137-58-3-6215

Microstructural Analysis Determines Defects Introduced in Carbon Steel (cont.)

advanced equipment for investigation of the structure of metals. R.O.

Card 2/2

BASKUTIS, P., prof., red.; YANITSKIS, I.[Janickis,I.], doktor khim. nauk, prof., red.; VIDMANTAS, Yu.[Vidmantas, J.], prof., otv. red.; STANAYTIS, I.[Stanaitis, I.], starshiy prepodavatel'., red.; BRAYNIN, S., kand. istor. nauk, dots., red.; INDRYUNAS, I., [Indriunas, I.], doktor tekhn. nauk, prof., red.; LASINSKAS, M., kand. tekhn. nauk, red.; NOVODVORSKIS, A., kand. tekhn. nauk, dots., red.; PESIS, R.[Pesys, R.], kand. tekhn. nauk, dots., red.; SADAUSKAS, T., dots., red.; SHESHEL'GIS, K.[Seselgis, K.], kand. arkh. dots., red.; VASAUSKAS, S., kand. tekhn. nauk, dots., red.; ZDANIS, Yu. [Zdanis, J.], kand. tekhn. nauk, red.; GRIGALYUNAS, B. [Grigaliunas,B], red.; EYTUTIS, V.[Eitutis, V.], red.; VIDMANTAS, Yu.[Vidmantas,J.], red.; NAUYOKAS, I. [Naujokas,I.], tekhn. red.

[Materials of the 5th Scientific Technical Conference of Students of Institutions of Higher Learning of the White Russian S.S.R., Latvian S.S.R., Lithuanian S.S.R. and Estonian S.S.R.] Trudy Nauchno-tekhnicheskoi konferentsii studentov vysshikh uchebnykh zavedenii Belorusskoi SSR, Latviiskoi SSR, Litovskoi SSR i Estonskoi SSR, 5th. Kaunas, Izd. Kaunasskogo politekhn. in-ta, 1961. 205 p. (MIRA 14:12)

1. Nauchno-tekhnicheskaya konferentsiya studentov vysshikh uchebnykh zavedeniy Belorusskoy SSR, Latviyskoy SSR, Litovskoy SSR i Estonskoy SSR, 5th.
(Science—Congresses) (Technology—Congresses)

PABILIUS, Vincas, dots., kand. tekhn. nauk; BIELIUNAS, Ksaveras, dots., kand. tekhn. nauk; NOVODVORSKIS, Andrius, dots., kand. tekhn. nauk; MELYNIENE, D., red.; SARKA, S., tekhn. red.

[Study of metals] Metalotyra. Vilnius, Valstybine politines ir mokslines literaturos leidykla, 1961. 217 p. (MIRA 15:3)
(Metals)

NOVODVORSKIY, A.Ye.

Causes for premature damage to packings in diffusers. Sakh.prom. 29 no.1:22-24 '55. (MLRA 8:4)

1. Glavprodmashdetal'.
(Diffusers)

ACC NR: AP7008928 SOURCE CODE: UR/0055/66/000/006/0052/0055

AUTHOR: Novodvorskiy, M. Ye. -- Novodvorsky, M. E.

ORG: Department of the Theory of Probability and Mathematical Statistics (Kafedra teorii veroyatnostey i matematicheskoy statistiki)

TITLE: Non-decomposable finite-dimensional representations of lie algebras

SOURCE: Moscow. Universitet. Vestnik, Seriya I. Matematika, mekhanika, no. 6, 1966, 52-55

TOPIC TAGS: algebra, mathematics

SUB CODE: 12

ABSTRACT: The paper gives examples of indecomposable representations of two-dimensional commutative, three-dimensional nilpotent and two-dimensional solvable Lie algebras that have identical kernels but are not equivalent. For the latter algebra is given an example of two indecomposable representations with the same kernel but of different dimensions. In the simplest cases all indecomposable representations with a given kernel are described. Orig. art. has: 6 formulas.

[JPRS: 39,689]

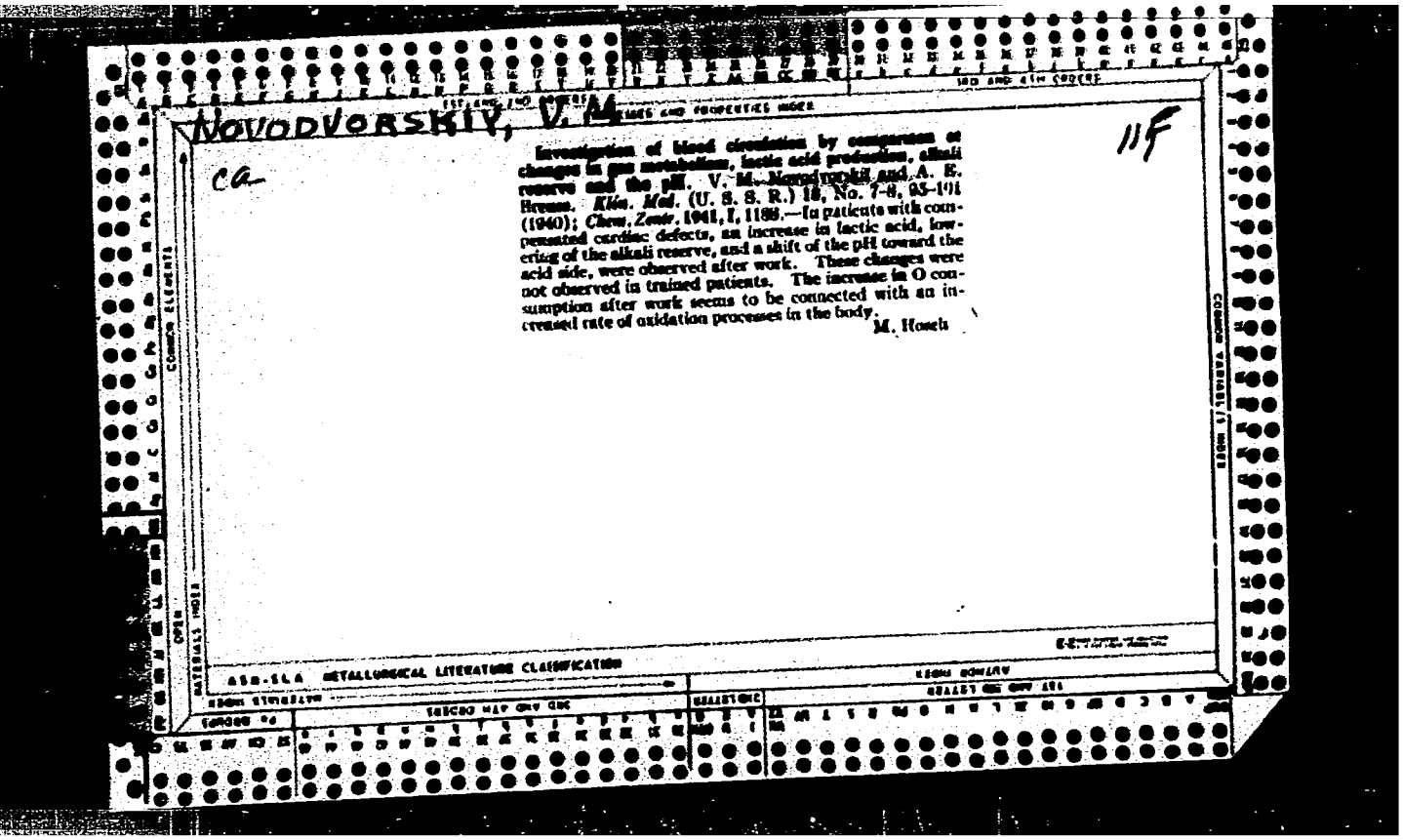
Card 1/1 UDC: 519.2

0929 1753

BUDANTSEV, A.; NOVODVORSKIY, V.

Apartment houses need a new lease on life. Zhil.-kom.khoz. 12 no.11:15-16 N '62. (MIRA 15:11)

1. Predsedatel' ispolnitel'nogo komiteta Frunzenskogo rayonnogo soveta Moskvy (for Budantsev). 2. Zamestitel' predsedatelya ispolnitel'nogo komiteta Frunzenskogo rayonnogo soveta Moskvy (for Novodvorskiy).
(Moscow--Apartment houses--Maintenance and repair)



NOVODVORSKIY, V. M.

Ca

11F

Investigation of blood circulation by comparison of changes in gas metabolism, lactic acid production, alkali reserve and the pH. V. M. Novodvorskii and A. E. Brauns. *Klin. Med.* (U. S. S. R.) 18, No. 7-8, 93-101 (1940); *Chem. Zentr.* 1941, I, 1188.—In patients with compensated cardiac defects, an increase in lactic acid, lowering of the alkali reserve, and a shift of the pH toward the acid side, were observed after work. These changes were not observed in trained patients. The increase in O consumption after work seems to be connected with an increased rate of oxidation processes in the body.

M. Hosch

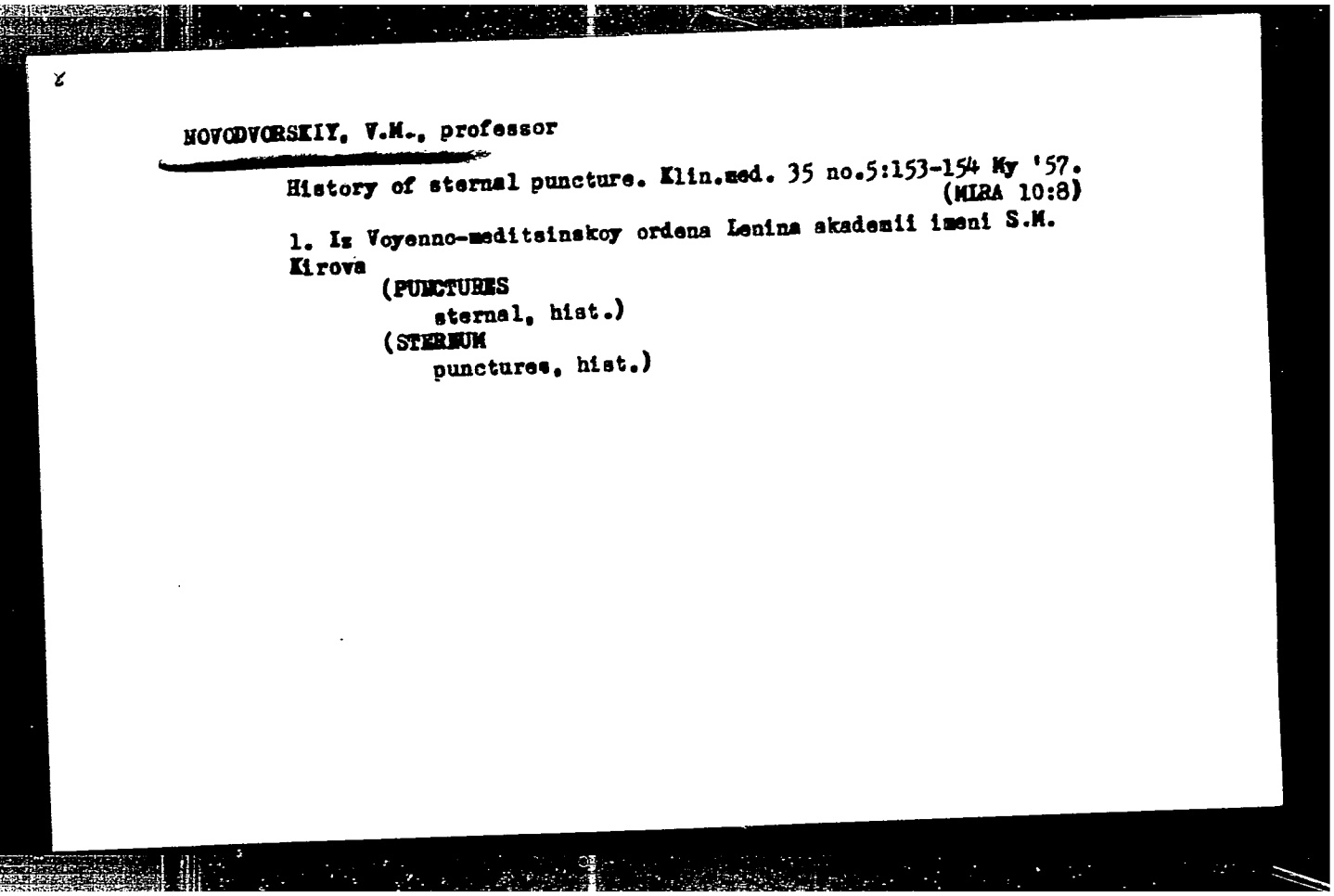
NOVOGVORSKIY, V. M.

Prof. Physical Clinic Mid. Acad. im. S. M. Kirov, -c1948-; Maj. Gen., Med. Corps, Chair, Therapy Faculty, -c1948-. "Contemporary State of Knowledge on the Clinical Treatment of Acute Leukosis," Klin. Med., 26, No. 1, 1948.

NOVODVORSKIY, V. M.

Novodvorskiy, V. M. - "Frequency and nature of nephritis in malaria," Sbornik trudov (Voyen.-med. akad. im. Kirova), Vol. XLIII, 1949, p. 132-39, - Bibliog: 17 items

SO: U-4355, 14 August 53, (Letopis 'Zhurnal 'nykh Statey, No. 15, 1949.)



NOVODVORSKIY, V.M., professor

History of sternal puncture. Klin.med. 35 no.5:153-154 My '57.
(MIRA 10:8)

1. Iz Voyenno-meditsinskoy ordena Lenina akademii imeni S.M. Kirova

(PUNCTURES
sternal, hist.)
(STERNUM
punctures, hist.)

NOVODVORSKIY, Vladimir Venediktovich; BITMAN, Leonid Grigor'yevich; MALOLETKOV, Ye.K., inzh., nauchnyy red.; VDOVENKO, Z.I., red.izd-va; NAUMOVA, G.D., tekhn.red.

[Horizontal and vertical conveyance of materials in housing construction] Gorizontal'nyi i vertikal'nyi transport materialov v zhilishchnom stroitel'stve. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 144 p. (MIRA 14:6)

(Building materials--Transportation)

NOVODVORSKIY, Ye. P

Novodvorskii, E. P., and [illegible]

equating maxima [illegible]

6(46), 174–181 (1951). (Russian)

The authors establish the validity of a process, attributed to Ya. L. Remez for [illegible]

[illegible]

required to have the following properties: it consists of functions [illegible]

two functions are identical if [illegible]

points [illegible] double [illegible]

[illegible]

points. *R. P. Boas, Jr.* [illegible]

Source: Mathematical Reviews, Vol. [illegible] No. [illegible]

SMW

NOVODVORSKIY, Ye.F.

Mathematical Reviews
Vol. 14 No. 9
October 1953
Mechanics

Novodvorskiĭ, E. P. On a method of design of mechanisms.
Akad. Nauk SSSR. Trudy Sem. Teorii Maš. i Mehanizmov 10, no. 42, 5–51 (2 plates) (1951). (Russian)

One of the principal problems in the design of mechanisms is the approximation of desired functions. The techniques developed by Chebyshef and his followers are here summarized. A number of theorems are derived showing how the parameters of a considered mechanism are adjusted to obtain the greatest number of intersections of the traced function with the desired function and the least deviation between them. For several simple mechanisms, like the crosshead mechanism, sine and tangent mechanisms and the four-bar linkage, the exact formulas for the motions are given in terms of the parameters. Several numerical examples are given in detail showing how the approximation of certain desired functions by them is performed.

M. Goldberg (Washington, D. C.).

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NOVODVORSKIY, Yu.B.

PHASE I BOOK EXPLOITATION SOV/6328

Presnov, Viktor Alekseyevich, Yuriy Borisovich Novodvorskiy, and Mikhail Petrovich Yakubenya

Osnovy tekhniki i fiziki spaya (Fundamentals of Bonding Technology and Physics) Tomsk, Izd-vo Tomskogo univ., 1961. 233 p. 3000 copies printed.

Ed. (Title page): V. A. Presnov, Doctor of Technical Sciences; Tech. Ed.: L. G. Mordovina.

PURPOSE: This book is intended for engineers working in the vacuum-tube industry and other branches of industry using combinations of metals and ceramics. It may also be used as a handbook by students of advanced courses specializing in electrical and chemical technology.

COVERAGE: The book reviews the results of physicochemical studies in bonding glass and ceramics to metal and has the object of clarifying the nature

Card 1/2

NOVODVORSKY, Milan, inz.

How to prolong the service life of metallic molds.
Slevarenstvi 12 no.4:153 Ap '64.

1. Slovak Higher School of Technology, Chair of Mechanical Technology, Bratislava.

NOVOFASTOVSKAYA, L.R., zavedmyushchiy; LOBODENKO, I.M., nachal'nik.

Case of metastatic melanoma of the stomach. Vest.rent.i rad. no.3:88-90 My-Je '53. (MLRA 6:8)

1. Rentgenodiagnosticheskoye otdeleniye TSentral'noy klinicheskoy rentgeno-radiologicheskoy bol'nitsy Ministerstva putey soobshcheniya (for Novofastovskaya). 2. TSentral'naya klinicheskaya rentgeno-radiologicheskaya bol'nitsa Ministerstva putey soobshcheniya (for Lobodenko).
(Stomach--Tumors)

NOVOFASTOVSKAYA, L. R., Candidate Med Sci (diss) -- "X-ray diagnosis of rigid antral gastritis". Moscow, 1959. 15 pp (State Sci Res Roentgenological-Radiological Inst of the Min Health RSFSR), 150 copies (KL, No 26, 1959, 128)

NOVOPASTOVSKAYA, L.R. (Moskva, ul. Novo-Basmannaya, d. 10, kv. 57)

X-ray diagnosis of rigid antral gastritis. Vest. rent. i rad. 34 no.1:16-22 Ja-F '59. (MIRA 12:3)

1. Iz III kafedry rentgenologii i radiologii (zav. - prof. I.L. Tager) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. - prof. V.P. Lebedeva)
(GASTRITIS, diag.
x-ray in rigid antral gastritis (Rus))

TAGER, I.L.; NOVOFASTOVSKAYA, L.R.

Dynamics of rigid antral gastritis. Khim. med. 38 no.5:101-109 My '60. (MIRA 13:12)
(GASTRITIS) (STOMACH—DISEASES)

NOVOFASTOVSKAYA, L.R., kand. med. nauk

Methodology of X-ray examination of the gallbladder. Vest. rent. i rad. 37 no.5:65-66 S-O '62. (MIRA 17:12)

NOVOFASTOVSKIY, D.D.

NOVOFASTOVSKIY, D.D.; KEYSEVICH, E.I.

Hygienic evaluation of "lignofol" panels. Gig.i san. no.5:50-51 My '54. (MLRA 7:5)

1. Iz Kiyevskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(Plywood) (Industrial hygiene)

NOVOFASTOVSKIY, D. D.

GUSLITS, I.G.; NOVOFASTOVSKIY, D.D.

Activities of the Kiev city sanitary-epidemiological station in the field of industrial hygiene. Gig. i san. no.6:42-44 Je '54. (MLRA 7:6)

1. Iz Kiyevskoy gorodskoy sanitarno-epidemiologicheskoy stantsii.
(INDUSTRIAL HYGIENE,
*in Russia, activities of municipal sanit.-epidem. stations)

NOVOFASTOVSKIY, D.D

NOVOFASTOVSKIY, D.D.

Concerning the article by G.A.Beilikhis and M.D.Rozova on "Some problems in the work practice of industrial sanitation laboratories." (MLRA 10:9)
Gig. i san., 22 no.8:67-68 Ag '57.

1. Iz sanitarno-epidemiologicheskoy stantsii Kiyeva.
(INDUSTRIAL HYGIENE) (CHEMICAL LABORATORIES)

NOVOFASTOVSKIY, D. D

32-6-52/54

AUTHOR: NOVOFASTOVSKIY, D.D.

TITLE: On the Participation of Works Laboratories in the Endeavors Made for the Improvement of Working Conditions in Factories and Plants. (Ob uchastii zavodskikh laboratoriy v ozdorovlenii usloviy truda na predpriyatiyakh - Russian)

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol 23, Nr 6, pp 766-766 (U.S.S.R.)

ABSTRACT: In order to be able to control air conditions in factories special stations have been established in works laboratories in the Kiev area. These stations were equipped with the necessary apparatus for this purpose. The entire campaign as well as the task of training personnel is in the hands of the Laboratory for Works Hygiene of the City of Kiev. The necessary specialists are already active and available in several of the more imprtant plants. Seminaries were established and lectures for practical instuctions were held at various factories and plants for the purpose of utilizing all available technical means of research in laboratories for air-decontamination, for the determination of atmospheric pressure, relative humidity, intensity of air motion, heat radiation, etc. Meetings of works physicians, technical inspectors, trade union representatives, etc. were also held for this purpose. These measures caused considerable and lively interest.

ASSOCIATION: F.D.Novofastovskiy, director of the municipal hygienic Research Laboratory 6f the Minicipal Sanitary Institute for Epidemics of the City of Kiev.

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AVAILABLE: Library of Congress.

Card 1/1

NOVOPASTOVSKAYA, L.R. (Moskva)

Role of morphine in the functional diagnosis of rigid antrum gastritis [with summary in English]. Klin.med. 37 no.1:55-60 Ja.'59. (MIRA 12:3)

1. Iz tret'yey kafedry rentgenologii i radiologii (zav. - prof. I.L. Tager) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. V.P. Lebedeva).

(GASTRITIS, diag.
x-ray after admin. of morphine in rigid antrum gastritis (Rus))

(MORPHINE, eff.
on motor funct. of stomach, value in x-ray diag. of rigid antrum gastritis (Rus))

OSTROVSKIY, V.S.; ZHUMAVSKIY, V.A.; NOVOFASTOVSKIY, M.G.

Production of chrome leather on semiautomatic lines. Kozh.-obuv. prom. 6 no.9:23-25 S '64. (MIRA 17:12)

NOVOPASTOVSKIY, M.S.

Color schemes and efficient lighting in leather enterprises. (MIRA 18:8)
Kozh.-obuv. prom. 7 no.7:1-4 Jl '65.

NOVOGRADSKI, Milena

Application of infrared spectroscopy in determining the degree of esterification of the cellulose molecules. Glas Hem dr 28 no.10:537-542 '63.

1. Faculty of Technology of the University of Belgrade, Belgrade.
Submitted January 29, 1964.

NOVOGORODSKAYA, E.M.; KHAZENSON, L.B.

Coli enteritis and principles for the organization of its control among young children. Pediatriia no.5:31-36 '61. (MIRA 14:5)

1. Iz laboratorii kishechnykh infektsii (rukovoditel' E.M. Novogorodskaya) i sektora epidemiologii (rukovoditel' I.M. Ansheles) Instituta epidemiologii, mikrobiologii i gigiyeny imeni Pastera (dir. - kand.med.nauk M.Ya. Nikitin, zam. dir. po nauchnoy chasti - prof. K.N. Tokarevich).
(ESCHERICHIA COLI)

NOVOGRODSKAYA, T.I.

Late results of the surgical treatment of pararectal fistulae. Khirurgiia 35 no.4:60-66 Ap '59. (MIRA 12:8)

1. Iz gospital'noy khirurgicheskoy kliniki (dir. - deystvitel'nyy chlen AMN SSSR prof. B.V.Petrovskiy) I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova.
(RECTUM, fistula
pararectal, surg., remote results (Rus))

NOVOGORODSKAYA, T.I.; GAL'PERINA, R.Ye.; BAKYCHAROV, Ya.P.

Late results of resuscitation following clinical death. Vest.khir. 84 no.1:118-120 Ja '60. (MIRA 13:10)
(RESUSCITATION)

KRYUKOV, K.P., inzh; NOVOGORODTSEV, B.P., inzh

Using free-center clamps on electric power lines. Elek.sta. 29 no.9:85-87 S '58. (MIRA 11:11)
(Electric lines)

NOVOGORODTSEV, G. A.

"An Investigation of the Influence of High Degrees of Milling on the Hardening of Cements." Cand Tech Sci, Moscow Order of Lenin Chemicotechnological Inst imeni D. I. Mendeleyev, 27 Dec 54. (VM, 17 Dec 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)
SO: Sum. No. 556, 24 Jun 55

L 50185-65 EWT(d)/EWP(v)/EWP(k)/EWP(h)/EWP(1) Po-4/Pq-4/Pf-4/Pg-4/Pk-4/
Pl-4 IJP(c) BC

AM5015052 Novogranova, Feak Exploitation UR/ 57 43 B+1

Ageyev, V. M. (Engineer), and others [EDITORS ?] 9 14

Instrument manufacture and automatic control devices; handbook in five volumes. v. 4: Automatic control and automatic devices (Priborostroyeniye i sredstva avtomatiki; spravochnik v pyati tomakh. t. 4: Avtomaticheskoye regulirovaniye i sredstva avtomatiki). Moscow, Izd-vo "Mashinostroyeniye", 1965. 716 p. illus., biblio., index. Errata slip inserted. 24,700 copies printed.

TOPIC TAGS: automation, automatic control systems, automatic controller classification, static linearization, designing complex automation

PURPOSE AND COVERAGE: This is the fourth volume of the handbook: "Instrument manufacture and automatic control devices." It consists of two parts. Part one presents the fundamentals and definitions of the theory of automatic control, modern methods of mathematical analysis and synthesis of linear and nonlinear systems, and the methods of their dynamic computation. The second part of

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the volume contains descriptions of typical electrically, pneumatically, and hydraulically operated controllers, actuating mechanisms, and control systems. It also gives basic technical characteristics of electronic computational techniques applied in automation, and elucidates problems of the organization and planning of the most widely used systems of automatic control.

TABLE OF CONTENTS [Abridged]:

Part I. Theory and methods of designing automatic control systems

1. Fundamental principles, sturcture of systems, and a definition of the theory of automatic control (Ye. G. Izvol'skiy, L. G. Novogranova, and V. V. Glukhov) -- 1-18
2. Objects of automatic control (Yu. Ye. Ruzskiy) -- 23-54
3. Elements of automatic controllers -- 58-132
4. Automatic controllers (Yu. Ye. Ruzskiy) -- 145-176
5. Methods for calculating the dynamics and the statics of SAR (system of automatic regulation), the SAC (system of automatic control) and servosystems (L. G. Nogranova and V. V. Glukhov) -- 176-230

Card 2/4

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17. Hydraulic and electrical-hydraulic means of automation and auxiliary devices -- 618-645
18. Designing systems for control and automatic regulation (A. B. Rodov) -- 645-694

SUB CODE: IE SUBMITTED: 05Feb65 NO REF SOV: 344

OTHER: 051

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Card 4/4

NOVOGORODTSEV, G.A.

Method in research work for determing standards in meeting the need for stomatological care. Zdrav.Ros.Feder. 6 no.7:7-14 Jl '62. (MIRA 15:9)

1. Iz otdela organizatsii zdravookhraneniya Moskovskogo nauchno-issledovatel'skogo instituta gigiyeny imeni F.F.Erismana (dir. A.P.Shitskova).

(STOMATOLOGY--RESEARCH)

NOVOGORODTSEV, G.A.

Incidence of dental and oral diseases in the residents of Minsk. Zdrav.Bel. 8 no.11:58-62 N '62. (MIRA 16:5)

1. Nachal'nik Planovo-finansovogo otdela Ministerstva zdravookhraneniya SSSR.

(MINSK—MOUTH—DISEASES)
(MINSK—TEETH—DISEASES)

VASIL'YEV, A.N.; NOVOGORODTSEV, N.F.; OTLIVANOV, S.G.; TERESHIN, G.G.

Use of thermocouples for temperature control of liquid steel in steel smelting sections of the Kuznetsk Metallurgical Combine. Zav. lab. 22 no.9:1127-1130 '56. (MLRA 9:12)

1. Kuznetskiy metallurgicheskiy kombinat.
(Thermocouples) (Steel) (Smelting)

NOVOGRADSKAYA, O.V.

Experimental investigation of the graphs of directivity of acoustic radiation from a circular pipe. Prom. aerodin. no. 18:48-53 '60. (MIRA 14:5)

(Acoustic engineering)

TRET'YAKOVA, I.V., inzh.; NOVOGRENKO, G.U., inzh.; KHOPOVA, M.P., inzh.

Effect of the temperature of ambient air on the heating of short-circuited AM, MA140, and MAP-series induction motors.
Elektrotekhnika 36 no.2:41-43 F '65.
(MIRA 18:4)

NOVOGRENKO, N.M.; KIRBYAT'YEV, L.N.; ZASTAVNOY, I.T.

The BVP nonpolar quick-break switch. Biul. tekh.-ekon. inform. no. 4:43-45 '61. (MIRA 14:5)
(Electric switchgear)

DOROFEYEV, B.G.; MEYEROVICH, Sh.S.; NOVOGRENKO, N.M.

Study of heat transfer and temperature fields of improved KF-1 and KF-2 electric resistors. Izv. vys. ucheb. zav.; elektromekh. 4 no.2:136-143 '61. (MIRA 14:9)
(Electric resistors) (Electric railroads--Electric equipment)

NOVOGRENKO, N.M., inzh.; KIRBYAT'YEV, L.N., inzh.; ZASTAVNOY, I.T., inzh.

Nonpolarized high-speed BVP-4 electric cutout. Vest. elektroprom. 32 no.5:72-75 My '61. (MIRA 15:5)
(Electric cutouts)

SMIRNOV, A.I.; TSOKANOVA, T.G.; BONDARENKO, Ye.M.; NOVOGRENKO, N.M.; DOROFEYEV, B.G.

Heat transfer of type SF-80 and LF-9B tape-wound resistors with air cooling. Sbor. nauch. trud. EINII 2:205-212 '62. (MIRA 16:8)

(Electric resistors--Cooling)
(Heat--Transmission)

STUKALKIN, A.N.; NOVOGRENKO, N.M.

Electromagnetic relay with a 0,9 ÷ 0,95 resetting ratio. Sbor. nauch. trud. EINII 2:249-251 '62. (MIRA 16:8)

(Electric relays)

NOVOGRENKO, N.M.; KIRBYAT'YEV, L.N.; ZASTAVNOY, I.T.

Use of an AB-1-type automatic device for protecting the N60 electric locomotive from generator currents. Elek.i tepl.tiaga 6 no.12:28-31 D '62. (MIRA 16:2)

1. Nachal'nik konstruktorskogo otdela elektricheskikh apparatov Novocherkasskogo nauchno-issledovatel'skogo instituta elektrovozostroyeniya (for Novogrenko). 2. Novocherkasskiy nauchno-issledovatel'skiy institut elektrovozostroyeniya (for Kirbyat'yev, Zastavnoy).

(Electric locomotives--Safety measures)
(Electric protection)

MAVDRIKOV, F.I., inzh.; NOVOGRENKO, N.M., inzh.; BONDARENKO, Ye.M., inzh.; YASTREBOV, A.V., inzh.; SMIRNOV, A.I., inzh.; DOROFEYEV, B.G., inzh.

New designs of air cooled resistances. Vest. elektroprom. 33 no.5:24-28 My '62. (MIRA 15:5)
(Novocherkassk--Electric equipment industry)
(Electric railroads--Electric equipment)
(Electric resistors)

ZOLOTAREV, P.A., inzh.-konstruktor; KOZOREZOV, M.A., inzh.-konstruktor; MELIKHOV, V.L., inzh.-konstruktor; NOVOGRENKO, N.M., inzh.-konstruktor; SVERDLOV, V.Ya., inzh.-konstruktor; Tushkanov, B.A., inzh.-konstruktor; SHAPIRO, I.L., inzh.-konstruktor

The N81 eight-axle a.c. locomotive. Elek.i tepl.tiaga 7 no.2:20-25 F '63. (MIRA 16:2)

(Electric locomotives)

ZOLOTAREV, P.A., inzh.-konstruktor; KOZOREZOV, M.A., inzh.-konstruktor; MELIKHOV, V.L., inzh.-konstruktor; NOVOGRENKO, N.M., inzh.-konstruktor; SVERDLOV, V.Ya., inzh.-konstruktor; TUSHKANOV, B.A., inzh.-konstruktor; SHAPIRO, I.L., inzh.-konstruktor

VL80 eight-axle a.c. locomotive. Elek. i tepl. tiaga 7 no.4: 24-28 Ap '63. (MIRA 16:5)

1. Novocherkasskiy elektrovozostroitel'nyy zavod i Novocherkasskiy nauchno-issledovatel'skiy institut elektrovozostroyeniya.
(Electric locomotives)

BEREZOVA, Ye.F., prof., doktor biologicheskikh nauk; SOROKINA, T.A., kand.biologicheskikh nauk; NOVOGRUDSKAYA, Ye.D.; SUDAKOVA, L.V.

Microbiological processes in manure-soil composts. Zemledelie 24 no.4:63-66 Ap '62. (MIRA 15:4)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta sel'skokhozyaystvennoy mikrobiologii.
(Compost)

NOVOGRUDSKAYA, Ye.D.

Effect of plants on the development of nitrifying bacteria in the zones of their root systems. Agrobiologiia no.5: 720-724 S-O'63. (MIRA 17:5)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta sel'skokhozyaystvennoy mikrobiologii.

NOVOGRUDSKAYA, Ye.D.

Accumulation of enzymes during the maturation of manure-soil composts. Agrobiologiia no.6:880-885 N-D '63.
(MIRA 17:2)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta sel'skokhozyaystvennoy mikrobiologii.

NOVOGRUDSKAYA, Ye.D.; ISAYEVA, L.I.; PERVUSHINA, L.V.

Effect of herbicides on soil microflora. Agrobiologiia no.4:577-582 Jl-Ag '65. (MIRA 18:11)

1. Moskovskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'skogo instituta sel'skokhozyaystvennoy mikrobiologii i Moskovskaya obshchnaya toksikologicheskaya laboratoriya Vsesoyuznogo instituta zashchity rasteniy.

NOVOGRUDSKIY, David Moiseyevich, 1898-1953; IMSHENETSKIY, A., redaktor

[Soil microbiology (soil as a habitat for soil micro-organisms); principle groups of the soil micropopulation] Pochvennaia mikrobiologiia (pochva kak sreda mestoobitaniia pochvennykh mikroorganizmov); osnovnye gruppy pochvennogo mikronaseleniia) Alma-Ata, Akademiia nauk Kazakhskoi SSR, 1956. 401 p. (MLRA 10:2)

(Soil micro-organisms)

NOVOGRUDSKIY, M.

Analyzing handling costs of stores and trading enterprises. (MLRA 10:8)
Sov.torg. no.6:54-56 Je '57.
(Commerce)

NOVOGRUDSKIY, V. N.

FAKIDOV, I.G.; GRAZHDANKINA, N.P.; NOVOGRUDSKIY, V.N.

Electric properties of manganese-germanium alloys. Izv. AN SSSR. Ser. fiz. 20 no.12:1509-1518 D '56. (MIRA 10:3)

1. Institut fiziki metallov Ural'skogo filiala AN SSSR.
(Manganese-Geranium alloys--Electric properties)

SOV/126-7-2-29/39

24(3)

AUTHORS: Vasil'yeva, I. N., Novogrudskiy, V. N., Samokhvalov, A.A. and Fakidov, I. G.

TITLE: The Hall Effect in the Mn-Sb System (Effekt Kholla v sisteme Mn-Sb)

PERIODICAL: Fizika Metallov i Metallovedeniye, 1959, Vol 7, Nr 2, pp 304-305 (USSR)

ABSTRACT: Electrical and magnetic properties of alloys are often used when the state (phase) diagram is constructed. Although galvanomagnetic properties are more structure-sensitive than electrical and magnetic properties, the former are rarely used in the construction of phase diagrams. The present paper reports measurements of the Hall effect in the two-phase system Mn-Sb as a function of composition. According to the phase diagram (Refs 1,2) the Mn-Sb alloys are a two-phase system in the region of Mn concentrations from 0 to 50 atomic %; this two-phase system consists of ferromagnetic MnSb and free antimony. These components form a eutectic at approximately 20 at.% Mn. Samples of Mn-Sb alloys were prepared by melting together fine, well-mixed powders of Mn (99.8% purity) and Sb (99.88% purity) in evacuated quartz ampoules.

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The authors studied alloys containing 15.2, 20.2, 28.0, 31.7, 44.0 and 49.6 at.% of Mn. The phase composition of samples was checked by metallographic examination. It was found that the phase composition of the alloys produced by the authors is identical with the phase composition of the alloys described by Murakami and Hatta (Ref 2). Measurements of the Hall effect were made, using Düsselhorst's compensator and a galvanometer with a sensitivity of 4×10^{-8}V per division. Fig 1 shows the dependence of the Hall e.m.f. on the applied magnetic field intensity for samples of alloys of compositions listed above (curves 2-7) and of pure antimony (curve 1). Fig 1 shows that the Hall effect curves have the usual form for ferromagnetics. With increase of the amount of antimony in the alloy, the Hall e.m.f. increases and the curves shown in Fig 1 become more linear. Dependences of the "ordinary" component of the Hall constant R_o (which is proportional to the magnetic field intensity) and of the Hall constant R_f of the ferromagnetic phase (which is proportional to

SOV/126-7-6-16/24

AUTHORS: Novogrudskiy, V. N. and Fakidov, I. G.

TITLE: Determination of the Sign of the E.M.F. for Individual Micro-Crystals on Polished Sections with the Aid of a PMT-3 Microhardness Meter

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 7, Nr 6, pp 903-905 (USSR)

ABSTRACT: The determination of the sign of the current carrier in an alloy requires emf determination for each phase separately. Boltaks and Zhuze (Ref 1) used a probe moved by a micrometer screw under the microscope objective at a magnification of 20. This method is not satisfactory at high magnifications and the present authors have adapted a type PMT-3 microhardness meter for this purpose. The diamond tip was replaced by a tungsten needle in a suitable mounting with its tip sharpened electrolytically to a thickness of 6-10 microns and fitted with a constantan-wire resistance heater (Fig 1). The load was 0.5-3 g. With very hard specimens an auxiliary polished section of aluminium in the focus of the microscope together with the specimen had to be used for centering the instrument. The technique was checked on Mn-Sb alloys,

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67658

SOV/126-8-6-5/24

24.7600

AUTHORS: Novogrudskiy, V.N., Samokhvalov, A.A. and Fakidov, I.G.

TITLE: On the Hall Effect in Ferromagnetics

PERIODICAL: Fizika metallov i metallovedeniye, 1959, Vol 8, Nr 6, pp 834-836 (USSR)

ABSTRACT: In spite of the fact that there exists a considerable amount of experimental material on the Hall effect in ferromagnetics, there is so far no final theory of this effect. The Hall effect is most frequently described by a formula of the form

$$E_x = R_0 H + R_1 M \qquad (1)$$

where R_0 is the Hall constant for the "usual" part of the effect, R_1 is the Hall constant for the ferromagnetic part, H is the magnetic field strength inside the specimen and M is the magnetization of the specimen. Another way of describing this effect is by the use of the formula

$$E_x = R (H_0 + \alpha M) \qquad (2)$$

where $\alpha = R_1/R_0$. It is further assumed that the "usual"

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On the Hall Effect in Ferromagnetics

Hall constant is determined by the concentration of conduction electrons n. If current carriers of one sign only are present, R = 1/cen. The weak temperature dependence of R_0 in some ferromagnetic metals and alloys can be explained by taking into account the interaction between s and d electrons (Ref 7 and 8). However, there exists another approach in which the Hall effect in ferromagnetics is described by a formula of the form

$$E = R_1 M + R_i M_i \qquad (3)$$

where R_1 and M have the same meaning as above and R_i is a Hall constant associated with the true magnetization of the ferromagnetic on saturation. According to this point of view, the constant R_i is associated with the appearance of a Hall emf due to a change in the spontaneous magnetization, and the constant R_i is not as simply related to the concentration of conduction electrons as is R_0. Experimental data confirm both of these points of view. It is known that the current carrier concentration calculated from the expression

On the Hall Effect in Ferromagnetics

be desirable to have more detailed experimental data above and below the ferromagnetic transformation temperature in substances in which the three terms are comparable. There are 14 references, 7 of which are Soviet, 6 English and 1 German.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals, AS USSR)

SUBMITTED: May 17, 1959

Card 4/4

18 1225

68491

S/126/60/009/01/027/031
E021/E191

AUTHORS: Gaydukov, L.G., Novogrudskiy, V.N. and Fakidov, I.G.

TITLE: The Problem of the Phase Composition of the Chromium-Tellurium System. Letter to the Editor.

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol 9, Nr 1, pp 152-154 (USSR)

ABSTRACT: X-ray and magnetic measurements have been carried out by Haraldsen but still insufficient work has been done on the Cr-Te system. Therefore further electrical and magnetic measurements were made. Alloys containing 5 to 95 atomic % Te were prepared from Cr and Te powders. Alloys containing up to 50% atomic % Te were heat-treated at 700 °C and those with more than 50% at 500 °C for 50 hours. All the prepared alloys were ferromagnetic at the temperature of liquid nitrogen. The temperature dependence of the electrical resistance of the alloys was studied, from which the Curie temperature was found. This was checked by the effect of temperature on the magnetic properties. Metallographic examination showed that the region of solid solution, if it exists, is in the region

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69683
S/126/60/009/03/003/033
E032/E414

24.7900

AUTHORS: Novogrudskiy, V.N. and Fakudov, I.G.

TITLE: The Magnetocaloric Effect and the Magnetization of Ferromagnetic Chromium Sulphide

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol 9, Nr 3, pp 332-336 (USSR)

ABSTRACT: A study is reported of the magnetocaloric effect and magnetization in $CrS_{1.17}$. The ferromagnetic chromium sulphide was prepared by baking fine powders of chromium and sulphur using the method described in a previous paper (Ref 4). The specimens were in the form of ellipsoids with semiaxes equal to 2.75 and 5.6 mm. The specimen was mounted as shown in Fig 1 in which, 1 are molybdenum leads, 2 is a silver-coated glass tube, 3 is a copper jacket, 4 is a thermistor and 5 is the specimen. Water was circulated through the copper jacket and was thermostated. The thermal effect was measured in a vacuum of 10^{-4} mm Hg which was produced with the aid of activated charcoal. The thermistor which was used to measure the temperature had a thermal inertia of the order of a few hundredths of a sec.

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S/126/60/009/03/003/033
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The Magnetocaloric Effect and the Magnetization of Ferromagnetic Chromium Sulphide

Its temperature coefficients of resistance was 2.8% per degree at 20°C. The resistance of the thermistor was measured with the aid of a bridge to an accuracy of ± 0.02 ohm. The sensitivity was not less than 0.005°C per mm and the temperature changes were measured to an accuracy of 4 to 5%. Magnetization curves were determined for the specimens by the ballistic method. The results obtained are summarized in Fig 2 to 5. The figure captions are as follows: Fig 2. Dependence of the magnetocaloric effect on the temperature for different magnetic fields (the change in temperature on magnetization or demagnetization is plotted as a function of the temperature in °C). The fields used were 14400, 10970, 9070, 7460 and 4150 oe. All the curves have a maximum at about 33°C. Fig 3. The dependence of the magnetocaloric effect on the square of the magnetization at different temperatures (the temperature change is plotted as a function of σ^2, σ being in oe/cm^3). The curves are linear except near the σ^2 axis. The

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The Magnetocaloric Effect and the Magnetization of Ferromagnetic Chromium Sulphide

temperatures used were 24, 22.2, 20.4, 18.5, 17.25, 16.35, 14.0, 11.4, 9.2 and 7.7°C. Fig 4. Dependence of the magnetocaloric effect as a function of the square of the magnetization at 34.9, 36.8, 31.3, 29.7, 28.2, 26.8 and 25.2°C. These curves are linear almost down to the σ^2 axis. Fig 5. Dependence of the spontaneous magnetization (curve 1) and the square of the spontaneous magnetization (curve 2) on temperature. The open circles were determined from the magnetocaloric effect and the dots using the method of equal magnetization lines. The results may be summarized as follows

$t \ll \theta \qquad \Delta t \sim H$ (θ is the Curie point)

$t = \theta \qquad t \sim H^{2/3}$

$t \gg \theta \qquad t \sim H^2$

In the intermediate temperature region the phenomenon is described by the more complicated expression

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$$\alpha \cdot \Delta t^{1/2} + \beta \cdot \Delta t^{3/2} = H$$

Acknowledgements are made to V.P.Krasovskiy.
There are 5 figures and 12 references, 8 of which are Soviet, 2 English, 1 French and 1 German.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals AS USSR

SUBMITTED: July 18, 1959

Card 4/4

NOVOGRUDSKIY, V.N.

81912

S/126/60/010/01/019/019
E032/E514

24.7600

AUTHORS: Fakidov, I.G. and Novogrudskiy, V. N.

TITLE: Hall Effect in $MnAu_2$

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol.10, No.1, pp. 158-160

TEXT: The alloy used in the present work was prepared by a method analogous to that described by Meyer and Taglang in Ref.1. The specimen was in the form of a plate 10.59 x 5.53 x 0.33 mm. Magnetic measurements showed that the specimen has a Neel temperature of 92°C. The Hall e.m.f. was measured with the aid of a low resistance potentiometer working in conjunction with the galvanometer having a sensitivity of 2×10^{-8} V/mm. The magnetic measurements were carried out using a pendulum magnetometer described by Dominicall (Ref.4). Fig.1 shows the dependence of the Hall e.m.f. on the external magnetic field at room temperature (curve 1) and at 96°C (curve 2). As can be seen from curve 1, the dependence of the Hall potential difference on the field is linear in the antiferromagnetic region. In the transition of $MnAu_2$ into the ferromagnetic state, the Hall e.m.f. increases and

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81912

S/126/60/010/01/019/019
E032/E514

Hall Effect in $MnAu_2$

2 French and 2 English.

ASSOCIATION: Institut fiziki metallov AN SSSR
(Institute of Physics of Metals, AS, USSR)

SUBMITTED: February 18, 1960

Card 3/3

S/181/61/003/011/005/056
B102/B138

24.7600 (1043, 1137, 1164)

AUTHORS: Novogrudskiy, V. N., and Fakidov, I. G.

TITLE: Hall effect in the metamagnetic compound $MnAu_2$

PERIODICAL: Fizika tverdogo tela, v. 3, no.11, 1961, 3278-3284

TEXT: The authors continued earlier studies (FMM, 10, 158, 1960; ZhETF, 40, 1, 1960) and measured Hall e. m. f. in $MnAu_2$ specimens by means of a low-resistance voltmeter and a sensitive galvanometer. The Neel point of the specimens was at 92°C, the threshold field strength was 8000 oe at 20°C. Measurements were made with two field and current directions in order to eliminate side effects. Magnetization was found to increase with H in a temperature-dependent manner. At 18.5°C $\sigma(H)$ is an S-shaped curve (slight increase up to 10 oe, steep increase between 10 and 15 oe, and then slight increase again), at 81°C it is more flat and crosses the $\sigma(H)$ curve for 96°C at about 8 oe. $\sigma(H)$ at 96°C forms a straight line. The Hall e.

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m. f. was measured as a function of H between -196 and + 110°C. The curves are almost straight lines, the gradients, which become steeper with rising temperature up to the Neel point. At higher temperatures the gradient is reduced again. Investigation of the temperature dependence of the Hall e. m. f. showed that the curves have rather broad maxima at the Neel point. I. K. Kikoin (Sow. Phys. 1, 9, 1936) has shown that for strong paramagnetics and for ferromagnetics above Curie point, the Hall e. m. f. $E_H = R_0(1+4\pi\chi)HI/d$. I is the current intensity in the specimen, d its thickness, χ the magnetic susceptibility and R_0 the usual Hall constant. This holds with good accuracy also for the $MnAu_2$ specimens if R_0 and χ are taken as $2.19 \cdot 10^{-12}$ v·cm/a·oe and 8.8, respectively. These values were determined from measurements in the paramagnetic temperature range. In order to find out if not only magnetic ordering but also the Hall constant changes when passing the threshold field strenght, E_H was measured as a function of magnetization. The curve shows a break at threshold field strength. The σ-dependence of $E_\chi - R_0 H$, however, forms almost a straight

line, the change in direction at threshold field strength is so little that it lies within measurement error limits. This shows that both parts of Hall effect have to be taken into account. Conclusions: Comparison of $E_H(t)$ in the paramagnetic and antiferromagnetic temperature ranges shows together with the $E_H(\sigma)$ measurements, that $MnAu_2$ has, as a further Hall e. m. f., in addition to the normal one. It can be assumed that this e. m. f. is caused by magnetization and that the Hall constant responsible for this part of the effect increases with temperature. The temperature dependence of the Hall potential difference in $MnAu_2$ below threshold field strength is very different from that in antiferromagnetics such as Cr or MnTe. It is not certain whether σ changes when passing through the threshold field, but the effective fields were found to be very close to one other in these two states. There are 4 figures, 1 table, and 13 references: 3 Soviet and 10 non-Soviet. The three most recent references to English-language publications read as follows: I. H. Smith, R. Street. Proc. Phys. Soc., 70, 1089, 1957. C. A. Dominicalli. Rev. Sci. Instr., 21, 327, 1958. E. M. Pugh. Phys. Rev., 97, 647, 1955.

30773
S/181/61/003/011/005/056
B102/B138

Hall effec in the metamagnetic compound ...

ASSOCIATION: Institut fiziki metallov AN SSSR [illegible] (Institute of Physics of Metals AS USSR, Sverdlovsk)

SUBMITTED: May 9, 1961

Card 4/4

89204

S/056/61/040/001/010/037
B102/B204

24.2200 (1137, 1142, 1158)

AUTHORS: Novogrudskiy, V. N., Fakidov, I. G.

TITLE: Temperature dependence of the Hall effect in $MnAu_2$

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 40, no. 1, 1961, 76-78

TEXT: Of the many substances having various types of spin ordering, hitherto above all the magnetic properties of ferromagnetic substances have been studied. The authors now study the galvanometric properties of antiferromagnetics with a view of determining alone the fraction of the Hall effect which is immediately due to antiferromagnetism. $MnAu_2$ was selected as a specimen, an antiferromagnetic with threshold field effect (at field strength $H>H_{thr}$ it goes over into the ferromagnetic state). It was studied at the Neel temperature $T_N = 92^{\circ}C$ and $H_{thr} = 8000$ oe. In an earlier paper it had already been shown that at $0<H<H_{thr}$ the Hall emf depends linearly on H. Now, the temperature dependence of the Hall emf was determined on the same specimen. The curve obtained at H = 5000 oe is shown in a figure. The

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Temperature dependence of ...

maximum is near the Neel temperature which had been determined from the temperature dependence of susceptibility. Here, $MnAu_2$ deviates essentially from magnesium telluride, which has a minimum of the Hall emf at Neel temperature. According to I. K. Kikoin, the Hall emf may be described by the equation $E_x = [R_0H + R_1\chi H]I/d = R_0[1 + 4\pi\alpha\chi]HI/d$, a formula which holds for highly paramagnetic substances and ferromagnetics above Curie temperature. Here, I is the current in the sample, d - the thickness of the plate, χ the magnetic susceptibility, R_0 the Hall constant for the ordinary part of the effect, R_1 - the Hall constant for that part of the effect which is connected with magnetization. As R_1 is independent of temperature, the validity of this formula was taken over also for antiferromagnetics above Neel point. As may be seen from the figure, this is fully justified; in this connection,

$R_0 = -2.19 \cdot 10^{-12}$ v.cm.oe^{-1}a^{-1}, $R_1 = -2.42 \cdot 10^{-10}$ v.cm.a^{-1}.gauss^{-1} and $\alpha = 8.8$ was determined. The α value is small compared to that of ferromagnetics. The high magnetic susceptibility ($\chi \approx 5 \cdot 10^{-3}$ cm^{-3}) leads to a considerable part of the Hall effect being due to magnetization in the paraprocess. As

Temperature dependence of ...

is seen from the figure, the theoretical curve coincides with the experimental curve only at temperatures above Neel temperature, whilst below that point it deviates. Thus, this formula then does not describe the temperature dependence of the Hall emf in antiferromagnetics, when R_0 and R_1 are assumed to be temperature-independent. As $MnAu_2$ is a metal, and thus R_0 is not temperature-dependent, it is assumed that either R_1 or α depend on temperature. If α is $\sim 10^1$, a considerable part of the Hall effect due to magnetization may be found only in substances, in which $\chi > 10^{-4}$ cm^{-3} - thus not in MnTe. The anomaly of the Hall constant in MnTe near Neel point indicates the existence of an additional Hall emf due to antiferromagnetism. The mechanism of the production of this emf, however, is other than with $MnAu_2$. There are 1 figure and 7 references: 3 Soviet-bloc and 4 non-Soviet-bloc.

ASSOCIATION: Institut fiziki metallov Akademii nauk SSSR (Institute of Metal Physics of the Academy of Sciences USSR)

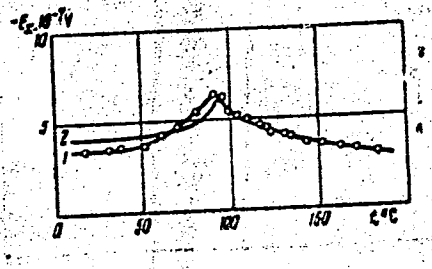
SUBMITTED: July 30, 1960

Card 3/4

89204

S/056/61/040/001/010/037
B102/B204

Temperature dependence of ...



Card 4/4

43120
S/181/62/004/011/019/049
B104/B102

24.2200

AUTHORS: Levina, S. S., Novogrudskiy, V. N., and Fakidov, I. G.

TITLE: The magnetic properties of the intermetallic compound Mn_5Ge_2

PERIODICAL: Fizika tverdogo tela, v. 4, no. 11, 1962, 3185 - 3188

TEXT: The hysteresis loops and magnetization curves of polycrystalline samples of Mn_5Ge_2 prepared according to the method of K. Yasukōchi, K. Kanametsu and T. Ohoyama (J. Phys. Soc. Japan, 15, 932, 1960) were established using a torsion balance in vacuum. The compensation point, i.e., that temperature at which the magnetic moments of the sublattice balance themselves, was at 122°C. A metallographic investigation showed the presence of a eutectic of Mn_5Ge_3 + $Mn_{3.25}Ge$ on the boundaries of the large Mn_5Ge_2 crystals, the compound $Mn_{3.25}Ge$ being paramagnetic. Since this compound is present only in small quantities the magnetic properties of the base material are only slightly affected. At 18° the material has a coercive force of 1000 oersteds, at 200°C it has 3000 oersteds. In the region of the compensation point the coercive force is considerably increased. This behavior resembles that of lithium chromite ferrite

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24703

S/126/62/013/005/026/031
E073/E435

AUTHORS: Levina, S.S., Novogrudskiy, V.N., Fakidov, I.G.

TITLE: Galvanomagnetic properties of the ferrimagnetic compound Mn_5Ge_2

PERIODICAL: Fizika metallov i metallovedeniye, v.13, no.5, 1962, 782-783

TEXT: The temperature dependence of the transverse galvanomagnetic effect of Mn_5Ge_2 was investigated using the same technology as that used by K. Yasukochi et al (J. Phys. Soc., Japan, 1960, 15, 932). The compensation temperature of the specimen was 130°C. The electric resistance was measured by means of compensation equipment, having a sensitivity of 2×10^{-8} volt/scale division. Preliminary conclusions:
1. The temperature dependence of the electric conductivity of Mn_5Ge_2 is similar to that of metals.
2. According to a plot of the temperature dependence for an external field intensity of 16000 Oersted, the transverse galvanomagnetic effect changes in sign on passing through the compensation temperature in a like manner to the

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L 16903-63 EWG(k)/EWT(l)/EWP(q)/EWT(m)/BDS AFFTC/ASD Pz-4 AT/JD

ACCESSION NR: AP3005243 S/0056/63/045/002/0052/0055

66
65

AUTHOR: Levina, S. S.; Novogrudskiy, V. N.; Fakidov, I. G.

TITLE: Odd component of the galvanomagnetic effect in the ferrimagnetic compound Mn_5Ge_2.

SOURCE: Zhur. eksper. i teoret. fiz. v. 45, no. 2, 1963, 52-55

TOPIC TAGS: manganese germanium compound, ferrimagnetism, magnetoresistance, compensation point, antiferromagnetic vector

ABSTRACT: The magnetoresistance $\Delta R/R$ of the intermetallic compound Mn_5Ge_2 was investigated in longitudinal and transverse magnetic fields in order to check on the influence of prior application of a magnetic field to a ferrimagnetic material with a compensation point. Polycrystalline specimens were checked and the maximum field was 16000 Oe. The influence of the location of the potential electrodes with respect to the current electrodes on the measured effect was also checked and found to lie within the limits of the experimental error. The results of the test have shown that prior application of the field does affect the magnetoresistance, and most strongly near the compensation point. It is concluded at the same time that

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ACCESSION NR: AP3005243

at temperatures far from the compensation point the application of the magnetic field gives rise to the odd component in the magnetoresistance of Mn_5Ge_2 in both transverse and longitudinal magnetic fields. The odd effect is linearly dependent on the field, and it is suggested that it is an odd function of the antiferromagnetic vector. Orig. art. has 3 figures and 1 table.

ASSOCIATION: Institut fiziki metallov Akademii nauk SSSR (Metal Physics Institute, Acad. Sci. SSSR)

SUBMITTED: 16Feb63 DATE ACQ: 06Sep63 ENCL: 02

SUB CODE: PH NO REF SOV: 005 OTHER: 000

Card 2/2

S/0126/64/017/003/0470/0471

ACCESSION NR: AP4029008

AUTHOR: Novogrudskiy, V. N.; Fakidov, I. G.

TITLE: Temperature dependents of magnetic resistance in Mn Au_3

SOURCE: Fizika metallov i metallovedeniye, vol. 17, no. 3, 1964, 470-471

TOPIC TAGS: ferromagnetic, paramagnetic, spin order, antiferromagnetic compound, Neel temperature

ABSTRACT: In this paper the authors conduct a study of galvanomagnetic phenomena in the antiferromagnetic compound Mn Au_3. The Neel temperature of this substance equals -120°C. The $MnAu_3$ compound was prepared by alloying finely crushed manganese with gold flakes in a vacuum. The Neel point for the sample was -115°C. The temperature dependence of magnetic resistance is given in a figure. The magnetic resistance in $MnAu_3$ as well as in $MnAu_2$ has a component which is determined by the intensity of the magnetization, created by the external field. The temperature dependence measurement results of the changes in electrical resistance in the cross section magnetic field are given. Orig. art. has: 1 figure.

ASSOCIATION: Institut fiziki metallov AN SSSR (Institute of Metal Physics, AN SSSR)

Card 1/2

NOVOGRUDSKIY, V.N.; FAKIDOV, I.G.

Hall effect in a ferrimagnetic with a compensation point. Part 1. Experiment with Mn_5Ge_2. Zhur. eksp. i teor. fiz. 47 no.1:40-42 Jl '64. (MIRA 17:9)

1. Institut fiziki metallov AN SSSR.

L 52524-65 EWT(l)/EWT(m)/EWP(t)/EWF(b) IJP(c) JD
ACCESSION NR: AP5010717 UR/0181/65/007/004/1095/1098

23
21
B

AUTHOR: Novogrudskiy, V. N.; Fakidov, I. G.

TITLE: Galvanomagnetic properties of $MnAu_3$

SOURCE: Fizika tverdogo tela, v. 7, no. 4, 1965, 1095-1098

TOPIC TAGS: magnetoresistance, Hall effect, antiferromagnetism, magnesium compound, Neel temperature

ABSTRACT: The authors measured the magnetoresistance and the Hall effect in the antiferromagnetic compound $MnAu_3$, prepared by fusing manganese powder and platelets of gold in an evacuated quartz ampoule. The Hall emf and the magnetoresistance were measured with a dc potentiometer and a galvanometer. To eliminate extraneous effects, the measurements were made in two directions of the magnetic [illegible] of the current in the sample. The temperature was maintained constant

a value -114C for the [illegible] was observed at this temperature, and a secondary kink has shown that no second-

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ACCESSION NR: AP5010717

2

order phase transition takes place at -114C. An analysis of the magnetoresistance dynamics shows that below the Neel temperature the magnetoresistance is connected with a change in the antiferromagnetic order upon application of a magnetic field. The Hall emf was found to be linear in the temperature both above and below the Neel point. The experimental data indicate conclusively that the Hall emf depends on the degree of antiferromagnetic ordering

the measurements. Orig. art. has: 4 figures and 3 formulas.

ASSOCIATION: Institut fiziki metallov AN SSSR, Sverdlovsk (Institute of Metal Physics, AN SSSR)

SUBMITTED: 09Oct64	ENCL: 00	SUB CODE: SS, EM	
NR REF SOV: 002	OTHER: 002		

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L 9245-66 EWT(1)/EWT(m)/EWP(t)/EWP(b) IJP(c) JD/GG

ACC NR: AP5022744 SOURCE CODE: UR/0181/65/007/009/2863/2865

44,55 44,55 44,55 72

AUTHOR: Novogrudskiy, V. N.; Fakidov, I. G.; Semenov, V. V.

44,55 B

ORG: Institute of Physics of Metals AN SSSR, Sverdlovsk (Institut fiziki metallov AN SSSR)

TITLE: Magnetic properties of Mn_3Ge_2

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2863-2865

21,44,55

TOPIC TAGS: manganese compound, germanium compound, phase transition, magnetic property, ferromagnetic material, magnetic anisotropy

21,44,55

ABSTRACT: [illegible] the compound Mn_3Ge_2 undergoes a ferromagnetic order phase transition at -120°C and that the compound is a weakly ferromagnetic material above this point. The present paper is an attempt to determine whether magnetic ordering takes place below the transition point. A magnetic balance was used to measure the intensity of magnetization in the longitudinal and transverse directions on grain-oriented specimens. Curves are given for magnetization as a function of field strength at various temperatures and for magnetic susceptibility as a function of temperature in both the longitudinal and transverse directions. Magnetic susceptibility decreases with an increase in temperature above -120°C and the susceptibility is very nearly equal in both directions independently of the field strength. This is

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L 9245-66

ACC NR: AP5022744

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one of the most characteristic properties of weak ferromagnetic materials. The authors are grateful to B. S. Borisov for taking the x-ray photographs. Orig. art. has: 3 figures, 2 formulas.

SUB CODE: 20/ SUBM DATE: 16Apr65/ ORIG REF: 004/ OTH REF: 001

Card 2/2 pw

NOVOGRUDSKIY, V.N.; FAKIDOV, I.G.; SEMENOV, V.V.

Magnetic properties of Mn_3Ge_2. Fiz. tver. tela 7 no.9:2863-2865 S '65. (MIRA 18:10)

1. Institut fiziki metallov AN SSSR, Sverdlovsk.

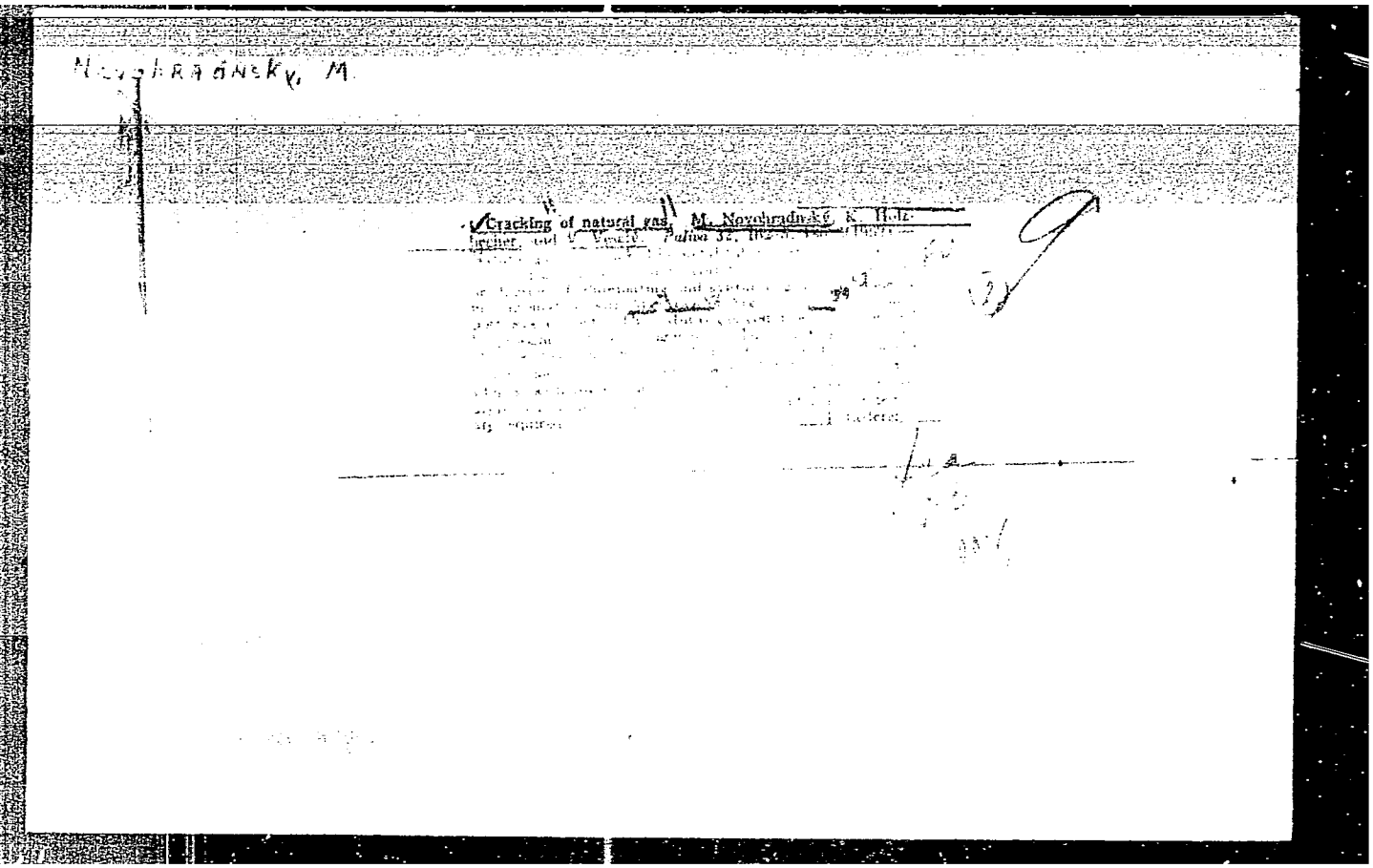
NOVOGRUDSKIY, Y.Ye., inzh.-podpolkovnik

Are we using all of the potentials available to us? Vest.Vozd.Fl. no.5:67-71 My '60. (MIRA 13:7)
(Airplanes—Maintenance and repair)

NOVOGRUDSKIY, Ye., gvardii insh.-podpolkovnik

Preparing rockets more rapidly. Av. i kosm. 45 no.1:66-68 Ja '63. (MIRA 16:1)

(Airplanes, Military—Armament)



Cracking of natural gas, M. Novohradský, K. Hulz

KNOR, F.; NOVOHRADSKY, M.

Results of the research and the development of a catalyst for city gas production from hydrocarbons. Paliva 44 no.5/6:156-159 My-Je '64.

NOVOHRADSKY, M.

Synthesis of hydrocarbons from carbon monoxide and hydrogen on iron catalyst. Prace Ust paliv 8:39-81 '64.

NOVOHRADSKY, V.

"Great October Revolution and the origin of the Czechoslavak Republic." (p.713). PRIRODA A SPOLOCNOST. (Spolocnost pre sirenie politickych a vedeckych poznatkov na Slovensku) Martin. Vol. 2, No. 12, 1953.

SO: East European Accessions List, Vol 3, No. 8, Aug 1954.

L 45277-66 EWT(m)/EWP(j)/T RM

ACC NR: AP6023234 (A) SOURCE CODE: UR/0342/66/000/004/0015/0017

29
28
B

AUTHOR: Kantonistov, A. M., (Deputy Director for Scientific Research, Candidate of Technical Sciences); Chubarova, G. D., (Chief of the Weaving Department); Novolodskaya, I. G., (Chief of Assortment Laboratory); Belousova, Z. P., (Chief of Laboratory of Weaving Technology)

ORG: Leningrad Scientific Research Institute of the Textile Industry (Len NIITP), (Leningradskiy nauchno-issledovatel' skiy institut tekstil' noy promyshlennosti)

TITLE: Bulked yarn fabrics

SOURCE: Tekstil' naya promyshlennost' , no. 4, 1966, 15-17

TOPIC TAGS: synthetic fiber, orlon, acrilon, exlan, courtell, nitron, lavsan, polyacrylonitrile, bulked yarn

ABSTRACT: The Leningrad Scientific Research Institute for the Textile Industry has created new imitation-wool bulk fabrics made from nonstabilized yarns containing corded fibers of polyacrylonitrile and polyester synthetics (orlon, acrilon, exlan, courtell, nitron, lavsan) and yarns made of spun fibers ("B" nitron and

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L 45277-66

ACC-NR: AP6023234

nitron, a pure polymer of irregular shrinkage. The fabric was bulked by irregular shrinkage of the fibers during heat treatment. The author describes the properties of the fabrics made from nonstabilized bulked yarn, processed from twisted orlon and gives a detailed description of the properties of the yarn used. The data given show that the yarn is of high and relatively uniform strength and, therefore, breaks infrequently during weaving. The use of twisted yarn made sizing unnecessary. Table 1 in the original article shows the weaving characteristics of the sample fabrics, finished at the V. Slutskaya and "Lensukno" mills. Table 2 shows the properties of some unfinished and finished samples. Fabrics made of nonstabilized yarn, produced from corded polyacrylonitrilic and polyester fibers were developed by the authors with the assistance of associates of the Zhelyabov Mill. Table 3 shows the properties of acrilon, exlans, courtell, nitron and lavsan of samples. The shrinkage of nitron samples during heat treatment was lower than for orlon fabrics. Fabrics made from nonstabilized yarn, produced from a blend of spun fibers of irregular shrinkage used nonstabilized No 54/2 (18.5 Text. x 2) fibers, containing "B" nitron and pure-polymer nitron. Samples of the three types of fabrics were produced at the Zhelyabov Weaving Mill, and the sample made from yarn containing 50% nitron (both types) was found to be the best. The tests carried

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ACC NR: AP6023234

out showed that the outlooks for the use of various highly shrinkable fibers to produce bulked fabrics are promising and that research to develop such fabrics should continue. Orig. art. has: 3 tables. [GC]

SUB CODE: 11/ SUBM DATE: none/

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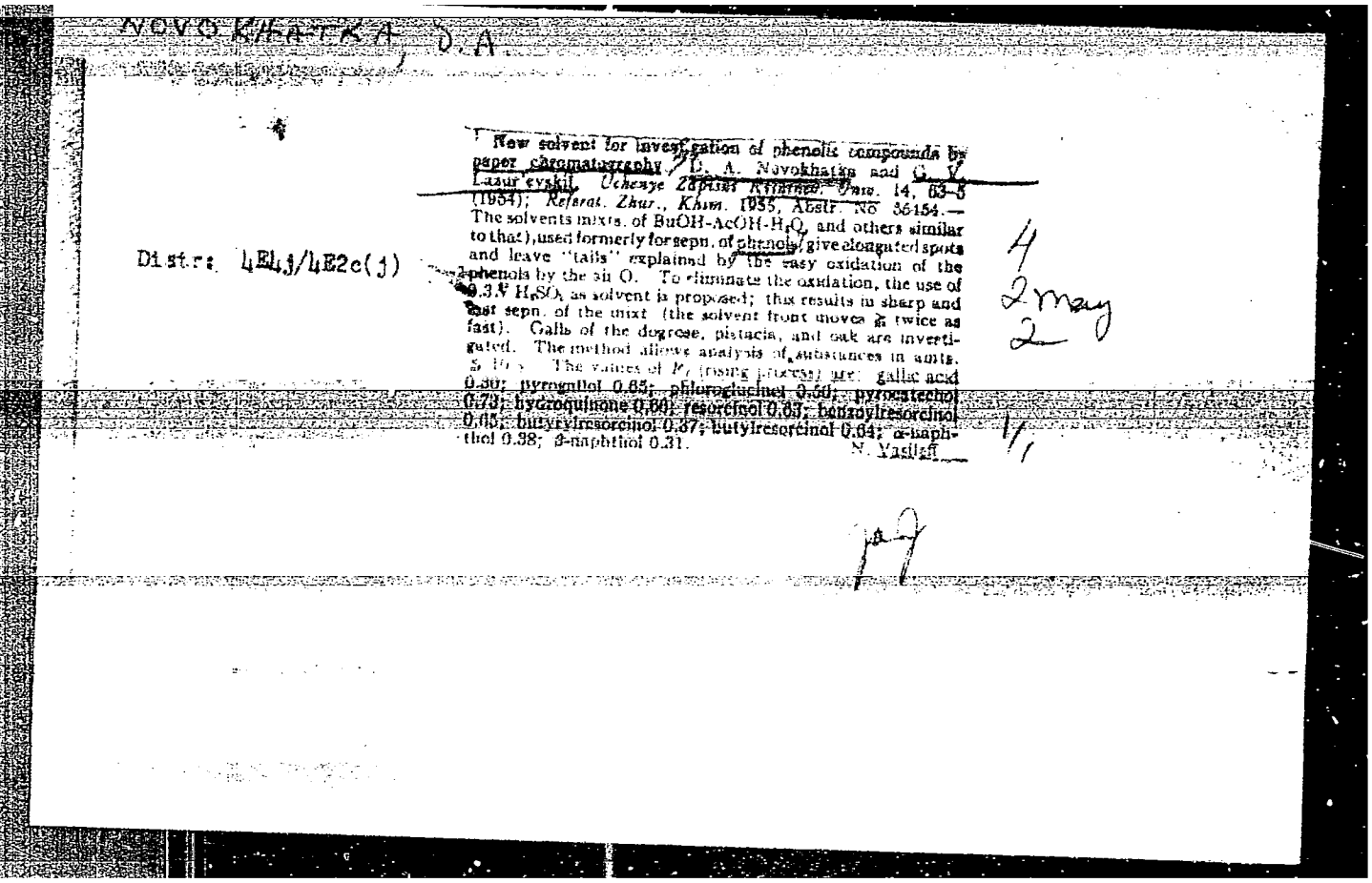

NOVOKHATSKA D A

Distr: 4E4j/4E2c(j)

New solvent for investigation of phenolic compounds by paper chromatography. D. A. Novokhatka and G. V. Lazur'evskii. *Uchenye Zapiski Kishinev. Univ.* 14, 63–5 (1954); *Referat. Zhur., Khim.* 1955, Abstr. No 36154.—The solvents mixts. of BuOH-AcOH-H_2O, and others similar to that), used formerly for sepn. of phenols, give elongated spots and leave "tails" explained by the easy oxidation of the phenols by the air O. To eliminate the oxidation, the use of 0.3 *N* H_2SO_4 as solvent is proposed; this results in sharp and fast sepn. of the mixt. (the solvent front moves 8 times as fast). Galls of the degrease, pistacia, and oak are investigated. The method allows analysis of substances in units. The values of R_f (using phenol) are: gallic acid 0.30; pyrogallol 0.65; phloroglucinol 0.60; pyrocatechol 0.70; hydroquinone 0.60; resorcinol 0.63; benzoylresorcinol 0.65; butyrylresorcinol 0.37; butylresorcinol 0.64; α-naphthol 0.38; β-naphthol 0.31.

N. Vasiliu

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2 May
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