si cercetari de inframicrobiologie, Vol 14, No 3, 1963; pp 335-340.

Abstract [English summary modified]: Vaccine against canine infectious hepatitis was prepared from trypsinized tissue culture cells, with slight changes in preparation technique versus standard Rumanian (Surdan et al.) by decreasing AlOH below 66%, increasing formalin. Effectiveness was tested by protection afforded to 3 - 6 puppies inoculated with agent and compared to controls, after 10, 180, 315 days following vaccine manufacture. Effectiveness was only slightly decreased after 10.5 months. Two tables; 1 Soviet, 5 Rumanian, 1 Hungarian, 10 Western references.

1/1

SOV/175-58-6-2/41

Our Experience in Preparation Fire and Driving

In the model section, e.g. that under officer I.P. Bondarenko, competitive fire practice has been introduced. A tank commander, Technical Sergeant Lutsenko started a competition for hitting the target with the first round. In connection with this, the author underlines the part played by the personal example of a commander. A lot of attention must also be paid to training equipment. In regard to preparation fire, the author again stresses the importance of a training center for driving with the necessary technical facilities. In the companies, under officers V.A. Baranov, B.V. Rodin, L.F. Zemnitskiy, B.P. Danilov and others, the highest training standard has been achieved. The company considers that only fully trained men should be at the controls. In conclusion the author states that acquiring advanced experience must be the final aim of all formations. There are 2 photographs.

Card 2/2

IVLIYEV, L.A.; SINCHILINA, Ye.M.

Tussock moth and its effect on the fluctuation in the abundance of the tent caterpillar in the Amur Valley. Vop. ekol. 7:65-67 '62. (MIRA 16:5)

1. Dal'nevostochnyy filial Sibirskogo otdeleniya AN SSSR, Vladivostok.

(Amur Valley--Tussock moth)
(Amur Valley--Tent caterpillars)

SINCHKOVSKAYA, M. V.

Chemistry - Study and Teaching

More active participation in the study of chemistry in the 7th class. Khim. v shkole no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress November 1952 Unclassified

1. DMITRIEV, M. V.

2. USSR (600)

4. School Discipline

7. Discipline during the lesson. Sem'ia i shkola 8, No. 2, 1953.

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

AID P - 4034

Subject : USSR/Power

Card 1/1 Pub. 26 - 23/31

Author : Sin'chugov, F. I., Eng.

Title : Elimination of the dead voltage zone in relay protection system of the P3-156 type with a time lag in the first zone.

Periodical : Elek. sta., 11, 56, N 1955

Abstract : A brief description of the advantages of the relay protection system of this type. One diagram.

Institution : None

Submitted : No date

SIN'CHUGOV, F.I., inzh.

Use of a group-type shunting reactor. Elek. sta. 33 no.5:88-89 My '62. (MIRA 15:7)
(Electric substations) (Electric reactors)

SIN'CHUGOV, F.I., inzh.

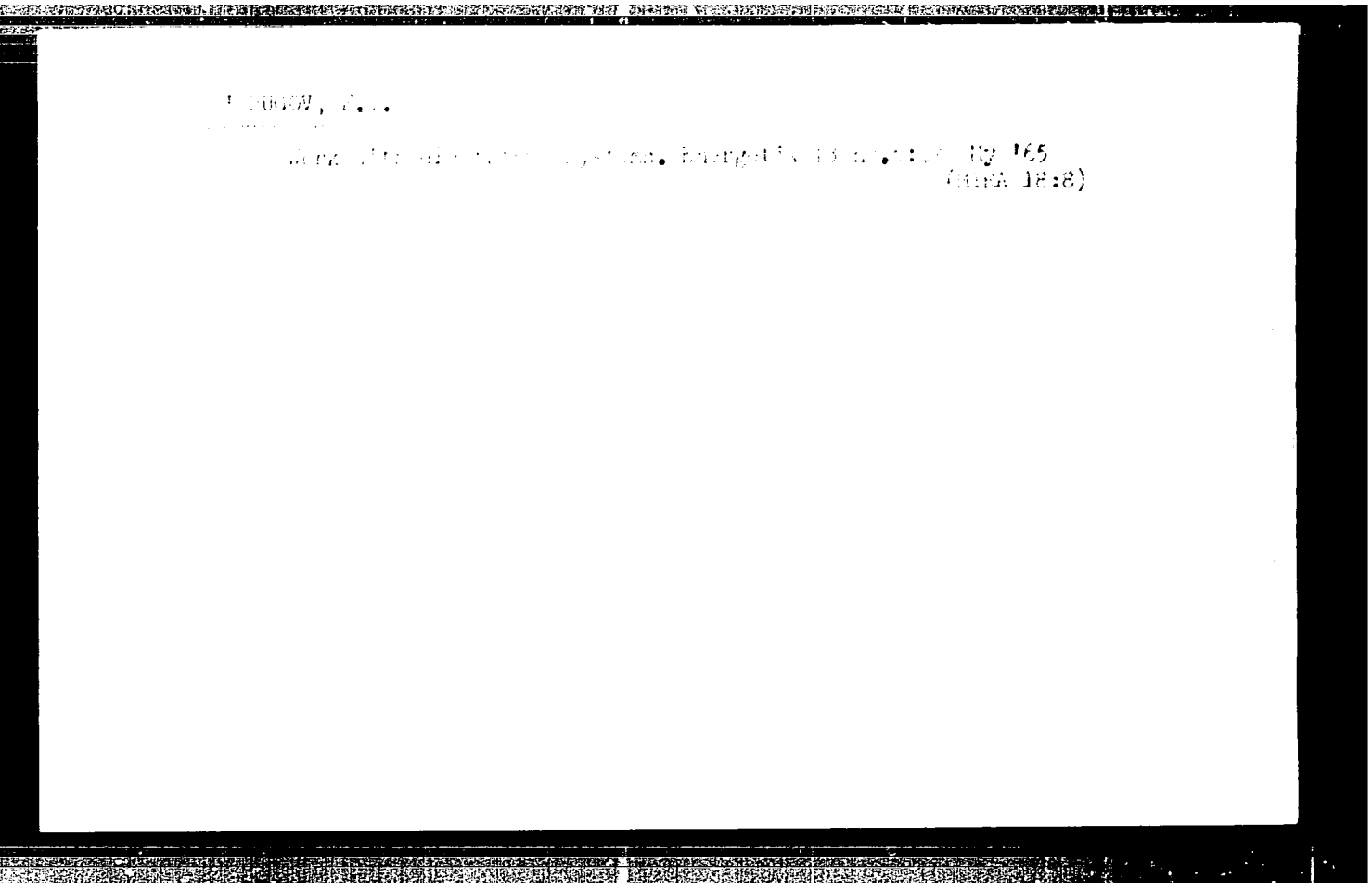
Use of electric reactors in parallel operation in step-down substations. Elek. sta. 33 no.7:57-59 Jl '62. (MIRA 15:8)
(Electric reactors) (Electric substations)

SIN'CHUGOV, F.I., inzh.

Concerning N.S. Shabalin's article "Overall automation and remote control in 35-110 kv. power distribution substations." Elektrichestvo no.11:80-83 N '63. (MIRA 16:11)

SIN'CHUGOV, F.I., inzh.

Blocking of the grounding blades in high-voltage electric power distribution devices. Elek. sta. 34 no.1:88-89 Ja '63. (MIRA 16:2)
(Electric power distribution)
(Electric cutouts)



ACC NR: AT7001991 SOURCE CODE: UR/0106/66/000/008/0095/0096

AUTHOR: Gnyurinov, N. M.; Gorovoy, A. A.; Postnikov, N. A.; Malychev, A. A.; Magidson, O. M.; Sin'chugov, F. I.; Zeylidzon, Ye. D.; Barchaninov, G. S.; Yermolenko, V. M.; Vasil'yev, A. A.; Sokolov, N. I.; Ul'yanov, A. S.; Fedoseyev, A. M.; Sarkisov, M. A.; Rokotyan, S. S.; Azar'yev, D. I.; Arson, G. S.; Dubinskiy, L. A.; Zhulin, I. V.; Kolpakova, A. I.; Antoshin, N. N. Frikunchik, A. D.; Kuchkin, M. D.; Preobrazhenskiy, N. Ye.; Rout, M. A.; Kheyfits, M. E.; Sharov, A. N.; Yakub, Yu. A.; Gorbunov, N. I.; Shurmukhin, V. A.; Beschinskiy, A. A.

ORG: none

TITLE: Boris Sergeyevich Uspenskiy (on his 60th birthday)

SOURCE: Elektricheskiye stantsii, no. 8, 1966, 95-96

TOPIC TAGS: hydroelectric power plant, electric engineering personnel

SUB CODE: 10

ABSTRACT: B. S. Uspenskiy was born in June 1906. He graduated from the State Electric Machine Building Institute in 1928 as an electric installation engineer. He worked in the State Electro-Technical Trust for four years, then in the All-Union ElectroTechnical Union, where he planned power construction units. Plans which he made up at that time for the electrical portion of electrical stations and sub-stations are still being used. He was invovled in planning and installation of the electrical portion of hydro-electric power stations and powerful pumping stations in the Moscow-Volga Canal. During the war, he was in charge in installation of the Krasnogroskaya Heat and Electric Power Station, the planning of the Urals Hydro-Electric Power Station and other projects. He

Card 1/1

0928 1534

LIKHACHEV, Yu.A.; VLADIMIRSKIY, V.S.; MALOVA, E.V.; SHUL'TS (mladshiy), S.S.; MAKAROVA, Z.A.; SINCHUGOVA, T.A.; CHUYENKO, P.P., red.; FEDOTOVA, M.I., vedushchiy red.; DEM'YANENKO, V.I., tekhn.red.

[Paleozoic tectonics of the Kyzyl Kum basement] Tektonika paleozoiskogo fundamenta Kyzylkumov. Leningrad, Gostoptekhizdat, 1963. 117 p. (Leningrad, Vsesoiuznyi geologicheskii institut. Trudy, vol. 105. Problema neftegazonosnosti Srednei Azii, no.15). (MIRA 17:3)

SINCHUK, A.P.

EWT(d)/EWT(m)/EWP(c)/EWA(d)/EWP(v)/T-2/EWP(t)/EWP(k)/EWP(b)/EWP(l)
ACCESSION NR AM4046730 BOOK EXPLOITATION Pf-4 MJW/JD/ S/
MLK

Samarin, A. M., ed. (Corresponding member, Academy of Sciences, U.S.S.R.) 8+1

Steel production; handbook (Staleplavil'noye proizvodstvo; spravochnik), t. 2., Moscow, Izd-vo "Metallurgiya", 1964, 1039 p. illus., biblio., tables. Errata slip inserted. 5,850 copies printed.

TOPIC TAGS: steel, open-hearth furnace, quality control, refractory

TABLE OF CONTENTS [abridged]: 16

Part 3. Thermal engineering
Ch. XV. Fuel and its combustion in an open-hearth furnace (N. I. Ivanov) -- 535
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Ch. XVII. Heat transfer in an open-hearth furnace (S.S. Magidson) -- 575
Ch. XVIII. Thermal operation of an open-hearth furnace (Ye. A. Kapustin) -- 603
Ch. XIX. Auxiliary thermal equipment in steel production (B. G. Turovskiy) -- 617

Card 1/3

L 17595-65
ACCESSION NR AM4046730 //

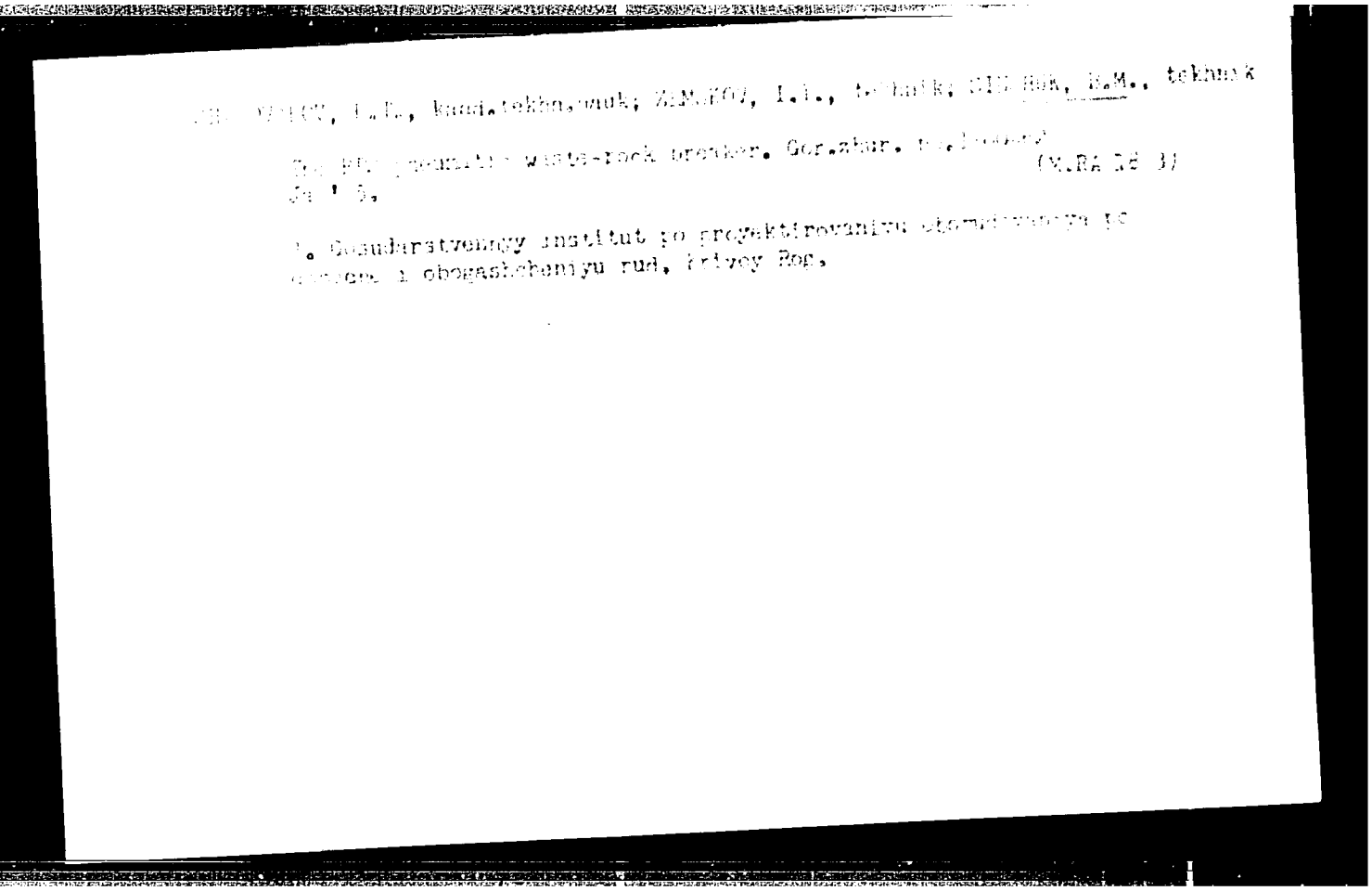
SUB CODE: MM SUBMITTED: 30May64 NR REF SOV: 279
OTHER: 030

Card 3/3

KHASHKOVETS, Irzhi[Haskovec, Jiri], inzh.; KOTEK, Zdenek, inzh.; MEL'TSER, R.Ye.[translator]; SINCHUK, B.I., nauchnyy red.; KLIMOVICH, Yu.G., red.; TOKER, A.M., tekhn. red.

[Small-scale automation]Malaia avtomatizatsiia. Moskva, Goskhimneftetekhizdat, 1961. 197 p. Translated from the Czech. (MIRA 15:7)

(Automation)



SINCIC, Frano (Split)

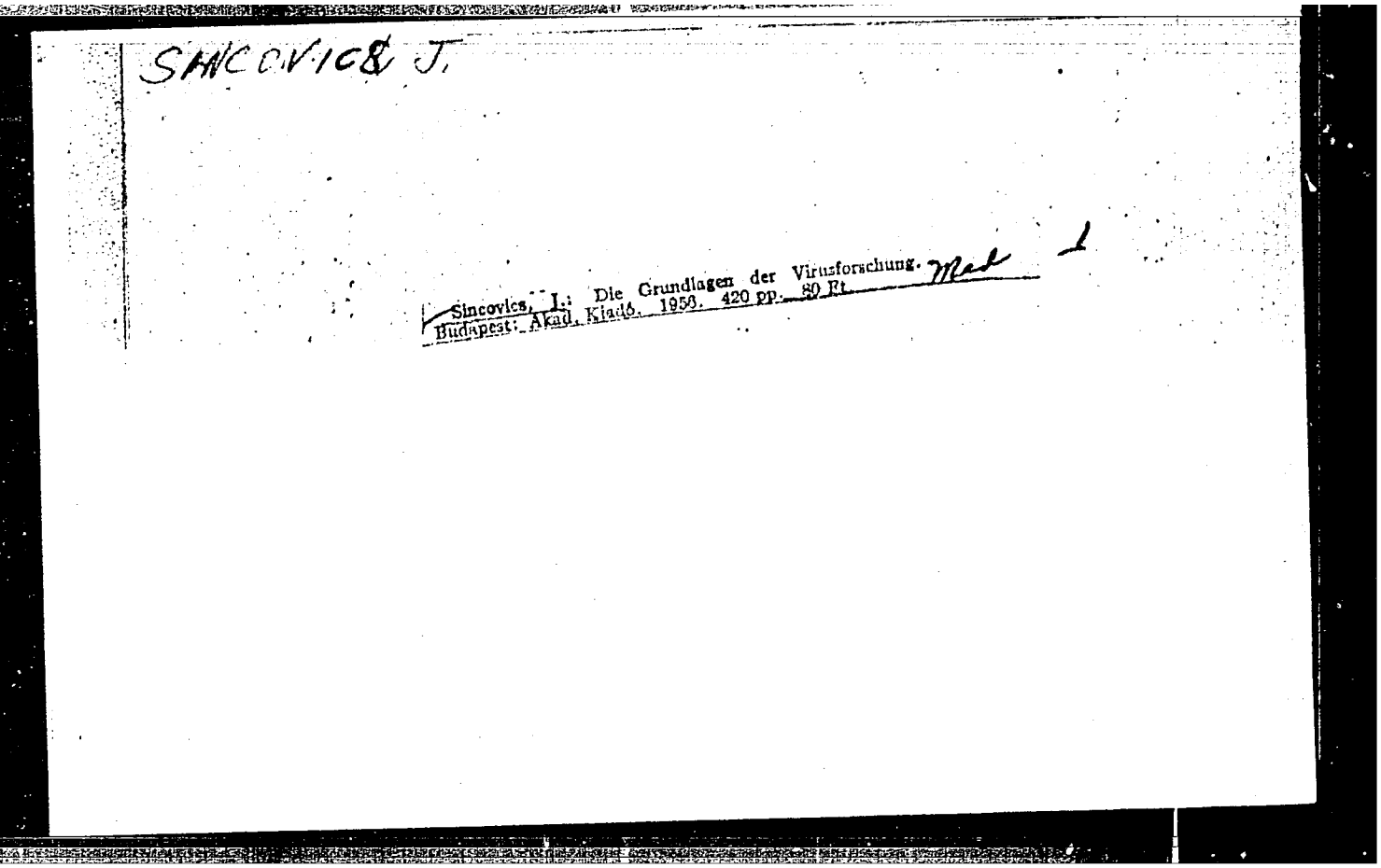
Essential oils of Dalmatia. Farmaceut gl Zagreb Supplement (18) no.5:41-42 '62

1. "Biljana" Enterprise, Split Branch, Split.

IGNJACEV, Zivojin; IVANKOVIC, Dragoslav; JANCIC-ZGURICA, Marija; SINCIC, Miodrag; BOSNJAKOVIC, Vladimir; POPOVIC, Radivoje.

Diffuse angiosarcomatosis. Med. pregl. 18 no. 3:75-80 ' 65

1. Patoloski institut Medicinskog fakulteta Univerziteta u Beogradu (Upravnik: Prof. dr. Zivojin Ignjacev); Interno odeljenje Gradske bolnice, Beograd (Upravnik: Prof. dr. Mihajlo Andrejevic).

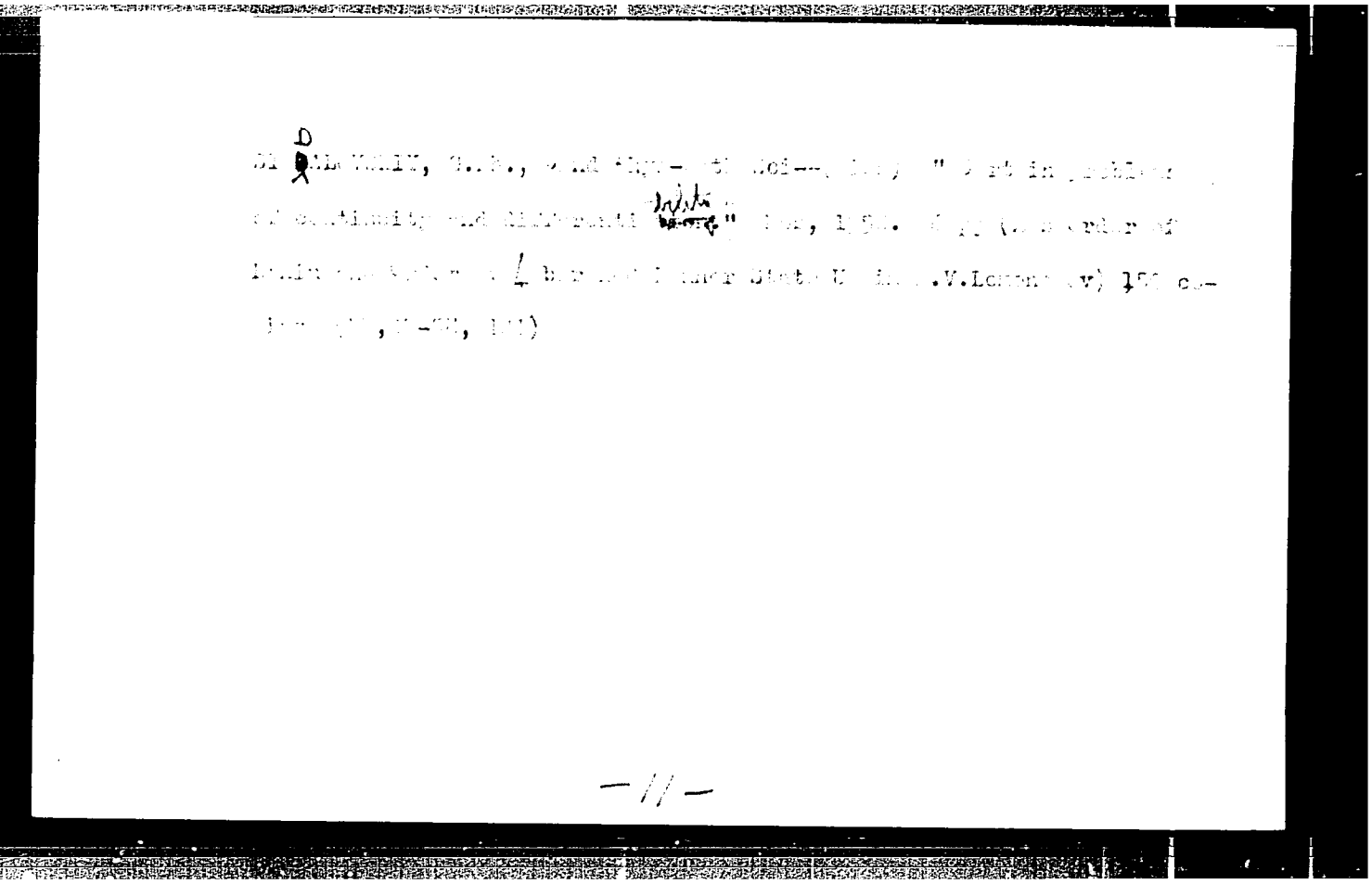


SINCOVICS J.

Sincovics, I.: Die Grundlagen der Virusforschung. Mark 1
Budapest: Akad. Kiadó. 1958. 420 pp. 80 Ft.

SINDALOVSKIY, G.Kh.

Some questions of continuity of measurable functions. Uch. zap. Mosk. un. no.181:175-182 '56. (MLRA 10:4)
(Functions)



—//—

AUTHOR: Sindalovskiy, G.Kh. SOV/38-22-3-7/9

TITLE: ~~Some Questions Concerning~~ the Continuity and Differentiability of Measurable Functions (Nekotoryye voprosy nepreryvnosti i differentsiruyemosti izmerimykh funktsiy)

PERIODICAL: Izvestiya Akademii nauk SSSR,Seriya matematicheskaya,1958, Vol 22,Nr 3,pp 395-432 (USSR)

ABSTRACT: Let $f(x)$ be defined on $(0,1)$, finite and measurable according to Lebesgue. Let

$$\Delta_1^{\varphi}(x,h) = f(x-\varphi(h)) - f(x-\varphi(h)-h)$$

$$\Delta_2^{\varphi}(x,h) = f(x-\varphi(h)+h) - 2f(x-\varphi(h)) + f(x-\varphi(h)-h)$$

where $\varphi(h)$ is assumed to be defined in the right neighborhood of zero and to be measurable and $\lim_{h\to\infty} \varphi(h) = 0$.

If in the point x

$$\lim_{h\to\infty} \Delta_1^{\varphi}(x,h) = 0$$

or

Card 1/3

Some Questions Concerning the Continuity and Differentiability of Measurable Functions

$$\lim_{h\to\infty} \Delta_2^{\varphi}(x,h) = 0$$

then $f(x)$ is called φ^1 - or φ^2 - continuous in x . The φ-differentiability is defined analogously :

$$f'_{\varphi}(x) = \lim_{h\to\infty} \frac{\Delta_1^{\varphi}(x,h)}{h} .$$

The notions of the symmetric right and left derivatives are contained in the notion of the φ-derivative. The function $f(x)$ can be φ-continuous or φ-differentiable for some $\varphi(h)$ and for the others not. The author shows that under certain assumptions on $\varphi(h)$ from the φ-continuity on a set E of positive measure it follows the ordinary continuity almost everywhere on E. The existence of the ordinary derivative almost everywhere follows from the φ-differentiability . With the aid of numerous interesting examples the author proves the necessity of his assumptions, e.g. he constructs a function which is φ-continuous on E and simultaneously discontinuous in the usual sense in each point of E (here the applied φ has denu-

Some Questions Concerning the Continuity and Differentiability of Measurable Functions

SOV/38-22-3-7/9

merably many points of discontinuity).
There are 8 references, 5 of which are Soviet, 1 Polish, 1 American, and 1 French.

PRESENTED: by M.A. Lavrent'yev, Academician

SUBMITTED: May 23, 1957

1. Functions--Measurement 2. Functions--Theory

Card 3/3

86396
S/055/60/000/005/002/010
C111/C222

16.2600 16.2800

AUTHOR: Sindalovskiy, G. Kh.

TITLE: On the Uniform Convergence of a Family of Functions[16] Depending on a Continuously Varying Parameter

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya I, matematika, mekhanika, 1960, No 5, pp. 14-18

TEXT: Theorem 1: Let the function $f_h(x)$ be defined in the square $0 \leq x \leq 1$, $0 < h \leq 1$, for every h Lebesgue-measurable as a function of x and for every x continuous in h. If $f_h(x)$ tends to $f(x)$ for $h \to 0$ and all $x \in E \subset (0,1)$, mes $E > 0$, then there exists a set $P \subset E$ (the measure of which is arbitrarily little different from mes E) so that on it for $h \to 0$ it converges uniformly $f_h(x) \to f(x)$

Let $f_h(x)$ have the property β if $\lim_{h \to 0} \sup_{0<x<1} \omega_x f_h(x) = 0$ (here $\omega_x f_h(x)$ is the variation of $f_h(x)$ as a function of x in the point (x,h)).

Theorem 2: Let $f_h(x)$ be defined in the square $0 < x < 1$, $0 < h < 1$ (or only for $x \in E$, $0 < h < 1$) and let it have the property β. If $f_h(x)$ for $h \to 0$ tends to

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S/055/60/000/005/002/010
C111/C222

On the Uniform Convergence of a Family of Functions Depending on a Continuously Varying Parameter

$f(x)$ for all $x \in E \subset (0,1)$, mes $E > 0$, then there exists a set $P \subset E$ the measure of which is arbitrarily little different from mes E so that on P, $f_h(x)$ tends to $f(x)$ uniformly in x for $h \to 0$.

The author mentions D.F.Yegorov and G.P.Tolstov. There are 3 references: 1 Soviet, 1 Polish and 1 English.

ASSOCIATION: Kafedra teorii funktsii (Chair of Theory of Functions)

SUBMITTED December 11, 1959

Card 2/2

SINDALOVSKIY, G.Kh.

One generalization of derived numbers. Izv.AN SSSR. Ser.mat. 24 no.5:707-720 S-O '60. (MIRA 13:10)

1. Predstavleno akademikom M.A.Lavrent'yevym.
(Aggregates)

SINDALOVSKIY, G.Kh.

Continuity and differentiability with respect to congruent sets.
Dokl. AN SSSR 134 no.6:1305-1306 O '60. (MIRA 13:10)

1. Predstavleno akademikom P.S.Aleksandrovym.
(Aggregates)

SINDALOVSKIY, G.Kh.

Continuity and differentiability relative to congruent sets.
Izv. AN SSSR. Ser. mat. 26 no.1:125-142 Ja-F '62. (MIRA 15:2)
(Aggregates)