

MALIKOVA, Ye. M.

Biochemical composition of some invertebrates eaten by fish.
Trudy probl. i tem. scv. no.7:89-94 '57. (MLRA 10:4)
(Fishes--Food)

MALIKOVA, Ya.M., kand.biol.nauk

Biochemical composition of feed invertebrates. Trudy sov.Ikht.kom.
no.8:437-440 '58. (MIRA 11:11)

1. Latviyskiy filial Vsesoyuznogo nauchno-issledovatel'skogo instituta
morskogo rybnogo khozyaystva i okeanografii.
(Baltic Sea region--Fishes--Food)

MALIKOVA, Ye. Mr., kand. biol.nauk, otd. red.; LISHEV, M.N., kand.
biol. nauk, red.; NIKOLAYEV, I.I., kand. biol. nauk;
VENGRANOVICH, A., red.; BYTAR, A., tekhn. red.

[Conference of young specialists] Trudy konferentsii molodykh
spetsialistov. Riga, Izd-vo Akad. nauk Latviiskoi SSR, 1962. 196 p.
(MIRA 16:2)

198 p.
1. Nauchno-issledovatel'skiy institut rybnogo khozyaystva.
Konferentsiya molodykh spetsialistov.
(Latvia--Fisheries) (Latvia--Fish culture)

S/058/63/CCC/002/049/070
A160/A101

AUTHORS: Malikowska, Halina, Pataj, Kazimierz

TITLE: The obtaining and measurement of some optical and photoelectric properties of cadmium-sulfide single crystals

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1963, 78, abstract 2E530
("Prace Przemysl. inst. elektron.", no. 1, 1962, v. 3, 34 - 41,
Polish; summaries in English and Russian)

TEXT: A description is given of the method of statistic sublimation with the help of which CdS single crystals were obtained in the form of needles and slabs. The measured absorption limit and the spectral distribution of the photoelectric sensitivity coincide with the data published in the literature. At an illuminance of 1,000 lux, the ratio of the photocurrent to the dark current of the obtained crystals equals 10^5 - 10^7 .

[Abstracter's note: Complete translation]

Card 1/1

MALIKOWSKA, Halina

Obtaining monocrystals of cadmium sulfide and its properties. Przegl
elektroniki 3 no. 5:226-228. Maj '62

1. Przemyslowy Instytut Elektroniki, Warszawa.

GRUSZCZYNKI, Emil; HRUBAN, Andrzej; MALIKOWSKA, Halina;

Obtaining silver of high purity. Przegl elektroniki 3 no.12:681-
682 D '62.

1. Przemyslowy Instytut Elektroniki, Warszawa.

MALIKOWSKI K.

H

POLAND/Electronics - Electron and Ion Emission.

Abs Jour : Ref Zhur Fizika, N: 1, 1960, 1464

Author : Malikowski, Kazimierz

Inst : Industrial Institute for Electronics, Poland

Title : Effect of Plastifiers on the Physical-Chemical
Properties of Emission Pastes

Orig Pub : Elektronika, 1958, 4, N: 7, 231-238

Abstract : An investigation was made of the role of plastifiers in the manufacture of emission pastes for oxide cathodes, their influence on the viscosity, surface tension, and adhesion of the paste to the core of the cathode. A formula is given for plastifier compounds, insuring better properties of cathode. --
D.G. Bulyginskiy

Card 1/1

- 75 -

MALIKOWSKI, Kazimierz

Application of the photochemical method for the preparation of certain elements of vacuum tubes. Przegl elektroniki 3 no. 5:234. Mj '62

1. Przemyslowy Instytut Elektroniki, Warszawa.

P/053/62/000/012/008/011
E192/E382

AUTHOR: Malikowski, Kazimierz

TITLE: Some work on the technology of "sarong" cathodes

PERIODICAL: Przegląd elektroniki, no. 12, 1962, 705 - 707

TEXT: The experimental work carried out at the Institute of Industrial Electronics aimed at producing "sarong" (oxide film) cathodes on polythene foils in such a way that the film could easily be removed from the foil after drying. High molecular polymers of butyl metacryllate, high-viscosity nitrocelluloses and ethyl celluloses were used as the plastic materials. The plasticizers play a very important part in the preparation of the cathodes since they impart the required elasticity to the film and facilitate the deposition of the emissive paste. Butyl phthalate was used as the plasticizer. Cathode films were obtained by employing resins of methyl and butyl metacryllate. The binders for the films were prepared from these resins. It was found experimentally that the cathode films made of butyl metacryllate resins were degassed more rapidly during evacuation of the tubes than the films made with other metacryllates. At present, the

Card 1/2

P/053/62/000/012/008/011
E192/E382

Some work on

investigations aim at producing a suitable paste for making films and reducing the quantity of the film-casting resin. Although a high content of polymer strengthens the mechanical characteristics of the films, it has an adverse effect on the degassing of the cathode and the life of the tube. Some tubes of the type EF80, fitted with sarong cathodes of the above types, were prepared. It was found that by reducing the quantity of metacryllate polymer in the emissive paste the life of the cathode could be increased. There are 2 tables.

ASSOCIATION: Przemysłowy Instytut Elektroniki
(Industrial Institute of Electronics)

Card 2/2

MALIMANOV, Yu.I., inzh.

Problem demanding immediate solution. Elek. i tepl. tiaga 2
no.5:9-12 '58. (MIRA 12:4)
(Electric lines—Poles)

MALIMANOV, Yu.I., inzh.

Make full use of hidden potentials for reducing railroad
electrification costs. Elektr. tepl. tiaga no.7:28-31
J1 '60. (MIRA 13:8)
(Electric railroads--Finance)

MALIMANOV, Yu.I., inzh.

New towers for contact net. Elek. i tepl. tiaga 14 no.3:
21-23 Mr '60. (MIRA 13:7)
(Electric railroads--Wires and wiring)

IGNATOV, S.I., starshiy inzh.; MALIMANOV, Yu.I., starshiy inzh.

Measures should be taken immediately. Elek. i tepl. tiaga 5
no.6:6-8 Je '61. (MIRA 14:10)

1. Glavnoye upravleniye kapital'nogo stroitel'stva Ministerstva
putey soobshcheniya (for Ignatov). 2. Ministerstvo putey
soobshcheniya (for Malimanov).

(Electric railroads—Wires and wiring)
(Concrete construction)
(Electric lines—Poles)

MALIMANOV, Yu.I., inzh.

Guaranteed service time of the overhead contact system poles. Zhel.
dor.transp. 45 no.2:34-38 F '63. (.INA 16:2)
(Electric railroads) (Poles and towers)

ALEKSEYEV, 'Ioksey Pavlovich, kand. tekhn. nauk; VANOV, Igor' Nikolayevich inzh.; MALIMANOV, Yury Ignat'yevich, inzh.; SESSAREVSKIY, Aleksandr Nikolayevich; VELICHKIN, Ye.A., red.

[Handbook on construction work for the electrification of railroads] Spravochnik po stroitel'nym rabotam pri elektrifikatsii zheleznykh dorog. [By] A.P.Alekseev.i dr. Moskva, Izd-vo "Transport," 1964. 322 p. (MIRA 17:6)

1. MALIMON, A. YA.
2. USSR (600)
4. Sweet Potatoes--Soviet Central Asia
7. Sweet potato as a feed crop in the souther part of Central Asia,
Korm. baza, 4, NO.1, 1953.
9. Monthly List of Russian Accessions, Library of Congress, April,
1953, Uncl.

MALIMON, A.Ya.

Sweet potato, a useful crop for animal and human consumption.
Izv.Otd.est.nauk AN Tadzh.SSR no.13:93-108 '56. (MIRA 9:10)

1.Institut zhivotnovedstva Akademii nauk Tadzhikskey SSR.
(Sweet potatoes)

MALIMONOV, N. S.: Master Agric Sci (diss) -- "The irrigation and water con-
sumption of gambari hemp in Rostov Oblast". Novocherkassk, 1959. 11 pp
(Min Agric USSR, Novocherkassk Soil Improvement Engineering Inst), 120 copies
(KL, No 3, 1959, 111)

MALIMONOV, N. S.

Saturation irrigation in Orenburg Province. Zemledelie 24 no.9:
22-24 S '62. (MIRA 15:10)

1. Orenburgskiy sel'skokhozyaystvennyy institut.

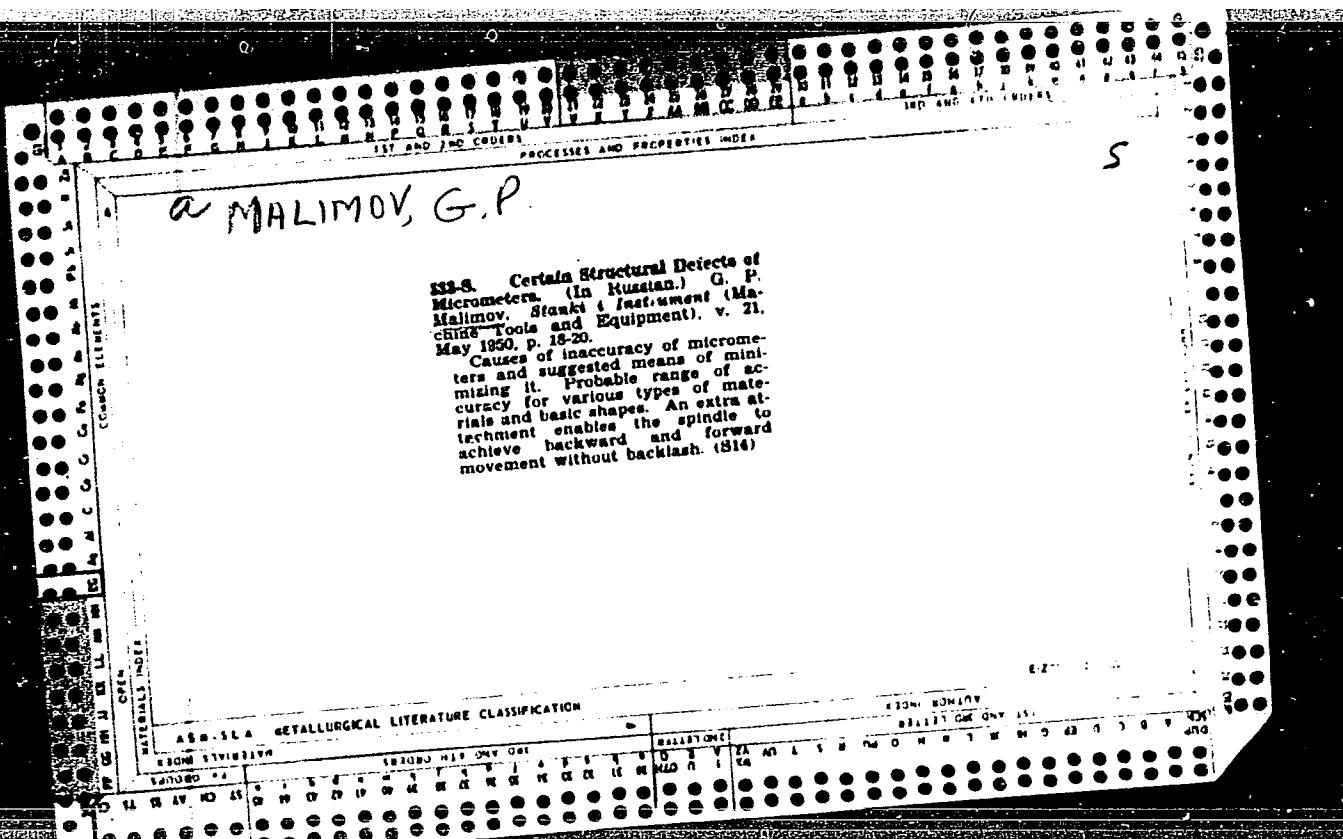
(Orenburg Province—Potatoes—Irrigation)
(Orenburg Province—Wheat—Irrigation)

ARTEM'YEV, A.A.; GENKINA, Ye.V.; MALIMONOV, A.B.; TROFIL'KINA, V.P.;
ISAYENKOVA, M.A.

Reduction of nitrocyclohexane with sodium thiosulfate.
Zhur.VKHO 10 no.5:588-589 '65.

(MIRA 18:11)

1. Gosudarstvennyy institut azotnoy promyshlennosti i
produktov organicheskogo sinteza.



Maimov, V.V.

SOV/1700

PLAN I BOOK EXPLOITATION

24(7)

Sov. Universit. Materiały i rezul'taty nauchno-tekhnicheskogo konferentsii po spektroscopii, 1956. So. XXI. Akademiya Nauk SSSR po spektroscopii. Materialy i rezul'taty nauchno-tekhnicheskogo konferentsii po spektroscopii, 1956. Vol. 2. Atomicheskaya spektroscopiya. Izd-vo Litteraturoi i znanii. Tsentral'nyi zhurn. po fizicheskoye i matematicheskoye nauki. 30,000 copies printed.

Additional sponsoring Agency: Akademika naim. SSSR. Komissiya po spektroscopii.

Editorial Board: O.I. Landshof, Akademik, (RCPD, MI); S.M. Rep'ev, Doctor of Physical and Mathematical Sciences; I.I. Fabrikant, Doctor of Physical and Mathematical Sciences; V.A. Fabrikant, Doctor of Physical and Mathematical Sciences; S.M. Kortikov, Candidate of Technical Sciences; L.N. Klimovskaya, Candidate of Physical and Technical Sciences; V.S. Klyuyevich, Candidate of Physical and Mathematical Sciences; A.Ye. (Bogosel), Doctor of Physical and Mathematical Sciences; G.I. Guberman, Doctor of Physical and Mathematical Sciences; M.I. G.I. Gusev, Tech. M.; F.V. Starostuk.

Purpose: This book is intended for scientists and researchers in the field of spectroscopy, as well as for technical personnel using spectral analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies of atomic spectroscopy presented at the 10th All-Union Conference on Spectroscopy in 1956. The studies were carried out by members of scientific and technical institutes and include extensive bibliographies of Soviet and other sources. The earth's extensive studies cover many phases of spectroscopy: spectra of rare earths, electromagnetic radiation, physicochemical methods for controlling uranium production, physics and technology of gas discharge, optics and spectroscopy, abnormal dispersion in metal vapors, spectroscopy and the combustion theory, absorption spectrum of ores and minerals, photographic methods for quantitative determination of the analysis of metals and alloys, spectral determination of the hydrogen content of metals by means of isotopes, tables, and indices of spectral lines, spark spectrographic analysis, statistical study of variation in the parameters of calibration curves, determination of traces of metals, spectrum analysis in metallurgy, thermodynamics in metallurgy, and principles and practice of spectrometrical analysis.

Card 2/31

Materials of the 10th All-Union conference (cont.)
Muzatovich, I.M. Spectral Analysis of Different Types of
Products by One Calibration Curve 533
Dem'yanchuk, A.G., and Ye.S. Relyea. Special Aspects of the
Spectral Determination of Carbon, Phosphorus, and Sulfur in
Metal Alloys 535
Shapitsyn, S.A. Effects of Development on the Measurement of
Spectral Line Intensities 539
Sokolov, L.A., and V.Z. Engel'sht. New Technique in the Use
of Additives 543
Maimov, V.V. Use of Mathematical Statistics in Analytical Work 546
Shatorovich, T.K., and O.B. Plikova. Use of the Spectral
Method for the Determination of Chlorine in Climatological
Studies 549
Fishman, I.J. Spectrum Analysis With the Aid of Reference
Curves 551

Card 30/31

MALIMOWSKI Roman

POLAND/Chemical Technology. Chemical Products and Their I-8
Application. Ceramics. Glass. Binders. Concrete.

Abs Jour : Ref Zhur-Khimiya, No 2, 1958, 5439.

Author : Malimowski Roman

Inst : Not Given.

Title : Some Technological Problems of the Production
of Plastic Slag Cement.

Orig Pub : Cement, Wapno, Gips., 1957, 13, No 4, 69-78.

Abstract : It is proposed to evaluate the activity of slag
used for the preparation of slag binders (SB)
on the basis of strength of specimens of mixed
binder produced from slag and activator (Fort-
land cement). On the basis of the results of
numerous experiments 3 classes of slag have been
established, according to their activity, as

Card 1/2

MALIN, A., kand. ekon. nauk.

Establish a better system of wages for combine operators. Nauka
i pered. op. v sel'khoz. 8 no.12:59-60 D '58. (MIRA 12:1)
(Wages) (Collective farms)

34417
S/081/62/000/002/090/107
B157/B110

11.01.32

AUTHORS: Malin, A. G., Bayburskiy, L. A., Krechetova, P. I.

TITLE: The possibility of obtaining gas turbine fuels from products processed at the Groznyy refineries

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 2, 1962, 495, abstract 2M297 (Tr. Groznensk. neft. n.-i. in-t. no. 11, 1961, 25-38)

TEXT: The results are described of an investigation into the possibility of obtaining gas turbine fuels from gasoline-free oils, from various distillates and residual products, by simple distillation and secondary refinery products, or from mixtures of these products. It was established that the production of fuels with low ash content requires the crude oil to be treated so that the chloride content amounts to \leq 30 mg/liter and dehydrated so that the water content amounts to \leq 0.1 - 0.2%. Groznyy mixed paraffin crude oils gasoline-free to 160 - 170°C, Achalukskiy and Karabulakskiy mixed crude oils, and Ozeksuatskiy and Turkmenian crude oils can be used as fuel for stationary gas turbine plants. Simple distillation fractions, filtrates of paraffin production and kerosenes

✓

Card 1/2

The possibility of obtaining...

S/081/62/000/002/090/107
B157/B110

from thermal cracking can be used as gas turbine fuel or as constituents. Fuel oils from low sulfur crude oils do not meet requirements for gas turbine fuel as regards the solidification point and viscosity although they can be used as constituents of gas turbine fuels. [Abstracter's note: Complete translation.]

✓

Card 2/2

MALIN, A.G.; NIKOLAYEVA, V.G.; BAYBURSKYI, L.A.; KRECHETOVA, P.I.;
RUDAYEV, V.Ye.; BOLOTOV, L.T.; OVSYANNIKOV, P.V.; VLASOV, F.F.

Obtaining gas turbine fuel on a base of thermal cracking products.
(MIRA 18:2)
Nefteper. i neftekhim. no.12;24-26 '64.

1. Groznenskiy neftyanoy nauchno-issledovatel'skiy institut.

41636

S/080/62/035/009/010/014
D204/D307

11.01.70

AUTHORS: Dorogochinskiy, A.Z., Viktorova, Ye.A., Shuykin, N.I.,
Boykova, Ye.P., and Malin, A.G.

TITLE: The effect of cycloalkenyl phenols on the stability
of a fuel containing unsaturated hydrocarbons

PERIODICAL: Zhurnal prikladnoy khimii, v. 35, no. 9, 1962,
2060 - 2064

TEXT: The stabilizing effects of: A) 3-methyl-4-(cyclopenten-2-yl);
B) 3-methyl-6-(cyclopenten-2-yl); C) 4-methyl-2-(cyclopenten-2-yl);
D) 2-(cyclohexen-2-yl); and E) 4-(cyclohexen-2-yl)-phenols were in-
vestigated, on a fuel containing ~15 % of unsaturated hydrocarbons,
over a period of 5 months, at $50 \pm 0.5^{\circ}\text{C}$. Five samples of fuel were
tested with the above additives (50 mg per 100 ml fuel), two addi-
tional samples were respectively treated with 10 g/100 ml of p-hydro-
xydiphenylamine and 50 mg/100 ml of inhibitor ф4-16 (FCh-16), and
one sample was kept as a blank. Each sample also contained steel
wire (with a surface area of 20 cm^2 per liter of fuel) and was open
to air via a capillary. Every month the samples were tested for tar ✓
Card 1/2

The effect of cycloalkenyl ...

S/080/62/035/009/010/014
D204/D307

content and stability to heat (1 hour at 150°C). It was found that B and C inhibited tar formation, similarly to antioxidants p-hydroxydiphenylamine and FCh-16. The formation of sediments at 150°C was impeded by B and D. The additive B thus exhibits a twofold action. There are 3 tables.

SUBMITTED: May 30, 1961

X

Card 2/2

MALIN, A.G.; BAYBURSKIY, L.A.; KRECHETOVA, P.I.

Obtaining gas-turbine fuels from high-paraffin crude. Trudy
GrozNII no. 15:94-104 '63. (MIRA 17:5)

AKSENOK, G.I.; BOROK, B.A.; MALIN, A.P.; KHROMOV, V.G.

Experience in the industrial rolling of metal powders. Trudy LPI
no.222:40-44 '63. (MIRA 16:7)
(Rolling (Metalwork)) (Powder metallurgy)

L 1662-66 EWT(d)/EWP(e)/EWT(m)/EWP(v)/EWP(t)/EWP(k)/EWP(h)/EWP(z)/EWP(b)/
EWP(l)/EWA(c) JD/HW

ACCESSION NR: AT5022888

UR/2776/65/000/043/0051/0059

AUTHOR: Boxok, B. A., Malin, A. P., Markelov, V. V., Andreyev, P. S., Kutyrina, V. M., Loginov, A. A., Grosval'd, V. G., Aksenov, G. I.

TITLE: Experience in rolling powders in an industrial-type rolling mill.

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metalurgii. Shornik trudov, no. 43, 1965. Poroshkovaya metallurgiya (Powder metallurgy), 53-59

TOPIC TAGS: rolling mill, powder metallurgy, metal powder, powder metal rolling

ABSTRACT: The authors describe an industrial two-high powder-rolling mill with roll diameters 600 and 900 mm, based on a standard rolling mill originally built in 1940, and equipped with special powder-feeding bunkers. The mill consists of an open-top steel housing with variable positioning of rolls - they can be aligned either horizontally or at angles of 22.5°, 45°, and 60° (Figs. 1, 2). Its main drive is powered by a DC 257.4 kw (350 HP) 40-800 RPM motor. It has been used for the experimental rolling of strips from the powders of iron, OKh18N9 stainless steel, molybdenum, and titanium. These experiments demonstrated the

Card 1/5

L 1662-66

ACCESSION NR: AT5022888

mill's suitability for organizing the industrial production of poreless strips from the powders of different metals and alloys. Such strips, 0.8-1.0 mm thick, display physical properties that are not inferior to those of strips produced by rolling ingot metal. This strip thickness is in complete agreement with the basic equation of rolling, which implies that strip thickness is a function of roll diameter:

$$\gamma_s = \frac{\tau D}{\alpha} \left[1 + \frac{D}{s} + \frac{\alpha^2}{2} \right]. \quad (1)$$

where γ_s and γ_p are the densities of powder (bulk weight) and strip, respectively, g/cm³; D is the roll diameter, s is the thickness of rolled strip, mm; α is the angle of reach, deg; and τ is the coefficient of reduction of the powder during rolling. Hence this basic equation applies not only for laboratory rolling mills but also for industrial rolling mills and can be used in designing the latter. Before the rolling of metal powders can be industrially introduced, however, these three problems must be solved: lateral restriction of the zone of deformation of powder in the rolls; continuous, uniform supply of powder to the feeder; and con-

2/5

Card

L 1662-66

ACCESSION NR: AT5022888

tinuous sintering of the strip. Crig. art. has: 2 figures, 3 tables, 5 formulae.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 02

SUB CODE: MM, M

NO REF Sov: 010

OTHER: 005

Card 3/5

L 1662-66

ACCESSION NR: AP5022868

ENCLOSURE: 01

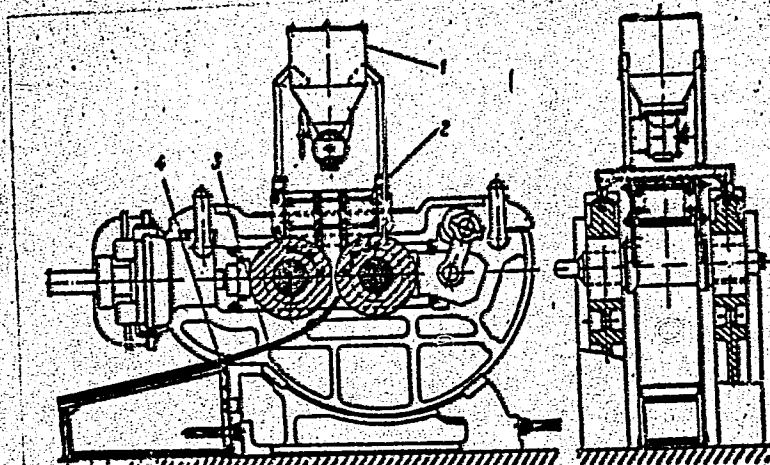


Fig. 1. Diagram of modified rolling mill (horizontal positioning of rolls):
1 - bunker; 2 - feeder; 3 - receiving chute; 4 - receiving table

Card 4 / 5

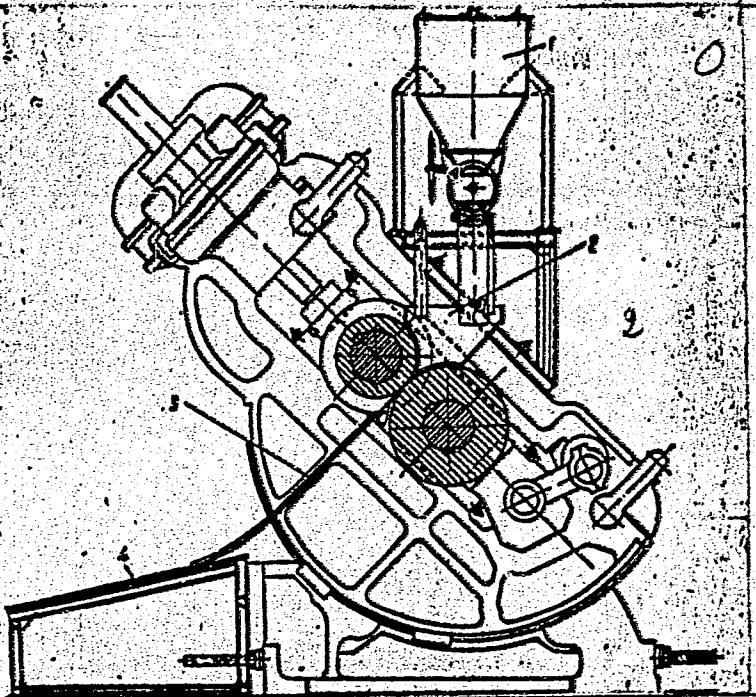
L 1662-66

ACCESSION NR: AP5022586

ENCLOSURE: 02

Fig. 2. Diagram of modified rolling mill
(tilted positioning of rolls)

1 - bunker; 2 -
feeder; 3 - receiv-
ing chute; 4 -
receiving table



Card 5/5 10

L 2850-66 ENT(m)/EWP(t)/EWP(k)/EWP(b)/ENA(c) EWP(c) JD/HW

ACCESSION NR: A15022889

UR/2776/65/000/043/0060/0068

54

53

AUTHOR: Malin, A. P.; Khromov, V. G.; Tikhonov, G. F.; Suchkov, A. B.

44,51

44,55

44,55

B11

TITLE: Production of high-purity sheets and strips by means of the direct
rolling of electrolytic titanium powder

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut chernoy
metallurgii. Sbornik trudov, no. 43, 1965. Poroshkovaya metallurgiya (Powder
metallurgy), 60-68

TOPIC TAGS: titanium, metal powder, metal rolling, rolling mill, cold rolling,
annealing

ABSTRACT: The authors present the results of an experimental investigation of the
direct rolling of the powder of electrolytically refined titanium at a labora-
tory rolling mill in the Gor'kiy Polytechnic Institute (roll diameters, 180 and
350 mm, roll-barrel length, 150-330 mm; RPM, 1-8) and at an industrial-type rol-
ling mill in the TsNIIChM (Central Scientific Research Institute of Ferrous Me-
tallurgy) (roll diameters, 600 and 900 mm; barrel length, 630 mm; RPM, 1.25 to
4.7). Four batches of powdered titanium were used: 1) screened coarse fraction,

Card 1/3

L 2850-66
ACCESSION NR: AT5022889

1.6 + 1.0 mm; 2) mixture of fractions to 1.6 mm; 3) screened medium fraction, 1.0 + 0.63 mm; 4) screened fine fraction, 0.4 + 0.315 mm. Quality strip could be rolled from the coarse-grained powder (fractions 1.6 + 1.0 mm) only in the mill with rolls of a diameter of at least 600 mm, which is in agreement with the theory that strip thickness is directly proportional to roll diameter. In experiments with the further processing of strip the best results were produced by the variant with 20% deformation, which involves a large number of sinterings in an argon atmosphere, which serves to eliminate H₂, Mg, and other impurities. Strip rolled from electrolytic titanium displays high plastic properties which make it amenable to final processing by means of cold deformation (e.g. deep drawing). The techniques thus developed dispense with the need for hot working (and hence also for cold working and pickling of sheets) and reduce the percentage of wastes to 10% of the weight of raw powder used. The following industrial sequence of operations can thus be recommended: 1. Screening of powder. Use of the fraction 1.6 + 1.0 mm for rolling; 2. Rolling of 7 mm thick, 600 mm wide strip in TsNIIChM mill with roll diameters 600/900 mm; 3. Cutting of strip into sections measuring 120x350 mm; 4. Processing of strip by means of 6 cycles "sintering in argon (1200°C, 3 hr) - cold rolling," with roughing after each cycle until strip thickness is reduced to 1.4-0.8 mm; 5. Vacuum annealing of 0.8 mm thick

Card 2/3

L 2850-66

ACCESSION NR: AT5022889

at 900°C for 2 hr; 6. Cold rolling to 0.4 mm (6 passes); 7. Vacuum annealing at 700°C for 2 hr (in coil); 8. Cold rolling to 0.2 mm; 9. Vacuum annealing at 700°C for 2 hr (in coil); 10. Cold rolling to 0.1 mm; 11. Vacuum annealing at 700°C for 2 hr (in coil); 12. Cold rolling to 0.05 mm; 13. Vacuum annealing at 700°C for 2 hr (in coil). The thus obtained strip has a polyhedral structure. Orig. art. has: 6 figures, 3 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MM.

NO REF Sov: 007

OTHER: 001

Pure metal 18

BVK
Card 3/3

L 07435-67 EWP(k)/EWT(m)/EWP(e)/EWP(t)/ETI IJP(c) MJW/JD/HW/JG

ACC NR: AP6029223

SOURCE CODE: UR/0145/66/000/004/0151/0156 53

AUTHOR: Malin, A. P. (Engineer); Sukhov, A. V. (Aspirant); Gromova, S. P. ^B
(Engineer); Polyayev, V. M. (Candidate of technical sciences); Borok, B. A. (Candidate
of technical sciences)

ORG: None

TITLE: Development of technology for producing porous fittings

SOURCE: IVUZ. Mashinostroyeniye, no. 4, 1966, 151-156

TOPIC TAGS: porous metal, powder metallurgy, hydrostatic pressure, nichrome alloy,
stainless steel

ABSTRACT: The article is a summary of work on the production of porous pipes from ni-
chrome, molybdenum, stainless steel and nickel by powder metallurgy methods. The best
materials for this purpose are Kh80N20 nichrome powder produced by joint reduction, or
a mixture of GKh5-48-NP nickel and TsNIIChm TU 1-53 chromium powders. Experiments on
development of technology for manufacturing porous fittings from these metal powders
showed that pipe sections with a wall thickness from 15 to 0.5 mm may be produced by
hydrostatic pressing and sintering in hydrogen furnaces. This method may be used for
producing porous fittings with a height which is limited only by the dimensions of the
hydrostatic press and the sintering furnace with theoretically unlimited possibilities

Card 1/2

UDC: 621.9-496

L 07435-07

ACC NR: AP6029223

for increasing size. Shrinkage during pressing takes place uniformly over the entire height of the fitting. The particles of powder do not move along the rubber shell and consequently there is no friction. This gives the finished part identical density (porosity) at all points. It is shown that the porosity of the finished product is a function of the granulometric composition of the powder, the hydrostatic pressure, the quantity of binder used and sintering condition. The article was presented for publication by Doctor of technical sciences, Professor V. G. Saksel'tsev, MVTU. Orig. art. has: 5 figures, 2 formulas.

SUB CODE: 11, 13/ SUBM DATE: 27Nov64

MS
Card 3/2

Classified

ALTAYSKIY, I.P., kand. sel'khoz. nauk: CHESHKOV, A.F., kand. ekon. nauk; ~~MALIN~~, A.S., kand.ekon. nauk [deceased]; BOROVSKIY, V.A., kand. ekon. nauk; AREF'YEV, T.I., kand. ekon. nauk; GLINYANY, V.G., kand. ekon. nauk; FRAYER, S.V., kand. sel'khoz. nauk; VINTAYKIN, Z.P., kand. ekon. nauk; DUDOROV, I.T., kand. ekon. nauk; BUSAROV, N.A., kand. sel'khoz. nauk; LUK'YANOV, A.D., kand. sel'khoz. nauk; RAKITINA, Ye.D., red.; SOKOLOVA, N.N., tekhn. red.

[Production brigades on collective and state farms] Proizvodstvennye brigady v kolkhozakh i sovkhozakh. Moskva, Sel'khozizdat, 1963. 374 p. (MIRA 17:1)
(Farm management)

MALIN, A.S.

New method for cementing casing space. Razved. i okh. nedr 26 no.10:
44-45 O '60. (MIRA 13:11)

1. Vostochno-Kazakhstanskoye geolupravleniye.
(Boring)

IVANOV, B.A.; PARFENOV, K.A.; MALIN, B.A.

Electrical wireless turbotachometer operating in the frequency range
below 1 hz. Mash. i neft. obor. no.8:27-30 '65. (MIRA 18:9)

1. Grozneskiy filial Vsesoyuznogo nauchno-issledovatel'skogo i
proyektno-konstruktorskogo instituta kompleksnoy avtomatizatsii
neftyanyoy i gazovoy promyshlennosti.

ADIROVICH, B.I.; KOLOTILOVA, V.G.; MALIN, B.V.

Transient conditions in semiconductor triodes. Radiotekhn. i elektron
l no.8:1052-1057 Ag '56. (MIRA 10:1)

(Semiconductors)

(Transistors)

L 56230-63

ENT(d)/EED-2/EWP(1) R7-4/P3-4/PK-4 IJP(c) BB/GG

ACCESSION NR: AT5004897

S/2657/64/000/012/0244/0263 35
621.382.322:681.142.67AUTHOR: Basiladze, S. G.; Karmazinskiy, A. N.; Malin, B. V.

BT/

TITLE: Logical circuits and a half-adder using field-effect transistors

SOURCE: Poluprovodnikovyye pribory i ikh primeneniye; sbornik statey, no. 12, 1964, 244-263

TOPIC TAGS: logical circuit, half adder, transistor, field effect transistor

ABSTRACT: Generalities on thin-film microminiature field-effect transistors after W. Shockley (Proc. IRE, 1952, v. 40, no. 11) and A. V. J. Martin (Semiconductor Products, 1962, no. 2-3) are explained, as well as simple logical circuits such as AND, OR, NOT. A low forward transadmittance and high cutoff voltage are cited as the main shortcomings of today's field-effect transistors. Logical circuits with these transistors can operate at a clock frequency of 100 kc or lower. Two experimental half-adders were built, one with p-type and n-type

Card 1/2

ACCESSION NR: AT5004897

transistors, and the other with all transistors of the same type. The integral-type half-adder circuit operated correctly at $\pm 20\%$ variation of the supply voltage and $\pm 5\%$ variation of the input-signal amplitude. Orig. art. has: 15 figures, 20 formulas, and 3 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: DP, EC

NO REF SQV: 001

OTHER: 003

Card 2/2

L 20451-66 DIA(1)/DIA(1) A(1) 61/66
ACC NR: AT6008790

SOURCE CODE: UR/2657/65/000/014/0196/0210

AUTHOR: Karmazinskiy, A. N.; Kheyfets, A. Sh.; Malin, B. V.; Sorin, M. S.

ORG: none

TITLE: Register using field-effect transistors

SOURCE: Poluprovodnikovyye pribory i ikh primeneniye; sbornik statey, no. 14, 1965,
196-210

TOPIC TAGS: shift register, transistorized circuit, field effect transistor

ABSTRACT: A shift register based on flip-flops consisting of d-c-coupled field-effect transistors is described. Two variants, differing only in the reset circuits for each flip-flop, were tested. The two reset variants are shown in Fig. 1. A 2-bit shift register based on the configuration of Fig. 1a is shown in Fig. 2. The information stored in the register is shifted by one place in four steps. In the initial state, flip-flops T₁, T₂ store information and T'₁, T'₂ are reset to the 0 state. A pulse on sample terminal l₂ transfers the information from T₁, T₂ to T'₂, T'₁. A second pulse on reset 0₁ resets T₁, T₂. A third pulse on sample terminal l₁ transfers the information from T'₂, T'₁ to T₁, T₂. Finally, the fourth pulse on reset 0₂ resets T'₁, T'₂. When a bias voltage of 15 v is used, the 0 state is identified by 11 v and the 1 state, by 3 v. The criterion of proper operation of the register was taken to

Curd 1/3

L 20451-66

ACC NR: AT6008790

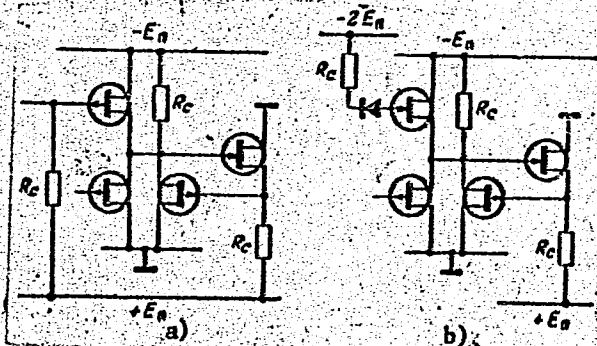


Fig. 1. Set and reset circuits

be the absence of errors when bit combinations 11 and 01 were circulated. The register performed satisfactorily with individual bias voltage fluctuations of $\pm 20\%$, combined bias voltage fluctuations of $\pm 10\%$, input-signal variations of 15% , and resistance variations in the drain circuit of $\pm 50\%$. The maximum working frequency for the register based on Fig. 1a was 30 kc; for the one based on Fig. 1b was 43 kc. At 20°C, the fan-out was 4-5. The speed of the shift register may be increased by a

Card 2/3

E 20151-66

ACC NR: AT6008790

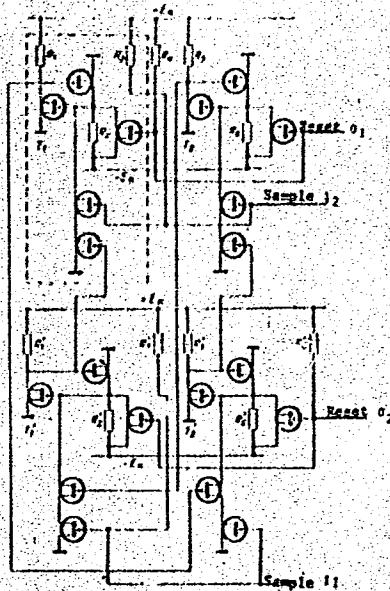


Fig. 2. Two-stage shift register

factor of 10—15 if field-effect transistors with transconductance of 1 mamp/v are used instead of those with transconductance of 0.1—0.4 mamp/v. Orig. art. has: 10 figures.

[BD]

SUB CODE: 09/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001/ ADD PRESS: 4222
Card 1/3 MJS

MALIN, G.

RUMANIA/Chemical Technology - Chemical Products and Their
Application - Medicinals, Vitamins, Antibiotics.

H-17

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, 8995

Author : Braileanu Cl., Malin G., Manolescu-Devesel C.

Jrst :

Title : Comparative Studies of Some Binding Agents Used in
Making Pills and of Their Effect on Disaggregation and
Preservation of Preparations.

Orig Pub : Farmacia (Romin.), 1957, 5, No 1, 47-58

Abstract : Presentation of data of comparative studies of a 10% gel
of tragacanth in sunflower seed oil, methyl cellulose gel
and a mixture of flour and lactose, as binding agents in
making pills of different composition. The composition of
the pills is stated and a study is made of the effects of
the above-stated binding agents on the length of time
prior to disintegration of the pills and on preservation
of medicinal preparations.

Card 1/1

MALIN, G.; MEYERSON, Z.

Results of applying the new regulation on reviewing norms.
Sots.trud no.9:10^o-110 S '57. (MLB: JH: P)

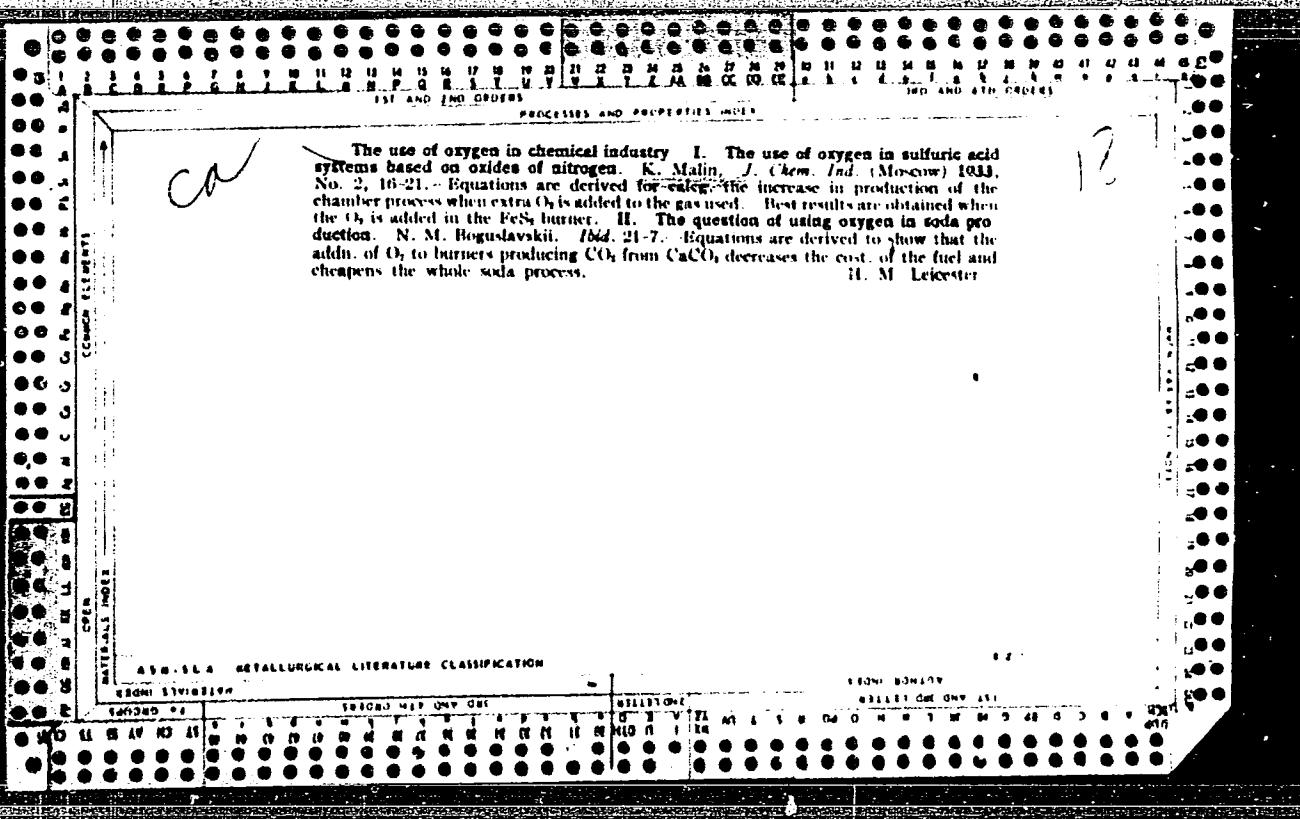
1. Direktor zavoda imeni "Komsomol'skoy Pravdy" (for Malin).
2. Nachal'nik ot dela truda i zarabotnoy platy (for Meyerzon)
(Leningrad--Plastic materials--Production standards)

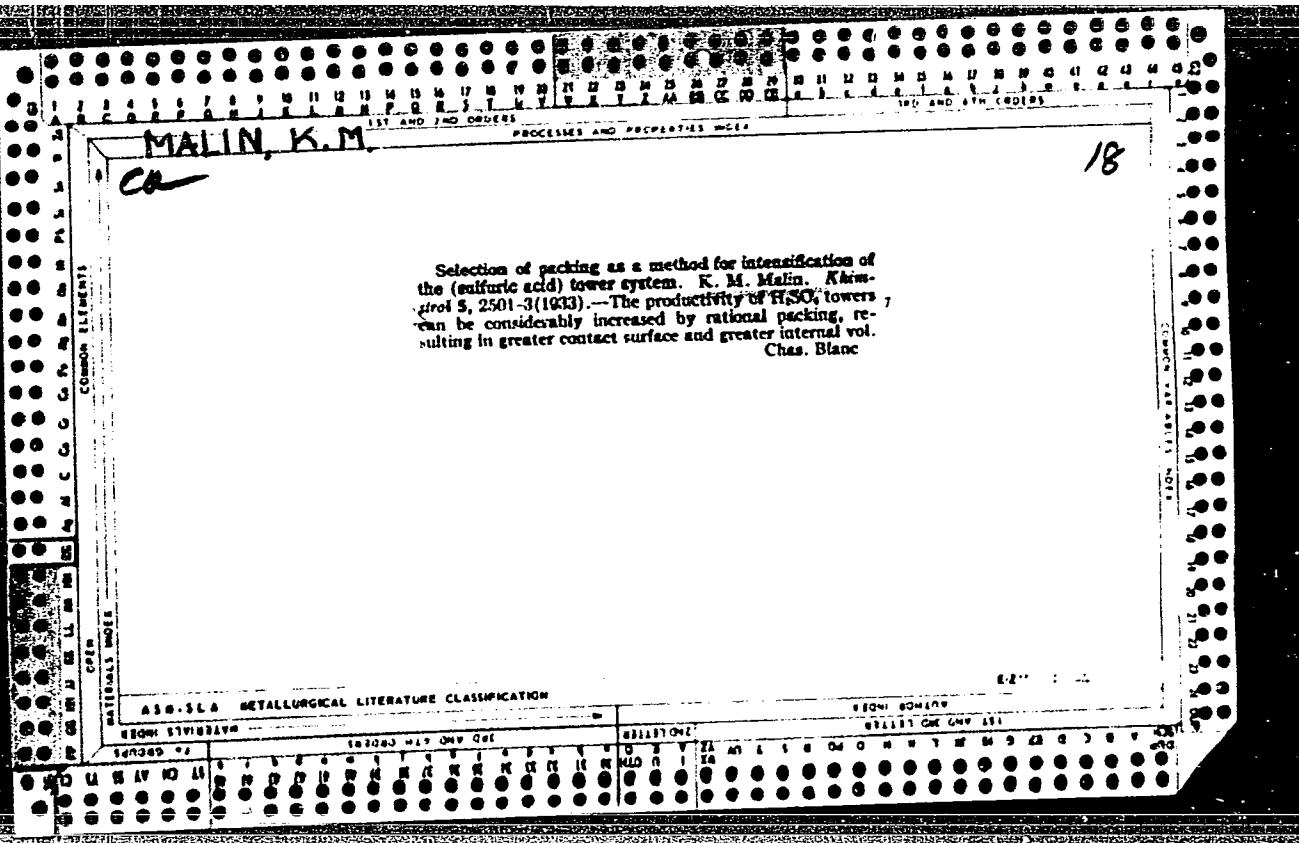
MALIN, G.; MEYERSON, Z.; RATNER, A.; BOZHKO, M., inzh.-ekonomist;
KOTYUZHINSKIY, G.

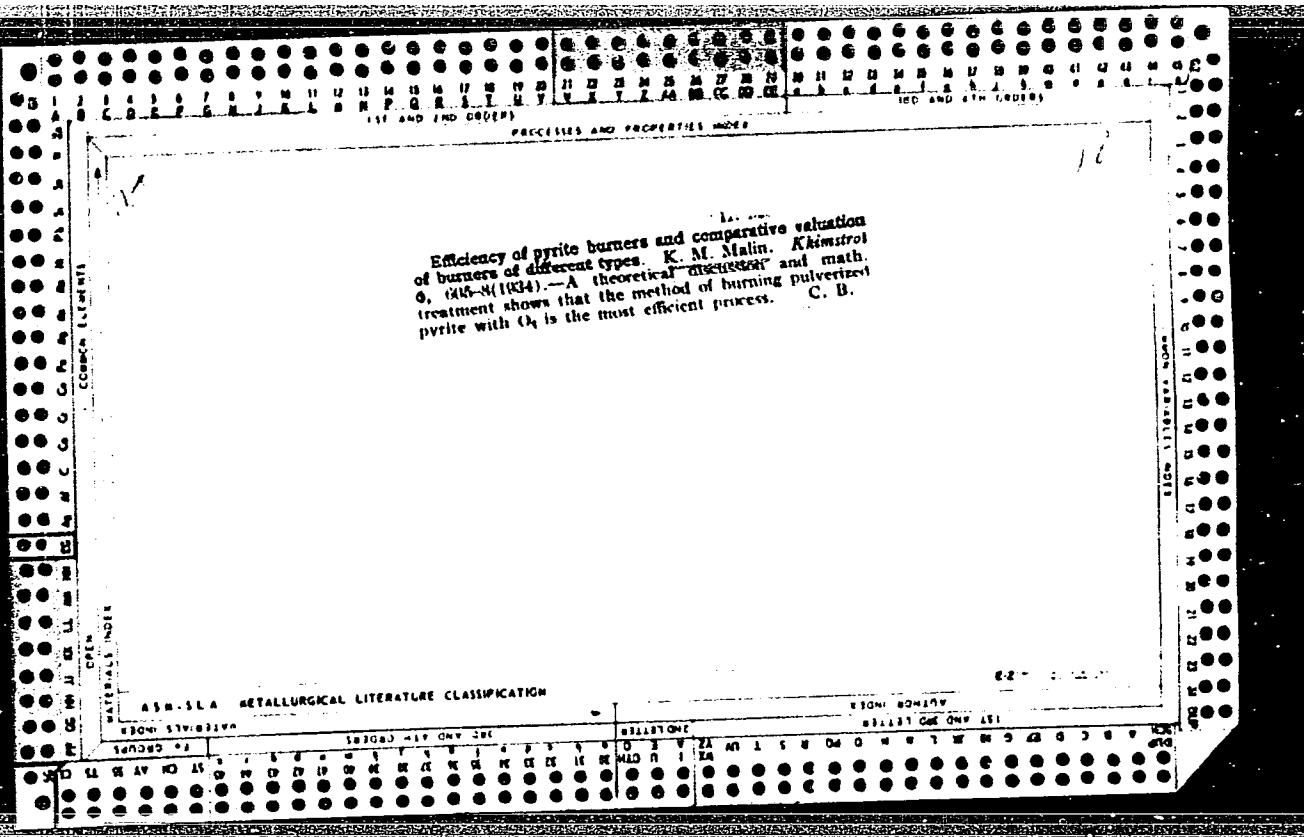
Creating conditions for growth in hourly output. Sots. trud no.8:
97-109 Ag '58. (MIRA 11:9)

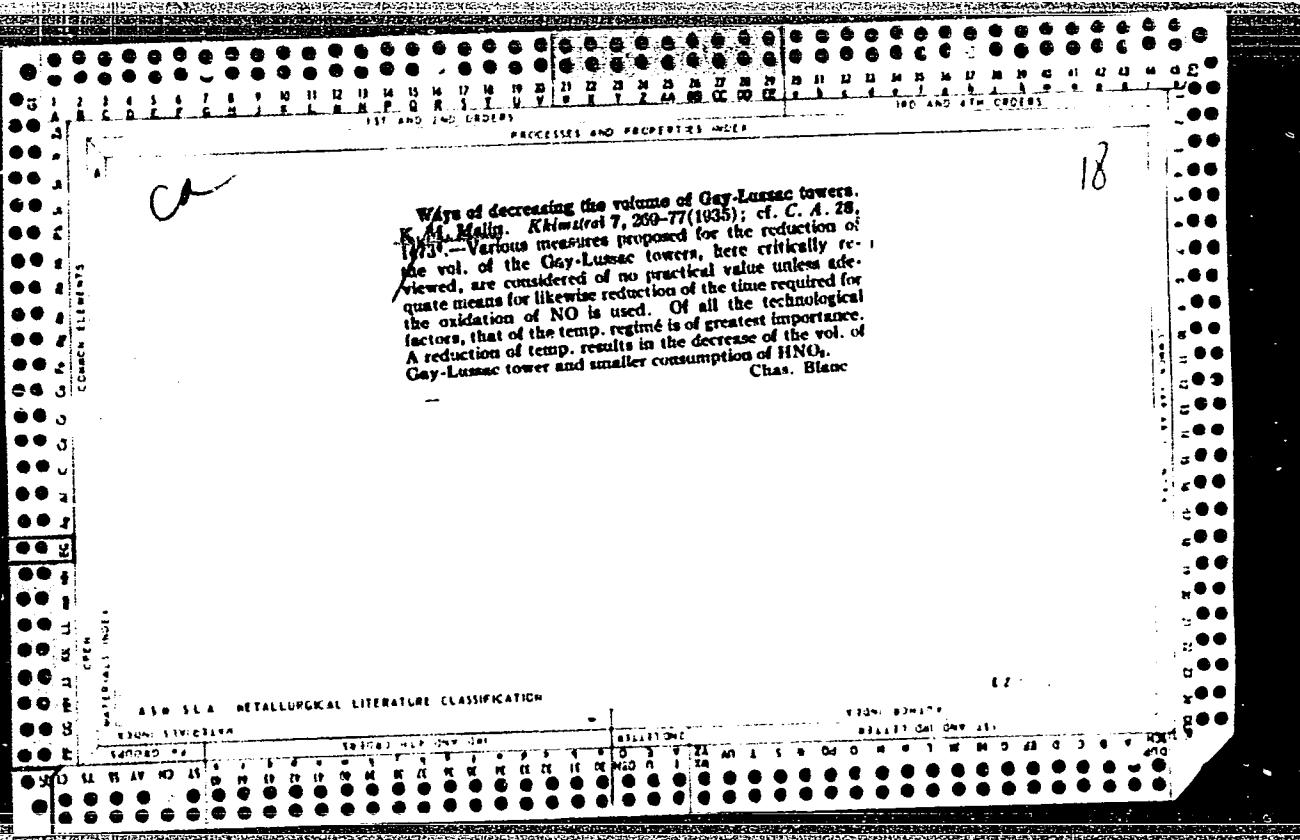
1. Direktor zavoda imeni Komsomol'skoy pravdy" (for Malin). 2. Nachal'nik otdela truda i zarabotnoy platy zavoda im. Komsomol'skoy pravdy" (for Meyerson). 3. Nachal'nik otdela truda i zarabotnoy platy Okhtenskogo khimicheskogo kombinata (for Ratner). 4. Zamestitel' nachal'nika otdela truda i zarabotnoy platy Upravleniya metallurgicheskoy promyshlennosti Chelyabinskogo sovnarkhoza (for Kotyuzhinskiy).

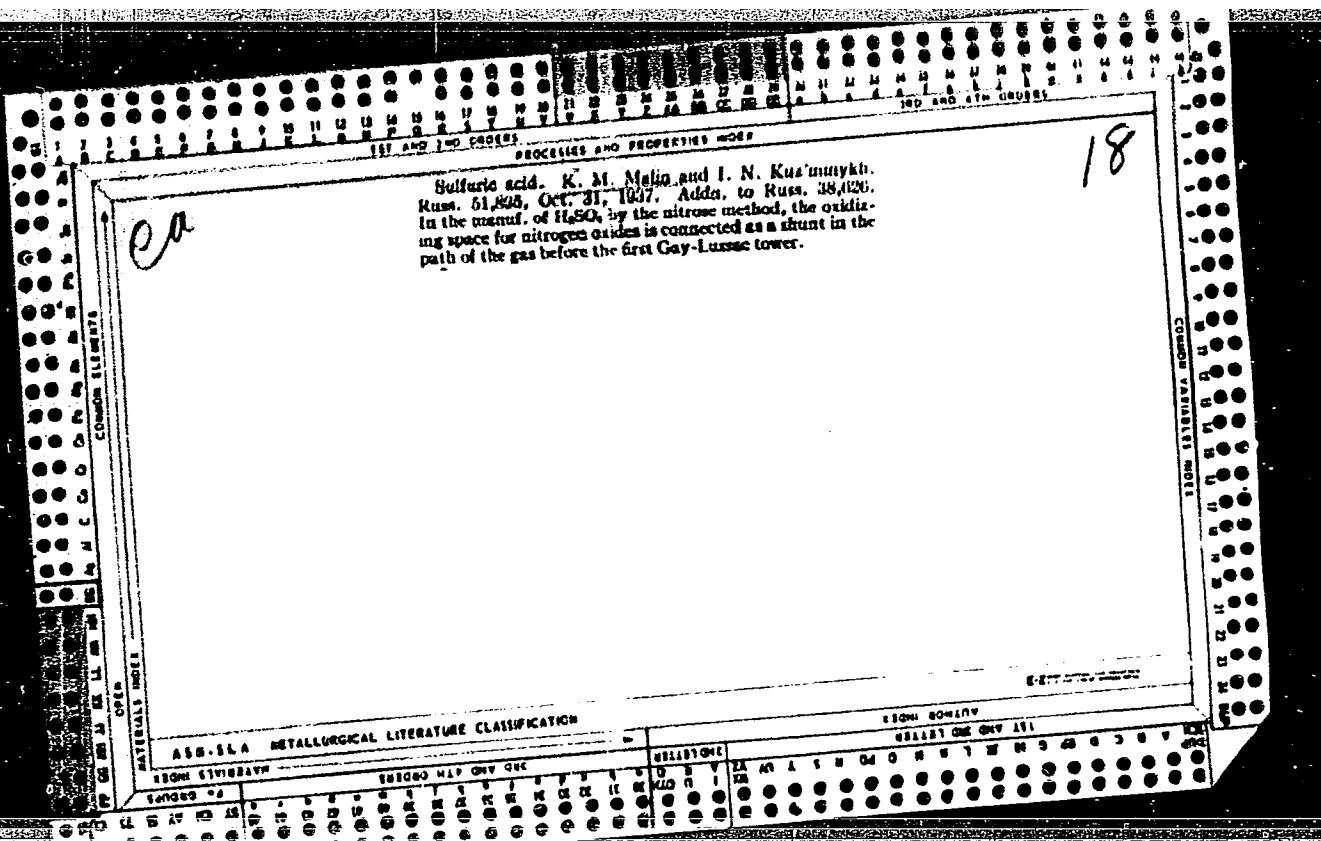
(Labor productivity)

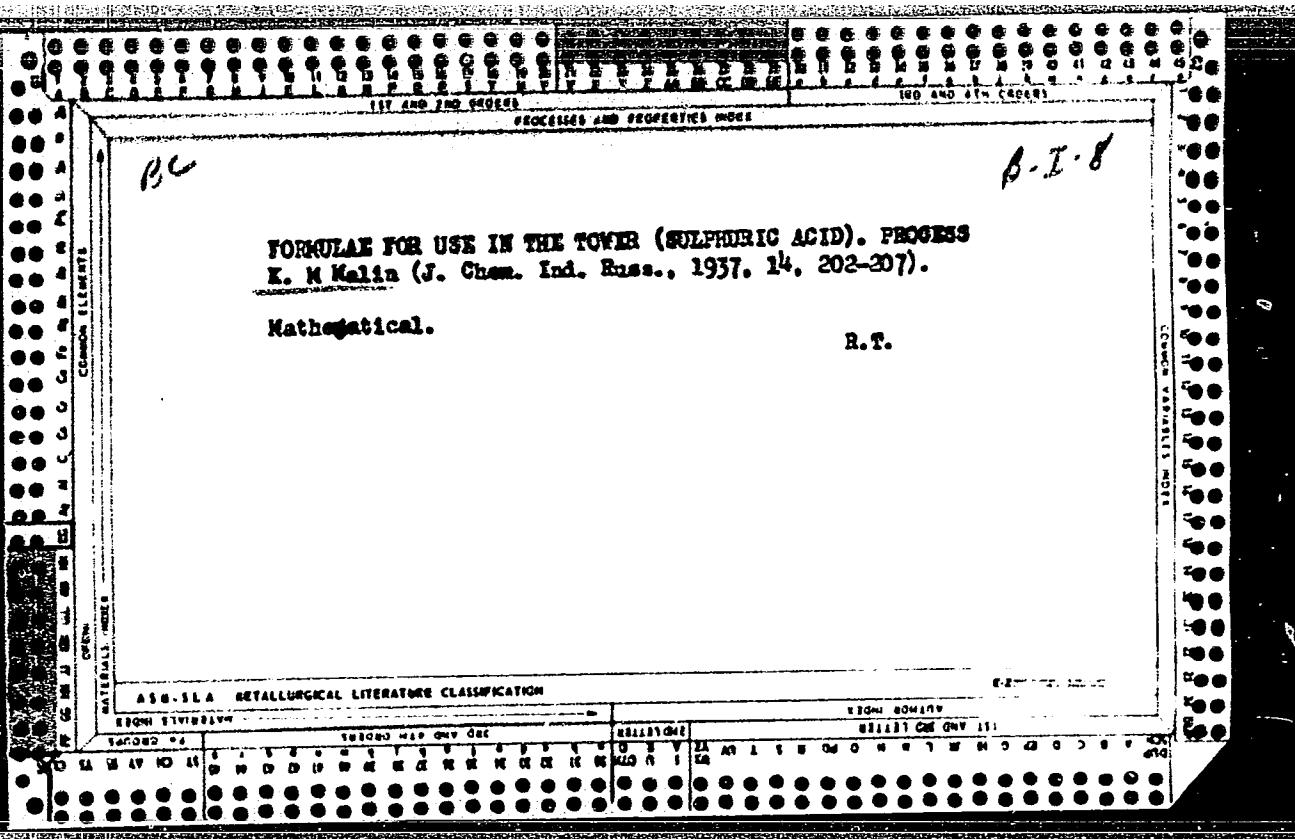


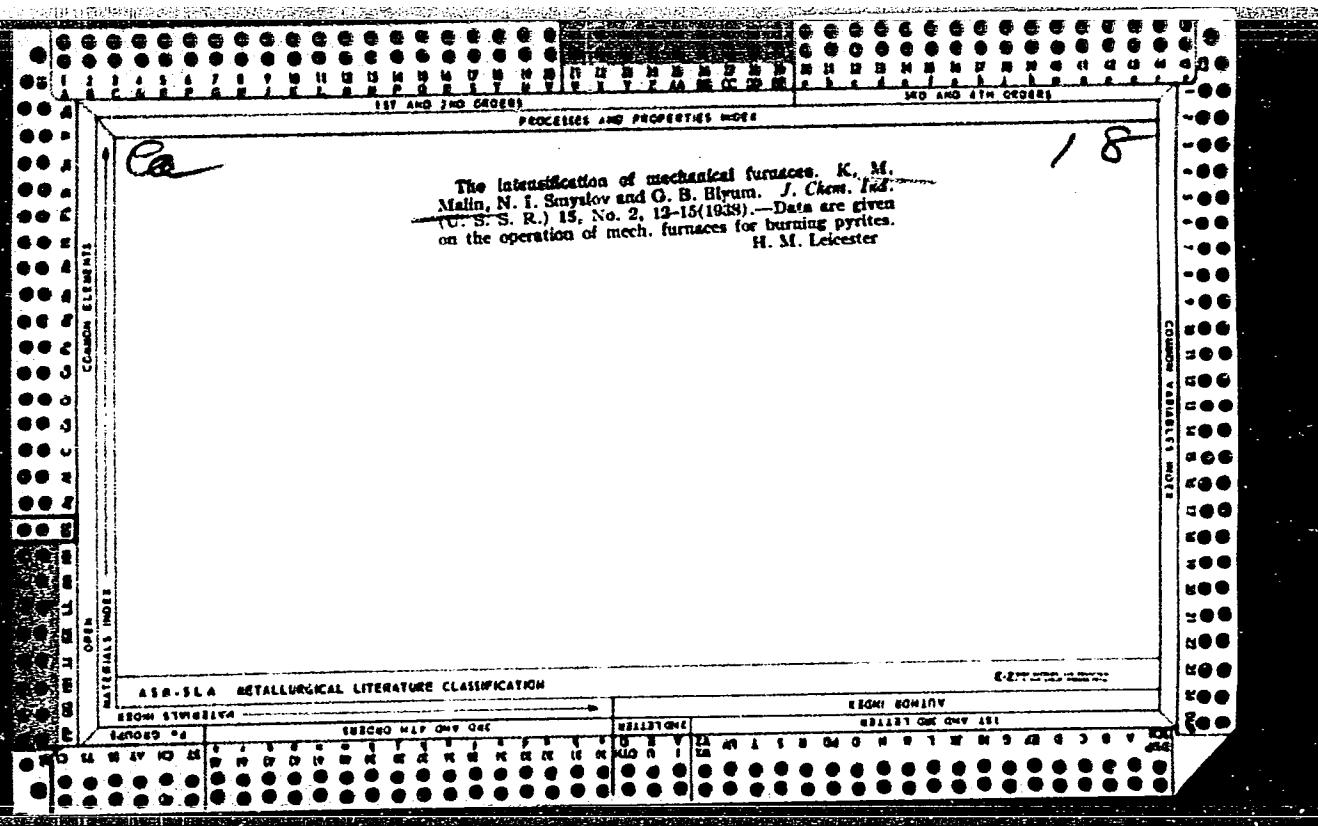


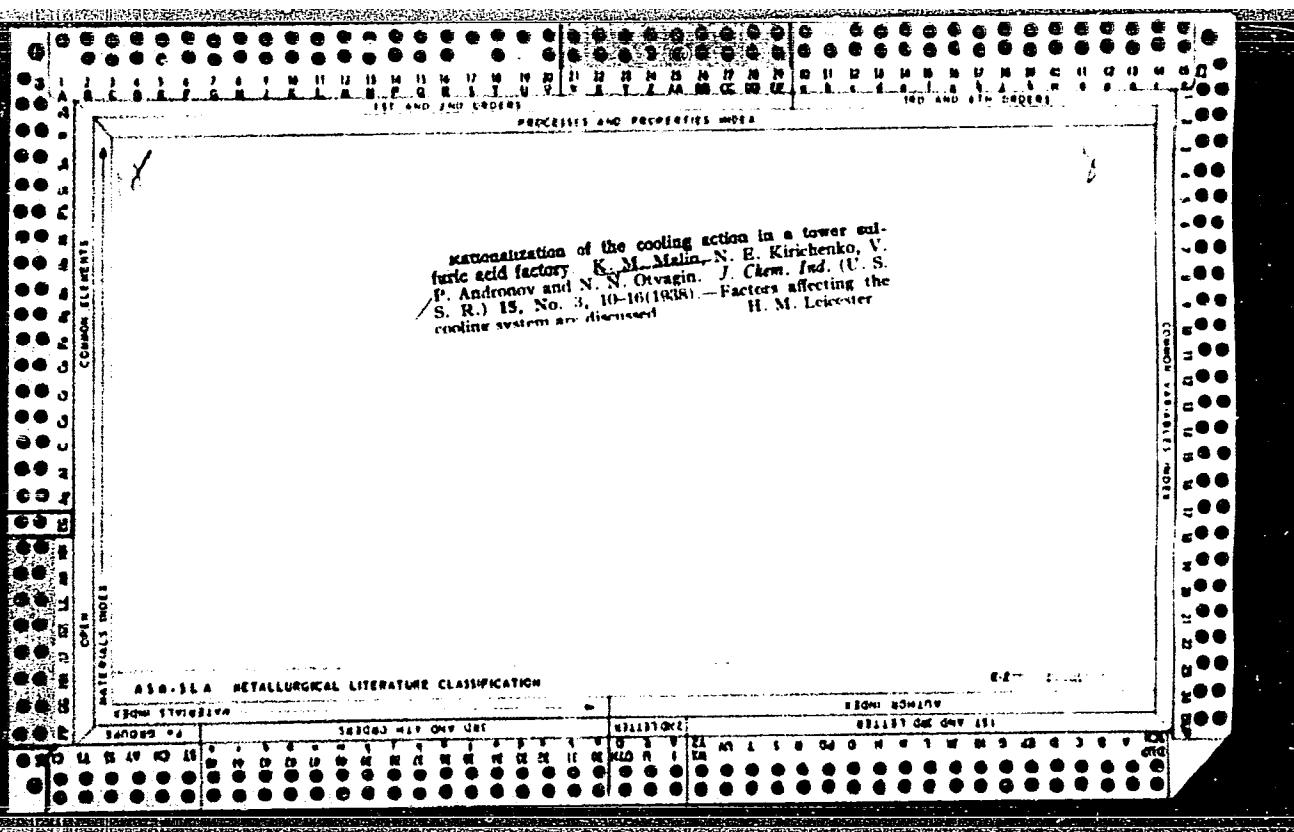


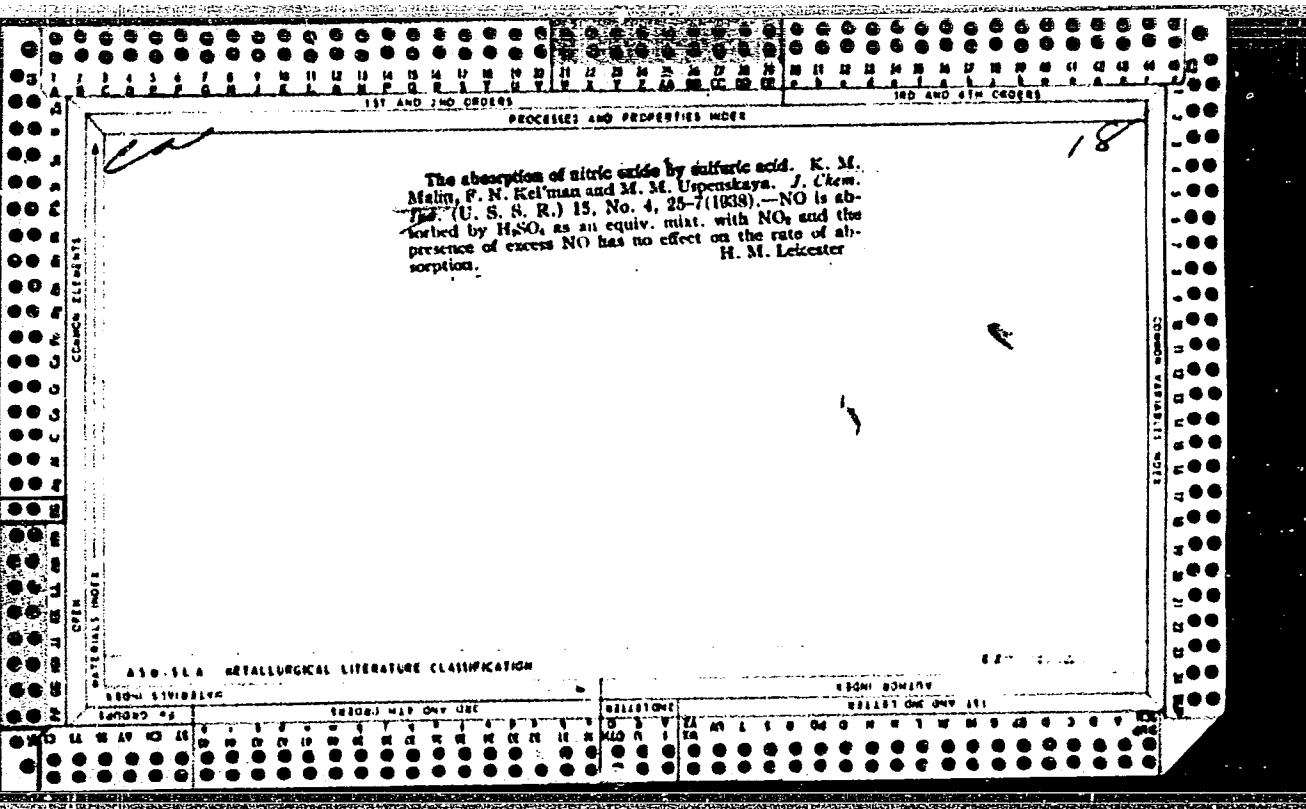


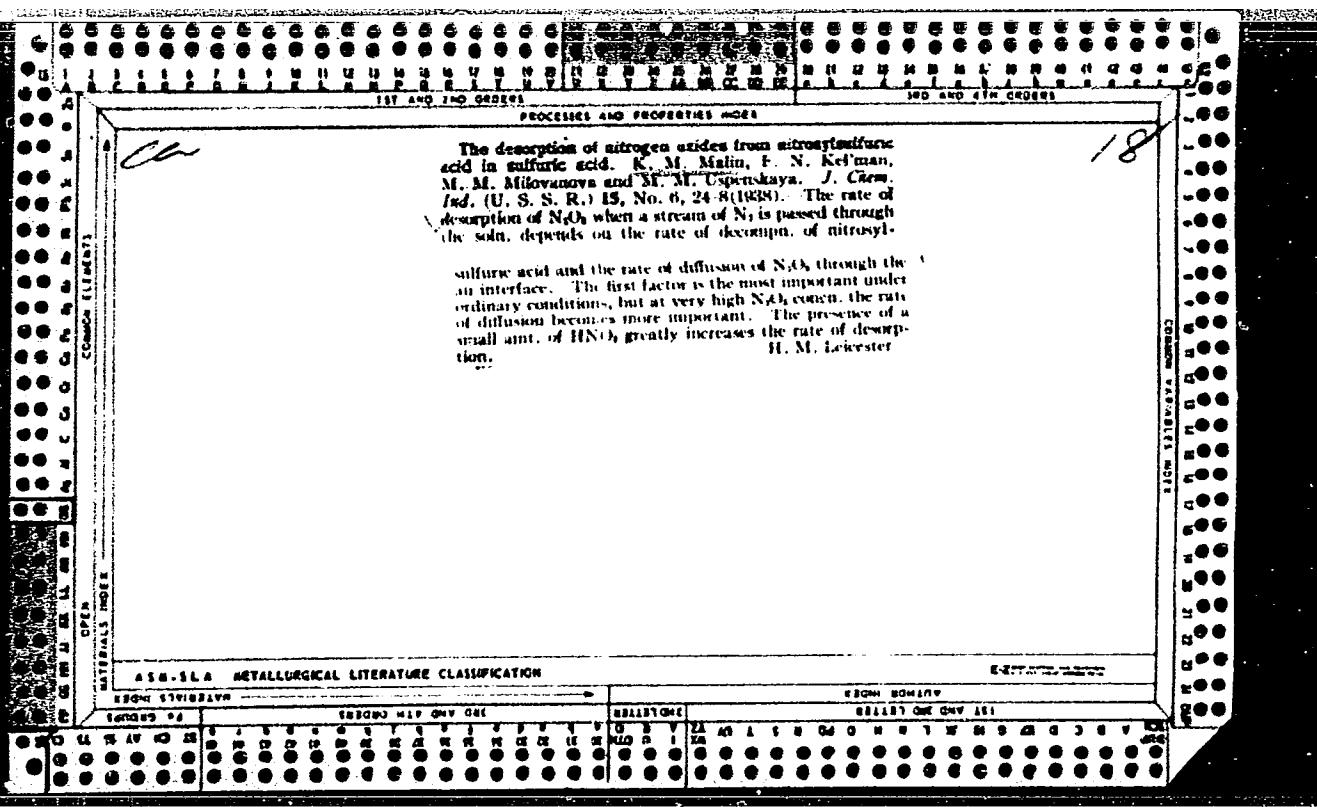


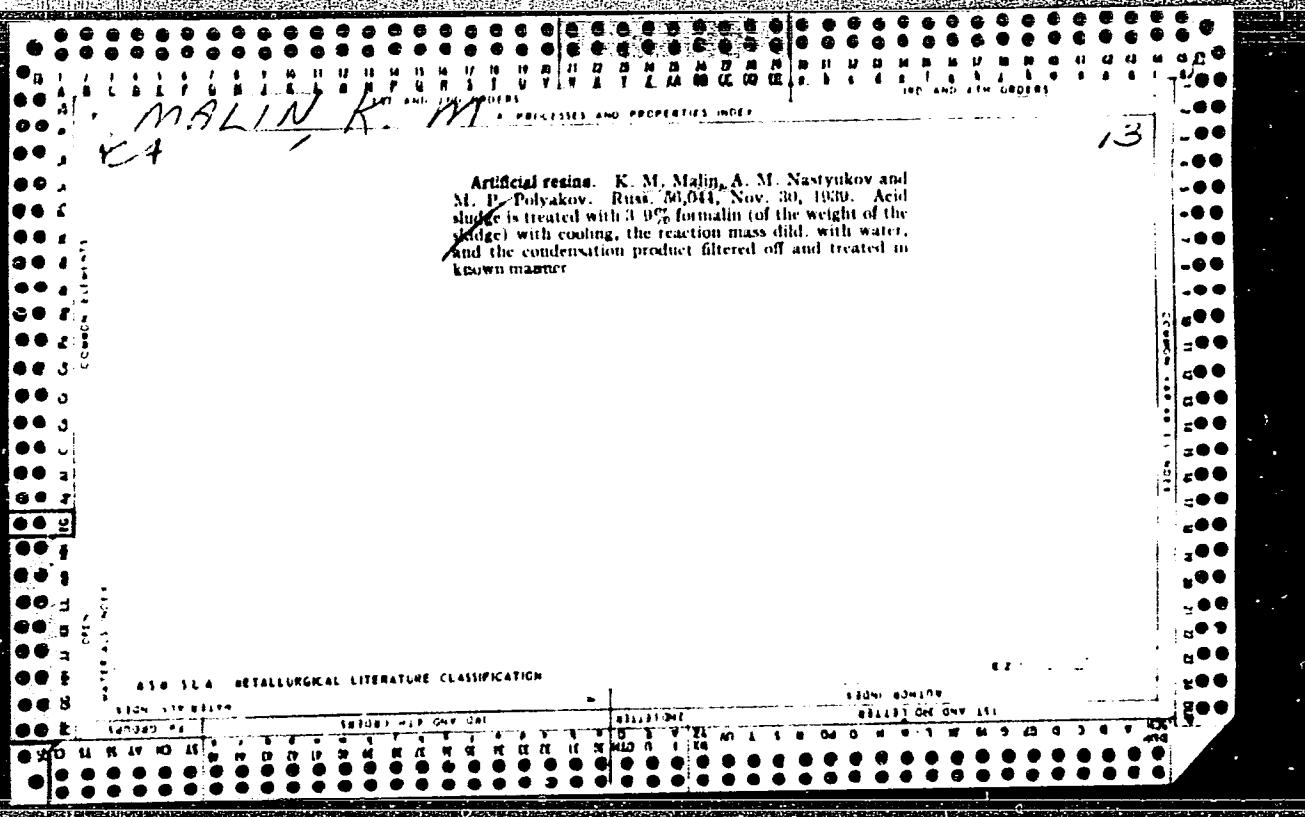










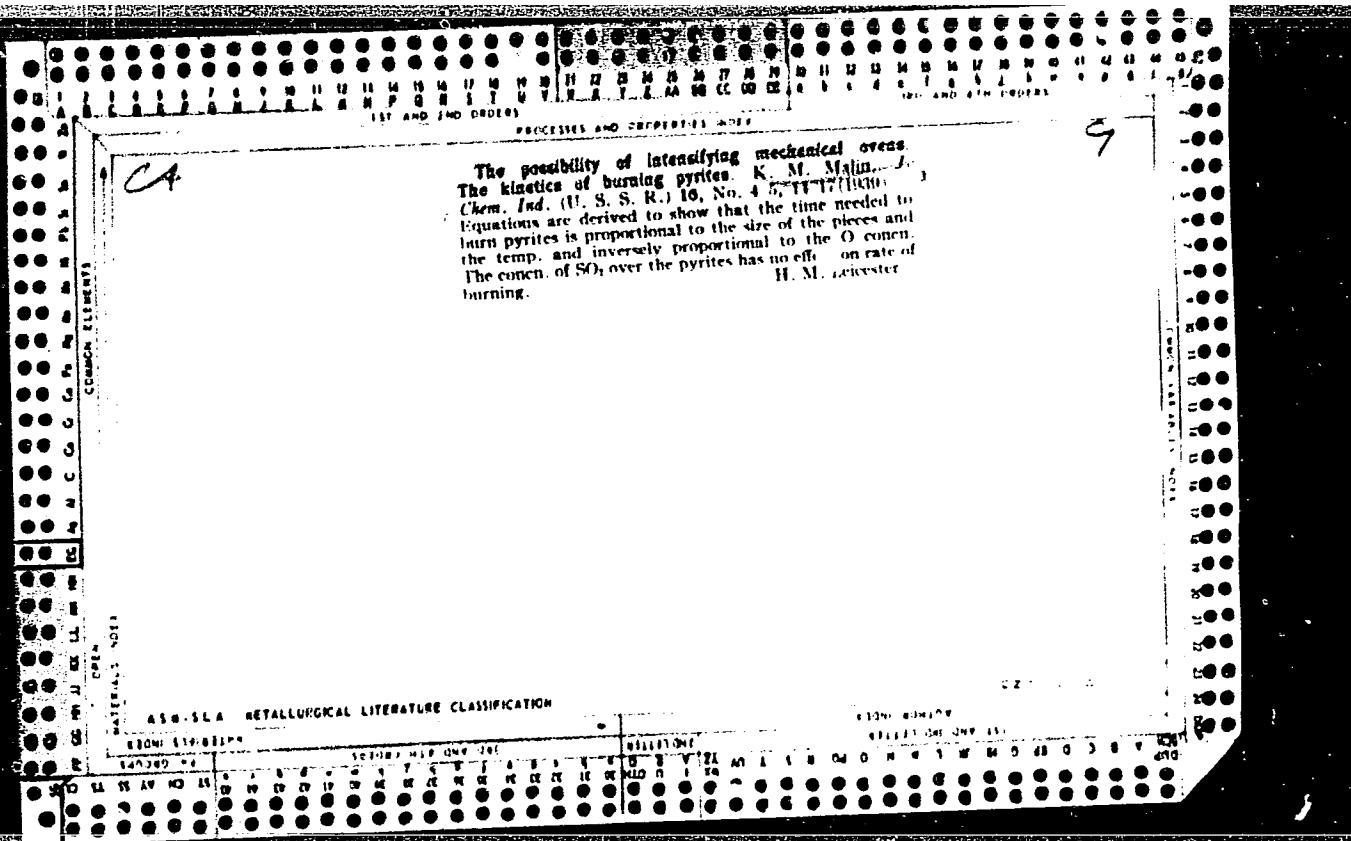


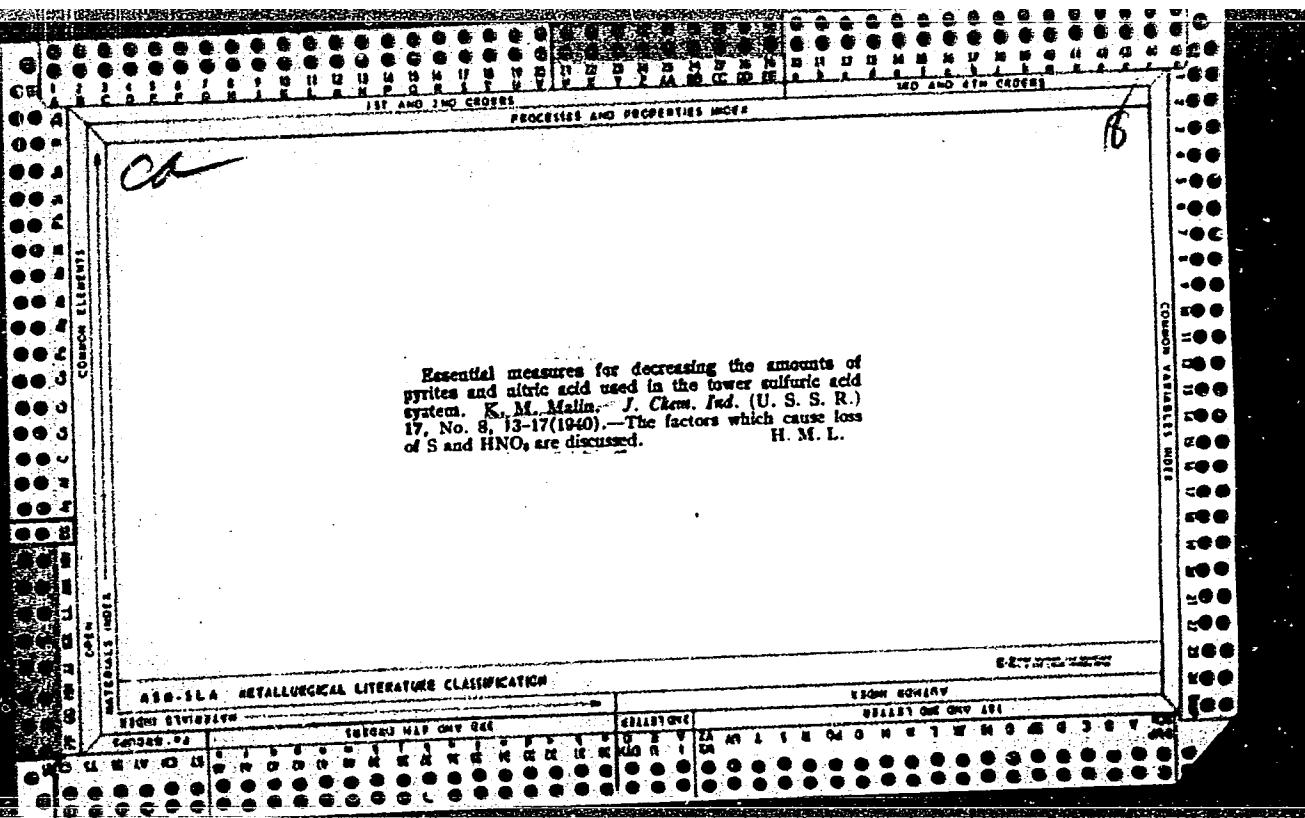
Standardization and increasing the capacity of the equipment of sulfuric acid plants. K. M. Malin and M. N. Vtorov. *Nauč. Inst. po Uderoznijem T'fizologii i Sintezu im. Ya. V. Samoilova* 1919-39, 75-81 (1939); *Khim. Referat.* 1940, No. 6, 139-40.—The av. daily yield of H_2SO_4 per cu. m. of the tower is 100 kg. The 350-kg. yield per sq. m. of the floor in furnaces can be increased to 500 kg. by increasing the temp. of the furnace, a uniform burning of pyrite, a uniform supply of pyrite and air to the furnace and using air enriched with O₂. The burning of pyrite is expressed by $t = (R/K)(1 - \sqrt{1 - k^t})$, where t is the time of burning, R the diam. of the pyrite lump, k the degree of burning of S, K the burning-velocity const., depending on the temp. Increasing the capacity of condensers increased the yield of H_2SO_4 to 1 ton per 6 sq. m. of surface. Self-irrigation of the Gay Lussac towers should be avoided and the temp. of the acid passed to the production towers should be kept at 80°. Excess of NO (instead of the stoichiometric mixt., $NO + NO_2 \rightarrow N_2O_4$) has no effect on the absorption velocity, and the absorption coeff. of NO_2 is proportional to the linear velocity of gases in the 0.8th degree only to a definite limit of the velocity. Expts. were carried out to replace Pb app. by Fe, ferrocrocite and cast Fe. This decreased the amt. of Pb required for the tower system from 2000 to 200 tons.

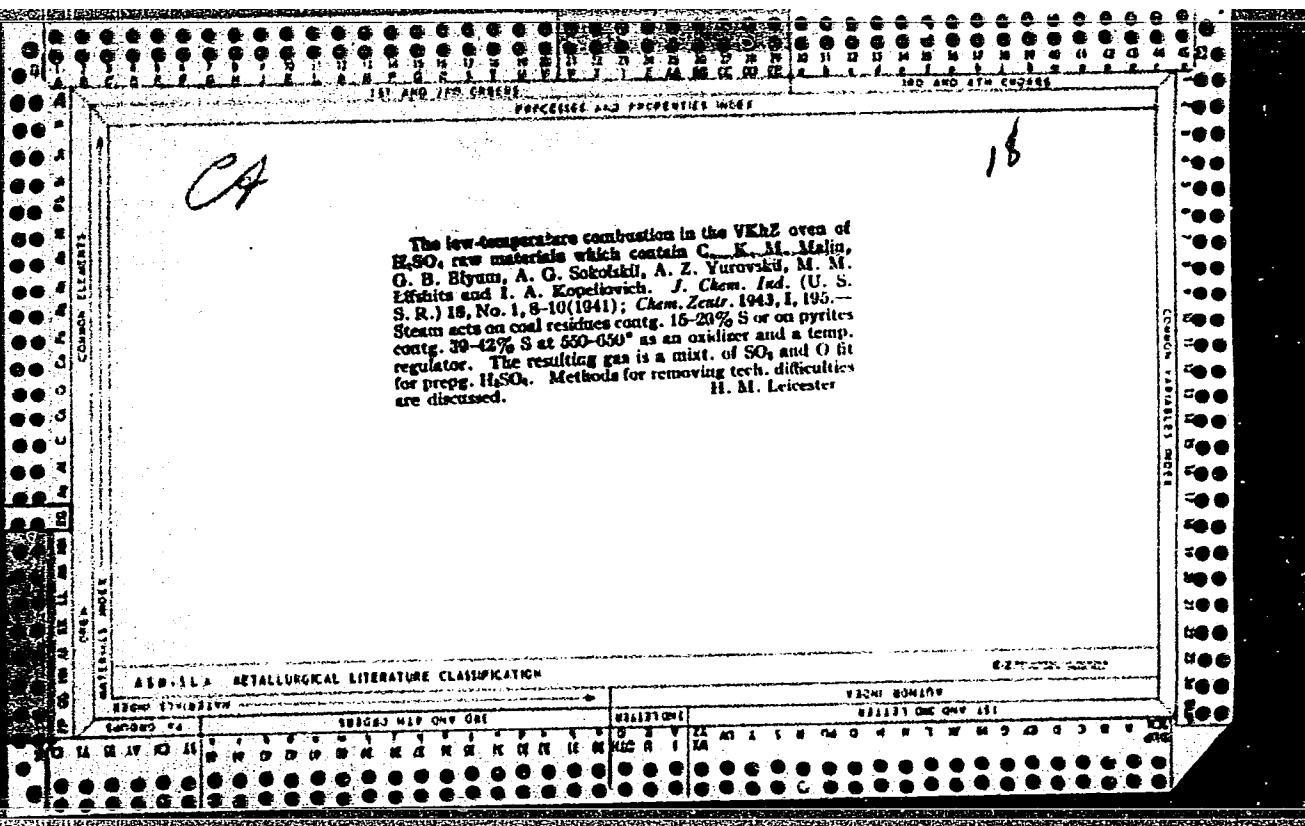
W. R. Hein

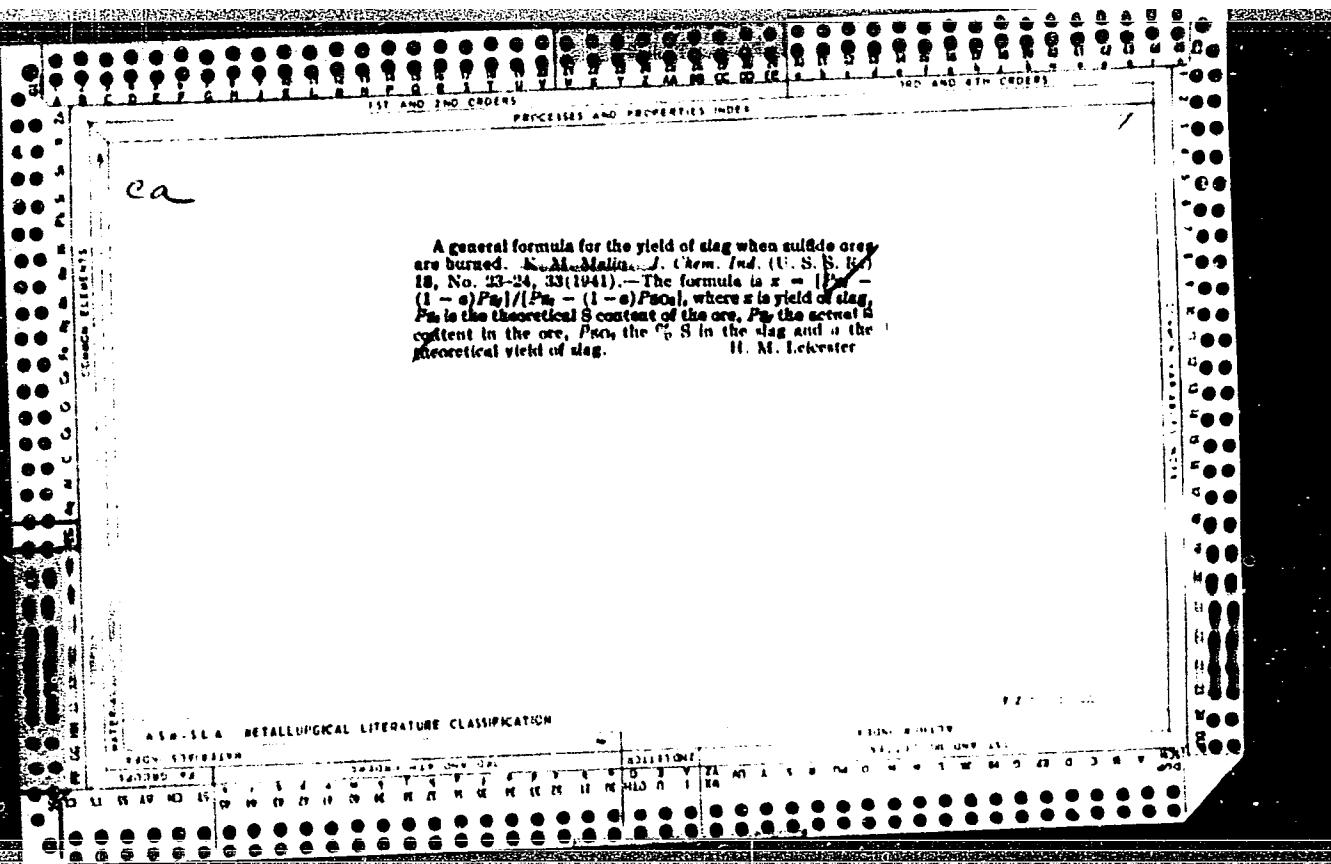
APPROVED FOR RELEASE: 06/20/2000

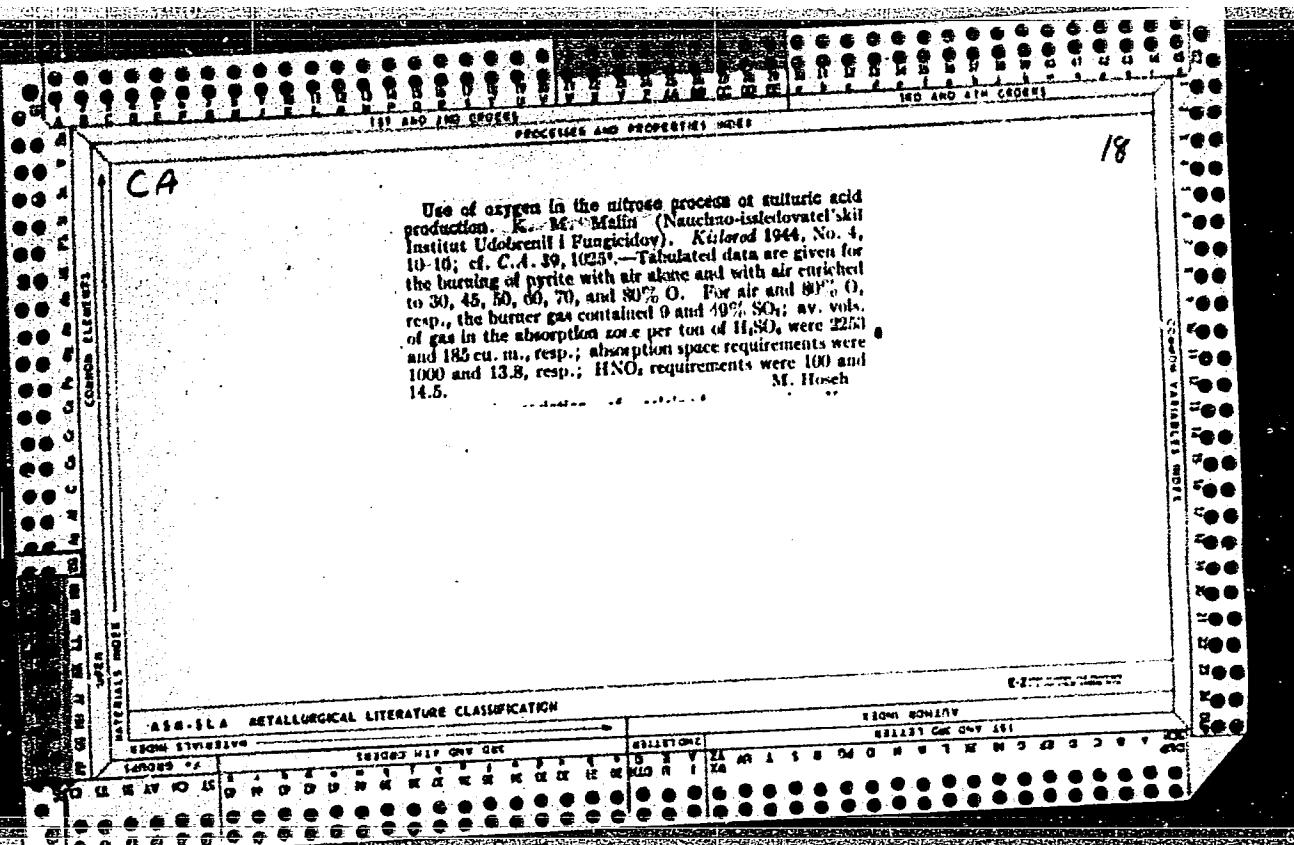
CIA-RDP86-00513R001031810010-6"

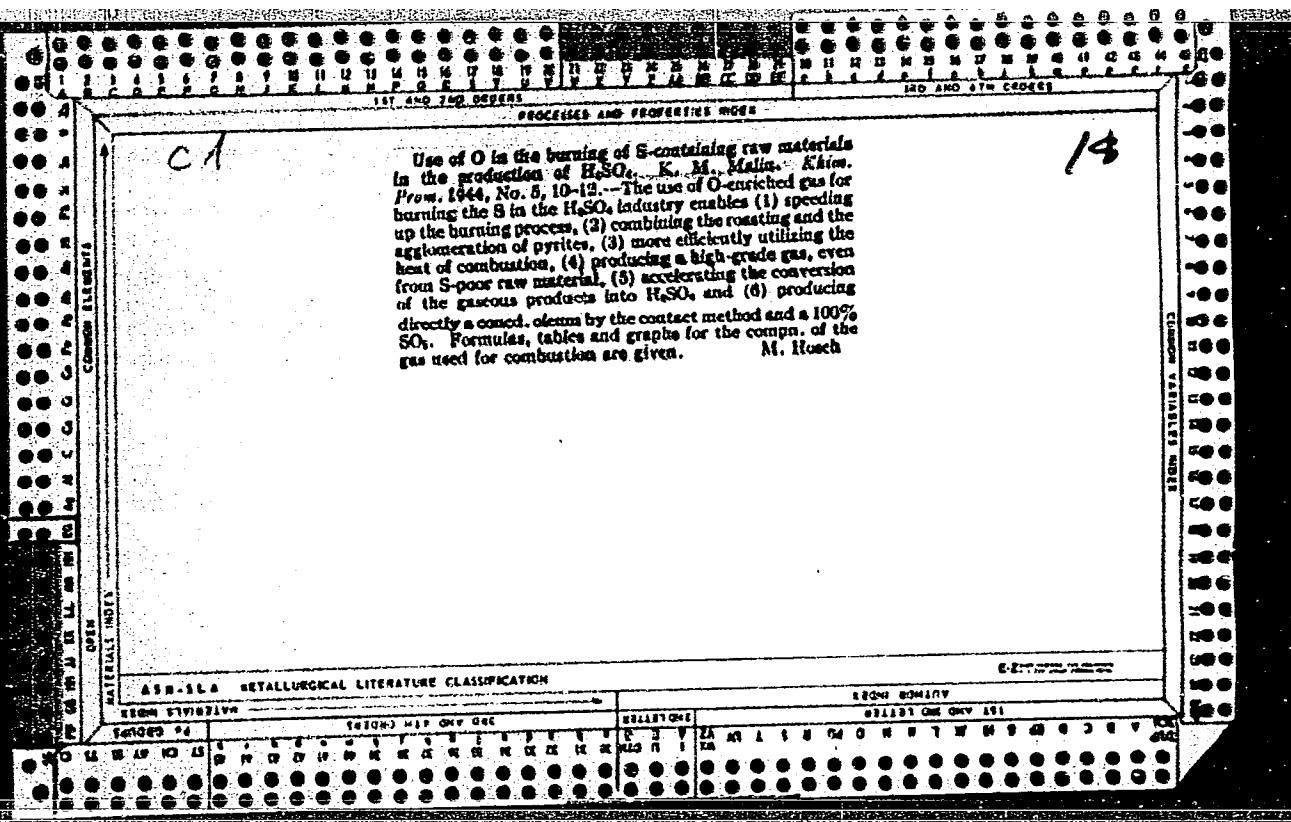












CA

18

Drying force of nitrogen oxide absorption by sulfuric acid. K. M. Melia and M. O. Sipyagina. *Khimicheskaya Prom.* 1940, No. 7/8, 4-5.—Expts. were carried out on the effect of excess NO over the mixt. $\text{NO}_2\text{-NO}$ on the absorption of the oxides by the nitroso. Excess concn. of NO had no effect. Under production conditions there is excess O in the gas. It is therefore necessary to create conditions that would reduce the oxidation of NO as much as possible. This can be achieved by packing the absorbers with substances having a max. of specific surface area and leaving the smallest possible free vol. The oxidation of NO prior to absorption should be increased to 50%. M. Hosch

ASR-26A METALLURGICAL LITERATURE CLASSIFICATION

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6"

MALIN, K. M.

On Technical Sci.

"Sulfuric Acid Nitroso Process." Sub 2 Jul 47, All-Union Sci Res Inst
of Mineral Raw Materials.

Dissertations presented for degrees in science and engineering in Moscow
in 1947

SO: Sum No. 457, 18 Apr 55

MALIN, K. M.

USER/Chemistry - Sulfuric Acid
Sulfuric Acid

Nov 1947

PA 34T14 "The Sulfuric Acid Industry over Thirty Years of
Soviet Rule," K. M. Malin, Candidate in Technical Sci-
ences, 2 pp

"Khimicheskaya Promst'" No 11

Fyrite, extracted mainly in the Caucasus, amounted to
approximately 100,000 tons in 1912. In 1928, 200,000
tons of sulfuric acid were produced. A rate of 200 -
250 kilograms per square meter of sole of the furnace
was prevalent throughout most of the plants (Vosk-
resensk, Chernorechensk, Vinnitskij, Nerskij, and
others) before World War II. General information is
CON

USER/Chemistry - Sulfuric Acid (Contd) Nov 1947

Given on the historical development of the sulfuric
acid industry.

CON

34T14

Caking of pyrite and its prevention. K. M. Malin, F. N. Kel'man, and A. S. Grigor'eva. Khim. Prom. 1947, No. 3, 14-17.—Tests were run to determine the temperature at which pyrite starts caking, the loss of S through caking, and means of preventing it. The several kinds of pyrite tested caked at different temperatures. The caked material contained more FeS than the material that did not cake in all instances but in varying degree. Of the various additives tried, clay (>15%) and MgO (>5%) reduced caking appreciably. Boiler clinker (>10%) prevented caking entirely. However, the use of additives is undesirable, since it interfered with the subsequent use of the pyrite cinders. Mixing of various kinds of pyrite is effective and is recommended if possible. Caking in most instances is prevented if the temperature in any of the hearths exceeds 800°.

18

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R001031810010-6"

MALIN,K.M., kandidat tekhnicheskikh nauk; KEL'MAN,F.N., mladshiy nauchnyy sotrudnik; GRIGOR'YEVA,A.S.

Eliminating caking in pyrites. Khim.prom. no.3:78-79 Mr 47
(MIRA 8:12)

1. Nauchno-issledovatel'skiy institut po udobreniyam i insektofungisidam
(Pyrites)

MALIN, K. M.

Author: Malin, K. M.

Title: The technology of sulfur acids. (Tekhnologiya sverk kisloty) 570 p.

City: Moscow

Publisher:

Editor: State Scientific and Technical Pub. of Chemical Literature.

Date: 1950

Available: Library of Congress

Source: Monthly List of Russian Acquisitions, v. 3, no. 12, page 61

VALIN, K.M.

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

<u>Name</u>	<u>Title of Work</u>	<u>Nominated by</u>
Valin, K.M.	"Technology of Sulfuric Acid" (student manual)	Ministry of the Chemical Industry
Boreskov, G.K.		
Slin'ko, N.G.		
Arkin, I.L.		

SO: W-30604, 7 July 1954

MALIN, K. M., ARKIN, N. L., BORESKOV, G. K.
SLIN'KO, M. G.

Sulfuric Acid

"Production of sulfuric acid." Reviewed by D. A. Yepshteyn. Zhur.prikl.khim. 25 No. 4,
1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. Unclassified.

USSR/Chemistry - Sulfuric Acid Aug 52

"The Theory of the Nitroso Process in the Production of Sulfuric Acid," K. M. Malin, D. Ya. Imkina, Sci Res Inst for Fertilizers, Insecticides and Fungicides

"Zhur Pril Khim" Vol 25, No 8, pp 797-802

States that the deg of influence of sep factors on the speed of the processing of SO₂ by means of nitroso depends on the relative amounts of resistance by liquid and gas films in the over-all resistance to the process of acid formation, i.e.,

228r3

PA 228r3

on the hydrodynamic conditions of the process. Notes that varying hydrodynamic conditions under which different researchers have worked have led them to diverse conclusions as to the relative deg of influence of those factors and of the tem used.

228r3

MALIN, K. M.

USSR/Chemistry - Acids Sep 52

"The Kinetics of Acid Formation," D. Ya. Itkin, K. M. Malin, M. G. Pastukhova

"Zhur. Fiz. Khim." Vol 25, No 9, pp 912-918

In recent decades, as a result of the theoretical and practical study of the process, the productivity of the tower systems has been increased approximately 10 times. A further increase in the intensity of the systems will have to proceed both through a change in the technological method, based on the max use of

232T37

all kinetic possibilities of the given process, and through a change of the equipment used in the process. This work investigates the role of the liquid and gas films, and also the compn of the liquid phase in the treatment of SO₂. Expts show that the max possible intensity can be attained through the use of equipment which almost completely eliminates the resistance of the liquid and gas films and thus affords the max possibility of utilizing all the factors which increase the rate of the chem reaction (nitrose content, temp).

232T37

MALIN, K. M.

USSR.

Kinetics of acid formation. D. Ya. Itkina, K. M. Malin, and M. G. Pastukhova. *J. Appl. Chem. U.S.S.R.* 25, 1081-95 (1952) (Engl. translation); *Zhur. Priklad. Khim.*

25, 1023-31 (1952).—The effect of temp. and SO₂ concn. on the conversion of SO₂ to SO₃ was studied for max. liquid spray rates (in order to minimize the liquid film resistance

to mass transfer). The liquid phase was an acid spray with a concn. of N oxides equiv. to 7% HNO₃. The gas-phase SO₂ concn. was varied from 4 to 10%. Over the temp. range from 80 to 130°, the conversion of SO₂ to SO₃ increased with temp.; the effect was most marked at SO₂ concns. greater than 10%. The effect of temp. on the conversion of SO₂ to SO₃ was explained as a balance between 2 opposing factors. As the temp. increased, the chem. reaction velocity increased owing to an increase in the rate of hydrolysis. However, this effect was opposed by an increase in the gas film resistance to mass transfer at the higher temps. At temps. greater than 100°, the increases in the gas film resistance to mass transfer were sufficient to significantly reduce the rate of increase in SO₃ conversion. The effect of O concn. in the gas phase was insignificant for SO₃ conversion at the high liquid rates and N oxide concns. studied.

I. Leibson

1. MALIN, K.
2. USSR (600)
4. Agricultural Chemistry
7. For high yields, Sov. soiuz, no. 2, 1953.

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

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6

MALIN, K.M., doktor tekhnicheskikh nauk, professor, laureat Stalinskoy premii; OCHKIN, A.V., inzhener.

Soda. Nauka i zhizn' 20 no.4:10-12 Ap '53.

(MLRA 6:5)
(Soda industry)

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6"

MALIN, K.M.

The task of science in connection with the development of the
production of mineral fertilizers. Soob.o nauch.rab.chl.VKH0
no.3:1-6 '54. (MIRA 10:10)
(Fertilizers and manures)

FD-958

USSR/Chemistry - Sulfuric acid production

Card 1/1 Pub. 50 - 1/19

Author : Malin, K. M.

Title : New possibilities of increasing the efficiency of mechanical furnaces.

Periodical : Khim. prom., No 7, 385-7, (1-3), Oct-Nov 1954.

Abstract : States that as a result of experimental work done by the personnel of the Voskresensk Chemical Combine and of NIUIF, an efficiency corresponding to an operational load of 300 kgs. of 45% pyrite per 1 square meter of furnace bottom was achieved, and that most plants at present operate at an increased load of 200 kgs or higher. Outlines improvements in design and operational procedures which will increase the efficiency of pyrite furnaces. Sets as an immediate goal a load of 300 kgs per square meter and as a more remote goal one of 500 kgs per square meter.

Institution : Scientific Research Institute of Fertilizers and Insectofungicides (NIUIF).

MALIN, K.M.

Tasks next in turn in the field of mineral fertilizers. Zhur.
prikl.khim. 27 no.3:229-236 Mr '54. (MLB 7:3)
(Fertilizer industry)

MALIN, K. M.
USSR/Chemistry - Sulfuric acid production

FD-1726

Card 1/1 : Pub. 50-2/18

Author : Malin, K. M.

Title : Basic measures for lowering the consumption of nitric acid in the production of sulfuric acid by the tower method

Periodical : Khim. prom., No 1, 10-13, Jan-Feb 1955

Abstract : States that although the improved efficiency which has been achieved in the production of sulfuric acid by the tower method does not necessitate an increased consumption of nitric acid, this consumption is still too high. Recommends specific measures for reducing the amount of nitric acid used and brings out that many of them will improve the efficiency.

MALIN, K.

Production of sulfuric acid. p. 120

Vol. 5, no. 2, Feb. 1955
PRIRODNI VEDY VE SKOLE
Praha, Czechoslovakia

So: Eastern European Accession Vol. 5, No. 4, 1956

MALIN, K.M., professor

Manufacture of mineral fertilizers. Khim.v shkole 10 no.3:3-15 Hy-Je
'55. (Fertilizer industry) (MIA 8:8)

USSR/Chemical Technology. Chemical Products and Their Application -- Fertilizers,
I-6

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5058

Author: Malin, K. M.

Institution: None

Title: State of Production of Fertilizers and Current Problems

Original

Publication: Khim. nauka i prom-st', 1956, 1, No 2, 125-128

Abstract: Review of the planned development of the industry of mineral fertilizers in the USSR during the Sixth Five-Year Period.

Card 1/1

USSR/Chemical Technology. Chemical Products and Their Application -- Sulfuric acid, sulfur, and its compounds,
I-2

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5003

Author: Malin, K. M.

Institution: None

Title: Methods of Roasting of Sulfur-Containing Raw Materials

Original

Publication: Khim. nauka i prom-st', 1956, 1, No 2, 174-185

Abstract: A review. Intensification of pyrite roasting in the mechanized furnaces of Voskresenskiy and other chemical plants. The furnaces are of the pulverized roasting type: Saint Jacques, Nicols-Freeman, bottom feed of pyrite (USSR); experiments on roasting with agglomerate production and with production of fused cinders. Horizontal revolving furnaces. Furnaces for pseudo-fluidized bed roasting: Lurgi, "Flow-Solid," etc. High temperature roasting. Combustion of S in melted

Card 1/2

USSR/Chemical Technology. Chemical Products and Their Application -- Sulfuric acid,
sulfur, and
its compounds,
I-2

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5003

Abstract: form, in reverberatory furnace, in redesigned mechanized furnace of
the Nevskiy plant. Roasting of gypsum, anhydride, kieserite; experi-
ments on roasting of phospho-gypsum. Prospects of roasting of sulfur-
containing raw materials in O₂ or with oxides of Fe and production of
concentrated SO₂. Bibliography, 10 references.

Card 2/2

MALIN, K.M., professor.

Chemical means for controlling diseases and pests of plants.
Khim. v shkole 11 no.1:9-16 Ja-F '56. (MLRA 9:2)
(Agricultural chemicals)

MALIN, K.M., doktor khimicheskikh nauk, professor.

Fertilizer-concentrates. Nauka i zhizn' 23 no.5:15-18 '56.
(MLRA 9:8)

1. Direktor nauchno-issledovatel'skogo instituta udobreniy i
insektofungisidov.
(Fertilizers and manures)

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6

MAB 2 101 K.M.

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6"

M. M. K. M.

✓ Effect of rate of wetting on the rate of absorption of nitrogen oxides by sulfuric acid. A. N. Kudryavtsev and V. S. Kuznetsov. Zhur. Fizich. Khim. 29, No. 4 (1955).

Abstract. The rate of absorption of 4.0-4.5% NO-NO₂ in 78% H₂SO₄ at 30° was determined in a wetted-wall glass column, diam. = 0.612 m., working height = 0.220 m., and wetted surface = 0.00893 sq. m. The NO obtained from NaNO₂ + KI (2:1) and 50% H₂SO₄ scrubbed with NaOH and dried with H₂O₂ was oxidized with air and finally dried with N₂. The exit gases were scrubbed with concn. H₂SO₄

*and with 3% HNO₃. The value of Henry's const. necessary for the evaluation of the partial pressures of NO-NO₂ in the effluent H₂SO₄ was obtained from the datum Kudryavtsev (C.I. 38, 957). For gas velocities *V* of 10 and 20 cm./sec. the values of *K_f*, 15.97 and 21.33 k_p/sq. m. atm., were independent of the liquor rate *w* in the range of 10-60 ml./min. For *V* = 30 and 60 cm./sec. the variation with *w* was slight, so that *K_f* = *cw*^{0.9} (where *c* is a const.). The results of Kuznetsov (C.I. 42, 3243) with packed towers indicating the contrary are ascribed to the likelihood that in a packed tower not all of the packing is completely wetted. The plots of log *K_f* vs. 1/*V*ⁿ were linear functions passing through the origin; this indicated that the liquid film resistance was negligible; the values of *n* at 20, 30, 40, and 50° were 0.44, 0.49, 0.50, and 0.61, respectively. L. Benecarit.*

*2
3
0
0*

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6"

"APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6

✓ Effect of linear velocity of nitrogen oxide gas and the
temperature on the rate of absorption by sulfuric acid.
A. S. Bakhman and K. M. Maini, J. Appl. Chem. U.S.S.R.,
29, 551-8 (1966) (English translation). See C.A. 60, 151965.

B. M. R.

APPROVED FOR RELEASE: 06/20/2000

CIA-RDP86-00513R001031810010-6"