TIKUNOVA, Ye.I.

Candidamycotic pleuritis. Sov.med. 23 no.7:83-84 Jl '59.
(MIRA 12:11)

1. Iz propedevticheskoy terapevticheskoy kliniki (zav. - prof. S.V.Shestakov) Kuybyshevskogo meditsinskogo instituta.
(MONILIASIS)
(PLEURISY)

ACC NR: AP6021572 (A) SOURCE CODE: UR/0131/66/000/003/0059/0061

AUTHOR: Nazarenko, N. D.; Vlasko, N. I.; Tikush, V. L.; Skryabinskaya, L. V.

ORG: Institute of Materials Research, AN UkrSSR (Institut Problem Materialovedeniya, AN SSSR)

TITLE: Superduty nonfired refractories with magnesium phosphate used as the binder

SOURCE: Ogneupory, no. 3, 1966, 59-61

TOPIC TAGS: refractory, magnesium compound, phosphate, nonclay refractory product

ABSTRACT: Superduty concretes were experimentally produced on using fused-magnesite wastes of electric-heater production and monosubstituted magnesium phosphate. The phosphate was obtained by adding small portions of active MgO to preheated phosphoric acid:

$$MgO + 2H_3PO_4 \rightarrow Mg(H_2PO_4)_2 + H_2O$$

and evaporating the solution until a dry residue remained. This residue, dry monosubstituted magnesium phosphate, was added as the binder to the charge. Specimens of the resulting material were immediately pressed in semi-dry form in a hydraulic press and dried, first in

Card 1/2 UDC: 666:856

ACC NR: AP6021572

air and then at 100–110°C (when the final setting of the phosphate binder additionally enhanced the strength of the material). The dry specimens were heated to 900°C in a muffle furnace and to 1700°C in a Kryptol furnace. Findings indicate that the minimum spalling resistance of the specimens after heating at 900°C is sufficiently high, and that it increases markedly when they are heated at 1200–1500°C. The material thus developed may be primarily recommended for the production of rammed refractory linings and accessories (including flame tubes) for high-temperature furnaces of the laboratory type. Orig. art. has: 5 tables.

SUB CODE: 11 / SUBM DATE: none/ OTH REF: 002

Card 2/2

TIKVESANSKI, S.

Affirmation of the Electrical Factory "Jug" on domestic and foreign markets. Elektroprivreda 14 no.7/8:401-403 Jl-Ag '61.

THE A.

1ST AND 2ND ORDERS

Corrosion of metals as an electrochemical problem. A.
Fil. *Sbornik Elektrokhim. Teoriya Korrozii* 1938, 30-32.—Theoretical
Khim. Referat. Zhur. 2, No. 1, 130-1(1939).—The theory
of the mechanism of corrosion are reviewed. That absolutely
of local elements is of most importance. That absolutely
pure metals do not corrode was verified on a sample of
specially purified Zn. A slight corrosion of Zn in 0.5 N
HCl took place only at breaking points, or scratches.
Corrosion of ordinary Zn was different in different samples.
and it even changed on polishing over the same sample.
In all cases (after an initial period) the soln. velocity was
const. When Zn was connected to an electrode of a dif-
ferent metal contained in the same soln. the corrosion
velocity increased while the amt. of H (evolved on Zn
decreased (difference effect). The value of the difference
effect was proportional to the current flowing in the ele-

ment. This is explained by the increase of the concn. of
Zn in the contact layer of the soln., which was caused by
increased soln. of Zn, and which was connected with the
change of the potential of Zn. In strong currents passivity
of the electrode is possible. The increasing action depends
on the nature of the metal of the auxiliary electrode (in-
creases with a decrease of the overvoltage of H). For Al
(sol. in alkali) the difference effect is larger than for Zn.
When dissolved in HCl the difference effect of Al is op-
posite in sign (the reason remains undetd.). The acceler-
ating action of graphite on the soln. of Zn cannot be ex-
plained by low overvoltage of H on graphite, since this is
of the same order of magnitude as that of Pb.

W. R. H.

A.S.M.-S.L.A. METALLURGICAL LITERATURE CLASSIFICATION

TIL, A.V.

AID Nr. 990-6 14 June

SCIENTIFIC-TECHNICAL CONFERENCE ON MODERN GYROSCOPE TECHNOLOGY (USSR)

Izvestiya vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 6, no. 2, 1963, 156-158. S/146/63/006/002/010/010

The Fourth Conference on Gyroscope Technology, sponsored by the Ministry of Higher and Secondary Special Education RSFSR, was held at the Leningrad Institute of Precision Mechanics and Optics from 20 to 24 November 1962. The conference was attended by representatives from 93 organizations in 30 S[illegible] cities, including educational establishments, scientific research institutes, design bureaus, and industrial concerns. The following are some of the topics covered in the 92 papers presented and discussed at the conference. Vibrations of a gyroscope pendulum with a movable suspension in a nonuniform gravitational field: M. Z. Litvin-Sedoy, Senior Scientific Worker; improving dynamic characteristics of some gyro instruments and devices: A. V. Reprikov, Docent, Candidate of Technical Sciences; some problems of the dynamics of a gyroscope with an electric drive installed in a gymbol suspension: S. A.

Card 1/3

AID Nr. 990-6 14 June

SCIENTIFIC-TECHNICAL CONFERENCE [Cont'd] S/146/63/006/002/010/010

Kharlamov, Engineer; problems of the theory of the inertial method for measuring aircraft acceleration: I. I. Pomykayev, Docent, Candidate of Technical Sciences; determining the drift of a floated-type integrating gyroscope without the use of a dynamic stand: G. A. Slomyanskiy, Docent, Candidate of Technical Sciences; natural damping of nutational vibrations of a gyroscope: N. V. Gusev, Engineer; motion of a not quite symmetrical gyroscope pendulum with vertically movable support: A. N. Borisova, Aspirant; gyroscope-type inclinometer for surveying vertical freezing wells: V. A. Sinitsyn, Candidate of Technical Sciences; effect of joints between channels in triaxial gyro-stabilized platform: L. N. Slezkin, Engineer; theoretical proposal for the possible design of a generalized gyro instrument: M. M. Bogdanovich, Docent, Candidate of Technical Sciences; problem of drift in a power-type triaxial gyro stabilizer: V. N. Karpov, Engineer; methods of modeling random disturbances in gyro systems: S. S. Shishman, Senior Engineer; method of noise functions for investigating a system subjected to random

Card 2/3

AID Nr. 990-6 14 June

SCIENTIFIC-TECHNICAL CONFERENCE [Cont'd] S/146/63/006/002/010/010

signals: G. P. Molotkov, Docent, Candidate of Technical Sciences; drifts in a gyro-stabilized platform as a result of the effect of cross joints under determined and random disturbances: B. I. Nazarov, Docent, Candidate of Technical Sciences; stability and natural oscillations in inhomogeneously rigid gyro systems with backlash under external influences: S. A. Chernikov; methods of designing a gyro vertical with automatic latitude and course corrections: A. V. Til', Candidate of Technical Sciences; use of asymptotic methods in solving problems of the motion of an astatic gyroscope in gymbol suspension: D. M. Klimov, Candidate of Physical and Mathematical Sciences, and L. N. Slezkin; theory of aperiodic gyro pendula: V. S. Mochalin, Docent, Candidate of Technical Sciences; and selecting basic parameters of course gyros by using nomograms: V. P. Demidenko, Engineer. [AS]

Card 3/3

TIL', A. V. (Candidate of Technical Sciences)

"Methods of designing a gyro vertical with external influences"

report presented at the Scientific-technical Conference on Modern Gyroscope Technology Ministry of Higher and Secondary Special Education RSFSR, held at the Leningrad Institute of Precision Mechanics and Optics, 20-24 November 1962

(Izv. vysshikh uchebnykh zavedeniy. Priborostroyeniye, v. 6, no. 2, 1963)

TIL', A.V.

KUZ'MIN, V.I., dots., kand. tekhn. nauk; BULOKHOV, E.A., inzh.; TIL', A.V., inzh.

ALS-1 instrument used for locating faults in communication lines having steel and nonferrous metal wiring. Sbor. nauch. trud. LETIIZHT no.5:118-132 '53. (MIRA 11:3)
(Pulse techniques (Electronics)) (Railroads--Communication systems)

TIL', B.L.; SUSLOV, V.P.

Mechanical welding of the axle shaft housing of the ZIL-157 automobile (MIRA 14:6)
Avt.prom. 27 no.6:37 Je '61.

1. Moskovskiy avtozavod imeni Likhacheva.
(Automobiles—Welding)

TIL', Z.K.; MARKUSHINA, I.; SAPUNAR, K.; PONOMAREV, A.A.

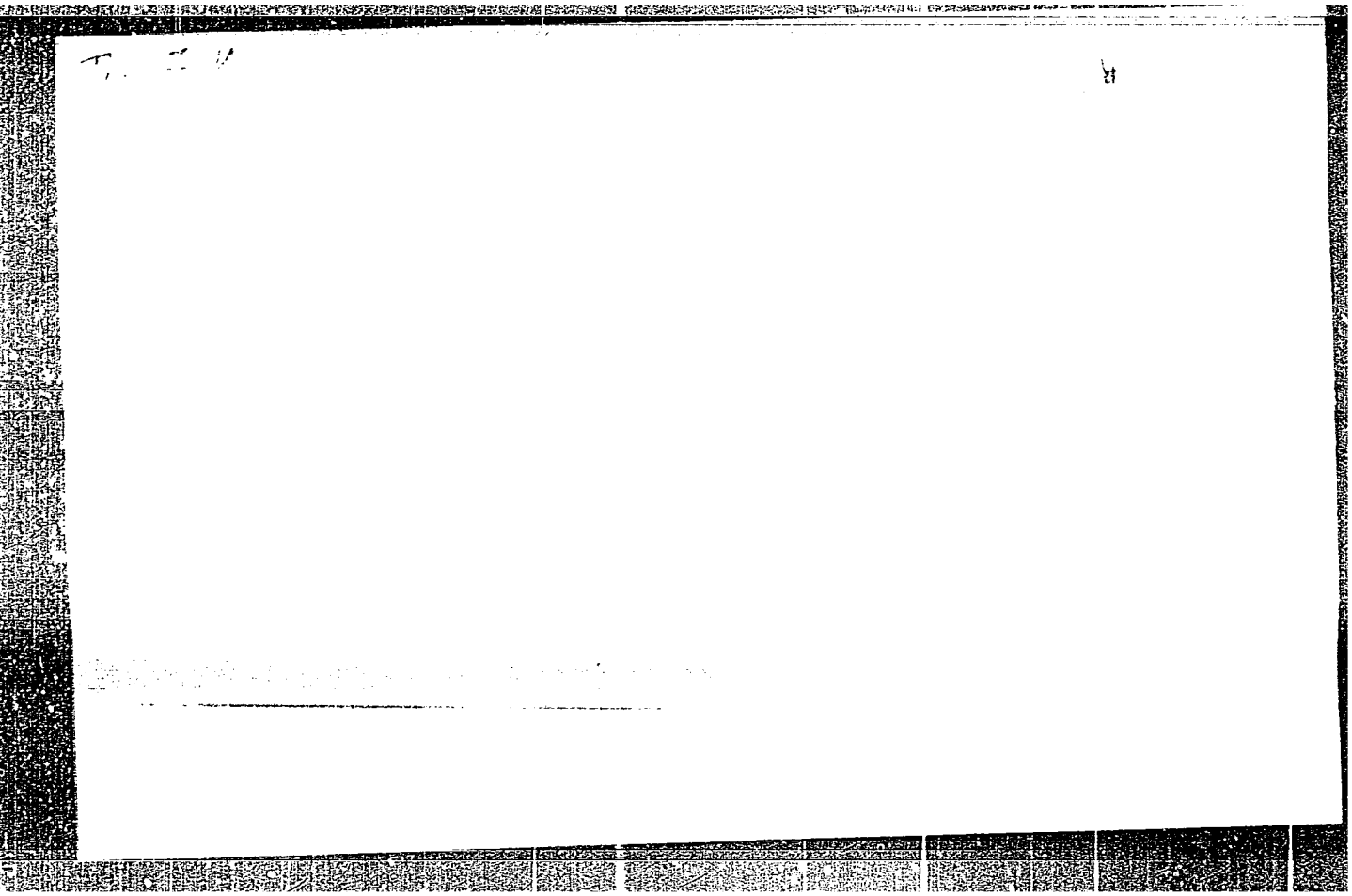
Study of furan compounds. Part 7: Two-stage hydration of furfurylidene ketones. Zhur. ob. khim. 27 no.1:110-117 Ja '57. (MLRA 10:6)

1. Saratovskiy gosudarstvennyy universitet.
(Furaldehyde)

PONOMAREV, A.A.; TIL', Z.V.; SEDAVKINA, V.A.

Furan compounds. Part 25: Dehydration of furan and tetrahydrofuran alcohols and synthesis of furyl- and tetrahydrofuryl alkanes. Zhur. ob.khim. 33 no.12:3951-3954 D '63. (MIRA 17:3)

1. Saratovskiy gosudarstvennyy universitet imeni Chernyshevskogo.



APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R001755620020-3"

TIL', Z.V. Cand Chem Sci -- (diss) "Synthesis and catalytic conversions of secondary and tertiary Furan alcohols and their derivatives." Saratov,1957. 19 pp 19 cm. (Min of Higher Education USSR. Saratov State Univ im N.G. Chernyshevskiy). 150 copies. (KL, 23-57, 109).

TIL'72 V.

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61529

Author: Ponomarev, A. A., Til', Z. V.

Institution: None

Title: Synthesis and Dehydration of Tertiary Furan Alcohols

Original Periodical: Nauchn. yezhegodnik za 1954 g., Saratovskiy un-t, Saratov, 1955, 497-500

Abstract: By interaction of 2-acetylfuran or 1-(α-furyl)-alkanones-3 or -5 with Mg-alkyl halides have been synthesized the tertiary furan alcohols: $C_4H_3O-(CH_2)_nCOH(CH_3)R$ (I) (listing n, R, yield in %, BP in ° C, $n^{20}D$, d_4^{20}: 0, C_6H_5 (Ia), 50, 112-116°/2, 1.5558, 1.1220; 0, C_4H_9, 59, 64-71/2.5, 1.4706, 0.9843; 0, iso-C_5H_{11}, 43, 81-82.5/2.5, 1.4679, 0.9648; 0, CH_2C[redacted] 58, 123-124/3, 1.5340, 1.081; 2, C_2H_5, 72, 81-83/2, 1.4787, 0.9942; 2, C_4H_9, 63, 114-116/3.5, 1.4746, 0.9683; 2, [redacted]$_5H_{11}$, 55, 130-132/7, 1.4730, 0.9[redacted]75; 4, CH_3, 64, 96-98/2.5, 1.4731, 0.9974. I, in which n = 0, were dehydrated

Card 1/2

USSR/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61529

Abstract: with 60% yield by short heating to 5[illegible] in presence of a crystal of J_2; other I were dehydrated by passing their vapors at 220-240°/5-10 mm through tube containing aluminum silicate catalyst; thus from Ia was obtained 1-(α-furyl)-1-phenylethylene, BP 105-107°/2 mm, $n^{20}D$ 1.5770, d_4^{20} 1.086; in other instances were obtained α-furylalkenes $C_4H_3O-(CH_2)_n-C(CH_3)$ = CHR (listing n, R, BP °C, $n^{20}D$, d_4^{20}): 0, C_3H_7, 72-74/15, 1.4940, 0.9273; 0, iso-C_4H_9 [illegible] (II), 92-94/15, 1.4910, 0.9122; 0, C_6H_5, 131-133/5, 1.5986, [illegible]; 2, CH_3, 65-67/8, 1.4735, 0.9222; 2, C_3H_7, 91-94/8, 1.4720, [illegible] 0.9[illegible]47; 2, iso-C_4H_9, 98-1[illegible]/8, 1.4705, 0.9017; 4, CH_3, 80-82/8, 1.4717, 0.9121. II was hydrogenated in alcohol over PtO_2 (activated $FeSO_4$) to 2-(α-tetrahydrofuryl)-5-methylhexane, BP 83.5-85.5°/10 mm, $n^{20}D$ 1.4390, d_4^{20} 0.8498.

Card 2/2

AUTHORS: Til', Z. V.; Markushina, I.; Sapunar, K.; and Ponomarev, A. A.

TITLE: Study of Furan Compounds. Part 7. Two-Stage Hydrogenation of Furfurylidene Ketones (K izucheniyu furanovykh soyedineniy. VII. Dvukhstadiynoye gidrirovaniye furfurilidenketonov)

PERIODICAL: Zhurnal Obshchey Khimii, 1957, Vol. 27, No. 1, pp. 110-116 (U.S.S.R.)

ABSTRACT: The authors describe the results obtained during two-stage hydrogenation of several furfurylidene ketones synthesized with a yield of 60 to 86% during the condensation of furfurole and homologous ketones, namely: furfurylidenemethylethyl ketone, furfurylidenemethylpropyl ketone, furfurylidenemethylbutyl ketone, furfurylidenemethylamyl ketone, furfurylidenemethylisohexyl ketone, furfurylideneacetophenone, furfurylidenepropiophenone and furfurylidenebenzylideneacetone. The furan alcohols obtained were hydrogenated over kieselguhr catalysts and converted into tetrahydrofuran alcohols. The secondary reaction products obtained were identified as alkyl and aryl homologues of 1,6-dioxaspiro (4,4) nonane. Tables 1 and 2 offer data about the most important physical constants and analyses of all products obtained from hydrogenation. Pressure hydrogenation

Card 1/2

of furfurylideneacetophenone and furfurylidene propiophenone in dioxane as solvent and Raney's Ni at 135 - 140° led to immediate hydrogenation of the furan cycle and elimination of the carbonyl oxygen. Experimental data are presented showing that the condensation of furfurole with methylalkyl ketones results in the formation of furfurylidene ketones of normal structure. The properties of a liquid product obtained from the alcohol-phenylisocyanate reaction were not investigated.
Two tables. There are 30 references, of which 8 are Slavic.

ASSOCIATION: Saratov State University (Saratovskiy Gosudarstvennyy Universitet)

PRESENTED BY:

SUBMITTED: February 14, 1956

AVAILABLE:

PONOMAREV, A.A.; SEDAVKINA, V.A.; TIL', Z.V.

Furan compounds. Part 22: Influence of the structure of α-furyl alkanols on the reaction orientation during their catalytic hydrogenation. Zhur.ob.khim. 33 no.4:1303-1309 Ap '63. (MIRA 16:5)

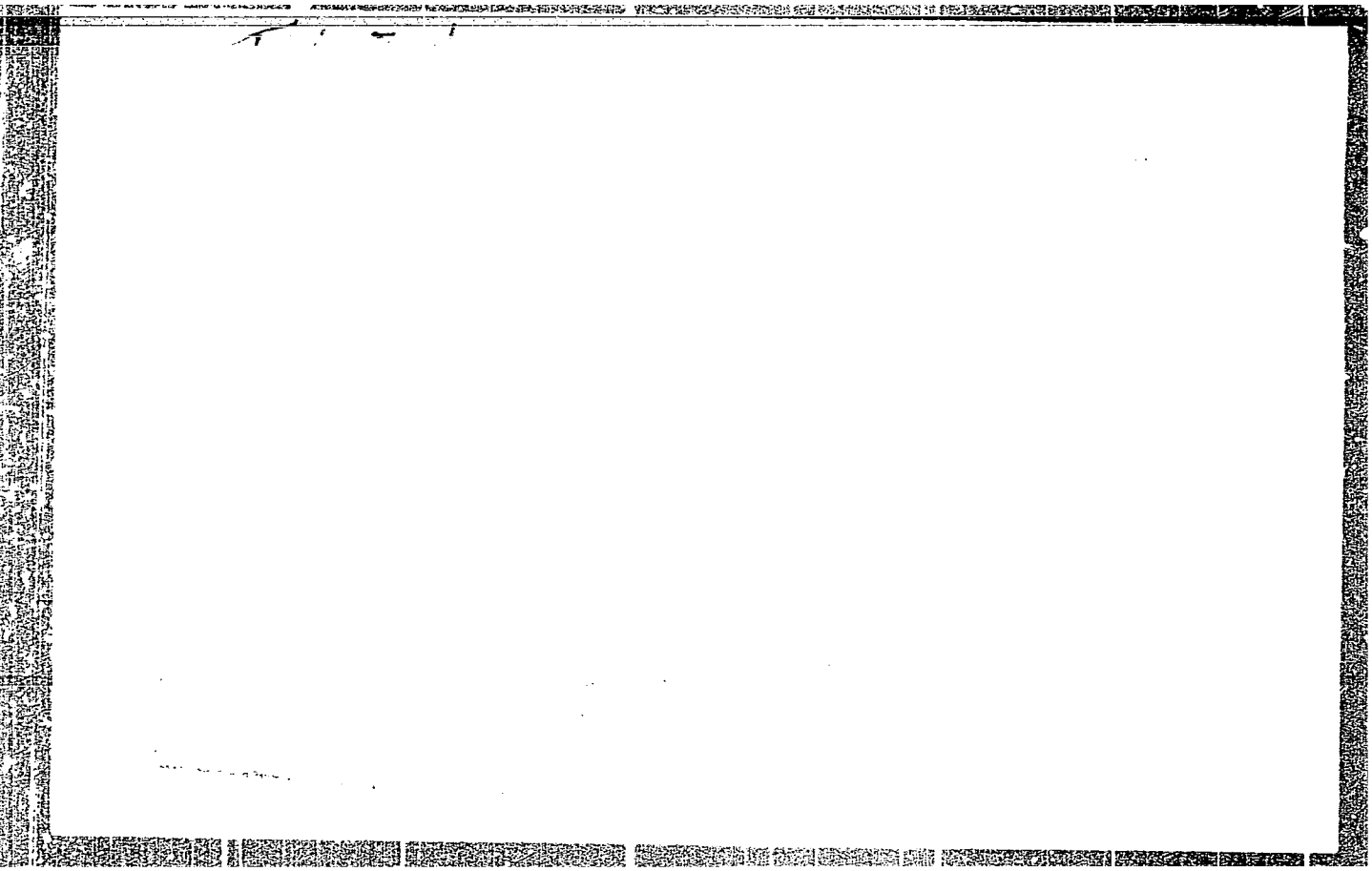
1. Saratovskiy gosudarstvennyy universitet imeni N.G.Chernyshevskogo.
(Furfuryl alcohol) (Hydrogenation)

TIL' Z V

PONOMAREV, A.A.; TIL', Z.V.; PESHEKHONOVA, A.D.; RESHETOV, V.P.

Study of furan compounds. Part 9: Synthesis and hydration of tertiary γ-furylalkanols. Zhur.ob.khim. 27 no.5:1369-1374 My '57. (MLRA 10:8)

1.Saratovskiy gosudarstvennyy universitet.
(Furan)



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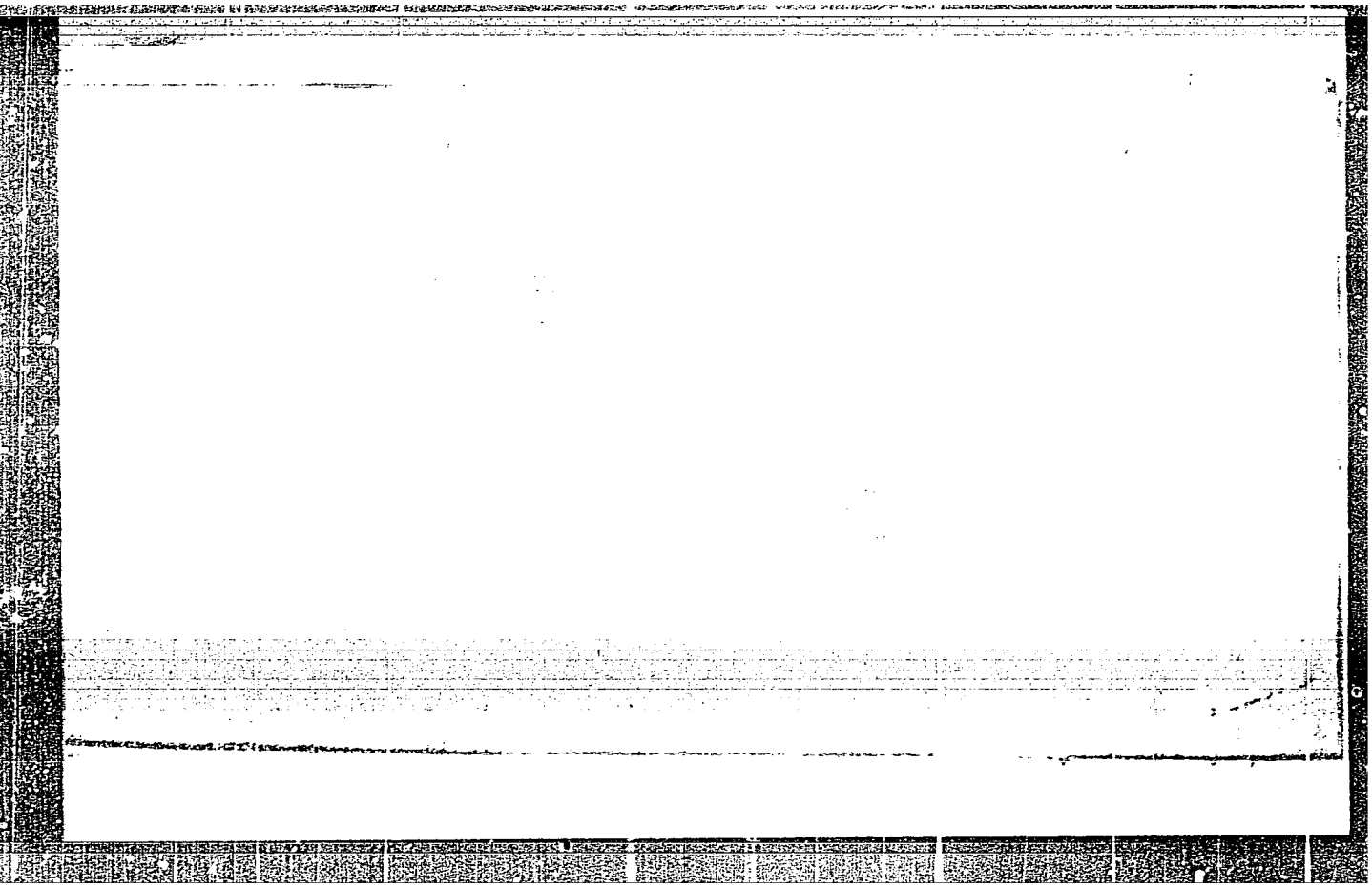

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TIL', Z. V.

PONOMAREV, A.A.; TIL', Z.V.

Study of furan compounds. Part 8: Selective hydration of the ethylene bond of α,β-unsaturated furan aldehydes and ketones in the presence of Raney's nickel catalyst. Zhur. ob. khim. 27 no.4:1075-1078 Ap '57. (MLRA 10:8)

1. Saratovskiy gosudarstvennyy universitet.
(Furan)

F, L, 2. V.

Distr: 4E4j/4B3d/4S2c(1)

Furan compounds. VIII. Selective hydrogenation of the ethylene bond in α,β-unsaturated aldehydes and ke-

A. A. Ponomarev, Z. V. Til

IX. Synthesis and hydrogenation of tertiary ω-(furyl)alkanols. A. A. Ponomarev, Z. V. Til, A. D. Pralnikova, and V. F. Kezhetov. *Ibid.* 1959 [illegible] Reaction of Grignard reagents with appropriate ketones, 1-(2-furyl)-3-butanone, 1-(2-furyl)-6-methyl-3-hexanone, or [illegible](furyl)-6-hexanone, yielded the following alcs.: 87.5% [illegible] $H_2CH_2CMe_2OH$ b₁ 81.3°, [illegible] 92.5°, n_D^{20} 1.4787, d_{20} 0.9943 [illegible] 1.4770 [illegible] 1.4708 [illegible] 0.9649 [illegible] $CH_2CH_2CHMeCH_2CH_2C(OH)Me_2$ [illegible] 1.4730 [illegible] 1.4731 [illegible] These were hydrogenated at 130° at [illegible] [illegible]

[illegible]

R were obtained in the indicated yields after fractionation. I (*R* shown): *Et*, b₁₄ 102-4°, 1.4443, 0.9014 (23.7%); *Pr*, b₁₀ 84-6°, 1.4406, 0.9499 (16%); *Bu*, b₁₂ 99-101°, [illegible]4490, 0.9399 (41.3%); *iso-Bu*, b₁₂ 90-3°, 1.4470, 0.9340 (14.3%); *iso-Am*, b₁₄ 107.5-9.5°, 1.4483, 0.9304 (36%). II (*R* shown): *Et*, b₁₄ 114-15°, 1.4608, 0.9629 (68.0%); *Pr*, b₁₄ 129-31°, 1.4622, 0.9551 [illegible] [illegible] 1.4604, 0.9407 [illegible] 1.461 [illegible]

[illegible]

PONOMAREV, A.A.; TIL', Z.V.; MARKUSHINA, I.; SAPUNAR, K.; NESMEYANOV, A.N., akademik.

Multistep hydrogenation of furfurylidene ketones. New homologs of 1,6-dioxaspiro (4,4)nonane. Dokl.AN SSSR 93 no.2:297-300 N '53. (MLRA 6:10)

1. Akademiya nauk SSSR (for Nesmeyanov). (Hydrogenation) (Nonane)

PONOMAREV, A.A.; TIL', Z.V.

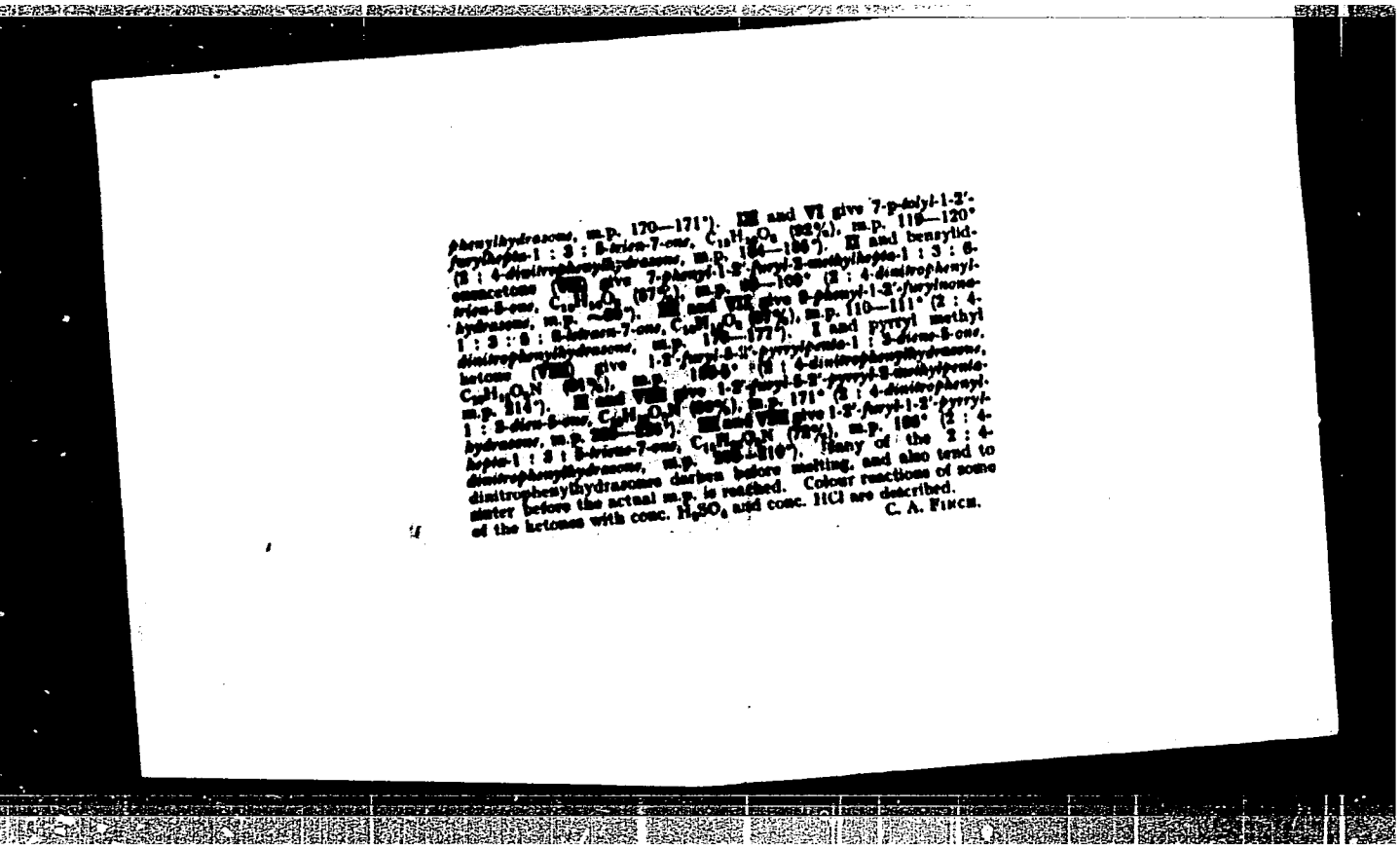
Furan compounds. Part 27: Synthesis of some 2-(2'-furyl)-1,3,4-oxadiazoles and furoylhydrazones. Zhur.ob.khim. 33 no.7:2368-2372 Jl '63. (MIRA 16:8)

1. Saratovskiy gosudarstvennyy universitet imeni Chernyshevskogo.
(Oxadiazole) (Hydrazones)

8A

Polyene ketones of the furan series. A. A. Ponomarev, Z. V. Tikhonova, and V. V. Zelenkova (*J. gen. Chem. USSR*, 1960, **30**, 1085—1091 [U.S. transl., 1127—1132]).—Furan unsaturated aldehydes condense with alkyl, alkylaryl, and heterocyclic methyl ketones, giving good yields of the corresponding di-, tri-, and tetra-ene ketones. The prep. and most important properties of polyene ketones of the furan series, formed by the condensation of β-2′-furylacrolein with methyl hexyl ketone, methyl nonyl ketone, and pyrryl methyl ketone, of 1-2′-furfurylidenepropanol with *p*-methylacetophenone, benzylideneacetone, and pyrryl methyl ketone, and of furyl pentadienal with pinacoline, methyl isobutyl ketone, methyl hexyl ketone, methyl nonyl ketone, PhCOMe, *p*-methylacetophenone, benzylideneacetone, and pyrryl methyl ketone. Furan ketones with aliphatic radicals do not give a colour reaction with conc. H_2SO_4, HCl, or Br. The other ketones prepared exhibit halochromism.

All the polyene ketones are prepared by using a 1 : 1-molar ratio of β-2′-furylacrolein (II), 1-2′-furfurylidenepropanol (III), or furylpentadienal (III) with the ketone in aq. EtOH under the influence of 10% NaOH. With III and pinacoline the product is 1-2′-*furyl*-6 : 6-*dimethylhepta*-1 : 3 : 5-*trien*-7-*one*, $C_{15}H_{16}O_2$ (81%), m.p. 98° (2 : 4-*dinitrophenylhydrazone*, m.p. 156—157°). III and isobutyl methyl ketone give 1-2′-*furyl*-5-*methylhexa*-1 : 3 : 5-*trien*-7-*one*, $C_{14}H_{16}O_2$ (71%), m.p. 83° (2 : 4-*dinitrophenylhydrazone*, m.p. 210°). I and methyl hexyl ketone (IV) give 1-2′-*furylnona*-1 : 3-*dien*-5-*one*, $C_{17}H_{22}O_2$ (66%), m.p. 59—60° (2 : 4-*dinitrophenylhydrazone*, m.p. 124—125°). III and IV give 1-2′-*furyltrideca*-1 : 3 : 5-*trien*-7-*one*, $C_{21}H_{26}O_2$ (82%), m.p. 78° (2 : 4-*dinitrophenylhydrazone*, m.p. 128—129°). I and methyl nonyl ketone (V) give 1-2′-*furylundeca*-1 : 3-*dien*-5-*one*, $C_{19}H_{26}O_2$ (48%), m.p. 63° (2 : 4-*dinitrophenylhydrazone*, m.p. 88—89°). III and V give 1-2′-*furyltetradeca*-1 : 3 : 5-*trien*-7-*one*, $C_{23}H_{30}O_2$ (90%), m.p. 91° (2 : 4-*dinitrophenylhydrazone*, m.p. 111—112°). III and COMeMe give 7-*phenyl*-1-2′-*furylhepta*-1 : 3 : 5-*trien*-7-*one*, $C_{17}H_{16}O_2$ (90%), m.p. 86—87° (2 : 4-*dinitrophenylhydrazone*, m.p. 180°). II and *p*-methylacetophenone (VI) give 1-2′-*furyl*-6-(*p*-*tolyl*)-2-*methylhexa*-1 : 3-*dien*-5-*one*, $C_{18}H_{18}O_2$ (41%), m.p. 107—108° (2 : 4-*dinitro*-



phenylhydrazone, m.p. 170—171°). III and VI give 7-*p*-tolyl-1-2'-furylheptan-1 : 3 : 5-trien-7-one, $C_{18}H_{16}O_2$ (82%), m.p. 119—120° (2 : 4-*dinitrophenylhydrazone*, m.p. 184—186°). II and benzylidenacetone give 7-phenyl-1-2'-furyl-3-methylheptan-1 : 3 : 6-trien-5-one, $C_{18}H_{16}O_2$ (87%), m.p. 98—100° (2 : 4-*dinitrophenylhydrazone*, m.p. ~200°). III and VIII give 6-phenyl-1-2'-furylhexan-1 : 3 : 5 : 6-tetren-7-one, $C_{18}H_{16}O_2$ (80%), m.p. 110—111° (2 : 4-*dinitrophenylhydrazone*, m.p. 176—177°). I and pyruvyl methyl ketone (VIII) give 1-2'-furyl-3-2''-pyruvylpenta-1 : 3-dien-5-one, $C_{12}H_{11}O_3N$ (60%), m.p. 169·5° (2 : 4-*dinitrophenylhydrazone*, m.p. 214°). III and VIII give 1-2'-furyl-3-2''-pyruvyl-3-methylpenta-1 : 3-dien-5-one, $C_{13}H_{13}O_3N$ (60%), m.p. 171° (2 : 4-*dinitrophenylhydrazone*, m.p. 208—210°). III and VIII give 1-2'-furyl-1-2''-pyruvylhepta-1 : 3 : 5-trien-7-one, $C_{15}H_{13}O_3N$ (78%), m.p. 188° (2 : 4-*dinitrophenylhydrazone*, m.p. 208—210°). Many of the 2 : 4-dinitrophenylhydrazones darken before melting, and also tend to sinter before the actual m.p. is reached. Colour reactions of some of the ketones with conc. H_2SO_4 and conc. HCl are described.

C. A. Finch.

C A

Some polyene ketones of the furan series. A. A. Ponomarev, Z. V. Til, and V. V. Zelenkova (N. G. Chernyshev State Univ., Saratov). *Zhur. Obshchei Khim.* (J. Gen. Chem.) 20, 1085-91 (1950).—Furan-based unsatd. aldehydes readily react with Me ketones and yield di-, tri-, and tetraene ketones. *2-Furanacrolein* was prepd. by König's method (*C.A.* 20, 1235) in 72.5% yield when −3° reaction temp. and 3.5 hrs.' duration were used. *Furylpentadienal* was also made according to König, while *1-(2-furfurylidene)propine* was prepd. from furfural and EtCHO according to D. Ivanov (*C.A.* 19, 1138). All following ketones were prepd. analogously by condensation of the above ketones with RCOMe in aq. alc. with 10% NaOH. A typical example: 4 g. 2-furanacrolein and 5.58 g. $C_6H_{11}COMe$ in 25 ml. 70% EtOH with 4 ml. 10% NaOH gave in 24 hrs. 45% *1-(2-furyl)-1,3-tetradecadien-5-one*, m. 63° (from EtOH) (*2,4-dinitrophenylhydrazone*, m. 85-6°). Other un satd. *1-(2-furyl)alkanones* prepd. (m.p. of *2,4-dinitrophenylhydrazone* in parentheses) included: *8,8-dimethyl-1,3,5-nonatrien-7-one*, m. 92°, (136.7°) in 51% yield; *9-methyl-1,3,5-decatrien-7-one*, m. 53°, (210°); *1,3-hendecadien-5-one*, m. 78° (128.9°); (124-5°); *1,3,5-tridecatrien-7-one*, m. 91° (111-12°); *7-phenyl-1,3,7-hexadecatrien-7-one*, m. 80.7° (190°), gives a green color with H_2SO_4; *5-p-tolyl-2-methyl-1,3-pentadien-5-one*, m. 107-8° (170-1°), gives a red color with H_2SO_4 and concd. HCl; *7-p-tolyl-1,3,5-heptatrien-7-one*, m. 119-20° (184-5°), gives a brown color with H_2SO_4; *7-phenyl-2-methyl-1,3,6-heptatrien-5-one*, m. 99-101° (80°), violet in H_2SO_4, turning yellow on dilu.; *9-phenyl-1,3,5,8-nonatetraen-7-one*, m. 110-11° (170-7°), gives with H_2SO_4 a deep-red, with concd. HCl a blue-green color; *5-(2-pyryl)methyl-1,3-pentadien-5-one*, m. 156.5° (214°), red-brown in H_2SO_4, red in HCl, and red in Br-$CHCl_3$; *5-(2-pyrryl)methyl-1,3-pentadien-5-one*, m. 171° (225-6°), red-brown in H_2SO_4, red in HCl, yellow in Br-$CHCl_3$; *7-(2-pyrryl)-1,3,5-heptatrien-7-one*, m. 180° (208-10°), brown-red in H_2SO_4, red in HCl, deep red in Br-$CHCl_3$. The yields generally ranged from 70 to over 90%, with few cases in the 40-60% range. G. M. Kosolapoff

TILA, YUOZAS, Cand Agr Sci -- "Certain problems of the ~~potato~~ agricultural engineering of potatoes on light soils." Kaunas, 1961. (Min of Agr LiSSR. Lithuanian Agr Acad) (KL, 8-61, 25)

TILAJKA, Sandor

Elastic loom propulsion. Magy textil 17 no.1:3-7 Ja '65.

CEKULINA, A.; LASIS, A.; SKARDS, V.; TILAKS, S.; INTAITIS, E.; KELPIS, E.; SALMANIS, A.; REINIKOVS, T.; KARKLINS, J.; ABOLINS, J.; KULA, P. TIMSANS, S.; JESPERINS, L.; PRUSIS, R.; KLAVINS, E., red.

[Overall mechanization of dairy farms] Piena lopu farmu kompleksa mehanizacija. Riga, Latvijas Valsts izdevnieciba, 1964. 309 p. [In Latvian] (MIRA 18:7)

SHUL'MAN, N.K.; ANDREYEVA, I.A.; PALENKO, I.A.; KOSITSYN, I.Ye.; TIL'BA, A.P.; BARANCHEYEV, L.M.; MOSKALENKO, A.V., red.; GOLOVIN, A.A., tekhn.red.

[Nature in Amur Province] Priroda Amurskoi oblasti. Blagoveshchensk, Amurskoe knizhnoe izd-vo, 1959. 308 p. (MIRA 13:4)

1. Amurskiy otdel Vsesoyuznogo geograficheskogo obshchestva (for all, except Moskalenko, Golovin).
(Amur Province--Geography)

TIL'BA, A.P., kand.biologicheskikh nauk

Bottom-land vegetation of the Amur River. Amur sbor. no.2:151-16[illegible] '60. (MIRA 15:3)

1. Deystvi[illegible]l'nyy chlen Geograficheskogo obshchestva SSSR.
(Amur Valley--Botany)

TIL'BA, A. P. Cand. Biolog. Sci.

Dissertation: "Effect of Nitrogenous Fertilizers on the Growth and Yield of Soya." Moscow State Pedagogical Inst imeni V. I. Lenin, 27 Oct 47.

SO: Vechernyaya Moskva, Oct, 1947 (Project #17836)

TILCHEEV, M.D.,
A. N. SAKHANOV, Gosudarstvennoe Nauch.-Tekn. Izdatelstvo
Moscow-Petro rad 1931,18-79.

TITLE: General circulation in the upper

ABSTRACT: This paper discusses a new theory of the general circulation of the atmosphere which is based on the law of rotation of particles (layers) of a heavenly body about its axis of symmetry. The theory recognizes the fact that the stratification of particles to the

L 10592-65
ACCESSION NR: AP4045510

...that the proposed theory will be useful for a more exact mathematical forecasting ... physical problems such ... daytime and ...

... etc. Orig. art. has: 5 formulas.

... NO REF SOV: 000 OTHER: 000

Card 2/2

TILE, G. [Tile, H.], prof.; BERBOM, P., doktor (Berlin)

Prevention of allergic diseases. Nauka i zhyttia 11 no.5:42-43, 46 My '61. (MIRA 14:7)

(ALLERGY)

Q

COUNTRY : USSR
CATEGORY : Farm Animals.
General Problems.

ABS. JOUR. : RZhBiol., No. 6, 1959, No. 25767

AUTHOR : Tile, I.; Pshenichnaya, V.
INST. : Moscow Academy of Agriculture imeni K. A.*
TITLE : The Application of Antibiotics in Feeding Young Fowl and Nursing Piglets.

ORIG. PUB. : Sb. stud. nauchno-issled. rabot Mosk. s.-kh. akad. im. K. A. Timiryazeva, 1957 (1958), vyp.**

ABSTRACT : When 2 1/2 months old pullets were given 16 mg of penicillin with their feed, their weight gains increased by 10 percent and the expenditures of digestible nutritive substances were 23.3 percent lower per 1 kg of weight gain than in control young stock, and correspondingly, the figures for pullets which were each given 24 mg of penicillin, were 5 and 18.5 percent. The egg production of the latter group was 220 percent higher, and

CARD: 1/2

*Timiryazev.
**7, 150-156

2

COUNTRY : USSR
CATEGORY :

ABS. JOUR. : RZhBiol., No. 1959, No.

AUTHOR :
INST. :
TITLE :

ORIG. PUB. :

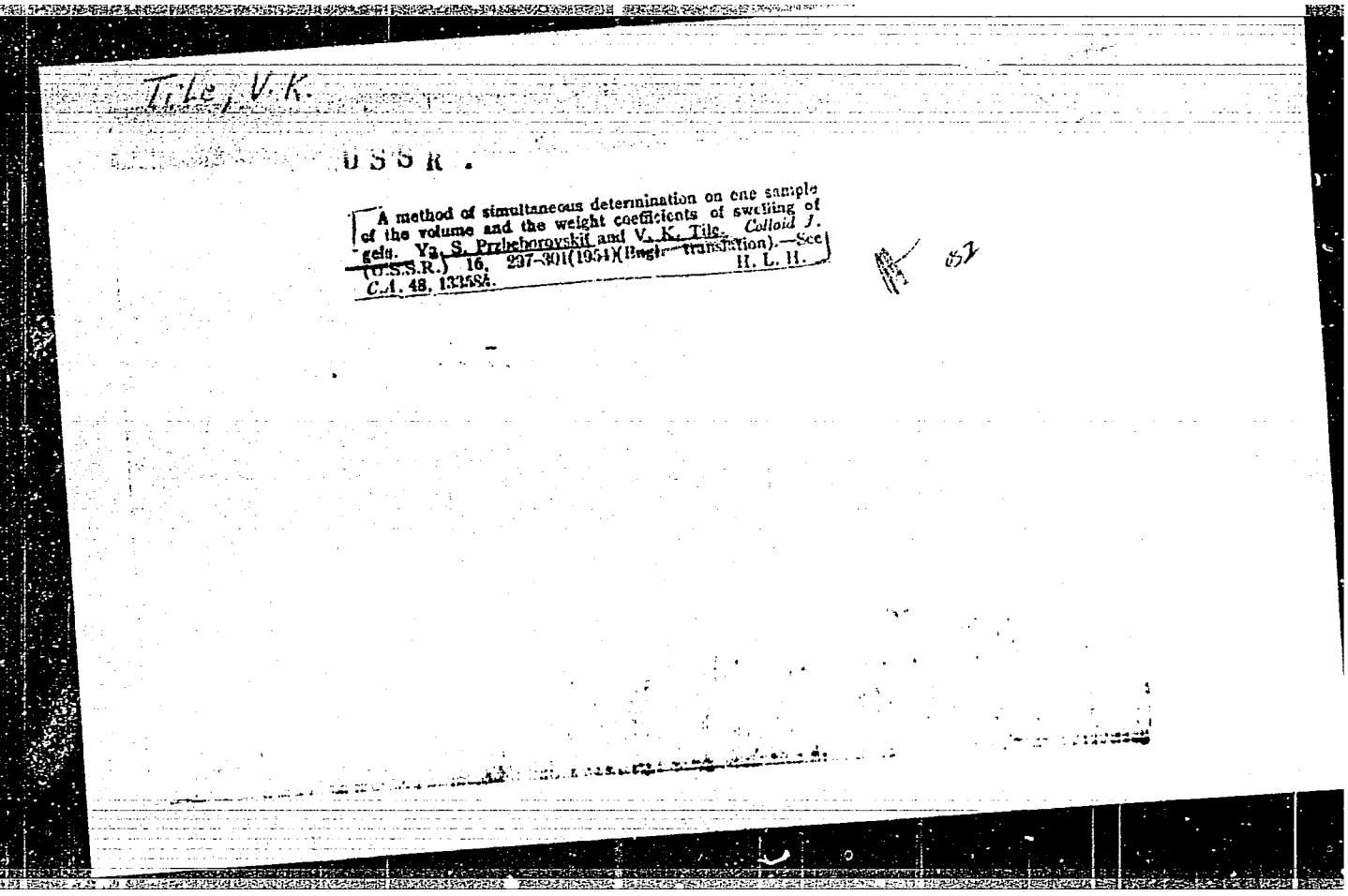
ABSTRACT : of hens receiving 16 mg, 73 percent higher than in controls. When piglets were given 3 mg of penicillin during the 1st, 6 mg during the 2nd, and 10 mg during the 3rd 10-day period per head, their weight gain was 17 percent higher than in controls. When antibiotics were given to nursing piglets sick with diarrhea, the disease process was terminated. It is recommended to use penicillin waste. -- M. F. Demina

Card: 2/2

TILE, J.

Importance of inhibitors in the fight against corrosion, p. 256,
TECHNICKA PRACA (Statne nakladatelstvo technickej literatury)
Baratislava, Vol. 7, No. 6, June 1955

SOURCE: East European Accessions List (EEAL) Library of Congress,
Vol. 4, No. 12, December, 1955



Tile, V. K.

USSR

A method of simultaneous determination on one sample of the volume and the weight coefficients of swelling of gels. Va. S. Przhehorovskii and V. K. Tile. *Colloid J.* (U.S.S.R.) 16, 297-301(1954)(Engl. translation).—See *C.A.* 48, 13358*i*. H. L. H.

GARBUZOV, Andrey Ignat'yevich, dotsent; MISHIN, Vasiliy Porfir'yevich, dotsent; TILE, Vera Karlovna, assistant; KUVSHINSKIY, M.N., red.; ZUYKVA, N.K., tekhn.red.

[Semimicro qualitative chemical analysis] Kachestvennyi khimicheskii polumikroanaliz. Moskva, Gos.izd-vo med.lit-ry, 1960. 230 p. (MIRA 13:5)
(Chemistry, Analytical--Qualitative)

TILE, V. K.

PHASE I BOOK EXPLOITATION SOV/4288

Garbuzov, Andrey Ignat'yevich, Vasiliy Porfir'yevich Mishin, and Vera Karlovna Tile

Kachestvennyy khimicheskiy polumikroanaliz (Chemical Qualitative Semimicroanalysis) Moscow, Medgiz, 1960. 230 p. 20,000 copies printed.

Ed.: M.N. Kuvshinskiy; Tech. Ed.: N.K. Zuyeva.

PURPOSE: This book is intended for students of chemical analysis at medical schools and institutes for stomatology.

COVERAGE: The textbook, which reflects the academic program in qualitative semimicroanalysis outlined by the General Chemistry Department of the First Moscow Order of Lenin Medical Institute imeni I.M. Sechenov, covers the theory of qualitative semimicro determination of the chemical elements or compounds constituting a substance or mixture of substances. Both chemical and physicochemical methods are discussed. The first is based on "analytical reactions" (characteristic reactions) of certain reagents while the second is based on the physical characteristics of the determined substance, e.g., absorption spectra, shape and color of crystals, the nature of luminescence under ultraviolet light, melting point, capacity for adsorption on various adsorbents, etc. The textbook also reviews chemical methods of analyzing inorganic substances. The authors thank Professor Ya.S. Przheborovskiy and N.D. Verderevskaya for assist-

Card 1/ 10

Chemical Qualitative Semimicroanalysis

ance. There are 39 figures and 4 tables. There are no references.

TABLE OF CONTENTS:

Chemical Qualitative Semimicroanalysis

AVAILABLE: Library of Congress

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10-5-60

Tile, V. K.

A method of simultaneous determination on one sample of the volume and the weight coefficients of swelling of gels. Ya. S. Przhcborovskii and V. K. Tile (1st Med. Inst., Moscow). Kolloid. Zhur. 16, [illegible] A swollen gel is weighed in 2 inert liquids having d. d_1 and d_2. If the apparent wts. are p_1 and p_2 resp., the vol. of the gel is $(p_1 - p_2)/(d_2 - d_1)$ and the wt. of the gel in vacuo is $(p_1 d_2 - p_2 d_1)/(d_2 - d_1)$. The method is tested for agar and beans in H_2O and rubber in toluene; the inert liquids are not specified.

I. I. R.

TILE, V. K.

Tile, V. K. - "The Problem of Methods of Determining the Degree of Swelling of Gels (Comparative Investigation of Volumetric and Gravimetric Methods of Determining the Degree of Swelling)." Moscow State Pedagogical Inst imeni V. I. Lenin. Moscow, 1956 (Dissertation for the Degree of Candidate in Chemical Sciences).

So: Knizhnaya Letopis', No. 10, 1956, pp 116-127

GARBUZOV, Andrey Ignat'yevich; TILE, Vera Karlovna; STUKOVNIN, N.D., red.; YEZHOVA, L.L., tekhn. red.

[Chemical quantitative semimicroanalysis] Kolichestvennyi khimicheskii polumikroanaliz. Moskva, Gos.izd-vo "Vysshaia shkola," 1963. 145 p. (MIRA 17:1)

TILEA, D.

Basic principles in the development of the engineer's brake valve. p. 601.

REVISTA CAILOR FERATE. (Caile Ferate Romine) Bucuresti, Rumania.
Vol. 6, no. 11, Nov. 1958.

Monthly List of East European Accessions (EEAI) IC, Vol. 8, no. 7, July 1959

Uncl.

TILEA, D.

General principles for projecting automatic brake levers.

P. 453 (REVISTA CAILOR FERATE) (Bucuresti, Rumania) Vol. 5, no. 9, Sept. 1957

SO: Monthly Index of East European Accessions (EEAI) LC Vol. 7, No. 5. 1958

TILEKMETOV, B.; LOSS', G.; KALININ, N.; SHABALIN, S.

In the photography sections of the Union of News Reporters. Sov.foto 20 no.10:44 0'60. (MIRA 13:10)

1. Predsedatel' pravleniya fotosektsii Soyuza zhurnalistov Kazakhskoy SSR (for Tilekmetov). 2. Predsedatel' pravleniya fotosektsii Soyuza zhurnalistov Estonskoy SSR (for Loss'). 3. Predsedatel' pravleniya fotosektsii Altayskogo otdeleniya Soyuza zhurnalistov SSSR (for Kalinin). 4. Fotokorrespondent gazety "Orlovskiy komsomolets" (for Shabalin). (Photography, Journalistic)

TILENE, G.G.

Parks are favorite recreation spots for Muscovites. Gor.khoz.Mosk. 37 no.10:41-43 O '63. (MIRA 17:2)

1. Zamestitel' nachal'nika otdela kul'turno-prosvetitel'noy raboty Upravleniya kul'tury Ispolnitel'nogo komiteta Moskovskogo gorodskogo Soveta deputatov trudyashchikhsya.

RUMANIA / Physical Chemistry. Surface Phenomena. B-13
Adsorption. Chromatography. Ion Exchange.

Abs Jour: Ref Zhur-Khimiya, No 2, 1959, 4059

Author : Tilenschi, S.
Inst : Not given.
Title : Specific Surface Measurements.

Orig Pub: Rev Chim, 9, No 5, 239-246 (1958) (in Rumanian with summaries in German, English, French, and Russian).

Abstract: A review article with a bibliography listing 23 titles.

Card 1/1

Adsorption and separation of hydrocarbons from gases. S. Tilenschi. *Rev. Chim.* (Bucharest) 5, 305–18 (1954).—The theories and the dynamics of adsorption are discussed, and special attention is given to the work of Dubinin (*C.A.* 46, 9378*a*; 47, 2012*h*). Fractionating desorption, such as the desorption of $PhCH_2Cl$ at 0, 5, 10, 15, and 17° by a turbulent or laminar air stream is discussed. Various hydrocarbon fractions which have been adsorbed together may be desorbed in this manner. In the case of technical hydrocarbon mixts. from, e.g., petroleum gases, the desorption occurs at higher temps., 115–125°. Gas chromatography is just a specialized case of such a process. Tech. equipment is shown in which such sepn. can be run on a large scale; the process is economical. Werner Jacobson

TILENSCHI, S.

Preparation and properties of the monocrystalline silica gel. S. Tilenschi (Rumanian Acad. Sci., Cluj branch). *Acad. Rep. Populare Romîne, Studii Cercetări Stiint.* 5, 119–137(1954)(French Summary).—A 12.5% aq. soln. of Na_2SiO_3 (2 or 3 parts) added dropwise to 10% HCl (1 part) under continuous agitation until stable gels appeared, the supernatant liquid decanted, the sol aged for 24–48 hrs. (no syneresis occurred), the gel cut into the desired sizes, preferably by wire and in the same vessel, then washed with 1% NH_4OH or HCl (the latter for transparent products), treated 2 hrs. with H_2O vapor, and dried below 50°, gave a hard silica gel with a monocryst. macrohomogeneous structure. Its satn. capacity for H_2O, EtOH, and C_6H_6 was 20–5% higher than that of the usual com. products, and so was its surface at 450–500 sq.m./g. It had a great affinity for O^{--} and OH^- and a marked pleochroism. A discontinuity of its dynamic adsorption isotherms was in line with T.'s monomol. capillary condensation theory (meniscus theory).

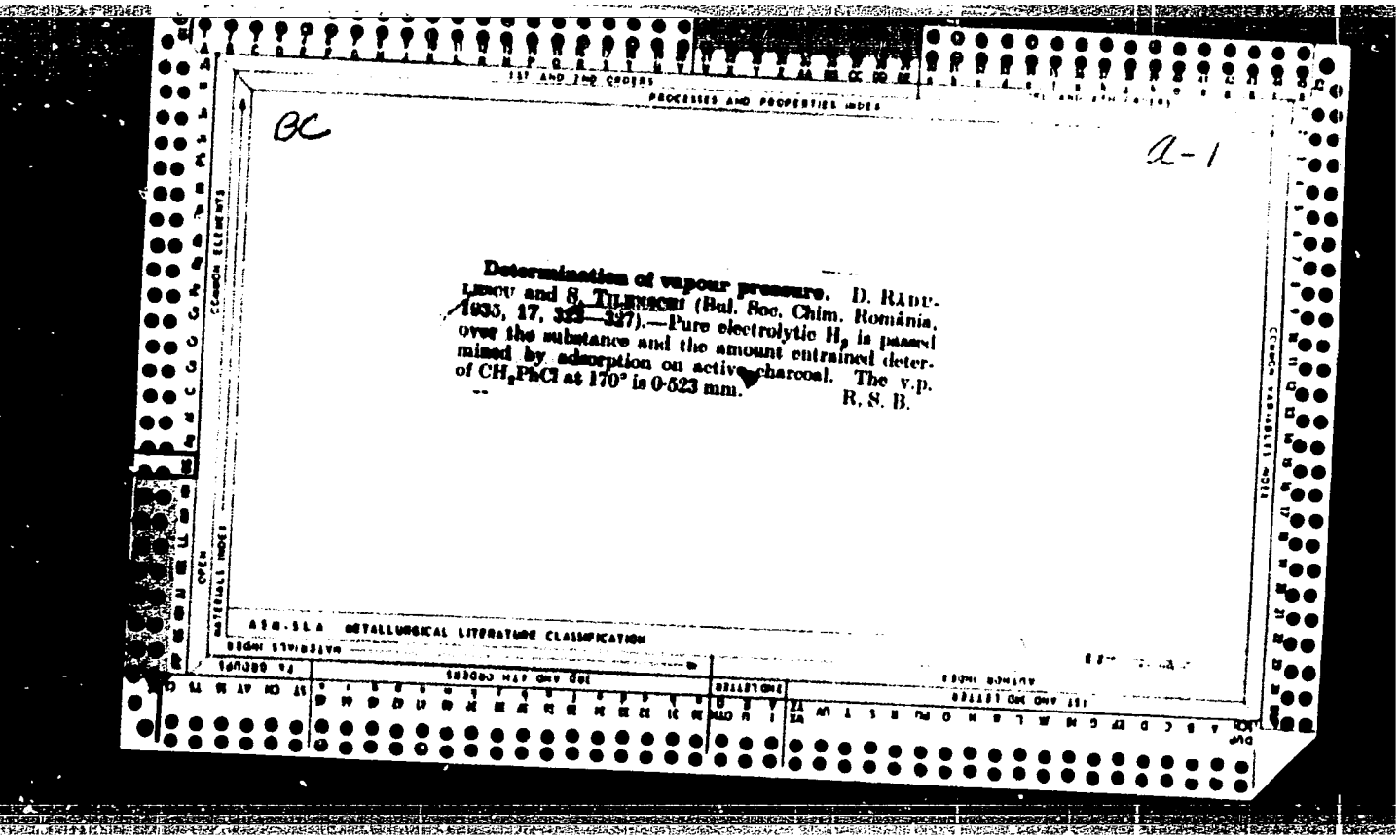
Gary Gerard

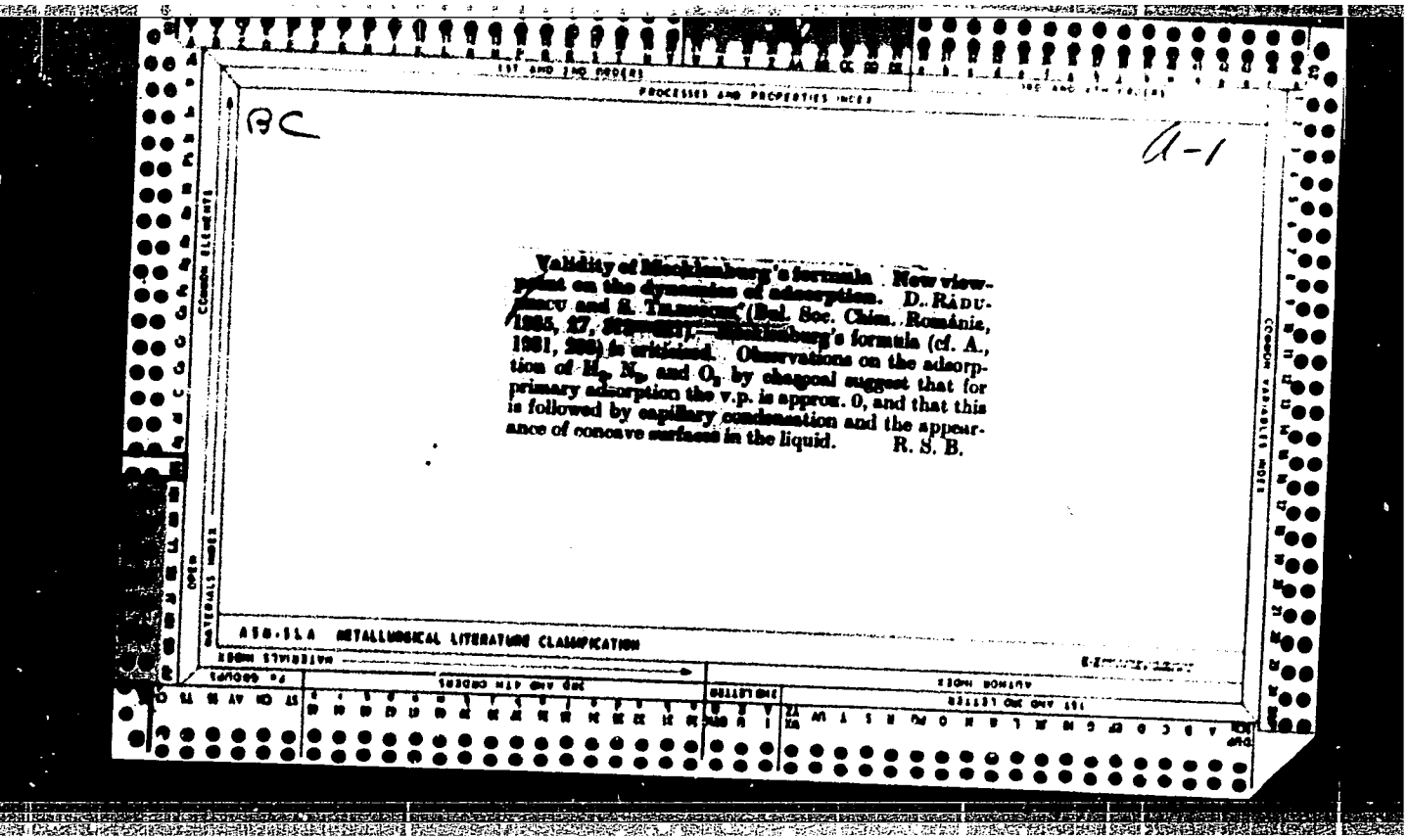
Tilenschi, Silviu

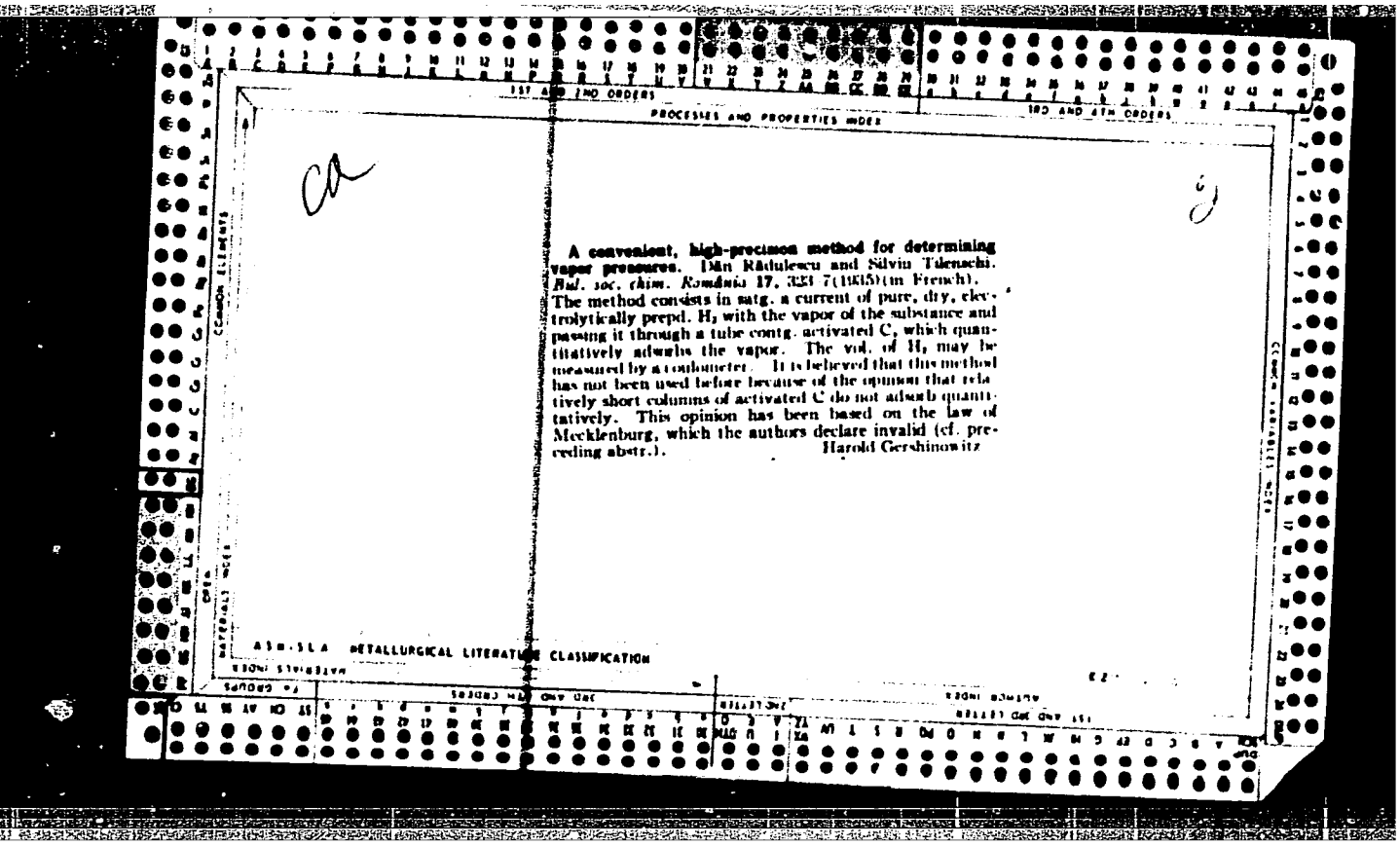
4

A new color reaction of acetylene. Silviu Tilenschi (Romanian Acad. Sci., Cluj). *Acad. rep. populare Romîne, Filiala Cluj, Studii cercetări ştiinţ.* 3, No. 3/4, 99–102(1952). —$CuSO_4.5H_2O$ in aq. soln. is reduced by $NH_2OH.HCl$ in the presence of NH_3, then H_2SO_4 is added until the pH is 6.3. This soln. will react with C_2H_2 in the dissolved or gaseous state with formation of a blue color, which can be used both for detection and detn. of C_2H_2; it is fairly stable, which distinguishes it from the time-honored Hosvay reagent (*Ber.* 32, 26(1899)).

Werner Jacobson







PROCESSES AND PROPERTIES INDEX

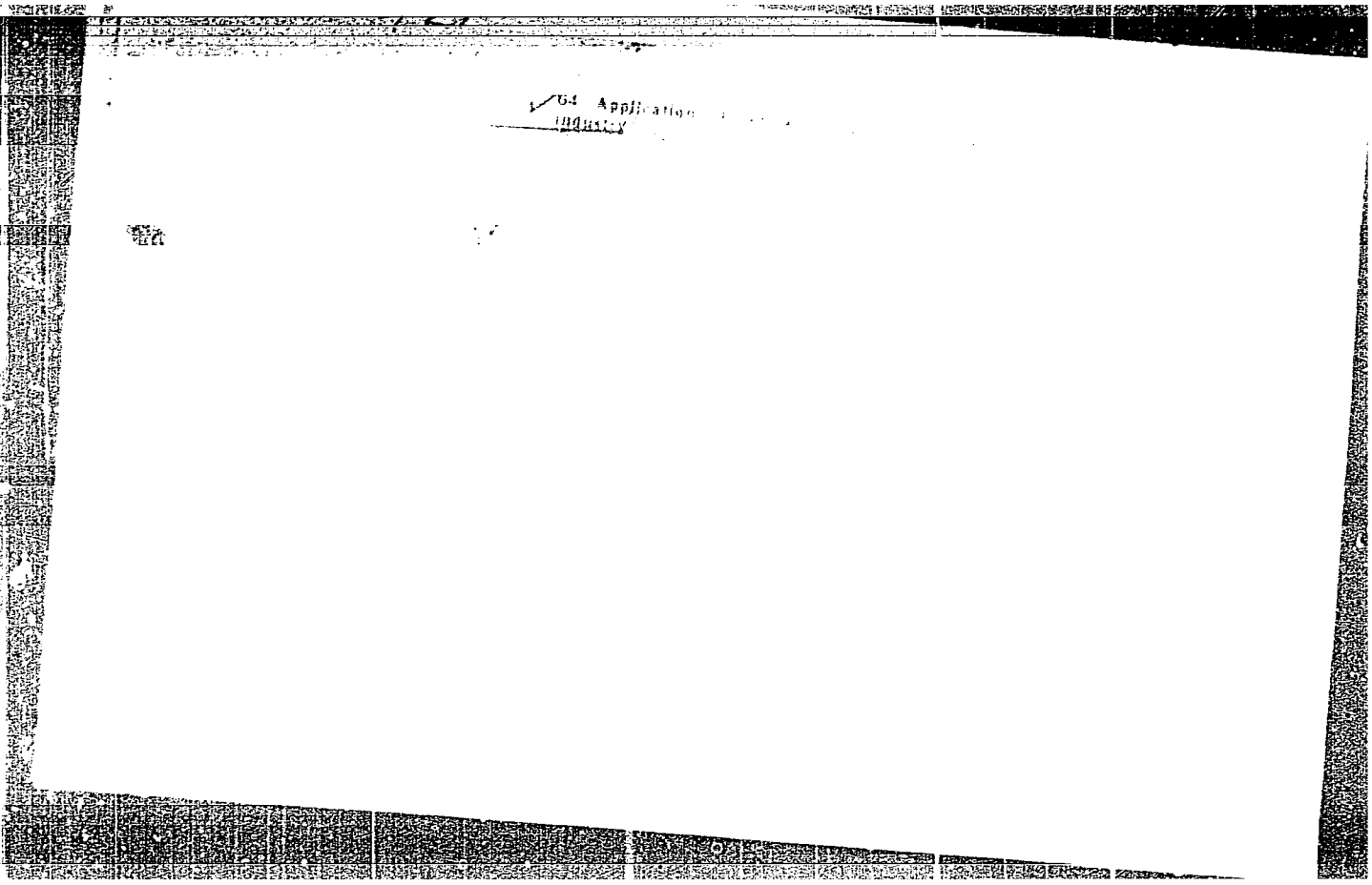
A convenient, high-precision method for determining vapor pressures. Dan Rădulescu and Silviu Tănăsachi. *Bul. soc. chim. Romînia* 17, 331-7(1935)(in French). The method consists in satg. a current of pure, dry, electrolytically prepd. H_2 with the vapor of the substance and passing it through a tube contg. activated C, which quantitatively adsorbs the vapor. The vol. of H_2 may be measured by a coulometer. It is believed that this method has not been used before because of the opinion that relatively short columns of activated C do not adsorb quantitatively. This opinion has been based on the law of Mecklenburg, which the authors declare invalid (cf. preceding abstr.). Harold Gershinowitz

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

TILENSCHI, Silviu

The structure of liquids and liquid surfaces. Rev chimie 7 no. 1: 615-623 '62.

1. Laboratory of Colloid Chemistry, Bucharest University.



DUDAS, Jozsef, okJ.olajmernok; TILESCH, Leo,okl.banyamernok

A new evaluation of the Lovaszi-series of the Lovaszi oil field from the view point of oil-geology and exploitation. Bany lap 94 no.5:334-347 My '61.

1. Koolajipari Troszt, Laboratorium i Foosztaly, Budapest.

TILEPCI, [illegible]

Remarks about the geologic [illegible] deposits near [illegible]

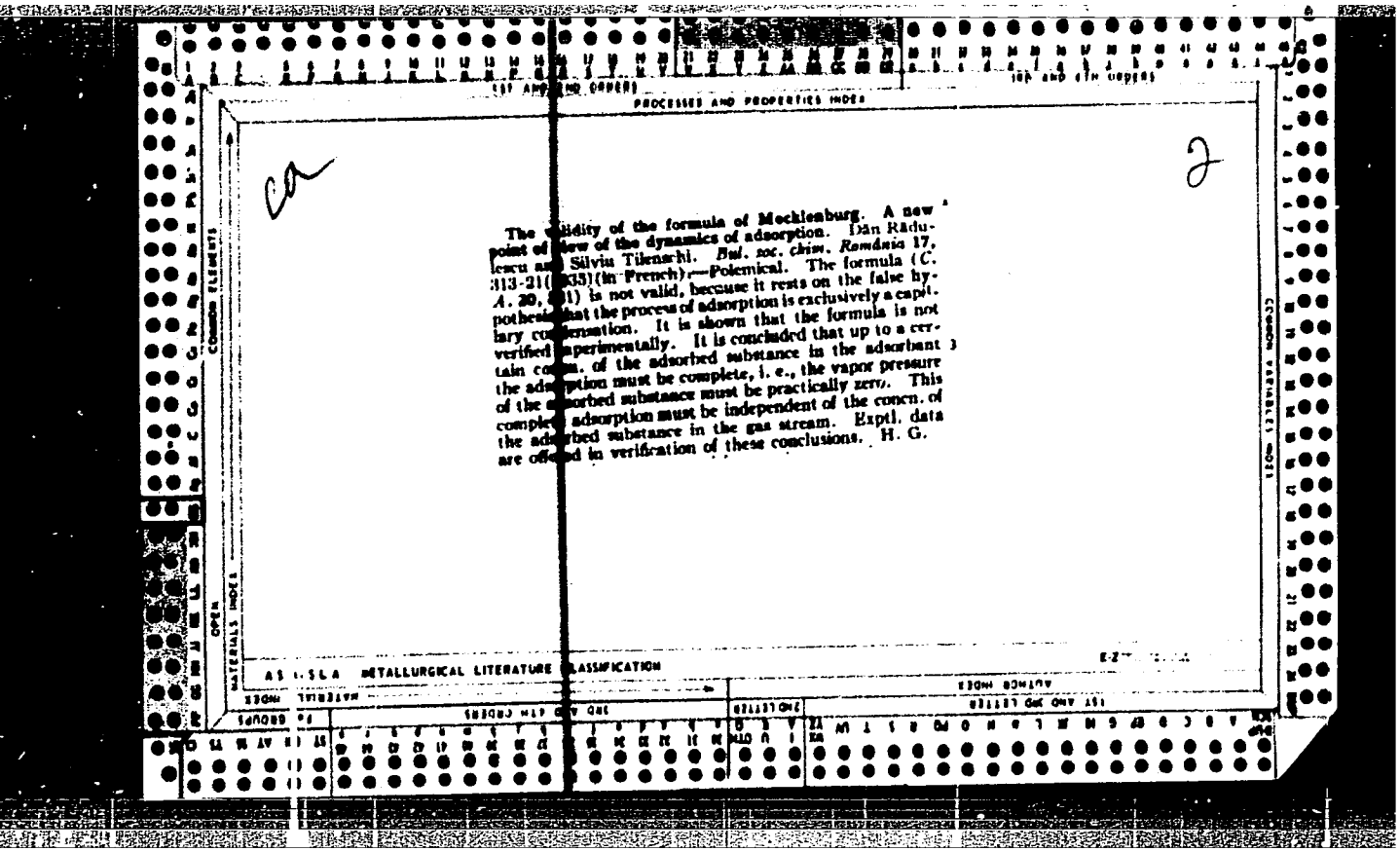
1. National [illegible] and Gas [illegible] Budapest.

APPROVED FOR RELEASE: 07/16/2001 CIA-RDP86-00513R001755620020-3"

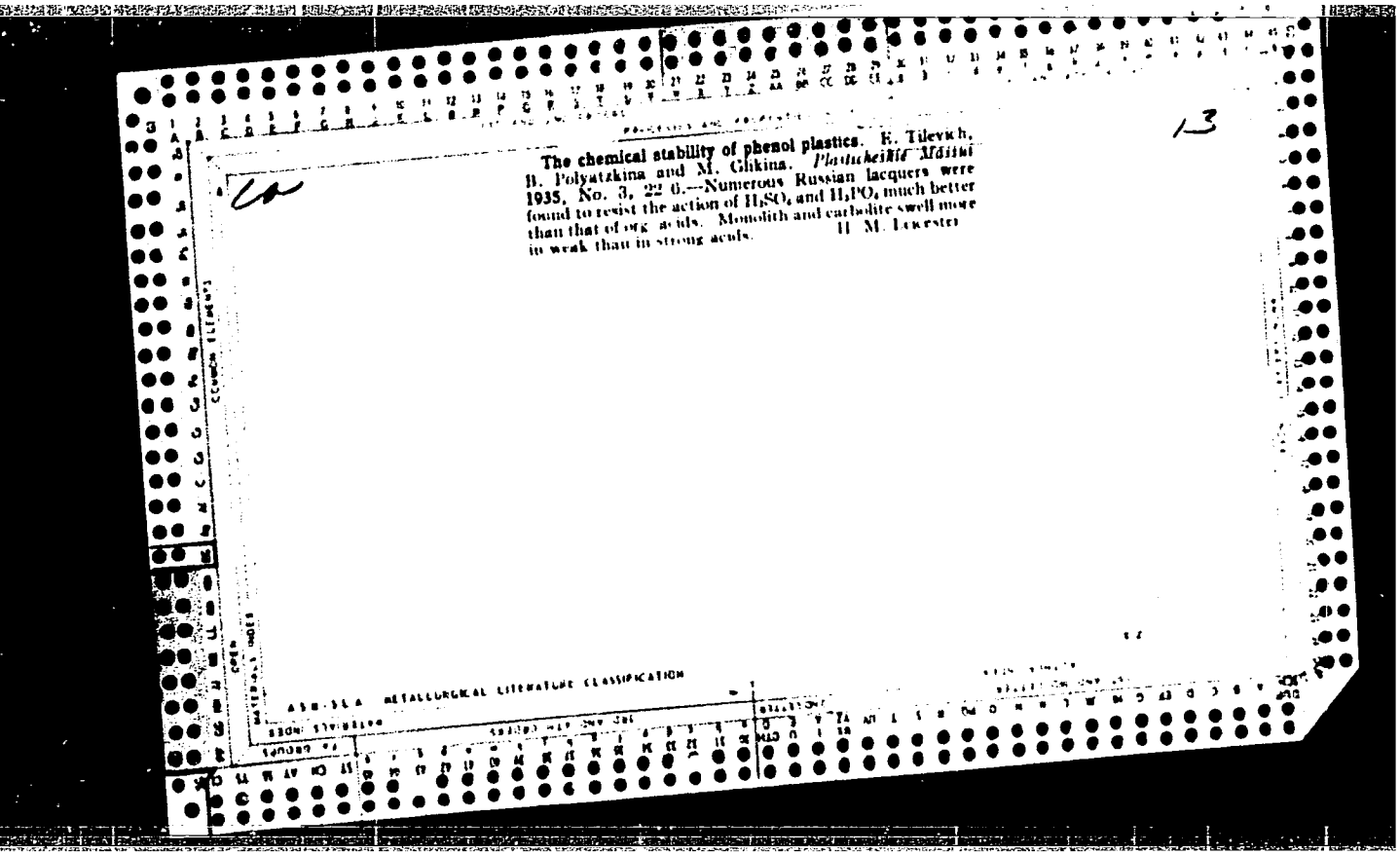
TILESCH, Leone

Introducing the international subscriber's dialing in the Hungarian telex network. Hir techn 15 no.9:280-284 S '64.

1. Central Telegraph Office of the Hungarian Post, Budapest.



The validity of the formula of Mecklenburg. A new point of view of the dynamics of adsorption. Dan Rădulescu and Silviu Tilenschi. *Bul. soc. chim. Romănia* 17, 313-21(1935)(In French).—Polemical. The formula (*C. A.* 20, 1) is not valid, because it rests on the false hypothesis that the process of adsorption is exclusively a capillary condensation. It is shown that the formula is not verified experimentally. It is concluded that up to a certain concn. of the adsorbed substance in the adsorbant the adsorption must be complete, i. e., the vapor pressure of the adsorbed substance must be practically zero. This complete adsorption must be independent of the concn. of the adsorbed substance in the gas stream. Exptl. data are offered in verification of these conclusions. H. G.



The chemical stability of phenol plastics. E. Tilevich, B. Polyatzkina and M. Glikina. *Plasticheskie Massui* 1935, No. 3, 22–6.—Numerous Russian lacquers were found to resist the action of H_2SO_4 and H_3PO_4 much better than that of org. acids. Monolith and carbolite swell more in weak than in strong acids. H. M. Leicester

ACC NR: AP6031395 SOURCE CODE: UR/0114/66/000/009/0002/0006

AUTHORS: Ris, V. F. (Doctor of technical sciences); Den, G. N. (Candidate of technical sciences); Shershneva, A. N. (Candidate of technical sciences); Tilevich, I. A. (Engineer)

ORG: none

TITLE: Some work of the Nevskiy Machine Building Works in studying the flow part of centrifugal compressor machines

SOURCE: Energomashinostroyeniye, no. 9, 1966, 2-6

TOPIC TAGS: centrifugal compressor, multistage compressor, exhaust diffuser, gas dynamics, compressor rotor

ABSTRACT: The results from studies of the flow parts of centrifugal compressor machines are given. The effect of intake chambers at various periods of time were studied. Tests of a final stage with a pump-type rotor with a short bladeless diffuser and a symmetric pear-shaped helix made in the presence of an intake chamber and with axial intake gave practically identical results (see Fig. 1). The effect of certain rotor parameters is studied on the basis of an earlier work of V. F. Ris (Tsentrobezhnyye kompressornyye mashiny. Izd. Mashinostroyeniye, 1964). It is found that when the exit angle β_2 is increased from 15 to 90° the efficiency of the final

UDC: 621.515.001.5

ACC NR: AP6031395

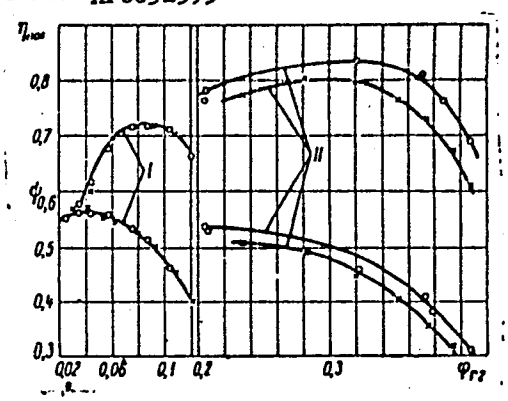


Fig. 1. Effect of intake chamber on characteristics of various stages: I and II - β_2 = 20 and 45°: 0 - stage with axial intake; X - stage with intake chamber

stage increases at first, and then decreases. When the relative width of the rotor b_2/D_2 is reduced to 0.0131, the maximum values of efficiency are reduced by only 1% (see Fig. 2). The effect of bladed-diffuser geometry is also studied.

Card 2/3

ACC NR: AP6031395

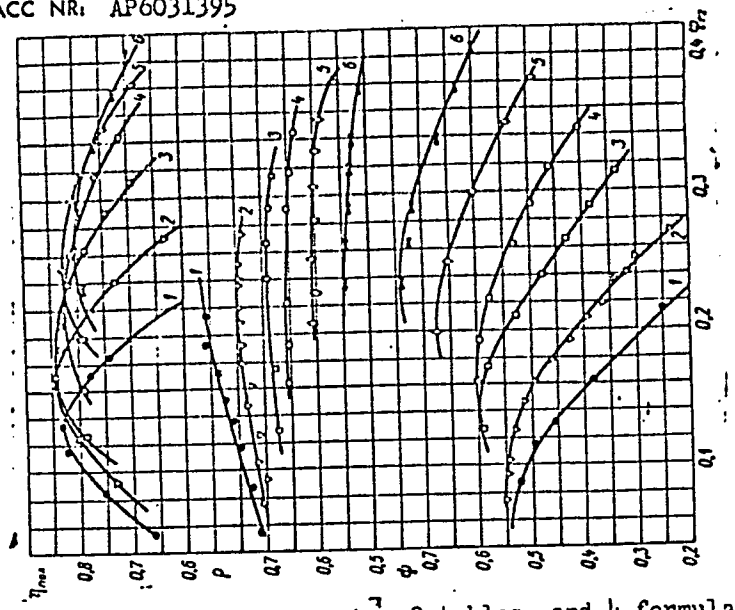


Fig. 2. Effect of exit angle β_2 for identical fixed elements of flow part of stage and $b_2/D_2 = 0.05$: 1 - 15°; 2 - 22.5°; 3 - 32°; 4 - 45°; 5 - 63°; 6 - 90°

Orig. art. has: 11 graphs, 2 tables, and 4 formulas.

SUB CODE: 13/ SUBM DATE: none/ ORIG REF: 002/ OTH REF: 001

Card 3/3

L 06202-67 EWT(l)/EWP(m)/EWT(m)/EWP(w)/EWP(f)/EWP(v)/EWP(k) IJP(c) WW/EM
ACC NR: AP6031397 SOURCE CODE: UR/0114/66/000/009/0012/0016

AUTHOR: Tilevich, I. A. (Engineer)

ORG: none

TITLE: Aerodynamic forces acting on centrifugal compressor diffuser vanes and losses in vaned diffusers

SOURCE: Energomashinostroyeniye, no. 9, 1966, 12-16

TOPIC TAGS: centrifugal compressor, compressor, diffuser design, compressor performance, AERODYNAMIC FORCE

ABSTRACT: The performance of a centrifugal compressor can be changed by adjusting ten diffuser vanes. However, such an adjustment can only be made after compressor shutdown. In connection with designing a mechanism for diffuser vane adjustment while the compressor is in operation, an experimental investigation was made of the aerodynamic forces acting on diffuser vanes in a centrifugal compressor. Tested was a two-stage compressor model 305 mm in diameter at peripheral speed of 160 m/sec. Aerodynamic forces were determined from static pressure measurements along the vane contour. The attained results show that aerodynamic forces and moments acting on the diffuser vanes of centrifugal compressor can be of considerable magnitude and must be considered

Card 1/2 UDC: 621.515.533.6.001.5

L 06202-67
ACC NR: AP6031397

in calculating vane fastenings. The numerical results can be used in calculating a diffuser vane adjusting mechanism. Orig. art. has: 4 figures, 2 tables, and 7 formulas.

SUB CODE: 13,20 /SUBM DATE: none/ ORIG REF: 004/

Card 2/2 afs

L 38435-66 EWP(m)/EWT(l)/EWT(m)/EWP(k)/T-2/EWP(v)/T IJP(c) EM/WW

ACC NR: AP6019730 SOURCE CODE: UR/0096/66/000/007/0033/0036

AUTHOR: Den, G. N. (Engineer); Tilevich, I. A. (Engineer) 54

ORG: Nevskiy Machine Building Plant im. V. I. Lenin (Nevskiy mashinostroitel'nyy zavod) B

TITLE: Gas dynamic characteristics of vane-type diffusers of centrifugal compressors 24

SOURCE: Teploenergetika, no. 7, 1966, 33-36

TOPIC TAGS: diffuser design, centrifugal compressor, gas dynamics

ABSTRACT: The work of a diffuser is conveniently evaluated from the value of the loss coefficient ζ, which represents that part of the kinetic energy in front of the diffuser $\bar{q}_3$ which is lost during the passage of the stream through the vanes, and from the value of the recovery coefficient ξ, which characterizes that part of the kinetic energy which is transformed into static pressure:

$$\zeta = \delta\bar{H}^*/\bar{q}_3, \quad \xi = \Delta\bar{H}/\bar{q}_3,$$

where $\bar{q}_3$ is the mean velocity head in front of the diffuser; $\delta \bar{H}^*$ is the loss of total head in the diffuser; $\Delta \bar{H}$ is the change in the static

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heat in the diffuser. Experiments were carried out in an experimental unit which is illustrated in the article. A table gives the characteristic dimensions of the apparatus. Based on the experimental data, graphs show the effect of the number of vanes on the characteristics of the diffuser and the effect of the diffuser channel. The following formula is derived

$$\delta = \frac{0{,}23\,(2a/l)^3 - 0{,}002\alpha_4 + 0{,}18}{\frac{1}{\alpha_4 - \alpha_3}\sqrt{l/t} - 0{,}002},$$

where l/t is the density of the grid; α is the abscissa of the mean curvature of the middle line; $\alpha_4 - \alpha_3$ is the angle of rotation of the shape in the grid, degrees. The formula is said to be valid for values of $\alpha_4 \geqslant 40^\circ$. Orig. art. has: 5 figures and 2 tables. [06]

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TILEVICH, I. A.

YEFIMOV, Aleksey Nikolayevich; PARKHUTA, Andrey Nikitovich; TILEVICH, Izrail' Aleksandrovich, TULER, Lazar' Stulevich; FEL'DBLYUM, Boris Borisovich; SHAPOSHNIKOV, Kas'yan Grigor'yevich; ZAKHAROV, D.M., inzhener-podpolkovnik, red.; MYASNIKOVA, T.F., tekhn.red.

[Principles of the theory of airplane flight] Osnovy teorii poleta samoleta. Moskva, Voen.izd-vo M-va obor. SSSR, 1957. 443 p. (MIRA 11:5)
(Airplanes--Aerodynamics)

TILEVICH, I. A.

Yefimov, Aleksey Nikolayevich, Parkhuta, Andrey Nikitovich, Tilevich, Izrail' Aleksandrovich, Tuler, Lazar' Srulevich, Fel'dblyum, Boris Borisovich, and Shaposhnikov, Kas'yan Grigor'yevich

Osnovy teorii poleta samoleta (Principles of the Theory of Aircraft Flight) Moscow, Voyen. izd-vo Min-va obor. SSSR, 1957. 443 p. No. of copies printed not given.

Ed.: Zakharov, D. M., Engineer-Col.; Tech. Ed.: Myasnikova, T. F.

PURPOSE: This book is intended as an aviation and technical text book on the secondary school level. It may also be used as a textbook in the study of the fundamentals of aircraft flight theory for the flying and technical personnel of the Air Forces and of the All-Union Voluntary Society for the Promotion of the Army, Aviation and Navy. The introduction is intended for readers who embark for the first time upon the study of the fundamentals of aviation. The text is approved as a textbook for military aviation and technical schools by the Chief of the Vuz Administration of the Military Air Force.

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COVERAGE: The authors discuss the fundamentals of applied general and high-speed aerodynamics, the fundamentals of the aerodynamics of propellers, aircraft performance, stability, control, maneuvering flight. The book contains 4 tables and 360 figures. There are 29 Soviet references, 4 of which are translations.

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SECTION V. EQUILIBRIUM, STABILITY, AND CONTROL OF AN AIRPLANE

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