

35408
S/076/62/036/003/006/011
B101/B108

1 P. 1152

AUTHORS: Gratsianskiy, N. N., and Bogacheva, N. A. (Kiyev)
TITLE: Study of corrosion resistance of solid metal solutions of
the system Mo - W
PERIODICAL: Zhurnal fizicheskoy khimii, v. 36, no. 3, 1962, 546 - 548

TEXT: Mo - W solid solutions were produced from pure metal powders in an electric arc furnace with tungsten electrodes, and corroded at 20°C in aqua regia (I) or in saturated solution of nitric acid and oxalic acid (II). The composition of the solution formed by corrosion was analyzed. The surface layer was removed electrolytically at high current density, and also analyzed. Results: ✓

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Study of corrosion resistance of ...

No.	A	B		C		D	E	
		W	Mo	W	Mo		W	Mo
2	I	77.41	22.11	70.0	30.0	~0.3	90.9	9.1
3	I	56.44	43.10	51.0	49.0	~0.45	85.4	14.6
4	I	27.17	72.91	11.0	89.0	~0.4	45.4	54.6
2	II	77.41	22.11	64.7	35.3	~0.2	89.5	10.5
3	II	56.44	43.10	40.8	59.2	0.35	66.6	33.4
4*	II	27.17	72.91	27.17	72.9	-	-	-

* Samples dissolved within 12 hr. Legend: (A) Corroding solution, (B) content in the alloy, % by weight, (C) solution after corrosion, % by weight, (D) thickness of the removed surface layer, μ , (E) analysis of the dissolved surface layer, % by weight. In aqua regia, the limit of corrosion resistance is at ~20 atom% W, in $\text{HNO}_3 + \text{C}_2\text{O}_4\text{H}_2$ at ~50 atom%.

W. The main cause of a limit of corrosion resistance is the formation of a phase consisting of a metal compound and a corrosion resistant, 0.1 - 0.2 μ thick layer of almost pure W. With ~20 atom% W, a corrosion

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Study of corrosion resistance of ...

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resistant layer is also formed in Mo - W alloys. The position of the limit of corrosion resistance in the composition - corrosion resistance diagram depends on the type of the corroding solution. There are 1 figure, 1 table, and 4 references: 2 Soviet and 2 non-Soviet.

ASSOCIATION: Akademiya nauk USSR, Institut obshchey i neorganicheskoy khimii (Academy of Sciences UkrSSR, Institut of General and Inorganic Chemistry)

SUBMITTED: June 3, 1960

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GRATSLANSKIY, N. N.

Dissertation defended for the degree of Doctor of Chemical Sciences
at the Institute of Physical Chemistry in 1962:

"Corrosion Resistance of Two-Component Solid Metal Solutions."

Vest. Akad. Nauk SSSR. No. 4, Moscow, 1963, pages 119-145

RYABOV, A.K.; GRATSIANSKIY, N.N.

Effect of small additions of metals on surface phenomena
during the process of hot zinc plating. Report No. 1. Ukr.
khim. zhur. 28 no.1:121-124 '62. (MIRA 16:8)

1. Institut obshchey i neorganicheskoy khimii.

GRATSIANSKIY, N.N.; BOGACHEVA, N.A.

Corrosion resistance of solid solutions of metals of the
system Mo - W. Zhur. fiz. khim. 36 no.3:546-548 Mr '62.
(MIRA 17:8)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

S/073/63/029/004/002/003
A057/A126

AUTHORS: Gratsianskiy, N.N., Ryabov, A.K., Tobolich, V.V.
TITLE: Surface phenomena in the corrosion of solid metal solutions. The system Pb - Tl
PERIODICAL: Ukrainskiy khimicheskii zhurnal, v. 29, no. 4, 1963, 408 - 410

TEXT: In continuation of earlier investigations (Zh. fiz. khim., v. 33, no. 2 and 6, 1959) the surface tension σ of liquid Pb - Tl solution and the pure components were measured in dependence on the concentration of the components, and the surface activity of the components in relation to each other was determined. The alloys were prepared in a vacuum from pure Pb and Tl and the value σ measured in a vacuum-gravitation apparatus with special capillaries. The structural diagram Tl - Pb shows that with an addition of Tl to Pb, σ rises up to 30 at% Tl. The minimum σ corresponds to the composition of the transition from σ - to the γ -phase. The maximum is at the ratio Tl : Pb = 2 : 1, and a second minimum at a composition corresponding to the transition from the γ - to the β -modification. Addition of Pb to Tl causes a sharp drop of the surface

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Surface phenomena in the corrosion of solid

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A057/A126

tension of thallium. Hence, in this system lead is the surface-active component. In corrosive media, where lead is more resistant than thallium, the former will diffuse to the limit alloy - corrosion medium and promote the formation of a corrosion resistant surface layer. The surface tension of pure thallium at 390 C was determined to be 507 erg/cm². There is 1 figure.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN USSR (Institute of General and Inorganic Chemistry of the AS UkrSSR)

SUBMITTED: June 23, 1962

Card 2/2

VDOVENKO, I.D.; GRATSIANSKIY, N.N.

Effect of organic additions on the corrosion of binary alloys of
nonferrous and rare metals in aggressive media. Ukr. khim. zhur.
29 no.9:983-987 '63. (MIRA 17:4)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

GRATSIANSKIY, N.N.; RYABOV, A.K.; TOBOLICH, V.V.

Effect of small additions of metals on the surface phenomena
during hot lead plating. Report No.2. Ukr. khim. zhur. 29
no.11:1219-1222 '63. (MIRA 16:12)

1. Institut obshchey i neorganicheskoy khimi AN UkrSSR.

RYABOV, A.K.; GRATSIANSKIY, N.N.

Effect of small admixtures of metals on the physicochemical
properties of zinc coatings. Ukr. khim. zhur. 30 no.8:883-886
'64. (MIRA 17:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 1591-66 EWT(m)/EWP(t)/EWP(z)/EWP(b) IJP(c) JD/HW/JG/MJW(GL)

ACCESSION NR: AP5020953

UR/0073/65/031/008/0789/0804

AUTHOR: Lisogor, A. I.; Gratsianskiy, N. N.

24
23
B

TITLE: Electrolytic deposition of a nickel-molybdenum alloy

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 8, 1965, 799-804

TOPIC TAGS: electrolytic deposition, electrolyte, nickel base alloy, molybdenum containing alloy, nickel compound, molybdenum compound

ABSTRACT: The work deals with the combined deposition of molybdenum and nickel from peroxymolybdate containing electrolytes. The deposition was conducted with a platinum anode and copper bar anode for 30 minutes at 30-70 C, at a cathode current density of 40 amp/dm², with electrolytes containing varying amounts of Na₂MoO₄ · 2H₂O, hydrogen peroxide and nickel sulfate, and a pH varying from 2 to 0.2 (through H₂SO₄ addition). Results obtained with the various concentrations are described and the influence and optima are reported for each factor of the process. Optimal conditions for obtaining dense, shiny depositions

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ACCESSION NR: AP5020953

with 20% molybdenum content require the following electrolyte: $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ - 400 g/lit, $\text{Na}_2\text{MoO}_4 \cdot 2\text{H}_2\text{O}$ - 10 g/lit, hydrogen peroxide (30%) - 15 ml/lit, H_2SO_4 to a pH 0.7. The electrolysis should be conducted at a current density of 40 amps/cm² at 50 C. Yield in respect to current is about 15%. With an electrolyte of the composition 600 g/lit nickel, 10g/lit molybdenum compound, 20 ml/lit peroxide, and with a pH of 2 and a d_c of 10 amps/dm² at the same temperature, an alloy with a 17% molybdenum content and a 50% yield in respect to current is obtained. The deposits are easily removed from the cathode and may be used as master alloys. Orig. art. has: 7 figures

ASSOCIATION: Institut obshchey i neorganicheskoy khimii AN UkrSSR (Institute of General and Inorganic Chemistry AN, UkrSSR)

SUBMITTED: 15Jul64

ENCL: 00

SUB CODE: MM

NR REF SOV: 013

OTHER: 009

Card 2/2

EP

LISOGOR, A.I.; GRATSIANSKIY, N.N.

Peroxymolybdate complex compounds in acid solutions. Ukr.
khim. zhur. 31 no.9:895-898 '65. (MIRA 18:11)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

L 36053-66 SWT(M)/T/ENP(L)/ETP LJP(S) JD/WB

ACC NR: AP6015903 (N) SOURCE CODE: UR/0073/65/031/012/1333/1337

AUTHOR: Bogacheva, N. A.; Gratsiyskiy, N. N.

37
36
B

ORG: Institute of General and Inorganic Chemistry (Institut obshchey i neorganicheskoy khimii)

TITLE: Corrosion resistance of thallium-lead and indium-thallium alloys in a hydrochloric medium

27 27 27 27

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 31, no. 12, 1965, 1333-1337

TOPIC TAGS: corrosion resistance, thallium containing alloy, indium containing alloy, lead containing alloy, hydrochloric acid

ABSTRACT: The article gives experimental data on the corrosion resistance of indium-thallium and thallium-lead solid solutions in hydrochloric acid solution as a function of the concentration of the alloys, and also on the behavior of indium-thallium alloys in a 5% solution of sodium chloride. The experimental temperature was $+20^{\circ} \pm 2^{\circ}$. Starting materials were pure lead, thallium and indium (approximately 99.999%). For each system, 11 alloys were prepared with the following thallium contents: 2, 10, 25, 40, 45, 50, 55, 60, 75, 90, and 98%. Samples of the indium-thallium system were stamped disks 2 mm thick with

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UDC: 620.193.2

30053-66

ACC NR: AP6015903

a total surface of 3.2 cm². In the thallium-lead system, they were cast cylinders with a working surface up to 1 cm². The tests were made by the weight and potentiometric methods. The results are shown in a series of curves. It was found that thallium is corroded to a considerable degree in hydrochloric acid of different concentrations, with free access of air to the solution. In all the media tested thallium was corroded more strongly than lead. Working of the surface of the metals and alloys increases the corrosion resistance of thallium-lead alloys. The rate of corrosion of lead-thallium and indium-thallium alloys increases with an increase in the hydrochloric acid concentration. The change in the corrosion rate of lead-thallium and indium-thallium alloys as a function of their composition is explained by phase transformations and by the formation of compounds of the metals. Orig. art. has: 4 figures.

SUB CODE: 1107/ SUBM DATE: 13Nov64/ ORIG REF: 005/ OTH REF: 009

Card 2/2 vmb

L 36874-66 EWT(m)/T/EWP(t)/ETI IJP(c) D₅/JD/HW/JG
ACC NR: AP6017650 (A) SOURCE CODE: UR/0073/66/032/001/0016/0019

AUTHOR: Lisogor, A. I.; Gratsianskiy, N. N.

ORG: Institute of General and Inorganic Chemistry, Academy of Sciences UkrSSR
(Institut obshchey i neorganicheskoy khimii AN UkrSSR)

TITLE: Cathode polarization during codeposition of nickel and molybdenum

SOURCE: Ukrainskiy khimicheskiy zhurnal, v. 32, no. 1, 1964, 16-19

TOPIC TAGS: cathode polarization, electroplating, nickel, molybdenum, nickel alloy, molybdenum alloy

ABSTRACT: The Ni-Mo alloy deposits were prepared by electrolysis of the solution of $\text{NiSO}_4 \cdot 7\text{H}_2\text{O}$ (600 g/l) + $\text{Na}_2\text{MoO}_4 \cdot 2\text{H}_2\text{O}$ (10 g/l) + 30% H_2O_2 (20 ml/l) + H_2SO_4 (up to pH = 2.0) at 50°C. The effects of H_2O_2 concentration and temperature and pH on cathode polarization were graphed. Low overvoltage on the Ni-Mo alloy plated electrode and ready alloy deposition are attributed to the ability of nickel to dissolve hydrogen. The increase in Mo content in alloys at lower pH of the electrolyte is attributed to a drop in the dissociation of the HMo_2O_7^- ions. The electrochemically deposited

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L 36874-66

ACC NR: AP6017650

Ni-Mo alloys were found (by x-ray technique) to be α -solid solutions with a cubic face-centered crystal lattice. After thermal treatment at 1000°C in an argon atmosphere for 2 hours, the lattice parameter of the Ni-Mo alloy was found to be 3.548 Å. Orig. art. has: 4 figures.

SUB CODE: 11,09/ SUBM DATE: 15Jul64/ ORIG REF: 009/ OTH REF: 001

Card 2/2021P

ACCESSION NR: APL030334

S/0049/64/000/003/0322/0338

AUTHOR: Oratsinskiy, V. G.

TITLE: Investigation of elastic waves in the model of a drill hole

SOURCE: AN SSSR. Izv. Ser. geofiz., no. 3, 1964, 322-338

TOPIC TAGS: elastic wave, acoustical logging, drill hole logging, head wave

ABSTRACT: The author has discussed a model to show the wave distribution arising during acoustical logging of a drill hole. The model consists of a block of marble 60 x 60 x 95 cm with a hole (112 mm in diameter) drilled parallel to the long dimension and filled with water. Results confirm the kinematic conclusions concerning the propagation of elastic waves along the surface of a hole as previously discussed by the author (Kinematicheskiye osobennosti volnovoy kartiny pri ul'trazvukovom karotazhe skvashin, Izv. AN SSSR, ser. geofiz., no. 7, 1963; Kinematika volnovykh frontov pri karotazhe skvashin s raspredeleniyami preobrazovatelyami, Izv. AN SSSR, ser. geofiz., no. 8, 1963). At some distance from the initial points along the propagation path of energy on the surface of the hole, the waves are deflected from the shortest geometrical path as computed from

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ACCESSION NR: AP4030334

geometric seismic considerations. More work is needed to define the cause of this. When PFP and PSP waves form, which are useful for acoustical logging, an insignificant part of the energy (of all the elastic energy emitted by the radiator) is dissipated. The form of the pulses of these waves does not depend on the distance the radiator is from the hole. As the pulse broadens with distance, the velocity, changing in phase, is less than the velocity of the wave front, and the difference in velocities increases the nearer the detectors are to the radiator and the more distant the phase is that is used for measuring. Waves reaching the detectors directly through the liquid in the hole are highly multiphase and poorly resolved vibrations, consisting of direct waves and of waves repeatedly reflected from the walls of the hole. In making acoustical logs, observations should be made with the sonde parallel to the axis of the hole, a technique that requires careful stabilization. Orig. art. has: 12 figures, 1 table, and 4 formulas.

ASSOCIATION: Akademiya nauk SSSR, Institut fiziki Zemli (Academy of Sciences SSSR, Institute of Physics of the Earth)

SUBMITTED: 18Apr63

DATE ACQ: 29Apr64

ENCL: 00

SUB CODE: ES

NO REF SOV: 002

OTHER: 000

Card 2/2

ACCESSION NR: AP4041178

S/0049/64/000/006/0819/0838

AUTHOR: Gratsinskiy, V. G.

TITLE: Amplitudes of glancing waves on the surface of a borehole

SOURCE: AN SSSR. Izv. Seriya geofizicheskaya, no. 6, 1964, 819-838 .

TOPIC TAGS: seismology, seismic prospecting, borehole, seismic wave, seismic modeling, seismic wave pattern, absorption coefficient

ABSTRACT: The author describes the time field of refracted and diffracted waves in a medium surrounding a borehole for any form or dimension of the acoustic source, and derives formulas for the amplitudes of the glancing waves in vertical and spiraling rays; these formulas are confirmed by the results of modeling. Modeling data are also used in determining the amplitude curves of a glancing wave on the generatrices of a cylinder and the field of amplitudes of a glancing wave on the surface of a borehole. The apparatus used in modeling, the processing method and the model itself were previously described by the author (Izv. AN SSSR, Ser. geofiz., No. 3, 1964). It was found in modeling that when the point source has an axial position in the borehole the exponent for the function of divergence between the glancing and head waves is $3/2$. In acoustic logging of boreholes it is necessary

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ACCESSION NR: AP4041178

to stabilize the position of the probe in the borehole rigorously. Due to an increase in the divergence of the glancing wave, the approach of the probe to the borehole wall will produce no increase in the amplitude of the received signal. The decrease in amplitude of glancing waves during measurement along the generatrices of a cylinder ($\psi \neq 0$, $r_0/R \neq 0$) differs considerably from the decrease in amplitude on the profile $\psi = 0$. If the change in the borehole has an arbitrary position this phenomenon can result in obtaining erroneous data on the absorption coefficient in the surrounding rocks. Orig. art. has: 57 formulas, 14 figures and 1 table.

ASSOCIATION: Institut fiziki Zemli, Akademiya nauk SSSR (Institute of Geophysics, SSSR Academy of Sciences)

SUBMITTED: 26Jun63

SUB CODE: ES

NO REF SOV: 006

ENCL: 00

OTHER: 001

Card

2/2

ACC NR: AP7001911

SOURCE CODE: UR/0387/66/000/012/0045/0053

AUTHORS: Gratsinskiy, V. G.; Dakhnov, G. V.

ORG: Institute of Earth Physics, Academy of Sciences SSSR (Institut fiziki Zemli, Akademii nauk SSSR) VNIIGeofizika

TITLE: A method of interpreting acoustical logs of the LAK-1 equipment

SOURCE: AN SSSR. Izvestiya. Fizika Zemli, no. 12, 1966, 45-53

TOPIC TAGS: acoustic recording, phase velocity, correlation function, acoustic logging, velocity profiling, elastic wave ~~propagation~~

ABSTRACT: A method of interpreting logs obtained from the LAK-1 equipment, designed by the Laboratory of Acoustic Logging and manufactured in the Soviet Union in 1962, is presented. Prior to this, interpretation of acoustic logs has been meager--generally only one parameter, the longitudinal-wave velocity, has been determined by means of first arrivals. The acoustic log represents the record of a complex of waves of many kinds, affected by equipment and drilling mud in the hole as well as by rocks. Interpretation has therefore been a complex problem, but the authors seek to show how individual waves may be discriminated and how correlations may be made. The design of the LAK-1 equipment was previously described by G. V. Dakhnov, A. L. Perel'man, G. Ya. Rabinovich, and T. V. Shcherbakova (Laboratoriya akusticheskogo karotazha tipa LAK-1, Prikl. geof., No. 43, 1965) and by G. Ya. Rabinovich and T. K. Zorin (Raschleneniye razrezov skvazhin po diagrammam LAK-1, Sb. Voprosy razvedochnoy

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UDC: 550.834

ACC NR: AP7001911

geofiziki, No. IV, 1964). By investigation of acoustic logs the authors have found it possible to discriminate any wave where the phase amplitude is 1.75 times the background (or more). Thin, thick, and intermediate beds were examined, and velocity formulas were obtained for all. The computations do not require absolute times for wave transmission, merely changes in time relative to a given point. The authors consider the most suitable technique for discriminating waves to be the use of the correlation criterion, specific for the equipment used and based on the form of the phase-correlation lines. On the log, each elastic wave is distinguished by a series of almost parallel lines of phase correlation. The application of this technique is shown graphically for different kinds of waves. For the first time, Rayleigh waves at a surface that is not free (PRP) have been distinguished in this way on acoustic logs in actual practice. Orig. art. has: 6 figures and 16 formulas. [09]

SUB CODE: 08/ SUBM DATE: 15Dec65/ ORIG REF: 007/ OTH REF: 005/
ATD PRESS: 5112

Card 2/2

GRATSIANSKIY, VLADIMIR N.

GRATSIANSKIY, Vladimir Nikolayevich; MIKHAYLOVSKIY, Yuriy Vseveledevich;
ROGOV, A. Ya., retsenzent; ATRAN, S. L., retsenzent; ROMANENKO, P. N.,
redakter; PITERMAN, Ye. L., redakter izdatel'stva; SHITS, V. P.,
tekhnicheskiy redakter.

[^Power plants] Silovye ustanovki. Moskva, Goslesbumizdat. 1956.
303 p. (MLRA 10:4)
(Electric power plants)

GRATSIANSKIY, Vladimir Nikolayevich; MIKHAYLOVSKIY, Yuriy Vsevolodovich;
Prinimal uchastiye ROMANENKO, P.N.; MIKHAYLOVA, L.G., red. izd-
va: GRECHISHCHEVA, V.I., tekhn. red.

[Fundamentals of heat engineering and power plants] Osnovy teplo-
tehniki i silovye ustanovki. Izd., perer. i dop. Moskva, Gos-
lestbumizdat, 1962. 434 p. (MIRA 16:7)
(Heat engineering) (Power plants)

GRATSIANSKIY, V. P.

C/1963

1964

TUBERCULOSIS

DECEASED

GRATSILEV, V.V.

Laying the brickwork of blast furnace bottoms and crucibles.
Biul. TSSICHM no.5:38-40 '61. (MIRA 14:10)

1. Trest"Yuzhdomnaremont"
(Blast furnaces—Design and construction)

GRATSINSKI, P.

Case of diphasic rupture of the spleen. *Khirurgiia, Sofia* 12 no.7:
655-656 '59.

1. Iz *Katedrata po bolnichna khirurgiia - VMI - Sofia.*
(*SPLEEN wds & inj.*)

GRATSINSKIY, V.A.

~~Lightweight grinding machines are needed. Put' i put, khos.~~
no.6:19. Je '59. (MIRA 12:10)

1. Zamestitel' nachal'nika distantsii, stantsiya Moskva-Paveletskaya.
(Grinding machines)

GRATSINSKIY, V.G.

Distortions of seismic pulse spectra by resonance analyzers and
method for their elimination. Izv. AN SSSR, Ser. geofiz. no.10:
1488-1501 0 '61. (MIRA 14:9)

1. AN SSSR, Institut fiziki Zemli.
(Seismometry)

GRATSINSKIY, V.G.

Spectrum of a segment of a sinusoid. Izv. AN SSSR. Ser.
geofiz. no.11:1552-1556 N '62. (MIRA 15:11)

1. Institut fiziki Zemli AN SSSR.
(Elastic waves--Spectra)

GRATSINSKIY, V.G.

Kinematic features of the wave picture in ultrasonic logging.
Izv. AN SSSR. Ser. geofiz. no.7:1021-1039 J1 '63. (MIRA 16:8)

1. Institut fiziki Zemli AN SSSR. Predstavleno chlenom
redaktsionnoy kollegii Izvestiy AN SSSR, Seriya geofizicheskaya,
Yu.V. Riznichenko.
(Logging (Geology))

GRATSINSKIY, V.G.

Kinematics of wave fronts in logging with distributing transformers.
Izv. AN SSSR. Ser. geofiz. no.8:1178-1197 Ag '63. (MIRA 16:9)

1. Institut fiziki Zemli AN SSSR. Predstavleno chlenom redaktsionnoy
kollegii Izvestiy AN SSSR, Seriya geofizicheskaya, Yu.V.Riznichenko.
(Logging (Geology))

S/137/61/000/008/028/037
A060/A101

AUTHORS: Gratsyanov, Yu. A., Gerasimenko, A. A.

TITLE: New magnetically-soft iron-nickel-silicon deformable alloys

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 8, 1961, 12, abstract 8I96
("Sb. tr. Tsent. n.-i. in-t chernoy metallurgii", 1960, no. 23,
34-46)

TEXT: As result of a study of the effect of various additives upon the engineering and magnetic characteristics of Fe-Ni-Si alloys containing 8 - 11% Si and 5 - 20% Ni, the possibility is established of obtaining deformable alloys with high-grade magnetic properties, containing 8 - 9% Si and 10 - 14% Ni with admixtures of up to 1.0% Cr up to 0.1% Ce, and up to 0.01% Li. The peculiarities of the manufacture of strips from the abovementioned alloys are established - a slowed down cooling schedule for the castings and their heating up before forging or hot-rolling, heating up of the hot-rolled sheets before rolling down to strip with 0.35 mm thickness, and some peculiarities of the rolling schedules are indicated. There are 12 references.

[Abstracter's note: Complete translation]

T. Rumyantseva

Card 1/1

GRATSYANSKAYA, Lyubov' Nikolayevna

[Occupational polyneuritis] Professional'nye polinevrity.
Leningrad, Medgiz, 1960. 112 p. (MIRA 13:9)
(NEURITIS, MULTIPLE)

H/016/63/000/003/003/003
D249/D307

AUTHOR: Gratton, Livio
TITLE: Stellar evolution
PERIODICAL: Fizikai Szemle, no. 3, 1963, 79-84

TEXT: This is a translation of an introductory paper on the problems of stellar evolution, given at the summer course organized by the Italian Physical Society in Ravenna, in 1962. A brief historical introduction to the subject is given. This introduction is followed by an outline of problems in the present state of development. The correct time scale of the formation of stars has been found. The age of the oldest spherical aggregates is 10^{10} years, but stars are also formed now in our and other galaxies. It has been widely assumed that the stars were formed from the scattered interstellar gases or dust which condensed into smaller clouds and finally contracted into dense bodies owing to gravitational instability. This theory is disputed by Ambartsumyan and co-workers, who propose that stars and interstellar material were formed simultaneously.

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Stellar evolution

H/016/63/000/003/003/003
D249/D307

ously from some protostellar material, the properties of which are unknown. Theories of the formation of elements are reviewed. Finally, the role of fundamental physics research in the future development of astrophysics is reviewed, in an attempt to forecast future progress. Translated into Hungarian by Iván Abonyi. There are 16 references: 2 Soviet-bloc and 14 non-Soviet-bloc.

Card 2/2

GRAT: ER. G. (Budapest)

On the class of subdirect powers of a finite algebra.
Acta math Szeged 25 no.1/2:160-168 '64.

l. Submitted June 26, 1963.

GRATZER, G.; SCHMIDT, E.T.

Characterizations of congruence lattices of abstract algebras.
Acta math Szeged 24 no.1/2:34-59 '63.

1. Mathematical Institute of the Hungarian Academy of
Sciences, Budapest. Submitted March 17, 1962.

GRATZER, Gy.; SCHMIDT, E.

Ideals and congruency relations of nets. p. 93. (Magyar Tudomanyos Akademia,
Vol. 7, No. 1, 1957, Budapest, Hungary)

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 8, Aug 1957. Uncl.

GRATZER, GY.

Ideals of lattices and its congruence relations. II.

P. 417 (Magyar Tudományos Akadémia, Matematikai és Fizikai Osztály. Közleményei.
Vol. 7, no. 3/4 1957. Budapest, Hungary)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2
February, 1958

GRATZER, G., Schmidt, E.

Arrangement of rings. In German. p. 259.
(ACTA MATHEMATICA. Vol. 8, no 1/2, 1957, Hungary)

SO: Monthly List of East European Accessions (EEAL) IC. Vol. 6, no. 12, Dec. 1957
Uncl.

GRÄTZER, G.

✓ Grätzer, G.; and Schmidt, E. T. On a problem of M. H. Stone. Acta Math. Acad. Sci. Hungar. 8 (1957), 455-460.

3

The authors define a pseudo-complemented distributive lattice to be a Stone lattice if $a^* \cup a^{**} = 1$ for all elements of the lattice. They prove that a pseudo-complemented distributive lattice is a Stone lattice if and only if every two distinct minimal prime ideals are co-prime. It is further shown that a relatively pseudo-complemented distributive lattice is relatively Stone if and only if each non-comparable pair of prime ideals is co-prime.

11

R. P. Dilworth (Pasadena, Calif.).

Amie

3

Grätzer, G. and Schmidj, E. J. On the Jordan-Dedekind chain condition. Acta Sci Math (Szeged) 18 (1957) 52-58

-I-F/W

The length of a chain \mathcal{C} is defined as the maximum of the set of its distinct parts. It is shown that the length of a chain \mathcal{C} is a proper subset of the set of all chains \mathcal{C} of the same length. (In the latter connection, reference might further have been made to J. Jakubik same Acta 16 (1955) 266-267 MR 17, 1046.) P. M. Whitman (Silver Spring, MD)

11

M

1-FW

6379:

Götzter, G.; and Schmidt, E. T. Two notes on lattice-congruences. Ann. Univ. Sci. Budapest. Eötvös. Sect. Math. 1 (1958), 83-87. 3

This note contains a proof that any complete, weakly-atomic Boolean algebra or chain is the lattice of all convergence relations of a suitable lattice.

R. P. Dilworth (Pasadena, Calif.)

6990:

Grätzer, G.; and Schmidt, E. T. Ideals and congruence relations in lattices. Acta Math. Acad. Sci. Hungar. 9 (1958), 137-175.

16
3
1-FW

The authors discuss many of the known results concerning the relationship between ideals and congruence relations in lattices. Some new proofs are given and some of the known theorems are generalized. Two new notions are introduced. A congruence relation θ is said to be separable if for each pair $a \leq b$ there exists a chain $a = z_0 \leq z_1 \leq \dots \leq z_n = b$ such that θ is either the unit or null congruence relation on each z_i/z_{i-1} . A lattice L is said to be weakly modular if a/b weakly projective into c/d with a/b proper implies that there exists a proper subquotient c_1/d_1 of c/d such that c_1/d_1 is weakly projective into a/b . It is shown that the lattice of congruence relations on L form a Boolean algebra if and only if L is weakly modular and all congruence relations on L are separable. It is also shown that if L is a weakly atomic lattice with separable congruence relations, then the lattice of congruence relations on L is isomorphic to the weakly closed subsets of the partially ordered set of prime quotients. (Two corrections should be noted. The hypothesis $a \neq b$ is omitted in the statement of corollary 2 to lemma 6. The hypothesis of distributivity should be added to the statement of theorem 14.)

8 2/1

GRATZER, Gyorgy; SCHMIDT, E.Tomas.

An associativity theorem for alternative rings. Mat kut kozl MTA
4 no.3/4:259-264 '59. (EEAI 9:9)
(Fields, Algebraic)

GRATZER, GY.

"Standard ideals." p. 81

Magyar Tudományos Akadémia. Matematikai és Fizikai Osztály. KOZLEMENYEI.
Budapest, Hungary, Vol. 9, No. 1, 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 6, June 1959.
Uncl.

GRATZER, G.; SCHMIDT, E.T.

A contribution to the theory of the simple expansion of solids.
In German. Mat kut kozl MTA 5 no.3:283-285 '60. (EEAI 10:8)
(Expansion of solids)

GRATZER, G. (Budapest); SCHMIDT, E. T. (Budapest)

Standard ideals in lattices. Acta mat Hung 12 no.1/2:17-86 '61.
(EEAI 10:9)

1. Presented by A. Renyi.

(Lattice theory) (Ideals (Algebra))

GRATZER, G.

A characterization of neutral elements in lattices (notes on
lattice theory I.). Mat kut kozl MTA 7 Ser.A no.1/2:191-192
'62.

HAJOS, Gyrogy; CSASZAR, Akos; PAL, Laszlo; TURAN, Pal; CORRADI, Keresztely;
KARTESZI, Ferenc; GALLAI, Tibor; GRATZER, Gyorgy; SCHMIDT, E.
Tamas; RENYI, Alfred; HETYEI, Gabor; BARTFAI, Pal; DEAK, Ervin;
KOVARI, Tamas

Mathematical problems. Mat lapok 13 no.1/2:174-183 '62.

1. "Matematikai Lapok" szerkeszto bizottsagi tagja (for Hajos).
2. "Matematikai Lapok" felelos szerkesztoje (for Turan).
3. "Matematikai Lapok" szerkeszto bizottsagi tagja (for Renyi).

GRATZER, G.

Free algebras over first order aviom systems. Mat kut kozl
MTA 8 A series no.1/2:193-199 '63.

GRATZER, Gyorgy

On the Jordan-Holder theorem for universal algebras. Mat kut
kozl MTA 8 series A no. 3:397-406 '63('64).

1. Editorial board member, "A Magyar Tudomanyos Akademia Ma-
tematikai Kutato Intezetenek Kozlemenyei."

GRATZER, G.

On semi-discrete lattices whose congruence relations form a Boolean algebra. Acta mat Hung 14 no.3/4:441-445 '63.

1. Mathematical Institute of the Hungarian Academy of Sciences, Budapest. Presented by L. Redei.

GRATZER, Gyorgy; LADANYI, Jozsef

Realization of logical functions from Maglogical elements.
Meres automat 12 no. 3:65-70 '64.

1. Mathematical Research Institute. Hungarian Academy of
Sciences, Budapest (for Gratzel). 2. Electric Automation
Institute, Budapest (for Ladanyi).

GRATZER, G.

Boolean functions of distributive lattices. Acta mat Hung 15
no.1/2:195-201 '64

1. Mathematical Institute of the Hungarian Academy of Sciences,
Budapest. Presented by I. Redei.

GRATZER, Z. (Budapest)

On Boolean functions. Rev math pures 7 no. 4:693-697 '62.

1. Mathematical Institute of the Hungarian Academy of Sciences.

TOMASIC, P.; GRAU, A.

Phage typing with special reference to the epidemic of typhoid
in Osijek and its environment. Higijena 12 no.1:26-34 '60.
(TYPHOID epidemiol)

NEVIDAL, A., dr.; GRAU, A., dr.; MERDZO, A., prim. dr.; JURISIC, S., dr.;
MILING, M., dr.

Epidemic and typhoid and paratyphoid fevers in Osijek-Donji Grad in
1958. Voj.san.pregl. 18 no.3:273-280 Mr '61.

1. Opca bolnica u Osijeku, Zarasni odjel, Higijenski zavod u Osijeku.

(TYPHOID epidemiol) (PARATYPHOID FEVER epidemiol)

GRAU, Petr, inz.; RUZICKA, Mil., inz.

Some problems of the pollution of streams. Vodni hosp no.9:
376-378 S '62.

1. Ministerstvo zemědělství, lesního a vodního hospodářství.

GRAU, Petr, inz.

Ten years of the water resources department of the Dairying
Research Institute in Brno. Vodni hosp 13 no.2:48
'63.

GRAU, Petr, inz.

Water resource management of the Mongolian People's Republic.
Vodni hosp 13 no.7:280 '63.

VUCKA, Vaclav, inz.; GRAU, Petr, inz., CSc.

"Water resources management in communities, cities and enterprises" by Kotyk, Frasek, Botur. Reviewed by Vaclav Vucka, Petr Grau. Vod hosp 13 no.11: 425 '63.

GRAU, Petr, inz. CSc.; HRUBEC, Jir., inz.

Reasons and course of perilous pollution of the Jihlava River
water by cyanides. Vod hosp 15 no.1:19-20 '65.

1. Central Office of the State Water Resources Inspection.

BARON, L.I., doktor tekhn.nauk, prof.; GRAUBITS, Zh.K., kand.tekhn.nauk
[deceased].

Lowering the yield of oversize by increasing the specific
expenditure of explosive for breaking down building stone
when quarrying it. Vzryv. rab. no.4:91-103 '60. (MIRA 15:1)

1. Institut gornogo dela AN SSSR.
(Blasting)
(Building stones)

GRAUBNER E. 7 Plicniho Ambulatoria ONP v Plzri. O. plieni silikosa se zretelem
k posudkovemu lekarstvi Pneumosilicosis in rapport to analytical medicine Casopis Lekarů
Ceskych, Prague (Czechoslovakia) 1947, 86/7 (198-203) Graphs 4

So: Medical Microbiology and Hygiene, Section IV, Vol. I. #1-6

GRAUBNER, E.

Diseases simulating silicosis in roentgenography. Pracovni lek. 2
no. 6:249-260 Dec 50. (CML 20:6)

GRAUBNER, E.

Tuberculosis and silicosis in dusty environments; case finding programs and medical prevention. Pracovni lek. 2 no.6:267-283 Dec 50.
(CJML 20:6)

GRAUBIER, E.

~~Actual aspects of pulmonary tuberculosis in Czechoslovakia.~~
Zdravot. rev. 25:10, Oct. 50, p. 281-3

CML 20, 3, March 1951

GRAUBNER, E.

X-ray mass examination in silicosis. Pracovni lek. 4 no. 1:86-88
Mar 1952. (CIML 23:3)

1. Brno.

GRAUBNER, E.

Reliability of miniature radiograms in screening for pneumoconioses.
Pracovni lek. 4 no.2:105-131 May 1952. (GLML 23:4)

GRAUBNER, Emil; BUNA, Eduard

Radiological agreement in pneumoniosis. Pracovni lek. 9 no.6:479-491 Dec 57.

1. Odd. pro Tbc, OUMZ, Plzen. Ustav hygieny prace a chorob z povolani, Praha, Prednosta: Prof. Dr J. Teisinger. S. G., Plzen, Nemcova 13.
(PNEUMOCONIOSIS, prev. & control
mass. x-ray in indust., train. of radiologists in reading
films (Cs))

GRAUBNER, E.

~~CONFIDENTIAL~~

Classification of the pneumoconioses. Pracovni lek. 10 no.2:109-116
May 58.

1. Tbc. oddeleni OUN-Plzen.
(PNEUMOCONIOSIS,
classif. (Cs))

GRAUBNER, M.

Silicotic calcuosis of the lungs. Pracovni lek. 10 no.2:116-121 May 58.

1. TBC oddeleni OUNZ-Plzen.
(SILICOSIS, complications
calcifications, pathol. (Cz))

GRAUBNER, E.

~~BOGIMAN (In uopn) Given Name~~

Country: Czechoslovakia

(2)

Academic Degrees: Doc Dr
Tuberculosis Department of the Municipal Institute of Public
Affiliation: Health (Tbc odd Mestskeho ustavu narodniho zdravi), Pizen;
Chief (Prednosta): Doc Dr E Graubner

Sources: Prague, Rozhledy v Tuberkulose a v Nemocech Plicnich.

Date: Vol XXI, No 7, August 1961, pp 501-507
"Principles of Early Pneumoconiosis Diagnosis."

FRADIN, Afroim Zelikovich; RYZHKOV, Yevgeniy Vasil'yevich; FEL'D, Ya.N., doktor tekhn. nauk, retsenzent; GRAUDE, B.V., doktor tekhn. nauk, otv. red.; NOVIKOVA, Ye.S., red.; MARKOCH, K.G., tekhn. red.

[Measurement of the parameters of antenna-feeding devices] Izmerenie parametrov antenno-fidernykh ustroystv. Moskva, Sviiaz'izdat, 1962. 315 p. (MIRA 15:8)
(Antennas) (Radio lines) (Wave guides)

GRAUDIN, E. A.

TIMOVSKIY, Leonid Georgiyevich; MEL'NIKOV, N. V., professor, rezensent; YERSHOV, A. S.
rezensent; **GRAUDIN, E. K., rezensent; SHESHKO, Ye. P., professor,**
doktor tekhnicheskikh nauk, redaktor; **YEZDOKOVA, M. L., redaktor**
izdatel'stva; **EVERSON, I. M., tekhnicheskiy redaktor**

[Blind winzes in deep pits] Tupikovye s'ezdy v glubokikh kar'erakh.
Moskva, Gos.nauchno-tekhn.isd-vo lit-ry po chernoi i tsvetnoi
metallurgii, 1957. 79 p. (MLBA 10:7)

1. Chlen-korrespondent Akademii nauk SSSR (for Mel'nikov). 2.
Nachal'nik otdela transporta i gemplanov Instituta Giproruda (for
Yershov). 3. Glavnyy tekhnolog gornogo otdela Instituta
Giproruda (for Graudin)
(Strip mining)

GRAUDIN, K. [Graudins, K.]

Karlis Kaulins, revolutionist and scientist. Vestis Latv ak no.5:
183-184 '61.

GRAUDIN, K.

Graudin, K. "The plant and its reserves," (From the experiences in the struggle for the above-quota accumulation. Factory 'VEF', Riga) Izvestiya Akad. nauk Latv. SSR, 1949, No.1, p. 159-62.

SO: U-4934, 27 October 1953, (Latvian 'Zhurnal 'nykh Statey, No. 16, 1949)

GRAUDIN, K. [Graudins, K.]

Development of Latvian national economy and culture, 1940-1960; a
book review. Vestis Latv ak no.1G:159-173 '60.

(EEAI 10:9:10)

(Latvia--Economic conditions)

(Latvia--Intellectual life)

GRAUDIN, K.[Graudins, K.]

Friendship with science, closeness to life; a valuable initiative of the Presidium of the Latvian Academy of Sciences and the Bureau of the Central Committee of the Latvian Lenin Communist Youth League. Vestis Latv ak no.12:165-168 '60.

(EEAI 10:9)

(Academy of Sciences of the Latvian S.S.R.)
(Communist Youth League)

GRAUDIN, K. [Graudins, K.]

Wishing successful progress to science in Soviet Latvia. Leaders of the Central Committee of the Communist Party of Latvia and of the Council of Ministers of the Latvian SSR meet scientists of the Academy of Sciences of the Republic. Vestis Latv ak no.4:161-165 '61. (EEAI 10:9)

(Latvia--Communist Party)
(Academy of Sciences of the Latvian S.S.R.)

GRAUDIN, K. [Graudins, K.]

Twenty-Second Congress of the CPSU. Vestis Latv ak no.11:
3-14. '62

1. Chlen-korrespondent AN Latvlyskoy SSR.

GRAUDIN, K. [Graudins, K.]

"Problems of economics in transportation." Reviewed by K. Graudins.
Vestis Latv ak no. 11:141-147 '61.

GRAUDIN, K. [Graudins, K.]

"Methods for the calculating and analyzing labor productivity on collective and state farms" by [kand.ekon,nauk] M.V.Bagrad. Received by K.Graudins. Vestis Latv ak no.11:148-150 '61.

LOCH, A. [Locs, A.]; GORBACHEV, P.; GRAUDIN, K. [Graudins, K.]

Development of industrial transportation in the Latvian
S.S.R. Vestis Latv ak no.2:21-31 '62.

1. Institut ekonomiki AN Latvviyskoy SSR.

BUZANOV, S.; GRAUDIN, K. [Graudins, K.]

Building of communism and the development of the unified transportation system. Vestis Latv ak no.4:15-26 '62.

GRAUDIN, K. [Graudins, K.]

Fiftieth anniversary of Lenin's "Pravda". Izv. AN Latv. SSR no.5:
3-24 '62. (MIRA 16:7)

1. Chlen-korrespondent AN Latviyskoy SSR.
(Russian newspapers)

GRAUDIN, K. [Graudins, K.]

Costs of transportation and the measures for improving the work
of narrow-gauge railway lines in the Latvian S.S.R. Izv. AN
Latv.SSR no.6:25-34 '63. (MIRA 17:4)

1. Institut ekonomiki AN LatvSSR.

GRAUDIN, K.M. [Graudins, K.], red.; LEVI, S., red.; PILADZE, Ye.
[Piladze, E.], tekhn. red.

[Specialization and cooperation in industry; collection of materials of the conference held in Riga on July 7 - 9, 1960]
Problemy spetsializatsii i kooperirovaniia v promyshlennosti; sbornik materialov soveshchaniia, sostoiavshegosia v Rige 7 - 9 iiulia 1960. g. Riga, Izd-vo Akad. nauk Latviiskoi SSR, 1961. 174 p. (MIRA 15:1)

1. Chlen-korrespondent AN Latviyskoy SSR (for Graudin).
(Industrial organization—Congresses)

GRAUDIN, K.M. [Graudins, K.], red.; VENGROVIDH, A., red.;
LEMBERGA, A., tekhn. red.

[Economic efficiency of the various types of transportation in the transport of short-mileage freight in the Latvian S.S.R.] Ekonomicheskaja effektivnost' razlichnykh vidov transporta pri perevozke korotkoprobeznykh gruzov v Latviiskoi SSR; sbornik statei. Pod red. K.M. Graudina. Riga, Izd-vo AN Latv.SSR, 1963. 98 p.

(MIRA 17:2)

1. Akademiya nauk Latviyskoy SSR. Institut ekonomiki.
2. Chlen-korrespondent AN Latviyskoy SSR (for Graudin).

GRAUDIN, T.A.

Basic level of complete mechanization and automation of the
production processes at the Magnitogorsk Mine. Gor. zhur.
no.2:17-20 F'62. (MIRA 17:2)

1. Glavnyy inzh. proyekta Gosudarstvennogo soyuznogo instituta po
proyektirovaniyu predpriyatiy gornorudnoy promyshlennosti,
Leningrad.

GRAUDINA, L.

Words with reduction of stressed vowels in poetic language. Vestis
Latv ak no.2:53-63 '61. (EEAI 10:9)

(Russian poetry—History & criticism)

GRAUDINA, L.

The language of modern Soviet poetry. Vestis Latv ak no.4:21-37
'61. (EEAI 10:9)

(Russian poetry--History & criticism)

OSIPOVS, Leonids; GRAUDINA, V., red.; UDRE, V., tekhn. red.

[Main processes and apparatus in chemical technology]
Kīmijas tehnoloģijas pamatprocesi un aparāti. Rīga,
Latvijas Valsts izdevniecība. Vol.1. 1962. 554 p.
(MIRA 16:5)
(Chemical engineering--Equipment and supplies)

1. GRAUDINS K., VORONTSOV N.V., KOVALENKOV V.
2. USSR (600)
4. Telecommunication
7. Innovators in communication work in the Latvian SSR, Latv. PSR Zin. Akad Vestis no.9, 1951.

9. Monthly List of Russian Accessions, Library of Congress, April 1953, unclass.

GRAUDINS, K.; MILSTEINS, A.

Valuble research in Latvian history; a book review. Vestis Latv ak
no.1:171-178 '60. (EEAI 9:11)
(Latvia--History)