LARICHEV, P.A. (Moskva)

The subject "powers and radicals in class 8." Mat.v shkole no.4:11-18
Jl-Ag '56.   (Algebra--Study and teaching)   (MIRA 9:9)

LARICHEV, Pavel Afanas'eyvich; LEPESHKINA, N.I., redaktor; MAKHOVA, N.N., tekhnicheskiy redaktor

[A collection of problems in algebra] Sbornik zadach po algebre. Moskva, Gos. uchebno-pedagog.izd-vo M-va prosv. RSFSR, Pt.2. [For grades eight to ten of secondary schools] Dlia 8-10 klassov srednei shkoly. Izd. 8-oe, perer. 1957. 222 p.   (MLRA 10:7)
     (Algebra--Problems, exercises, etc.)

LARICHEV, P.A. (Moskva).

Problems in rearranging the teaching of mathematics in secondary schools in connection with the introduction of the new program.
Mat. v shkole no.4:16-23 S-O '57.   (MLRA 10:8)
(Mathematics—Study and teaching)

LARICHEV, Pavel Afanas'yevich; LEPESHKINA, N.I., red.; MAKHOVA, N.N., tekhn.red.

[Handbook on problems in algebra; for classes 8 to 10 of secondary schools] Sbornik zadach po algebre; dlia 8-10 klassov srednei shkoly. Izd. 9-e. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR. Pt.2. 1958. 222 p.   (MIRA 11:4)
        (Algebra--Problems, exercises, etc.)

LARICHEV, P.A.

      Methodical advice. Mat. v shkole no.3:58-60 My-Je '58.

           (Mathematics--Study and teaching)

(MIRA 11:5)

LARICHEV, P.A. (Moskva)

Study of arithmetic in the 5th grade during the 1959-1960 school year. Mat.v shkole no.4:15-17 Jl-Ag '59.
(MIRA 12:11)

(Arithmetic--Study and teaching)

S/124/60/000/006/035/039
A005/A001

Translation from: Referativnyy zhurnal, Mekhanika, 1960, No. 6, p. 170, # 8025

AUTHOR: Larichev, P.Ya.

TITLE: The Calculation of Extracentrally Compressed Thin-Walled Rods on the Base of the Deformation State

PERIODICAL: V sb.: 17 Nauchn. konferentsiya professorsko-prepodavat. sostava Leningr. inzh. stroit. in-ta, Sekts. matem., soprotivleniya materi-alov, teor. mekhan., fiz., khimii, elektrotekhn., Leningrad, 1959, pp. 79-82

TEXT: A thin-walled rod of open cross section with two axes of symmetry is considered. It is compressed by forces applied to the ends with eccentricities. Two coordinate systems are used: 1) a stationary system, 2) a mobile trihedron, the edges of which are directed along the tangent of the deformed rod axis and along the main axes of the turned cross section. The expressions for the moments of the external forces with respect to the movable coordinate axes are set up for an arbitrary cross section: a) on the one hand, through the characteristics of the cross sections and the derivatives of deformations, whereat approximate

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S/124/60/000/006/035/039
A005/A001

The Calculation of Extracentrally Compressed on the Base of the Deformation State

formulae of the rod curvature are used, b) on the other hand through the moments and the longitudinal force at the rod ends. By equating the right-hand sides of the equations, a system of three nonlinear differential equations of equilibrium is obtained. It is assumed that the deflections vary according to a sinusoid. The equation system is reduced to one equation of seventh order with respect to one of the deflections. The general and particular solutions are found. The values of the four arbitrary constants in the particular solution are determined from the boundary conditions. Having found the solution for one of the deflections, the expressions for an other deflection and for the torsion angle can be derived, and having found these, the stresses at an arbitrary point of the rod can be found. It is necessary to point out that the problem studied in the article is a special case of the problem considered by S.P. Vyaz'menskiy, (Sb. nauchn. tr. Leningr. inzh.-stroit. in-t, 1957, No. 26, pp. 270-313 - RZhMekh, 1958, No. 11, # 13244) and L.N. Vorob'yev (Tr. Novocherk. politekhn. in-ta, 1958, Vol. 69/83, pp. 3-48 - RZhMekh, 1960, No. 1, # 1232.   G.M. Chuvikin

Translator's note: This is the full translation of the original Russian
                    abstract.

Card 2/2

LARICHEV, S.

Book section for amateur photographers. Sov. foto 17 no.4:76-77 Ap '57.
(Bibliography—Photography)   (MIRA 10:6)

LARICHEV, V.A.   DECEASED   1961/2
                                                  c 1961

SEE IIC

ENGINEERING

NIKITIN, Sergey Mikhaylovich; LARICHEV, V.I., red.; VINOGRADOVA, V.A.,
tekhn. red.

[Indices of industrial production in capitalist countries] Indeksy
promyshlennoi produktsii v kapitalistichskikh stranakh. Moskva,
Gos. stat. izd-vo, 1958. 105 p.   (MIRA 11:9)
                              (Industrial statistics)

ISKRA, Viktor Maksimovich; LARICHEV, V.I., red.; SHADRINA, N.D., tekhn.red.

[Automation--abundance or new calamities?] Avtomatizatsiia - izo-
bilie ili novye bedstviia? Moskva, Izd-vo VTsSPS Profizdat, 1959.
117 p.   (MIRA 13:7)
                        (Automation)

MISHA, Kristat' [Misja, Kristat]; LARICHEV, V.I., red.; RAKOV, S.I.,
    tekhn.red.

[History of the trade-union movement in Albania] Istoriia
profsoiuznogo dvizheniia v Albanii. Moskva, Izd-vo VTsSPS,
Profizdat, 1960. 94 p.   (MIRA 13:8)

1. Sekretar' TSentral'nogo Soveta profsoyuzov Albanii (for Misha).
            (Albania--Trade unions)

SOUKUP, Frantishek [Soukup, Frantiśek], inzh.; LARICHEV, V.I., red.;
SHADRINA, N.D., tekhn.red.

[Electricity never accepts an excuse; 99 cases of violations of
operating rules and safety rules with indications of their causes
and consequences] Elektrichestvo ne proshchaet; 99 sluchaev
narushenii pravil ekspluatataii i tekhniki bezopasnosti s ukaza-
niem ikh prichin i posledstvii. Moskva, Izd-vo VTsSPS Profizdat,
1960. 156 p. Translated from the Czech.   (MIRA 14:2)
          (Electric engineering--Safety measures)

LARICHEV, V. N.

LARICHEV, V. N. -- "The Investigation of the Electric and Photo-
electric Properties of Transistors of the PbS Group." Leningrad Physico-
technical Inst of the Acad Sci USSR, Leningrad, 1956. (Dissertation for
the Degree of Candidate in PHYSICOMATHEMATICAL SCIENCES).

SO: KNIZHNAYA LETOPIS' (Book Register), No. 42, October 1956, Moscow.

SOV/121-58-8-10/29

AUTHORS: Larichev V.N., Lind A.B. and Morozov I.K.

TITLE: A Pneumatic Device for the Inspection and Sorting of the Housings of Live Centres (Pnevmaticheskiy pribor dlya kontrolya i sortirovki korpusov vrashchayushchikhsya tsentrov)

PERIODICAL: Stanki I Instrument, 1958, Nr 9, pp 27-28 (USSR)

ABSTRACT: A pneumatic device is described, developed by the Office for Interchangeability of the Standards, Measures and Measuring Instruments Committee (Byuro vzaimozamenyayemosti komiteta standartov, mer i izmeritel'nykh priborov) under the designation BV-780 in order to inspect the fitting dimensions of the housings of live centres for lathes. Each of the two inspected hole diameters is sorted within the allowable limits into four dimensional groups, thus creating 16 groups. The maximum value of the mean diameter determines the group. The diameter and the deviation from the cylindrical form are measured by two pairs of nozzles arranged at right angles. The distance between nozzles is about 55% of the length of the bore. Fig 2 shows the pneumatic circuit. The air is filtered and

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SOV/121-58-8-10/29

A Pneumatic Device for the Inspection and Sorting of the Housings
of Live Centres

stabilised, and then proceeds to the distributor containing
the intake nozzles with a diameter so chosen that the
measuring pressure fed to the pneumatic plug is half the
working pressure. The pneumatic plug is a two-step
cylindrical plug and inspects simultaneously two fitting
diameters and the shape deviations (ovality and conicity).
It is connected to an 8 contact differential mercury
transmitter operating by the counter-pressure method.
In one of the transmitter chambers a constant pressure
is maintained. The other chamber has its pressure varied
depending on the outflow from the pneumatic plug.
Calibration is carried out with the help of a master
component.
There are 3 figures

Card 2/2

AUTHORS: Kolomiyets, B. T., Larichev, V. N.   57-28-5-1/30

TITLE: Investigation of the Photoelectric Properties of Semi-
               conductors of the Group PbS by Means of the Condenser
               Method (Issledovaniye fotoelektricheskikh svoystv polu-
               provodnikov gruppy PbS kondensatornym metodom)

ABSTRACT: As is known, lead-sulfide, -selenide and -telluride ex-
               hibit a strong photosensitivity in the infrared range on-
               ly, if they are in shape of small polycrystalline layers,
               which were specially treated (activated) in oxygen or in
               air at temperatures of from 300 - 500°C. According to the
               activation conditions, the photosensitivity can change by
               the hundred- or thousand-fold. In order to understand the
               nature of the photoconductivity of such activated layers,
               it is of interest to investigate the non-activated substan-
               ces. This, however, is connected with great experimental
               difficulties. The authors applied in their experiments
               the condenser method for the investigation of the internal

Card 1/4

Investigation of the Photoelectric Properties of
Semiconductors of the Group PbS by Means of the   57-28-5-1/36
Condenser Method

photoeffect in semiconductors (References 1 - 4). The
results obtained on the basis of the examinations are as
follows: The photo e. m. f. which was determined in lead-
-sulfide, -selenide and -telluride by means of the conden-
ser method, and the photoconductivity in the activated
layers of these semiconductors are of a completely different
type and are caused by two different processes. According
to data in publications it can be assumed, that the width
of the forbidden zone equals 0,37, 0,25 and 0,3 eV at room
temperature, corresponding to PbS, PbSe and PbTe. These
values correspond to the activation energy, which was com-
puted according to the long-wave limit of photoconductivi-
ty. If, however, the activation energy is computed accor-
ding to the red limit of the spectral distribution of the
photo e. m. f., values are obtained exceeding by from 5-8
times the width of the forbidden zone. Contrary to the
photoconductivity the photoeffect exhibiting such a spec-
tral distribution cannot be explained by spatial processes.

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Investigation of the Photoelectric Properties of
Semiconductors of the Group PbS by Means of the   57-28-5-1/36
Condenser Method

Just as much the great time constant of the photo e. m. f.
(up to 10^{-2} sec) cannot correspond to the mean life of the
light carriers in the volume, nor to the period of diffu-
sion equilibrium. In more pure monocrystals of PbSe and PbTe
the mean life of the carriers, which are not in equilibrium,
does not exceed 10^{-7}. The assumption seems to be most pro-
bable, that the hydrogen atoms adsorbed at the surface re-
present very deep superficial level wells for the electrons.
Therefore the photoeffect is caused by a liberation of elec-
trons from these wells by the action of visible light. This
assumption is also proved by the fact that the magnitude,
the sign and the shape of the spectral distribution of the
photo e. m. f. is markedly dependent upon the influence of
the atmospheric oxygen. From this assumption it also pro-
ceeds, that the sign of the photo e. m. f. in the general
case does not determine the sign of the photocurrent. The
results of this work cannot be regarded as final. Further
investigations are necessary.

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Investigation of the Photoelectric Properties of
Semiconductors of the Group PbS by Means of the   57-28-5-1/36
Condenser Method

There are 2 figures, 1 table and 6 references, 5 of which
are Soviet.

ASSOCIATION: Fiziko-tekhnicheskiy institut AN SSSR, Leningrad
(Physico-technical Institute, AS USSR, Leningrad)

SUBMITTED: June 26, 1957

1. Semiconductors--Photoconductivity

Card 4/4

AUTHORS: Kolomiyets, B. T., Larichev, V. N.   57-28-6-33/34

TITLE: On the Problem of the Mechanism of Conductivity and Photo-
              conductivity in Polycrystalline Layers of Semiconductors of
              the PbS Group (K voprosu o mekhanizme provodimosti i fotoprovo-
              dimosti v polikristallicheskikh sloyakh poluprovodnikov gruppy
              PbS)

PERIODICAL: Zhurnal Tekhnicheskoy Fiziki, 1958, Vol. 28, Nr 6,
              pp. 1358 - 1362 (USSR)

ABSTRACT: In the present paper some experimental results obtained by
              the investigation of the influence exercised by oxygen upon
              the electric and photoelectric properties of polycrystalline
              layers of PbS, PbSe and PbTe are described. On the basis of the
              work carried out the following conclusions may be drawn: The non-
              linearity of the volt-ampère characteristics of the photosensi-
              tive samples can be looked upon as proof of the fact that non-
              -ohmic transition resistances exist in the most active layers,
              and that they play an important part in the mechanism of the
              conductivity and photoconductivity of the layers. For such samples
              the barrier theory of p-n-p transitions is applicable. It was

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On the Problem of the Mechanism of Conductivity and   57-28-6-33/34
Photoconductivity in Polycrystalline Layers of Semiconductors of the PbS Group

worked out by Slater (Reference 7) and Petritz (Reference 8)
with respect to the layers of PbS. In photoresistances of PbSe
and in particular of PbTe the p-n-p transitions are of secon-
dary importance. The oxygen, which is introduced into the layers
at room temperature, is adsorbed at the edges of the microcry-
stals. The nonlinearity of the volt-ampère characteristics of
such samples do not prove, in the authors' opinion, that there
is no negative surface charge, but solely that there are no poten-
tial barriers on the edges of the microcrystals. Apparently the
influence exercised by the opposite boundary of the microcrystals
(Reference 9) makes itself felt. It follows herefrom that the
barriers of the Schottky type do not exercise any considerable
influence upon the conductivity and photoconductivity of the
polycrystalline layers of semiconductors of the PbS group and
that the theory developed by Smith and Gibson (Reference 1 and 6)
is not applicable in this case. The surface states occuring as a
result of oxygen adsorption apparently manifest themselves by
Card 2/3   the existence of the photoeffect (with a maximum of spectral di-
stribution in the visible part with a high degree of inertia),

On the Problem of the Mechanism of Conductivity and   57-28-6-33/34
Photoconductivity in Polycrystalline Layers of Semiconductors of the PbS Group

which is observed when measuring the photoelectromotive force
by the condenser method (Reference 1o). There are 3 figures and
1o references, 2 of which are Soviet.

SUBMITTED: July 22, 1957

1. Semiconducting films—Conductivity   2. Semiconducting
films—Photoconductivity   3. Semiconducting films—Electron
transitions   4. Oxygen—Electrical effects   5. Lead alloys—
Properties

Card 3/3

LARICHEV, V.N.; LIND, A.B.; MOROZOV, I.K.

Pneumatic instruments used for checking and sorting running-center
bodies. Stan. i instr. 29 no. 8:27-28 Ag '58.   (MIRA 11:8)
                    (Engineering instruments)
                    (Lathes--Testing)

LARICHEV, U.N.

24(4)

PHASE I BOOK EXPLOITATION   30V/3140

Akademiya nauk Ukrainskoy SSR. Institut fiziki

Fotoelektricheskiye i optichaskiye yavleniya v poluprovodnikakh;
   i optichaskim yavleniyam vsesoyuznogo soveshchaniya po fotoelektricheskim
   noyabrya 1957 g (Photoelectric and Optical Phenomena in poluprovodnikakh, K. Kiyev, 20-26
   conductors; Transactions of the First Conference on Photoelectric
   and Optical Phenomena in Semiconductors...) Kiyev, 1959. 403 p.
   4,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Prezidium.
   Komissiya po poluprovodnikam.

Ed. of Publishing House: I. V. Kislna; Tech. Ed.: A. A. Matveychuk;
   Resp. Ed.: V. Ye. Lashkarov, Academician, Ukrainian SSR, Academy
   of Sciences.

PURPOSE: This book is intended for scientists in the field of semi-
   conductor physics, solid state spectroscopy, and semiconductor
   devices. The collection will be useful to advanced students in
   universities and institutes of higher technical training
   specializing in the physics and technical application of semi-
   conductors.

COVERAGE: The collection contains reports and information bulletins
   (the latter are indicated by asterisks) read at the First All-
   Union Conference on Optical and Photoelectric Phenomena in Semi-
   conductors. A wide scope of problems in semiconductor physics
   and technology are considered: photoconductivity, photoelectro-
   motive forces, optical properties, photoelectric cells and
   photoresistors, the actions of hard and corpuscular radiations,
   the properties of thin films and complex semiconductor systems,
   etc. The material were prepared for publication by Z. I.
   Rambov, O. V. Snitko, K. D. Tolpygo, A. F. Lubchenko, and M. K.
   Sheykman. References and discussion follow each article.

Photoelectric and Optical Phenomena (Cont.)   SOV/3140

Karpovich, M. A., and A. V. Vavanyan. The "Rectifying"
   Effect of Photoelectromotive Force in Photoelectric Cells
   Employing Dyes   290

Akimov, I. A., and Yu. I. Putseyko. The Sign of Photo-
   electric Current Carriers and the Relaxation of Photocon-
   ductivity in Thallium and Silver Iodides Sensitized by
   Organic Dyes   301

Putseyko, Ye. I. Sensitization of Photoelectric Effect in
   Inorganic Semiconductors by Organic Dyes (Theses)   314

Kalnitsky, B. I., and V. N. Larichev. Investigation of
   Photoelectric Properties of Semiconductors of the PnS
   Group by the Condenser Method   316

Kozhevin, V. Ya. The Problem of the Nature of Condenser
   Photoelectric Effect (Theses)   318

Card 12/16

82991
S/181/60/002/008/010/045
B006/B070

24.3600
AUTHORS: Zolotarev, V. F., Larichev, V. N.

TITLE: p-n Junctions in Photosensitive PbS Films

PERIODICAL: Fizika tverdogo tela, 1960, Vol. 2, No. 8, pp. 1741-1750

TEXT: The aim of the authors was to investigate the volt-ampere characteristics of PbS films and their temperature dependence, and to demonstrate the existence of p-n junctions. At present, there are two groups of theories for photoconductivity. One of the theories assumes that, on illumination, carriers are released where oxygen plays an important role as electron trap. The second theory is based on the idea that the photosensitive film consists of a series of p-n junctions. The minority carriers, liberated by light, diffuse to the junction and lower the potential barrier between p- and n-type regions, thus increasing the photocurrent. In order to find out the actual mechanism, an experiment suggested in Ref. 5 is used as the criterion. If potential barriers exist in the film, volt-ampere characteristics must be nonlinear.

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p-n Junctions in Photosensitive PbS Films   S/181/60/002/008/010/045
                                                  B006/B070

Therefore, the authors investigated the volt-ampere characteristics of
PbS films prepared in different ways. The electrical circuit of the
arrangement is shown in Fig. 1. Typical characteristics (taken in light
and darkness) are shown in Fig. 2. The form of the characteristics was
found to be independent of the method of preparation of the film and to
depend on the manner of activation. Some samples showed a photo-emf that
is directly related to the non-linearity of the characteristic. Chemi-
cally prepared films of PbS showed linear characteristics for low
temperature activation in vacuo (Fig. 4). Fig. 5 shows $\ln\sigma$ (σ - the
conductivity) as function of $1/T$ for chemically prepared films for high X
temperature activation in air, taken in dark and in light of two
intensities. The results are discussed in detail. Experiments proved that
on high temperature activation in air PbS layers showed p-n-p junctions.
Films, that were activated at low temperature or in vacuum, showed no
potential barrier. The p-n junctions have shunts whose conductivity is
independent of temperature and exposure of the sample. The magnitude of
the shunt differs from film to film and also from junction to junction
in the same film; the photo-emf is a consequence of the latter. The

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p-n Junctions in Photosensitive PbS Films

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B006/B070

surface impurity conductivity of an oxide film; or chains of free lead atoms can act as shunt. Three possible reactions, from which free lead may arise on high temperature activation, are given. The 0^{--} levels are traps for the photo electrons in p-type region; free lead atoms are traps for the photo holes in n-type region. The photoconductivity $\Delta\sigma/\sigma$ depends mainly on the trap concentration and only slightly on the magnitude of the shunts. There are 7 figures and 11 references: 3 Soviet, 7 US, and 1 German.

SUBMITTED: February 28, 1959 (initially) and February 29, 1960
                (after revision)

Card 3/3

LARICHEV, V.N.; LIND, A.B.

Pneumatic device for checking the plates of a gear pump. Stan.i
instr. 34 no.5:31-32 My '63.   (MIRA 16:5)
                        (Pumping machinery—Testing)

L 25472-66   EWT(1)/EWT(m)   IJP(c)   AT/JD/JG

ACC NR: AP6009693   SOURCE CODE: UR/0181/66/008/003/0958/0959

AUTHOR: Iarichev, V. N.; Illarinova, V. A.

ORG: Kazan' State University im. V. I. Ul'yanov-Lenin (Kazanskiy gosudarstvenny universitet)

TITLE: Characteristics of induced photo emf in mercury iodide

SOURCE: Fizika tverdogo tela, v. 8, no. 3, 1966, 958-959

TOPIC TAGS: mercury compound, photo emf, light absorption, photosensitivity

ABSTRACT: The authors present preliminary results of the investigation of induced photo emf in mercury iodide, consisting in the fact that prior exposure of the semiconductor to light in the region of the intrinsic absorption in the impurity region causes a sharp increase in the photosensitivity. This is connected with the transfer of the carriers from the adhesion levels into one of the allowed bands. The induced photo emf was investigated by a capacitor method. The use of two monochromators made it possible to illuminate the samples simultaneously with two beams of different wavelengths. The samples were in the form of thin polycrystalline layers deposited on a glass substrate, and also in the form of powder and thin layers obtained by precipitation. A plot of the spectrum shows that illumination with 438 nm wavelength (region of intrinsic absorption) increases the sensitivity in the impurity region. The sign of the photo emf was determined by using a flash lamp, and was found to be negative in the intrinsic-absorption region, and positive in the impurity region.

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L 25472-66

ACC NR: AP6009693   O

In the transition region (590--600 nm) the supplementary illumination changed the sign of the photo emf. It is concluded that the adhesion levels were partially filled with carriers prior to the illumination. By using short pulses the authors also investigated the frequency characteristics of the photo emf and found that it can be described by a plot of the function $(1 + (\omega\tau)^2)^{-1/2}$ with two values of the time constant τ. The influence of constant illumination on the frequency character- istic of the photo emf calls for further study. Orig. art. has: 1 figure and 1 formula.

SUB CODE: 20/   SUBM DATE: 28May65/   ORIG REF: 004

Card 2/2 cc

LARICHEV, V.Ye.; KRYCHANOV, Ye.I.

"The remote past of the Maritime Territory" by A.P.Okladnikov.
Izv.Sib.otd.AN SSSR   no.1:105-107 '62.   (MIRA 15:3)
                    (Maritime Territory—History)

LARICHEVA, G. M.

GINDINA, M.M.; KOGANOVA, G.V.; LARICHEVA, G.M.; MELKOVA, A.Ye.; POLYAKOVA, M.G.; SKOBELKINA, I.F.; IKONNIKOV, V.V., prof. otvetstvennyy red. ROSHCHINA, L., red.izd-va; LEBEDEV, A., tekhn.red.

[State Bank of the U.S.S.R.; a brief account on the fortieth anniversary of the October Revolution] Gosudarstvennyi bank SSSR; kratkii ocherk k sorokaletiiu Oktiabria. Moskva, Gosfinizdat, 1957. 254 p.

(MIRA 11:2)

1. Gosudarstvennyy bank, Moscow.
        (Banks and banking)

LARICHEVA, I. I., Cand Med Sci -- "Treatment of chronic in-
flammatory diseases of female sexual organs by the mud-
iontophoresis of the episaeral region under non-resort
conditions." Kiev, 1961. (Kiev Order of Labor Red Banner
Med Inst im Acad A. A. Bogomollets) (KL, 8-61, 262)

- 483 -

IARICHEVA, K. A.

"On the Action of Acetylcholine upon the Rhythmical Contractions of the Skeletal Muscle," Dokl. AN SSSR, 53, No.3, pp. 289-92, 1946

Inst. Evolutionary Morphology im. A. N. Severtsov, AB USSR

MIL'SHTEYN, G.I.; LARICHEVA, K.A. (Moskva)

Effect of lysergic acid diethylamide on some aspects of the
behavior of mice and rats. Farm. i toks. 26 no.6:753-756
N-D '63   (MIRA 18:2)

BABAYANTS, R.S.; BLAGOVESHCHENSKAYA, V.V.; VERGILESOVA, O.S.; VISSONOV, Yu.V.;
        VYALOVA, N.A.; GLAZUNOV, I.S.; DRUTMAN, R.D.: KLEMPARSKAYA, N.N.;
        KOTOVA, E.S.; KURSHAKOV, N.A., prof.; LARICHEVA, L.P.; LYSKOVA, M.N.;
        MALYSHEVA, M.S.; PETUSHKOV, V.N.; RYNKOVA, N.N.; SOKOLOVA, I.I.;
        STUDENIKINA, L.A.; CHUSOVA, V.N.; SHESTIKHINA, O.N.; SHULYATIKOVA,
        A.Ya.; SHTUKKENBERG, Yu.M.; BARANOVA, Ye.F., red.

[Acute radiation lesion in man] Ostraia radiatsionnaia travma
u cheloveka. Moskva, Meditsina, 1965. 313 p.

(MIRA 18:9)

1. Chlen-korrespondent AMN SSSR (for Kurshakov).

LARICHEVA, L.S.   (Barnaul)

Limiting accuracy of the asymptotic expansions of a certain class
of functions. Part 1. Izv. vys. u heb. zav.; mat. no. 6 109-115
'63   (MIRA 17:8)

LARICHEVA, L.S (Barnaul)

Limit estimate of the exactness of asymptotic expansions of a certain
class of functions. Part 2. Izv. vys. ucheb. zav.; mat. no.3:111-116
'65.   (MIRA 18:7)

1. LARICHEVA, M. D.

2. USSR (600)

4. Rye

7. Studying fertility of rye seeds produced by wheat. Agrobiologiia No. 6
   1952.

9. Monthly List of Russian Accessions, Library of Congress, __April__ 1953, Uncl.

1. LARICHEVA, M. D.

2. USSR (600)

4. Hybridization, Vegetable

7. Productivity of hybrids as a function of conditions under which parental forms were raised. Sel.isem. 20 no. 1 1953.

9. Monthly List of Russian Accessions, Library of Congress, ____April____ 1953, Uncl.

KRASNIKOV, B.V., doktor sel'skokhozyaystvennykh nauk; LARICHEVA, M.D.,
kand.sel'skokhozyaystvennykh nauk

Late fall sowing as a method for developing resistance to
flower-stalk formation in sugar beets grown for feed purposes
in the non-Chernozem zone. Agrobiologiia no.6:791-795 N-D
'61.   (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov imeni
V.R. Vil'yamsa, st. Lugovaya, Moskovskaya oblast'.
                          (Sugar beets)

SHEBALINA, M.A., kand.sel'skokhozyaystvennykh nauk; LARICHEVA, M.D.,
kand.sel'skokhozyaystvennykh nauk

"Beets" by V.T. Krasochkin. Reviewed by M. A. Shebalina and M. D.
Laricheva. Zemledelie 23 no.11:92-93 N '61.   (MIRA 14:12)
(Beets) (Krasochkin, V. T.)

LARICHEVA, M.D., kand.sel'skokhozyaystvennykh nauk; SHNEYDER, Yu.I.,
kand.bilogicheskikh nauk; KASHMANOVA, O.I.

Late fall sowing as a method for developing a comparatively
disease resistant variety of sugar beets. Agrobiologiia no.3:
447-448 My-Je '62.   (MIRA 15:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov,
Moskovskaya oblast'.
         (MOSCOW PROVINCE--SUGAR BEETS--DISEASE AND PEST RESISTANCE)

LARICHEVA, M.D., kand. sel'skokhoz. nauk

Growth characteristics of the sugar beet in the non-Chernozem zone.
Agrobiologiia no.4:594-598 Jl-Ag '64.   (MIRA 17:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov, Moskovskaya
oblast'.

SPOTARENKO, S.S.; LARICHEVA, M.G.

Some results of mass use of gamma globulin in the prophylaxis
of infectious hepatitis in Moscow Province. Vop.med.virus.
no.9:419-424 '64. (MIRA 18:4)

1. Iz Moskovskoy oblastnoy sanitarno-epidemiologicheskoy stantsii.

LARICHEVA, M.N., kand. sel'skokhoz. nauk; SHNEYDER, Yu.I., kand. biolog.
nauk

Preservation of turnip and sugar beet roots. Zashch.rast. ot
vred. i bol. 9 no.10:24-25 '64   (MIRA 18:1)

1. Vsesoyuznyy institut kormov, Institut kartofel'nogo khozyaystva.

VOSTOKOVA, Ye.A.; SHAVYRINA, A.V.; LARICHEVA, S.G.; VIKTOROV, S.V.,
doktor geogr. nauk, nauchnyy red.; FEDOROVA, L.N., red.izd-
va; IYERUSALIMSKAYA, Ye.S., tekhn. red.

[Handbook on indicator plants for ground waters and soils in
southern deserts of the U.S.S.R.]Spravochnik po rasteniiam-
indikatoram gruntovykh vod i pochvo-gruntov dlia iuzhnykh
pustyn' SSSR. Pod red. S.V.Viktorova. Moskva, Gosgeoltekh-
izdat, 1962. 123 p. plates.   (MIRA 15:12)
            (Russia, Southern--Indicator plants)
            (Russia, Southern--Desert flora)

16(1)

SOV/40-22-4-15/26

AUTHOR: Laricheva, V.V. (Moscow)

TITLE: The Non-Linear Damping of Eigen Oscillations in Systems of Arbitrary Order (Nelineynoye gasheniye sobstvennykh kolebaniy sistem proizvol'nogo poryadka)

PERIODICAL: Prikladnaya matematika i mekhanika, 1958, Vol 22, Nr 4, pp 536 - 538 (USSR)

ABSTRACT: The damping of eigen oscillations of a system of second order of the form

$$(1) \qquad \ddot{x} + \omega^2 x = \delta$$

is based on the fact that the damping function δ as a function of the oscillation speed causes a dissipation of energy. In the present case the dissipation of energy is to take place by non-linear dampers which satisfy the equation:

$$\delta = \omega^2 k^2 x$$

where the magnitude k is to satisfy the following conditions

$$k^2 = 0 \quad \text{for } x\dot{x} > 0$$
$$0 < k^2 < 1 \quad \text{for } x\dot{x} < 0$$

Card 1/2

SOV/40-22-4-15/26

The Non-Linear Damping of Eigen Oscillations in
Systems of Arbitrary Order

Under the given conditions the energy of the system is di-
minished by a certain value during every oscillation, i.e.
the system is suppressed. For the given equation of second
order the problem can be solved and the damping time can be
approximatively calculated.
The same method is applied to systems of n-th order of the
form :

$$(13) \quad \sum_{s=1}^{n} (\beta_{sl} \ddot{x}_s + \alpha_{sl} x_s) = \delta_l \qquad (l = 1,\ldots,n)$$

The calculation of the initial conditions occurring in the
solution set up can be principally carried out according to
the same method as it is usual for linear systems. It is in-
dicated that the calculation of the damping is still prac-
ticable, if the magnitudes of damping δ do not depend on the
oscillation velocity, but only on the coordinate and on the
acceleration.

SUBMITTED: December 22, 1957

Card 2/2

S/892/62/000/001/022/022
B102/B166

ȷ̧4 (ᔕ̃ᔕ̃ᵕ)

AUTHORS: Larichev, A. V., Laricheva, V. V.

TITLE: Inversion of the matrix of the sensitivity function of a scintillation spectrometer

SOURCE: Moscow. Inzhenerno-fizicheskiy institut. Voprosy dozimetrii i zashchity ot izlucheniy, no. 1, 1962, 150-155

TEXT: The corrections for Compton distribution, photoefficiency, collimator solid angle, and low-energy γ-ray absorption, necessary in the transition from the apparatus pulse-height spectrum to the true γ-ray spectrum measured with a single-crystal scintillation spectrometer, have already been calculated by Yu. A. Kazanskiy (Pribory i tekhnika eksperimenta, no.4, 32, 1959). He obtained the correction formula by means of the original matrix of the Compton contributions. Since this method is cumbersome and not free from errors, the authors here use the inverse complete matrices of the sensitivity function (cf. Collection: Pribory i metody analiza izlucheniy, no.3, Gosatomizdat 1961) for calculating the correction for a spectrometer with an 80·80 mm NaI(Tl)

Card 1/3

S/692/62/000/001/022/022
B102/B186

Inversion of the matrix of the ...

crystal and a collimator 300 mm in length and 20 mm in diameter. The relation obtained for the normalization of the Compton distribution for one incident photon equals that given by J. Hubell (Rev. Sci. Instrum., 29, no.1, 65, 1958): $P_k = N_k/N_o = \varepsilon - \varepsilon p_{ph}$. If the multiplication of the photons (factor Ω_{eff}/Ω_o) due to transmission effects and their reduction in number (factor $e^{-\mu_1 d}$) due to absorption is taken into account, the correction function becomes $\varepsilon'' = p''_{ph} \varepsilon'' + p''_k = \varepsilon(\Omega_{eff}/\Omega_o)e^{-\mu_1 d}$, and therefore $p''_k = \varepsilon'' - \varepsilon'' p_{ph}$. The latter relation serves for normalizing each element of the Compton distribution of the original matrix. As an example, the original and inverse total matrices are given for $E_\gamma = 600$ kev

The results agree closely with those obtained by E. Rawson and D. Cormak (Nucleonics, 16, no.10, 92, 1958) and J. Kockum (Nucl. Instrum. 4, no.3, 171, 1959). The inverse matrix is characterized by the following properties: (1) it is triangular; (2) each diagonal element is the inverse of the corresponding element of the original matrix; (3) all its diagonal elements are positive and most of its off-diagonal elements negative;

Card 2/3

LARICHEVA, V.V; REYN, M.V. (Moscow)

"Asymptotic solutions based on the non-Kepler undisturbed motion".

report presented at the 2nd All-Union Congress on Theoretical and Applied
Mechanics, Moscow, 29 Jan - 5 Feb 64.

L 19230-66   EWT(d)   IJP(c)

ACC NR: AP5028271   SOURCE CODE: UR/0020/65/165/002/0289/0292

AUTHOR: Laricheva, V. V.

ORG: none

TITLE: Efficient transformation and asymptotics of a class of nonlinear differential equations

SOURCE: AN SSSR. Doklady, v. 165, no. 2, 1965, 289-292

TOPIC TAGS: differential equation, nonlinear differential equation

ABSTRACT: The author treats

$$dx/dt = -y + \varepsilon\Pi_1(p,x,y), \quad dy/dt = x + \varepsilon\Pi_2(p,x,y), \quad (1)$$

$$dp/dt = \varepsilon\Pi_3(p,x,y)$$

She shows that the interval of suitability of the averaged equations can be signifi-cantly broadened in comparison to the theorem of N. N. Bogolyubov and Yu. A. Mitropol'skiy (Asimptoticheskiye metody v teorii nelineynykh kolebaniy, M., 1963) on averaging system

$$d\xi/dt = \varepsilon X_0(\xi) \quad \left(X_0(\xi) = \frac{1}{T}\int_0^T X(t,\xi)\,dt\right), \quad (2)$$

depending on the initial conditions. She further describes a means for approximate determination of α, β, generalizing the corresponding result of V. V. Laricheva

UDC: 517.93

Card 1/2

L 19230-66

ACC NR: AP5028271

and M. V. Reyn (Kosmicheskiye issledovaniya, 3, v. 1, 26, 1965) in the form of a series which yields an asymptotic representation. This paper was presented by academician A. A. Dorodnitsyn on 2 April 1965. Orig. art. has: 32 formulas.

SUB CODE: 12/ SUBM DATE: 23Mar65/ ORIG REF: 002

Card 2/2 VLR

L 26116-65   EWT(1)/FS(v)-2/EWP(m)/EWG(v)/T   Po-4/Pq-4/Pe-5/Pg-4   GW

ACCESSION NR: AP5005436

S/0293/65/003/001/0027/0041

AUTHOR: Laricheva, V. V.; Reyn, M. V.

TITLE: Asymptotics of celestial mechanics equations which is suitable for a wide range of variation in eccentricity

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 1, 1965, 27-41

TOPIC TAGS: celestial mechanics, perturbed motion, quasi Hamiltonian equation, slowly varying osculating elements, motion equation transformation

ABSTRACT: Transformation of the equations of motion of a mass point in a central gravitational field under small perturbations to equations in slowly varying variables is proposed. Slowly varying variables in equations of motion correspond to non-perturbed non-Keplerian motion. The equations of perturbed motion in osculating elements are reduced to a "quasi-Hamiltonian" form which, when the parameter ε characterizing the value of the perturbation is equal to zero, becomes the Hamiltonian form of equations of non-perturbed Keplerian motion. The quasi-Hamiltonian form of the equations makes it possible to single out effectively the principal part of the perturbation in order to select the non-Keplerian non-perturbed motion from which the particular solution (spiral trajectory) of the equations of the perturbed

Card 1/2

L 26116-65

ACCESSION NR: AP5005436

motion can be obtained. Conditions for selecting slowly varying variables are presented. It is shown that these variables are more effective than Keplerian osculating elements for solving the problem of accelerating and decelerating the mass point in the gravitational field under small perturbations, using the first approximation of the Krylov-Bogolyubov method for averaging the equations of motion. It is proved that the solutions of averaged equations in various osculating elements are identical. The first approximation (of the Krylov-Bogolyubov method) to the solution and its relative error are analyzed for problems with a wide range of variation of orbital elements. The good accuracy of the proposed approach for obtaining solutions of equations of perturbed motion is verified by means of examples which have exact solutions. Orig. art. has: 1 figure and 53 formulas.   [LK]

ASSOCIATION: none

SUBMITTED: 27Nov63   ENCL: 00   SUB CODE: AA

NO REF SOV: 002   OTHER: 001   ATD PRESS: 3186

Card 2/2

L 20852-66   EWP(m)/EWP(c)/EWT(1)/T/EWA(d)   IJP(c)   GW
ACCESSION NR: AP5015663

UR/0293/65/003/003/0359/0367
521.401.4:521.6

/3

AUTHORS: Laricheva, V. V.; Reyn, M. V.

TITLE: A method for constructing solutions to the equations of plane perturbed motion in celestial mechanics

SOURCE: Kosmicheskiye issledovaniya, v. 3, no. 3, 1965, 359-367

TOPIC TAGS: satellite orbit, elliptic orbit, logarithmic spiral, perturbation theory, perturbed satellite motion, spiral trajectory, magnetic field, gravitational field, celestial mechanics

ABSTRACT: The equations of motion for a particle in a force field in the presence of perturbations are given by

$$\frac{dp}{du} = \frac{2\varepsilon a_u p^3}{(1+x)^3}, \quad \frac{dx}{du} = -y + \frac{2\varepsilon a_u p^2}{(1+x)^2}, \quad \frac{dy}{du} = x + \frac{\varepsilon a_u p^2 y}{(1+x)^3} + \frac{\varepsilon a_r p^2}{(1+x)^2},$$

where u is a polar angle, p, εa_r, εa_u - dimensionless focal parameter, radial and transverse perturbation acceleration components, respectively, and $x = \varepsilon \cos(u - \omega)$, $y = \varepsilon \sin(u - \omega)$. A stable motion for this equation is given by a

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L 20852-66

ACCESSION NR: AP5015663

spiral trajectory

$$x = \varepsilon f_1(p, \varepsilon), \quad y = \varepsilon f_2(p, \varepsilon);$$

which leads to

$$p = F_1(x, \varepsilon), \quad p = F_2(y, \varepsilon), \quad \frac{dx}{dp} = \varepsilon f_1'(p, \varepsilon), \quad \frac{dy}{dp} = \varepsilon f_2'(p, \varepsilon).$$

When substituted above, this gives

$$\varepsilon f_1' \frac{2\varepsilon a_u p^3}{(1+x)^3} = -y + \frac{2\varepsilon a_u p^2}{(1+x)^2}, \quad \varepsilon f_2' \frac{2\varepsilon a_u p^3}{(1+x)^3} = x + \frac{\varepsilon a_u p^2 y}{(1+x)^3} + \frac{\varepsilon a_r p^2}{(1+x)^2}.$$

Using these results, a set of special cases is analyzed. The first is a motion in a small radial perturbation field

$$p = \text{const} = 1 \quad \frac{dx}{du} = -y, \quad \frac{dy}{du} = x + \frac{\varepsilon a_r}{(1+x)^2}.$$

The analysis shows that under a small constant radial attraction no acceleration is possible for the particle with a satellite orbit. Next, the effect of the earth's magnetic field on the electrically charged satellite is investigated for $e_0 < 1$. This leads to the results

$$\varrho = \sqrt{A_n^2 + 2a A_m \cos(u - \varphi_n) + a^2}, \quad \omega = u - \text{Arc tg} \frac{A_n \sin(u - \varphi_n)}{A_n \cos(u - \varphi_n) + a}.$$

Card 2/3

L 20852-66

ACCESSION NR: AP5015663

Finally, the case is considered where the small perturbations are proportional to the gravitational pull described by the equations

$$\frac{dp}{du} = \frac{2\varepsilon p \bar{a}_u}{1+x}, \quad \frac{dx}{du} = -y + 2\varepsilon \bar{a}_u, \quad \frac{dy}{du} = x + \frac{\varepsilon \bar{a}_u y}{1+x} + \varepsilon \bar{a}_r,$$

The particular solution for these equations is shown to be a logarithmic spiral which leads to a non-Keplerian, unperturbed motion

тено. В [4] при помощи вычислительной

Orig. art. has: 38 equations and 2 figures.

ASSOCIATION: none

SUBMITTED: 27Nov63   ENCL: 00   SUB CODE: SV, ME

NO REF SOV: 001   OTHER: 004

Card 3/3

FAYBISOVICH, L.I.; VARAKIN, P.I.; LARICHKIN, M.S.; MEDOVAR, B.I.; LATASH, Yu.V.;
    MAKSIMOV, I.P.; TYURIN, V.I.; BUSHMELEV, V.M.

Effect of electric slag remelting on the quality of rotor open-hearth
steel. Met. i gornorud. prom. no.5:18-21 S-O '64.   (MIRA 18:7)

L 35339-66 EWT(m)/EWP(w)/T/EWP(t)/ETI/EWP(k)   IJP(c),   JD
ACC NR: AP6011826   (N)   SOURCE CODE: UR/0383/66/000/002/0035/0039

AUTHOR: Faybisovich, L. I.; Varakin, N. I.; Larichkin, M. S.; Medovar, B. I.;
Latash, Yu. V.; Yemel'yanenko, Yu. G.; Maksimov, I. P.; Koval', S. I.; Akulinin, M. A

ORG: none

TITLE: Quality of heavy forgings of 36KhN1MFAR electroslag rotor steel

SOURCE: Metallurgicheskaya i gornorudnaya promyshlennost', no. 2, 1966, 35-39

TOPIC TAGS: steel forging, steel, nonmetallic inclusion, brittleness, temper
brittleness

ABSTRACT: The study deals with the effect of electroslag melting on the quality of
vacuum-degassed and nondegassed open-hearth steel. Forgings of 36KhN1MFAR steel,
obtained from electroslag ingots weighing 13 tons, have a compact structure and a
homogeneous chemical composition. The content of sulfur, gas, and nonmetallic in-
clusions in them is considerably lower than in similar forgings from metal made the
conventional way. The mechanical properties of the remelt metal are characterized
by high stable values in the length and cross section of the forging both in longi-
tudinal and diametrical directions. Electroslag melted 36KhN1MFAR steel does not
possess a tendency to temper brittleness. Its nul ductility transition temperature
is below -70C. Orig. art. has: 5 figures and 4 tables.   [NT]

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 003
                                   UDC: 669-13:658.562
Card 1/1

DOBROVOL'SKIY, D.M.; LYAL'KIN, M.A. (g. Petrovka Gor'kovskoy oblasti);
   BOBERSKIY, A.A. (st.Kok-Su Alma-Atinskoy oblasti, Kazakhskoy
   SSR); MIKHAYLOV, A.V.; LARICHKIN, M.Ye.; GERSHMAN, V.I.;
   SMOLOV, Ye.I. (Sevastopol')

Notes on textbooks. Fiz.v shkole 22 no.6:87-89 N-D '62.
                                                (MIRA 16:2)
1. 3-ya vos'miletnyaya shkola, g.Serdol'sk, Penzenskoy oblasti
(for Dobrovol'skiy). 2. Srednyaya shkola, s.Undino-Posel'ye
Chitinskoy oblasti (for Mikhaylov, A.V.). 3. Shemshinskaya
srednyaya shkola Tatarskoy ASSR (for Larichkin). 4. 56-ya
vechernyaya shkola Moskva (for Gershman).
                  (Physics--Textbooks).

LARIKOV, A.F

MURASHEV, V.A., prof., doktor tekhn.nauk; MIRONOV, S.A., prof., doktor
tekhn.nauk; ALEKSANDROVSKIY, S.V., kand.tekhn.nauk; TAL', K.E.,
kand.tekhn.nauk; DMITRIYEV, S.A., kand.tekhn.nauk; MULIN, N.M.,
kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk; NEMIROVSKIY,
Ya.M., kand.tekhn.nauk; TABENKIN, N.L., inzh. [deceased]; KALA-
TUROV, B.A., kand.tekhn.nauk; BRAUDE, Z.I., inzh.; KRYLOV, S.M.,
kand.tekhn.nauk; FOKIN, K.F., doktor tekhn.nauk; GUSEV, N.M.,
prof., doktor tekhn.nauk; YAKOVLEV, A.I., inzh.; KORENEV, B.G.,
prof., doktor tekhn.nauk; DERESHKEVICH, Yu.V., inzh.; MOSKVIN,
V.M.; LUR'YE, L.L., inzh.; MAKARICHEV, V.V., kand.tekhn.nauk;
SHEVCHENKO, V.A., inzh.; VASIL'YEV, B.F., inzh.; KOSTYUKOVSKIY,
M.G., kand.tekhn.nauk; MAGARIK, I.L., inzh.; IL'YASHEVSKIY, Ya.A.,
inzh.; LARIKOV, A.F., inzh.; STULOV, T.T., inzh.; TRUSOV, L.P.,
inzh.; LYUDKOVSKIY, I.G., kand.tekhn.nauk; POPOV, A.N., kand.tekhn.
nauk; VINOGRADOV, N.M., inzh.; USHAKOV, N.A., kand.tekhn.nauk;
SVERDLOV, P.M., inzh.; TER-OVANESOV, G.S., inzh.; GLADKOV, B.N.,
kand.tekhn.nauk; KOSTOCHKINA, G.V., arkh.; KUREK, N.M.; OSTROVSKIY,
M.V., kand.tekhn.nauk; PEREL'SHTEYN, Z.M., inzh.; BUKSHTEYN, D.I., inzh.;
(Continued on next card)

MURASHEV, V.A.—(continued) Card 2.
    MIKHAYLOV, V.G., kand.tekhn.nauk; SIGALOV, E.Ye., kand.tekhn.nauk;
    GVOZDEV, A.A., prof., retsenzent; MIKHAYLOV, V.V., prof., retsen-
    zent; PASTERNAK, P.L., prof., retsenzent; SHUBIN, K.A., inzh.,
    retsenzent; TEMKIN, L.Ye., inzh., nauchnyy red.; KOTIK, B.A., red.
    izd-va; GORYACHEVA, T.V., red.izd-va; MEDVEDEV, L.Ya., tekhn.red.

    [Handbook for designers] Spravochnik proektirovshchika. Pod ob-
    shchei red. V.I.Murasheva. Moskva, Gos.izd-vo lit-ry po stroit.,
    arkhit. i stroit.materialam. Vol.5. [Precast reinforced concrete
    construction elements] Sbornye zhelezobetonnye konstruktsii.
    1959. 603 p.   (MIRA 12:12)

    1. Akademiya stroitel'stva i arkhitektury SSSR. Nauchno-issledo-
    vatel'skiy institut betona i zhelezobetona, Perovo. 2. Deystvitel'-
    nyy chlen Akademii stroitel'stva i arkhitektury SSSR (for Murashev,
    Gvozdev, Mikhaylov,V.V., Pasternak, Shubin). 3. Chlen-korresp. Aka-
    demii stroitel'stva i arkhitektury SSSR (for Mironov, Gusev, Moskvin,
    Kurek).
                (Precast concrete construction).

LARIKOV, I.A.

Improve the methods of growing vegetable seeds of the canning type. Kons.i ov. prom. 16 no.2:32-34 F '61.   (MIRA 14:4)

1. Vserossiyskiy sovet narodnogo khozyaystva.
(Vegetables--Varieties)   (Canning industry)

LARIKOV, I.A.

Improve the work of state farms under the economic councils
of the R.S.F.S.R. Kons.i ov.prom. 17 no.10:22-23 O '62.
(MIRA 15:9)
1. Upravleniye pishchevoy promyshlennosti Vserossiyskogo soveta
narodnogo khozyaystva.
(State farms) (Canning industry)

LARIKOV, L.N.

Resistometric study of the natural aging of lead-tin alloys. L. N. Larikov (Sofia Univ.). *Compt. rend. acad. bulgar. sci. 9, No. 3, 57-8(1956).*—The natural aging process was studied for Pb-Sn alloys contg. 1-19% by wt. Sn by the compensation method at 20°. For most samples there is a rapid decrease in the elec. resistance with time which sets in after a latent period. As the Sn concn. is increased the length of the latent period decreases and the rate of change in the resistance is increased. The exptl. data indicate that the ordering of these alloys is accompanied by a rapid decrease in the elec. resistance, thereby verifying that the aging is of the high-temp. type.   J. Rovtar Leach

BULGARIA/Physical Chemistry - Crystals.

B-5

Abs Jour : Ref Zhur - Khimiya, No 5, 1958, 13580

Author : L.N. Larikov.

Inst : Academy of Sciences of Bulgaria

Title : X-Ray Study of Aging Lead-Tin Alloys.

Orig Pub : Dokl. Bolg. AN, 1956, 9, No 4, 65-68

Abstract : The aging of Sn alloys with Pb was studied roentgenographi-
cally on monocrystals and polycrystal specimens. The de-
composition of the oversaturated solid solution starts af-
ter a preparatory (latent) period, it proceeds according
to a 2-phase scheme and results in the state of "coll.
equilibrium". A cecrease of interior stresses in the ba-
sic phase occurs in the result of the decomposition of the
solid solution, which may be seen from the relative inten-
sity rise of the high index lines of the basic phase on

Card 1/2

LARIKOV, L. N

Distr: 4E2c /

The age-hardening mechanism of lead-tin alloys. L. N. Larikov. Godishnik Sofilskiya Univ. Fiz. Mat. Fak. Khim. 50, Pt. 1-2, 27-54(1955/56)(Pub. 1958).—Pb-Sn alloys (I) in the entire interval of solid-soln. concns. have properties similar to those of higher Pb-content alloys. After tempering, room temp. hardness increases with time. With a Sn content exceeding 4.5% the hardness/time curve passes through a max. and then gradually falls off. The anomalous mech. properties of I are due to the great speed with which the natural age-hardening process proceeds. The hardness of tempered I, representative of a homogenous solid soln., increases almost linearly with increase in Sn content. The mech. properties of I cannot be permanently improved by the simple addn. of the deficient Sn, since an increase in Sn content not only increases the final max. hardness, but also the speed of the ensuing softening. The strengthening of I is accompanied by a simultaneous decrease in elec. resistance and a change in the lattice parameter. The results of x-ray tests testifies to the creation of significant tensions and deformations in age-hardened alloys. Natural age-hardening of I can be divided into 4 basic stages: (a) latent period, (b) period of spontaneous disintegration of the solid soln., (c) period of coagulation of the new phase, (d) period of recrystn. and softening. The duration of these periods and their correlation depends above all on the compn. of the alloys.   V. Himelblau

SOV/137-58-7-15658

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 249 (USSR)

AUTHOR: Larikov, L. N.

TITLE: Effect of Alloying Elements on the Hardening of Lead Alloys
            (Vliyaniye legiruyushchikh elementov na uprochneniye svintso-
            vykh splavov)

PERIODICAL: Sb. nauchn. rabot In-ta metallofiz. AN UkrSSR, 1957, Nr 8,
            pp 128-144

ABSTRACT: A review of extant works on the study of hardening of Pb-
            alloys. The effect of alloying elements on the formation and
            properties of Pb-base solid solutions is analyzed. The con-
            clusion is made that at temperatures below the melting point
            and at relatively great strain rates the relative hardening of
            solid solutions is practically independent of the nature of the
            solvent metal but depends only on the character of the modi-
            fication of the parameter of its crystalline lattice by the
            alloying element (in accordance with the law determined by
            A. P. Gulyayev and Ye. G. Trusova, ZhTF, Nr 20, p 66, 1950).
            At relatively high temperatures and low strain rates the action
            of the alloying element on the forces of interatomic bonds in

Card 1/2

SOV/137-58-7-15658

Effect of Alloying Elements on the Hardening of Lead Alloys

the solid solution is manifested more strongly. Furthermore, in the present
work, intermediary phases·in Pb alloys which can strengthen alloys either
in the role of primary components of the heterogeneous structure or as· a
secondary segregate separating upon the aging of supersaturated solid solu--
tions are analyzed. The problem of hardening of some Pb-base alloys upon
natural aging is discussed. Bibliography: 36 references.

Ya. L.

1. Lead alloys--Hardening   2. Alloys--Metallurgical effects

Card 2/2

LARIKOV, L. N.

Mechanism of natural aging of lead-tin alloys. L. N. Larikov. Compt. rend. acad. bulgare sci. 10, 69-72(1957); cf. preceding abstr.—The aging of Pb alloys contg. up to 19% Sn consists of 4 periods: (1) latent period, during which the hardness and lattice parameter remain the same and the elec. resistance decreases an insignificant amt., (2) spontaneous decompn. of solid soln., during which the hardness increases rapidly, elec. resistance drops sharply, and the decompn. of solid soln. proceeds heterogeneously. (3) coagulation period and recovery of lattice of primary phase, during which hardness and elec. resistance decrease slightly and the lattice parameter remains unchanged, and (4) recrystn. and softening period, during which hardness and elec. resistance decrease more rapidly and the lattice parameter reaches the equil. value.   H. W. Rathmann

LARIKOV, L. N. and POLOTSKIY, I. G.

"On the Question of the Influence of Ultrasonics on Phase Transitions in Solid Metals and Z Alloys."

paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May - 2 Jun 58.

LARIKOV, L.N.

Aging of lead alloys [with summary in English]. Ukr. fiz. zhur. 3
no.3:397-407 My-Je '58.   (MIRA 11:10)

1. Institut metallofiziki AN USSR.
(Lead alloys)

LARIKOV, L.N.

Determination of the recrystallization temperature of metals.
Ukr.fiz.zhur. 3 no.5:664-667 S-O '58.   (MIRA 12:2)

1. Institut metallofiziki AN USSR.
        (Metals)   (Crystallization)

LARIKOV, L.N.

Mobility of atoms in metals near the recrystallization tempe-
rature. Ukr.fiz.zhur. 3 no.5:668-672 S-O '58. (MIRA 12:2)

1. Institut metallofiziki AN USSR.
        (Metals)   (Molecular dynamics)

LARIKOV L. N.

18(4,7); 25(1)   PHASE I BOOK EXPLOITATION   SOV/2306

Akademiya nauk Ukrainskoy SSR. Institut metallofiziki

Voprosy fiziki metallov i metallovedeniya (Problems in the Physics of Metals and Metallography) Kiyev, Izd-vo AN Ukrainskiy SSR, 1959. (Series: Itel Sbornik nauchnykh rabot, Nr 9) Errata slip inserted. 3,000 copies printed.

Ed. of Publishing House: V.L. Shkurko; Tech. Ed.: M.I. Yefimova; Editorial Board: V.N. Svechnikov, Academician, Academy of Sciences, Ukrainian SSR (Resp. Ed.); S.D. Gertsriken, Doctor of Physical and Mathematical Sciences; and I.Ya. Dekhtyar, Doctor of Technical Sciences.

PURPOSE: This collection of articles is intended for scientific workers, aspirants, and engineers in the fields of the physics of metals, metallography, and metallurgy. It may also be useful to students of advanced courses in metallurgical and physical faculties.

COVERAGE: This collection of articles deals with the following topics: effect of high-speed heating, heat treatment, deformations, and crystallization conditions on phase transformations, structures, and properties of metals and alloys; the effect of additional alloying components on volumetric and intercrystalline diffusion in alloys; and the effect of repeated quench hardening and radioactive and ultrasonic treatment on the physical properties of alloys. No personalities are mentioned. References follow several of the articles.

Lysak, L.I., and Yu.P. Sosrishin. Effect of Plastic Deformation on Internal Stresses in Metal   22

Changes in the substructure of metals due to shifting from statical to vibratory loading were studied. Experiments in which cylindrical specimens of the aluminum alloy, AMTsM, were flattened, statically and with vibrations, between plates at room temperature are described.

Lysak, L.I., and L.V. Tikhonov. Changes in the Crystalline Structure of Columbium Subjected to Various Types of Deformation   27

This article deals with a study of changes which take place in certain characteristics of columbium when it is subjected to different types of deformation. Such changes include distortions of crystal lattices of the second and third types, distortion of the sizes of coherent zones, and changes in texture and strength accompanying varying methods and degrees of hardening.

Larikov, L.N. Problem of Phase Transformations in Plastically Deformed Metals and Alloys   36

The author discusses processes taking place in phases which were in a state of equilibrium or quasi-equilibrium before plastic deformation. Also discussed are processes occurring during the deformation of a metastable phase.

LARIKOV, L. N.

PHASE I BOOK EXPLOITATION   SOV/AITT

Akademiya nauk Ukrainskoy SSR. Institut metallofiziki

Voprosy fiziki metallov i metallovedeniya (Problems in the Physics of Metals and Metallography) Kiyev, Izd-vo AN USSR, 1959. 215 p. (Series: Its: Sbornik nauchnykh rabot, no. 10) 3,000 copies printed.

Ed. of Publishing House: O.K. Pokhmelnykh; Tech. Ed.: R.A. Runiy; Editorial Board: V.N. Svechnikov, Academician, Academy of Sciences UkrSSR (Resp. Ed.), S.D. Gertsriken, Doctor of Physics and Mathematics, and I.Ya. Dekhtyar, Doctor of Technical Sciences.

PURPOSE: This collection of articles is intended for scientific workers, engineers and engineers working in metal physics, metallography and metallurgy, and for students in advanced courses of metallurgy and physics departments.

COVERAGE: The collection of articles gives the results of an investigation of the effect of high heating rates, thermal treatment, deformation and crystallization conditions on the phase transformations, structure and properties of metals and alloys, and of the effect of alloying additives on volume and intergranular

Problems in the Physics of Metals and Metallography   SOV/AITT

diffusion in alloys, as well as the effect of repeated tempering by ultrasound irradiation on the physical properties of alloys. There is also a description of an x-ray camera for studying the structure of the individual grains. The following personalities are mentioned: V. Rusin, A.A. Galirev, B.G. Glazunov, Ye.I. Morozov, V. Danilenko, L.N. Klnv*, and I.Ya. Dekhtyar, Doctor of Technical Sciences. There is a bibliography of Soviet and non-Soviet references at the end of each article.

Card 6/6   IK/rm/mas
9-20-60

18(7)

SOV/21-59-1-11/26

AUTHORS: Zasimchuk, Ye.E . and Larikov, L.N.

TITLE: The Linear Rate of the Growth of Recrystallization
Centers in Heavily Deformed Nickel and Iron.(Liney-
naya skorost'rosta tsentrov rekristallizatsii v sil'-
no deformirovannykh nikele i zheleze)

PERIODICAL: Dopovidi Akademii nauk Ukrains'koi RSR, 1959, Nr 1,
pp 42-45 (USSR)

ABSTRACT: It has been demonstrated in the work of L.N. Larikov
$[1]$ that the time τ until the appearance of the first
recrystallized grains (size L) in heavily-deformed
metals is basically determined by the linear speed
(G) of the growth of the recrystallization centers,
and can be expressed by the equation $\tau = \dfrac{L}{2G}$. The
authors of this paper have established the way of
determining the temperature-dependence of G by
measuring τ and L in several temperatures, in the here-

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SOV/21-59-1-11/26

The Linear Rate of the Growth of Recrystallization Centers in Heavily Deformed Nickel and Iron.

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described radiometallographic experiments with iron and nickel deformed by compression to 80%. The data includes the pre-exponential factor G. and the activation energy Q_G of the process for electrolytic nickel (99.99%) forged at $1000°$ C, the same nickel remelted in a vacuum, armco iron (99.88%) and electrolytic iron (99.97%) refined by annealing in H_2 current in $1200°$ C and subsequently remelted and soaked in a vacuum for 12 hours. The results show that slight impurities lead to a perceptible change of G_0 and a considerable increase of Q_G. In the case of very pure, vacuum-remelted nickel, the Q_G value approaches the activation energy of boundary diffusion. There are 2 graphs, 1 table, and 5 references, 3 of which are Soviet, 1 German

Card 2/3

The Linear Rate of the Growth of Recrystallization Centers in
Heavily Deformed Nickel and Iron.

and 1 English.

ASSOCIATION: Institut metallofiziki AN UkrSSR (Institute of the Phy-
sics of Metals of the AS UkrSSR)

PRESENTED: August 11, 1958, By G.V. Kurdyumov, Academician.

Card 3/3

LARIKOV, L N.

24.1800

S/058/60/000/02/16/023

Translation from: Referativnyy zhurnal, Fizika, 1960, No. 2, pp. 137-138, # 3534

AUTHORS: Larikov, L. N., Polotskiy, I. G.

TITLE: The Problem of the Effect of Ultrasound on the Phase Transformation in Solid Metals and Alloys

PERIODICAL: Sb. nauchn. rabot In-ta metallofiz. AN UkrSSR, 1959, No. 9, pp. 50-53

TEXT: It was established that ultrasonic irradiation (750 kc, ~ 10 w/cm^2) produces no noticeable effect on the kinetics of natural aging of a lead-tin alloy and the allotropic transformation of γ-Co $\rightarrow \varepsilon$-Co. The ultrasonic irradiation of alloy samples of the Duraluminum type led to a considerable acceleration of the aging process. It was shown that under the conditions of irradiation pointed out above, the effect of acceleration of the phase transformations is observed only in those cases when the kinetics of the process is sensitive to small temperature changes, such as take place in the case of an aluminum alloy. It must be assumed, therefore, that the effects which are observed in similar cases are caused by a temperature increase due to the absorption of ultrasonic energy by the samples and its transformation into heat. This does not exclude a possible effect of ultrasound on phase transformations in metals and alloys by deformation of the samples during the action of oscillations with great amplitude.

Authors' conclusions

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LARIKOV, L.N.

Crystal growth in solid phase. Sbor. nauch. rab. Inst. metallofiz.
AN URSR no.10:111-121 '59.   (MIRA 13:9)
             (Crystals--Growth)   (Solutions, Solid)

LARIKOV, L.N.

Effect of soluble impurities on the linear speed of recrystallization nuclei growth. Sbor. nauch. rab. Inst. metallofiz. AN URSR no.10:121-129 '59. (MIRA 13:9)

(Crystallization)   (Alloys--Metallography)

18(7)

AUTHORS: Zasimchuk, Ye. E.,   Kurdyumov, G. V.,   Larikov, L. N.

TITLE: The Influence of Alloy Elements on the Kinetics of Recrystallization of the Alloys With Nickel Basis (Vliyaniye legiruyushchikh elementov na kinetiku rekristallizatsii splavov na nikelevoy osnove)

ABSTRACT: The introduction to the present paper contains a table accurately describing the analyses of 27 alloys. Each of these alloys was converted to the monophase condition by thermal treatment and subsequently deformed at room temperature up to 80%. The samples were then annealed from 5 minutes to 10 hours in the temperature range of 280-900°C, and the state of recrystallization was investigated. The time was measured after which the primary center of recrystallization attained the magnitude of 10^{-3} cm at a given temperature. The results obtained from various measurements of the alloys in question are summarized in four diagrams; the logarithm of time τ, elapsing until the appearance and growing of the first recrystallization centers up to a magnitude of 10^{-3} cm,

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SOV/48-23-5-16/31

The Influence of Alloy Elements on the Kinetics of Recrystallization of
the Alloys With Nickel Basis

is plotted on the ordinate, and the value $T^{-1}.10^3$ is plotted
on the abscissa, with T equalling the absolute annealing tem-
perature. It holds $\tau = Ae^{RT}$, i.e. the measuring values of
each individual alloy lie on a straight line, each alloy
possessing its own characteristics. The energy activating
recrystallization is determined from the velocity at which
recrystallization takes place, These values are summarized in
table 2 and are indicated in kcal/g-atom. Two further diagrams
(Figs 5, 6) show the values of the activating energy, of the
diffusion coefficient and of the modulus of elasticity of
nickel alloys with chromium and molybdenum. Finally, conclu-
sions are drawn from the results concerning the mobility of
the atoms in the metal lattice, the concentration ratios in
the boundaries of the growing recrystallization centers, and
concerning the dependence of the surface tension on concentra-
tion. There are 6 figures, 2 tables, and 11 references, 9 of
which are Soviet.

ASSOCIATION: Institut metallofiziki Akademii nauk USSR (Institute of Metal
Card 2/2   Physics of the Academy of Sciences, UkrSSR)

DANILENKO, V.M. [Danylenko, V.M.]; KRIVOGLAZ, M.O.[Kryvohlaz, M.O.]
    LARIKOV, L.N.; SMIRNOV, A.A.

    Ukrainian Republic Conference on the Theory of Metals and Alloys.
    Ukr. fiz. zhur. 5 no.1:130-135 Ja-F '60.   (MIRA 14:6)
                        (Metals—Congresses)
                        (Alloys—Congresses)

GRIDNEV, V.N., otv.red.; LARIKOV, L.N., kand.khim.nauk, red.; POLOTSKIY, I.G., doktor khim.nauk, red.; FAYNERMAN, I.D., doktor tekhn.nauk, red.; LEPKIY, S.D., red.izd-va; RAKHLINA, N.P., tekhn.red.

[Use of ultrasonic waves for the investigation of properties, quality control and the working of metals and alloys] Primenenie ul'trazvukovykh kolebanii dlia issledovaniia svoistv, kontrolia kachestva i obrabotki metallov i splavov. Kiev, 1960. 106 p.
(MIRA 13:6)

1. Akademiya nauk USSR, Kiyev. Institut metallofiziki. 2. Chlen-korrespondent AN USSR (for Gridnev).
        (Metals--Testing)   (Metalwork--Testing)
                (Ultrasonic testing)

LARIKOV, L.N..

Effect of inclusions and dispered particles of the secondary phase
on the growth of recrystallization nuclei. Sbor. nauch. rab. Inst.
metallofiz. AN URSR no.11:61-66 '60.
(MIRA 13:11)
(Crystals--Growth)

IARIKOV, L.N.

Investigating the effect of aluminum and chromium additions on the
kinetics of α -iron recrystallization. Sbor. nauch. rab. Inst.
metallofiz. AN URSR no.11:67-73 '60.   (MIRA 13:11)
          (Iron alloys--Metallography)   (Crystallization)

GERTSRIKEN, S.D. [Hertsriken, S.D.]; LARIKOV, L.N.; SLYUSAR, B.F.
[Sliusar, B.P.]

Determining the latent energy of deformation in copper, copper-zinc
alloys and in Armco iron by the calorimetric method. Ukr. fiz. zhur.
5 no. 5:672-67u S-O '60.   (MIRA 14:4)

1. Institut fiziki metallov AN USSR.
           (Deformation (Mechanics)) (Copper)
               (Copper-zinc alloys)   (Iron)

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E193/E483

/ 𝒹. 7500

AUTHORS: Gertsriken, S.D., Larikov, L.N. and Novikov, N.N.

TITLE: Volumetric and Structural Changes Taking Place in Cold-Worked Electrolytic and Cast Nickel During Heating

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol 9, Nr 3, pp 478-480 (USSR)

ABSTRACT: It has been found, during earlier investigations (Ref 1,2) of nickel, deformed in torsion, that changes occurring in this metal during subsequent heating take place in two stages. During the first stage (relaxation), the decrease in the dimensions of the specimens is accompanied by liberation of a part of the latent energy of deformation and an increase in the electrical conductivity, hardness of the metal remaining practically constant. During the second stage (recrystallization), the volumetric changes are accompanied by the liberation of the main part of the latent energy of deformation, further increase in the electrical conductivity and a decrease in hardness. However, it has not been found possible to determine the transition from one stage to the other from the dimensional changes.

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Volumetric and Structural Changes Taking Place in Cold-Worked
Electrolytic and Cast Nickel During Heating

To find an explanation of this effect, it was necessary
to correlate the volumetric changes with the structural
changes taking place in the same specimens, subjected
to various modes of deformation. Another interesting
problem was to find out whether the effect of small
gaseous additions on the temperature range of volumetric
changes in deformed nickel is similar to that on the rate
of growth of recrystallization centres, as revealed by
X-ray analysis (Ref 3). It was for this reason that
the present authors studied the volumetric and structural
changes that, on heating, take place in various grades of
plastically deformed nickel. Electrolytic nickel,
containing 99.99% Ni, was used as the starting material.
A portion of this material was melted in vacuum in order
to remove the gaseous impurities (mainly hydrogen).
The annealed specimens were deformed at room temperature
either by drawing to 0.5 mm diameter or by twisting wires
of the same diameter. The volumetric changes of the
Card 2/6   specimens during heating (at a rate of 50°C/h) were

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Volumetric and Structural Changes Taking Place in Cold-Worked
Electrolytic and Cast Nickel During Heating

measured with the aid of a device described elsewhere
(Ref 4). At the same time, the variation of the X-ray
diffraction patterns produced by specimens placed in
the same apparatus and heated to the same temperatures
at the same heating rates, was studied. The growth of
the first recrystallization centres to dimensions of the
order of 10^{-3} cm was revealed by appearance of spots on
the backgound of Debye lines; this background
disappeared when the process of recrystallization was
completed. The experimental results are reproduced in
Fig 1 and 2. Fig 1 shows the change of volume
($\Delta V/V$ x 10^4) in nickel deformed in torsion, plotted
against the temperature, curves 1 and 2 relating to
electrolytic nickel and nickel melted in vacuum
respectively; the degree of deformation is given by
nd/l , where n is number of turns, d the diameter
and l the length of the specimen; the magnitude of
nd/l for the electrolytic nickel and for the vacuum-
melted material was 0.3 and 0.25 respectively. The

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Electrolytic and Cast Nickel During Heating

results for nickel, deformed by drawing to $\varepsilon \approx 96\%$,
are reproduced in Fig 2, where $\Delta V/V \times 10^4$ (continuous
curves, left-hand scale), and the width of the $\beta(331)$
lines (broken curves, right-hand scale) are plotted
against temperature ($^\circ C$); curves 1, 2 relate to
electrolytic and vacuum-melted metal respectively;
arrows pointing upwards indicate the appearance of
spots on the X-ray pattern, arrows pointing downwards
indicate disappearance of the diffuse background. It
will be seen that the volumetric changes taking place
during relaxation and recrystallization stages are more
clearly separated in specimens deformed by drawing and
containing gaseous impurities. "Spreading" of these
effects in a wide temperature interval in the case of
specimens deformed in torsion is obviously associated
with the non-uniform character of the relaxation
processes taking place in non-uniformly deformed material.
Small deflections on the volume versus temperature curves
reflect the processes of relaxation and recrystallization

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taking place in the outer, most heavily deformed layer
of the torsion specimens; it was also these layers that
produced the X-ray diffraction pattern. The transition
from the relaxation to recrystallization stage in vacuum-
melted nickel specimens is not shown distinctly on the
volume versus temperature curves either; this is due
to the fact that the temperature ranges of relaxation
and recrystallization are very close. The relaxation
and recrystallization stages can be easily distinguished
in specimens of electrolytic nickel containing small
proportions of gaseous impurities. Although the
volumetric changes corresponding to the relaxation
stage terminate at the same temperature as in pure nickel,
they take place within narrower temperature range.
Similar narrowing of the temperature range of volumetric
changes is observed also during recrystallization; in
this case, however, the effect is displaced towards the
region of higher temperature in full agreement with the
Card 5/6   X-ray data. It should be pointed out also that,

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according to the X-ray data, the second stage of the
volumetric changes taking place during heating of
deformed nickel appears to be a result of the formation
and growth of the recrystallization centres; this is
indicated by the fact that the temperature range of
volumetric changes coincides with the temperature range
of the recrystallization process. There are 2 figures
and 6 references, 3 of which are Soviet, 2 English and
1 German.

ASSOCIATION: Institut metallofiziki AN USSR
(Institute of Physics of Metals AS UkrSSR)
Kiyevskiy gosudarstvennyy universitet im T.G.Shevchenko
(Kiev State University imeni T.G.Shevchenko)

SUBMITTED: July 6, 1959

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18(0), 24(0)

S/053/60/070/01/006/007
B006/B017

AUTHORS: Danilenko, V. M., Krivoglaz, M. A., Larikov, L. N., Smirnov, A. A.

TITLE: Congress of the Ukrainian Republic on the Theory of Metals and Alloys

PERIODICAL: Uspekhi fizicheskikh nauk, 1960, Vol 70, Nr 1, pp 191-198 (USSR)

ABSTRACT: This Conference which took place from 1 - 5 June, 1959 in Kiyev was attended by scientists from the Ukraine and from other Republics of the Union; 70 lectures were delivered and discussed in 2 plenary meetings in 2 sections (electron theory and molecular-kinetic theory of metals and alloys). The problems and prospects of metal theory in the light of the fulfillment of the Seven-year Plan and the phenomenological theory of ferromagnetism were summarized in 2 lectures by I. M. Lifshits and S. V. Vonsovskiy. The following lectures were also delivered: V. P. Silin on the investigation of the influence of the interaction between the conduction electrons on the metal properties by the aid of the theory by L. D. Lan-

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