VERESHCHAGIN, S.M.; TYSHCHENKO, V.P.

Study of trace and summation phenomena in the nervous world
of insects. Nerv. sist. no.5:29-39 '64.
(MIRA 18:3)

1. Laboratoriya sravnitel'noy fiziologii i kafedra entomologii
Leningradskogo gosudarstvennogo universiteta.

TYSHCHENKO, V.

New genus and new species of spiders (Aranei) from Kazakhstan.
Ent. oboz. 44 no.3:696-704 '65.   (MIRA 18:?)

t. kafedra entomologii Leningradskogo gosudarstvennogo universiteta
imeni A.A.Zhdanova, Leningrad.

VERESHCHAGIN, S.M.; SYTINSKIY, I.A.; TYSHCHENKO, V.P.

Blocking effect of gamma-aminobutyric acid on the central
synapses of insects. Nerv. sist. no.4:108-110 '63

(MIRA 18:1)

1. Fiziologicheskiy institut Leningradskogo universiteta.

VERESHCHAGIN, S.M.; SYTINSKIY, I.A.; TYSHCHENKO, V.P.

Effect of gamma-aminobutyric acid on giant nerve fibers in the earthworm. Fiziol. zhur. 49 no.7:879-881 Jl '63.

(MIRA 17:1)

1. Fiziologicheskiy institut imeni Ukhtomskogo Gosudarstvennogo universiteta, Leningrad.

TYSHCHENKO, Ye.; BERESHCHUK, N., red.; NAGIBIN, P., tekhn. red.

[On the eve of taking the frontiers] Nakanune shturma
rubezhei. Alma-Ata, Kazsel'khozgiz, 1962. 26 nos.in 1 v.
13 p.   (MIRA 17:1)

1. Direktor Ubinskogo sovkhoza Vostochno-Kazakhstanskoy
oblasti (for Tyshchenko).

CHIZHEVSKIY, A.L., professor (Karaganda); TIMOFEYEVICH, A.V., zaveduyushchiy;
  TYSHCHENKO, Z.A., glavnyy vrach.

  Electric reaction of the precipitation of red blood corpuscles; preliminary
  report. Klin.med. 31 no.3:60-63 Mr '53.   (MLRA 6:5)

  1. Klinicheskaya laboratoriiya khirurgicheskogo otdeletniya Karagandinskoy
  oblastnoy bol'nitsy (for Timofeyevich). 2. Karagandinskaya oblastnaya bol-
  nitsa (for Tyshchenko).   (Blood--Corpuscles and platelets)

CHIZHEVSKIY, A.L., professor (Karaganda);   TIMOFEYEVICH, A.V., zaveduyushchiy;
    TYSHCHENKO, Z.A., glavnyy vrach.

    Electric reaction of the precipitation of red blood corpuscles; prelimi-
    nary report.   Klin.med. 31 no.3:60-63 Mr '53.   (MLRA 6:5)

    1. Klinicheskaya laboratoriiya khirurgicheskogo otdeletniya Karagandinskoy
    oblastnoy bol'nitsy (for Timofeyevich).   2. Karagandinskaya oblastnaya
    bol'nitsa (for Tyshchenko).   (Blood--Corpuscles and platelets)

TYSHCHUK, A.A. (Kiyev)

Study of geometry at the eight-year school. Mat. v shkole no.3:35-39
My-Je '59.   (MIRA 12:9)
        (Geometry--Study and teaching)

TYSHCHUK, D. N.; BABICHEV, V. G.

PPK-15m air-feed leg drill. Gor. zhur. no.11:74 N '62.
(MIRA 15:10)

1. Krivorozhskiy gornorudnyy institut (for Tyshchuk).
2. Nauchno-issledovatel'skiy gornorudnyy institut, Krivoy Rog
(for Babichev).

(Boring machinery—Pneumatic driving)

AUTHORS: Sidorova, N. G., Tyshchuk, C. Kh.   SOV/79-28-8-6/66

TITLE: Cycloalkylation of Aromatic Compounds (Tsikloalkilirovaniya
              aromaticheskikh soyedineniy) XV. Condensation of Fluorene
              With Cyclohexanol in the Presence of Aluminum Chloride
              (XV. Kondensatsiya fluorena s tsiklogeksanolom v prisutstvii
                khloristogo alyuminiya)

PERIODICAL: Zhurnal obshchey khimii, 1958, Vol. 28, Nr 8, pp. 2030-2032
              (USSR)

ABSTRACT: This paper is a continuation of earlier papers (Ref 1) which
              describe the condensation of fluorene with cyclohexanol in
              the presence of $AlCl_3$. The end product of this reaction was
              a cyclohexylfluorene of unknown structure (m.p. 133°). The
              authors carried out several condensations with different
              amounts of $AlCl_3$ and with equimolecular amounts of both com-
              ponents. With increased and with decreased amounts of aluminum
              chloride the yield of alkylation product was inferior (maxi-
              mum: 32,9 % with 0,85 g. $AlCl_3$.aq.). Besides the alkylation
              reaction a dehydration of the cyclohexanol and a polymeri-
Card 1/3   zation of the resulting cyclohexene occurred, which indicated

Cycloalkylation of Aromatic Compounds.
XV. Condensation of Fluorene With Cyclohexanol in the Presence of Aluminum
Chloride

SOV/79-28-8-6/66

clearly how the cyclohexanol was being used up. In order to
ascertain the position of substitution to produce cyclohexyl-
fluorene this compound was oxidized under pressure in dilute
nitric acid at 140-150°, which produced 2-fluorocarbonic acid
and which was then used to make the methyl ester. By dehydrat-
ing the cyclohexylfluorene in the presence of platinum black
a new product, a 2-phenylfluorene, was produced. Both reactions
clearly indicate that the condensation product is 2-cyclo-
hexylfluorene (Formula I). To study this new hydrocarbon a
mono-nitro derivative was prepared. Since all electrophilic
substitution reactions in the fluorene molecule take place
at the 2 and 7 positions, this compound probably has the
structure (II). There are 1 table and 3 references, 1 of which
is Soviet.

ASSOCIATION: Sredneaziatskiy gosudarstvennyy universitet
(Central Asia State University)

SUBMITTED: July 4, 1957

Card 2/3

Cycloalkylation of Aromatic Compounds.   SOV/7...-3-8-6/66
IV. Condensation of Fluorene With Cyclohexanol in the Presence of Aluminum
Chloride

Card 3/3

SIDOROVA, N.G.;TYSHCHUK, G.Kh.

Cycloalkylation of aromatic compounds. Part 15: Condensation of
fluorene with cyclohexanol in the presence of aluminum chloride.
Zhur. ob. khim. 28 no. 8:2030-2032 Ag '58.   (MIRA 11:10)

1. Sredneaziatskiy gosudarstvennyy universitet.
                    (Fluorene)
                  (Cyclohexanol)
          (Condensation products(Chemistry))

TYSHCHUK, N.F., ekonomist

Improved spray burner for feed steamers. Zhivotnovodstvo 21
no.7:81 Ja '59.   (MIRA 12:9)

1. Belogorskaya remontno-traktornaya stantsiya, Belogorskiy
rayon, Khmel'nitskaya oblast'.
                    (Burners)

TYSHCHUK, Ye.A.

Plastic skin surgery in injuries of the foot. Ortop., travm. i
protez. 21 no.11:25-30 '60.   (MIRA 14:4)
            (FOOT—WOUNDS AND INJURIES)   (SKIN GRAFTING)

TYSHCHUK, Ye.A.

Use of homoplastic and fibrin film in arthroplasty of the
interphalangeal and the metacarpophalangeal joints. Khirurgiia
35 no. 5:52-59 My '59.   (MIRA 13:10)

1. Iz patologoanatomichskoy laboratorii (zav. - prof. P.V. Sipovskiy)
i otdeleniye neotlozhnoy travmatologii (zav. - dotsent S.Ye.
Kashkarov) Leningradskogo nauchno-issledovatel'skogo instituta
travmatologii i ortopedii (dir. - prof. V.S. Balakina).
        (BLOOD AS FOOD OR MEDICINE) (HAND--SURGERY)

TYSHCHUK, Ye.A.

Comparative evaluation of anesthesia methods in surgical interven-
tions on the extremities. Trudy Len.gos.nauch.-issl.inst.travm.i
ortop. no.8:25-31 '61.   (MIRA 15:9)
          (EXTREMITIES (ANATOMY)--SURGERY)   (ANESTHESIA)

TYSHCHUK, Ye.A.

Pathological changes in newly formed metacarpophalangeal joints
following arthroplasty. Trudy Len.gos.nauch.-issl.inst.travm.i
ortop. no.7:161-169 '58.   (MIRA 13:6)

1. Iz otdeleniy patologoanatomicheskogo i neotloshnoy travma-
tologii Leningradskogo gosudarstvennogo nauchno-issledovatel'-
skogo instituta travmatologii i ortopedii.
        (JOINTS--DISEASES)   (PLASTIC SURGERY)

TYSHCHUK, Ye.A.

Anatomical characteristics of the pain syndrome in fractures of the radius in a typical location. Ortop.travm. i protez. 20 no.1:34-37 Ja '59.   (MIRA 12:3)

1. Iz otdeleniya neotlozhnoy travmatologii (zav. - kand.med.nauk S.Ye. Kashkarov) i bol'nitsy Frunzenskogo rayona g. Leningrada.
        (RADIUS, fract.
                causing pain synd., anat. causes (Rus))

TYSHCHUK,Ye.A.

Blood vessel and nerve injuries in fractures of the radius
at a typical site. Ortop.travm. i protez. no.2:11-13 Mr-Ap
'55.   (MLRA 8:10)

1. Iz kafedry operativnoy khirurgii i topograficheskoy anatomii
(zav.-prof. A.P. Nadein) Gosudarstvennogo instituta usovershen-
stovavniya vrachey im. S.M.Kirova i khirurgicheskoto o tdeleniya
(zav.-prof. A.P.Nadein) bol'nitsy Frunzenskogo rayona g.Lenin-
grada (glavnyy v rach-L.A.Talyzina)
        (RADIUS, fractures,
            blood vessels & nerves inj.)
        (FRACTURES,
            radius, inj. to blood vessels & nerves)
        (BLOOD VESSELS, wounds and injuries
            in fract. of radius)
        (NERVES, RADIAL, wounds and injuries
            in fract. of radius'
        (WOUNDS AND INJURIES,
            blood vessels & radial nerves in fract. of radius)

GRINSHTEYN, I.M.; TYSHETSKAYA, O.V.

Special features of the stripping of hydrogen chloride from
thickened hydrolyzates by live steam. Sbor.trud. NIIGS 11:23-30
'63.

Stripping of hydrogen chloride from hydrochloric hydrolyzates at
atmospheric pressure. Ibid.:31-40   (MIRA 16:12)

GRINSHTEYN, I.M.; TYSHETSKAYA, O.V.; BABINA, O.M.

Rotary absorber for producing concentrated hydrochloric acid. Gidroliz.i lesokhim.prom. 13 no.6:12-13 '60.

(MIRA 13:9)

1. Nauchno-issledovatel'skiy institut gidroliznoy i sul'fitno-spirtovoy promyshlennosti.

(Kansk--Hydrochloric acid)   (Absorption)

TYSHETSKIY, V. I.

Morbidity of the population in Vinnitsa Province from malignant
tumors. Vop. onk. 8 no.7:99-104 '62.   (MIRA 15:7)

1. Iz kafedry organizatsii zdravookhraneniya i istorii meditsiny
(zav. - prof. L. G. Lekarev) Vinnitskogo meditsinskogo instituta
im. N. I. Pirogova (dir. - dots. S. I. Korkhov)

(VINNITSA PROVINCE—CANCER)

Pyrolysis of wood material for portable gas generators
A. K. Slavyanskii, V. M. Tyshetskii and P. A. Krasulov.
Lesokhim. Prom. 1939, No. 11, 19-23; *Khim. Referat.
Zhur.* 1940, No. 3, 111.--Wooden chips or blocks were
subjected to pyrolysis in kerosene, to obtain brown blocks
with recovery of the wood chemicals. The process was
carried out at 250-60°. The yields on the dry wt. of wood
were: brown blocks 64-70, acids approx. 5.5, alc. approx.
0.8 and gases approx. 8%. Losses of kerosene were from
0.2 to 1.5% of the wt. of kerosene taken for the expts.
(18-23 kg. of kerosene per 6-7 kg. of wood.)   W. R. H.

METALLURGICAL LITERATURE CLASSIFICATION

TYSHETSKIY, V.I.

Method of special examinations of malignant neoplasms.
Zhur. eksp. i klin. med. 3 no.3:99-103 '63.
(MIRA 17:1)

1. Institut onkologii AMN SSSR i kafedra organizatsii
zdravookhraneniya Vinnitskogo meditsinskogo instituta.

KAUFMAN, B.D.; LIBERMAN, I.S.; TYSHETSKIY, V.I.

Some materials dealing with the distribution of esophageal
cancer in Gur'yev Province, Kazakh S.S.R. (according to
materials of the 9th Expedition of the Institute of Oncology
of the Academy of Medical Sciences of the U.S.S.R. Vop. onk.
11 no.12:78-85 '65.   (MIRA 19:1)

1. Iz nauchno-organizatsionnogo otdela Instituta onkologii AMN
SSSR (ispolnyayushchiy obyazannosti zaveduyushchego otdelom -
kand. med. nauk B.D. Kaufman, dir. instituta - deystvitel'nyy
chlen AMN SSSR zasluzhennyy deyatel' nauki RSFSR prof. A.I.
Serebrov).

TYSHEV, A.A.

Device for determining the coefficient of rocks under pressure.
Izv.Sib.otd.AN SSSR no.11:91-93 '59.   (MIRA 13:4)

1. Severo-Vostochroye otdeleniye Instituta merzlotovedeniya
im. V.A.Obrucheva AN SSSR.
                (Rocks)

TYSHEV, YU A.

Teplo-i massoobmen v merzlykh tolshchakh zemnoy kory (Heat and Mass Transfer in the Frozen Strata of the Earth's Crust) Moscow, Izd-vo AN SSSR, 1963 213p.
     Research by the staff of the Heat-and Mass-Transfer Division of the Instituteof Permafrost Study, Siberian Branch, AS USSR.

Card 6/7

filler and glass plastic, respectively. The deviation of calcu...
...and the formula can be used for

TYSHKEVICH, R.

Irreducible nilpotent groups of matrices of level P^2.
Vestsi AN BSSR. Ser.fiz.-tekh.nav. no.4:34-41 '59.
(MIRA 13:4)

(Groups, Theory of)

SUPRUNENKO, D.A.; TYSHKEVICH, R.I.

Reducible nilpotent and locally nilpotent linear groups.
Trudy Inst.fiz.i mat.AN BSSR   no.3:221-233   '59.
(MIRA 13:4)

(Groups, Theory of)

TYSZKIEWICZ,Magdalena

Several cases of Huntington's chorea, chronic schizophrenia
and other mental disorders within the same family. Neur. &c.
polska 10 no.1:121-124 Ja-F '60.

1. Z Poradni Zdrowia Psychicznego w Gdyni, Kierownik: lek.
M. Tuszkeiwicz.
        (SCHIZOPHRENIA genetics)
        (CHOREA HEREDITARY case reports)
        (MENTAL DISORDERS genetics)

GOL'BINDER, A.I.; SVETLOVA, L.M.; TYSHEVICH, V.F.

Some reasons for detonation damping in boreholes. Vzryv. delo
no.52/9:155-168 '63.   (MIRA 17:12)

1. Moskovskiy ordena Lenina khimiko-tekhnologicheskiy institut
imeni D.I. Mendeleyeva.

TYSHETSKIY, V.I.

LEKAREV, L.G., professor; RYUKHOV, F.S.; TYSHETSKIY, V.I.

Hospital requirements of the population of Vinnitsa and methods for its estimation. Vrach.delo no.6:635-639 Je '57.   (MIRA 10:8)

1. Kafedra organizatsii zdravookhraneniya i istorii meditsiny (zav. - prof. L.G.Lekarev) Vinnintskogo meditsinskogo instituta
        (VINNITSA--HOSPITALS)

TYSHKEVICH, N.I.

Structure of the Central Office of Technological Information
of the National Economic Council. NTI no.5:3-7 '64.
(MIRA 17:10)

89533

S/044/60/000/008/005/035
C111/C222

_16.2000_

AUTHORS: Suprunenko, D.A., and Tyshkevich, R.I.

TITLE: Reducible nilpotent and locally nilpotent linear groups

PERIODICAL: Referativnyy zhurnal. Matematika, no.8, 1960, 29,
abstract no.8620. Tr. In-ta fiz. i matem. AN BSSR, 1959,
no.3, 221-233

TEXT: The authors describe a simple method for the reduction of the
investigation of arbitrary nilpotent linear groups over the algebraically
closed field P to the investigation of irreducible nilpotent groups.
Basing on this construction and on earlier results the authors prove the
following facts. 1) All maximal nilpotent subgroups of $GL(n,P)$ of the
class $1 > n-1$ decompose into an only finite number of classes of con-
jugate subgroups. 2) The number of non-conjugated maximal locally nil-
potent subgroups of $GL(n,P)$ is smaller than or equal to the number of
representations of the number n in the form: $n = k_1 \frac{n_1}{k_1} + k_2 \frac{n_2}{k_2} + \ldots + k_s \frac{n_s}{k_s}$,

where n_i/k_i are not divisible by the characteristic of the field P.
[Abstracter's note: The above text is a full translation of the original
Soviet abstract.]
Card 1/1

SUPRUNENKO, D.A.; TYSHKEVICH, R.I.

Reducible locally nilpotent linear groups. Dokl.AN BSSR 4 no.4:
                                              (MIRA 13:10)
137-139 Ap '60.

1. Belorusskiy gosudarstvennyy universitet im. V.I.Lenina.
              (Groups, Theory of)

KOZEL, P.T.; TYSHKEVICH, R.I.

Two theorems on solvable groups. Izv.vys.ucheb.zav.; mat.
no.6:45-50 '62.   (MIRA 15:12)

1. Belorusskiy gosudarstvennyy universitet imeni V.I.Lenina.
                      (Groups, Theory of)

KHANOVICH, Miron Grigor'yevich, kand.tekhn.nauk; ALYSHITS, I.Ya., kand.
tekhn.nauk, retsenzent; TODER, I.A., inzh., retsenzent; KARA-
TYSHKIN, S.G., prof., doktor tekhn.nauk, red.; VASIL'YEVA, V.P.,
red.izd-va; FRUMKIN, P.S., tekhn.red.

[Liquid friction and combined supports] Opory zhidkostnogo treniia
i kombinirovannye. Moskva, Gos.nauchno-tekhn.izd-vo mashinostroit.
lit-ry, 1960. 271 p.   (MIRA 13:7)

(Bearings (Machinery))

SEREBRENNIKOV, V.V.; TYSHINSKAYA, I.I.; CHUPAKHINA, R.A.

Formation of complex compounds by rare earths. Trudy TGU
(MIRA 12:3)
145:161-162 '57.

1.Kafedra neorganicheskoy khimii Tomskogo gosudarstvennogo uni-
versiteta imeni V.V. Kuybysheva.
(Rare earth compounds)

TYSHKEVICH,A.A., inzhener; CHERNYAK,I., redaktor; TRUKHANOVA,A.A., tekhni-
cheskiy redaktor

[Innovations in the technology of producing lime from chalk] Novoe v
tekhnologii proizvodstva izvesti iz melov; iz opyta raboty novatorov
izvestkovykh zavodov raionnoi promyshlennosti BSSR. Minsk, Gos.izd-
vo BSSR, 1955. 62 p.   (MIRA 9:1)
                            (Lime)

TYSHKEVICH, G.I.

USSR/Forestry - Dendrology.   K.

Abs Jour   : Ref Zhur - Biol., No 21, 1958, 95022

Author   : Tyshkevich, G.I.
List   :
Title   : Physical-Mechanical Properties of Spruce Wood in the Car-
               pathians and Their Change Depending on the Type of Bran-
               ching.

Orig Pub   : Izv. vyssh. uchebn. zavedeniy, Lesn. zh., 1958, No 1,
               68-71.

Abstract   : No abstract.

Card 1/1

.. 11 ..

USSR / Forestry. Forest Economy

K-3

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58385

tree, and in an area of the type B_2-C_2 occupied
by pure spruce groves. It was determined that it
is necessary to take into consideration the sub-
sequent reforestation of the spruce, when conduc-
ting massive fellings in spruce groves on deep
melkozem (fine) soils (60-70 centimeters thick)
and on flat northern slopes, the most widespread
type C_3 in the Carpathians. Combined reforesta-
tio is recommended where the width of the clear-
ing is over 150 meters. Natural reforestation sh-
ould be conducted near the forest borders, and
artificial reforestation is recommended over the
new felling, without soil preparation. In the
type B_2-C_2, where the thin layer of organic soil
substance is destroyed during lumbering and where
only stone scatterings remain, natural reforesta-

Card 2/3

USSR / Forestry. Forest Economy   K-3

Abs Jour: Ref Zhur-Biol., No 13, 1958, 58385

          tion is impossible and cultivation is indispen-
          sable. --V. V. Protopopov

Card 3/3

TYSHKEVICH, G. L.

Soils of Carpathian spruce forests [with summary in English].
Pochvovedenie no.2:26-29 F '58.   (MIRA 11:3)

1. Lesotekhnicheskiy institut, L'vov.
                    (Carpathian Mountains--Forest soils)

TYSHKEVICH, Galina Leonidovna; MELEKHOV, I.S., akademik, otv. red.;
ENDEL'MAN, G.N., red. izd-va; VOLKOVA, V.G., tekhn. red.

[Spruce forests of the Soviet Carpathians]Elovye lesa Sovetskikh
Karpat. Moskva, Izd-vo Akad.nauk SSSR, 1962. 172 p.
(MIRA 15:10)

1. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni
V.I.Lenina (for Melekhov).
(Carpathian Mountain region—Spruce)

TYSHKEVICH N. G.

COUNTRY   : USSR   Q

CATEGORY   : Farm Animals. Cattle

ABS. JOUR.   : RZBiol., No. 13, 1958, No. 59499

AUTHOR   : Gordiyenko, M. F.; Ros', I. F.; Tyshkevich, *

INST.   : Kamenets-Podol'skiy Agricultural Institute

TITLE   : Pinzgau Cattle and Prospects of Breeding
                  Work with Them

ORIG. PUB.   : Sots. tvarinnitstvo, No 10, 41-44

ABSTRACT   : In 1956, the Kamenets-Podol'skiy Agricultural
                  Institute carried out investigation of 1,000
                  heads of Pinzgau cattle and its crosses in
                  six kolkhozes of Chernovitskaya Oblast; of
                  these, 33% were purebreds and 61% were cros-
                  ses with Simmenthals. The live weight of
                  purebred cows averaged 430 kg. and that of

                  * N. G.

CARD: 1/2

TYSHKEVICH, N.I., kandidat tekhnicheskikh nauk.

Length of receiving and departure tracks for "group" trains. Zhel.
dor. transp. 39 no.3:62-64 Mr '57.   (MLRA 10:4)
                        (Railroads--Making up trains)

TYSHKEVICH, N. I.

The experience of dispatche Orlov Moskva, Gos. transp. zhel-dor. izd-vo, 1949.
42 p. (50-19901)

TF563.T97

1. Railroads - Penzenskaya oblast', Russia - Training dispatching

TYSHKEVICH, N. I.

Opyt dispetchera Orlova. /Orlov's train-dispatching experience/. Moskva, Gos.
transp. zhel-dor. izd-vo, 1949. 42 p. port., diagrs.
                                    DLC: TF563.T97

SO: Soviet Transportation and Communications, A Bibliography, Library of Congress
     Reference Department, Washington, 1952, Unclassified.

TYSHKEVICH, N.I.

Reference and information collections of All-Union and branch
information centers. NTI no.9:3-5 '65.   (MIRA 19:1)

TYSHKEVICH, R.I. (Minsk).

Nilpotent linear groups. Mat. sbor. 42 no.4:441-444 Ag '57.
                    (Groups, Theory of)   (MIRA 10:12)

SUPRUNENKO, D.A.; TYSHKEVICH, R.I.

Reducible locally nilpotent linear groups. Izv. AN SSSR. Ser.
mat. 24 no. 6:787-806 N-D '60.   (MIRA 14:1)

1. Predstavleno akademikom A.I. Mal'tsevym.
            (Groups, Theory of)

TYSHKEVICH, R.I.: Master Phys-Math Sci (diss) -- "Nul-potential linear

groups". Minsk, 1958. 4 pp (Belorussian State U im V.I. Lenin, Chair

of Algebra), 150 copies (KL, No 1, 1959, 113)

SUPRUNENKO, D.A.; TYSHKEVICH, R.I.

　　　　Dynamic representations and one class of determinate machine⌐.
　　　　Kibernetika no.2:9-17　Mr-Ap '65.　　　　　　　　　(MIRA 18:5)

TYSHKEVICH R.I.

AUTHOR: TYSHKEVICH R.I. (Minsk)   39-4-2/9

TITLE: On Nilpotent Linear Groups (O nil-potentnykh lineynykh gruppakh)

PERIODICAL: Mat.Sbornik,   1957, Vol.42, Nr.4, pp.441-444 (USSR)

ABSTRACT: Let P be an algebraically closed field; M - the multiplicative
             group of P; GL(n,P) - complete linear group of n-th degree
             over P; A : B - index of the subgroup B in the group A.
             Theorem: Let G be an irreducible nilpotent subgroup of GL(n,P)
             being maximal among all subgroups of the class $1 > 1$. Let
             $Z_1 = M \subset Z_2 \subset .... \subset Z_{1-1} \subset G$ be its upper central series.

             1. if Z_i is irreducible, then $Z_i = G$,

             2. if $1 > 2$, then Z_2 is commutative,

             3. if $Z_2 : Z_1 = n$, then Z_{1-1} is abelian.

             Three Soviet references are quoted.
SUBMITTED: May 17, 1956
AVAILABLE: Library of Congress

Card 1/1

SUPRUNENKO, D.A.; TYSHKEVICH, R.I.

Dynamic mapping. Dokl. AN BSSR 7 no.5:289-292 My '63.
(MIRA 16:12)

1. Belorusskiy gosudarstvennyy universitet imeni Lenina.

Kibernetika no 2 1965 9-17

AUTHOR: Tyshkevich, V. A.

TITLE: The Method of Affinity Regions of Mechanisms and Its Application to
the Study of the Characteristics of Hinged Four-bar Linkages (Metod
oblastey rodstva mekhanizmov i yego primeneniye pri izuchenii
svoystv sharnirnykh chetyrekhzvennikov)

PERIODICAL: Tr. Seminara po teorii mashin i mekhanizmov In-ta mashinoved.
AN SSSR, 1956, Vol 16, Nr 62, pp 11-25

ABSTRACT: A mechanism is presented in the form of a representative point in an
n-dimensional coordinate system along the axes of which the relative
dimensions of the links are plotted on the chart.   The geometrical
region of the existence of mechanisms with identical kinematic
schemes is next established as follows: The points of a mechanism
which possess similar kinematic properties are plotted on the chart
along well-defined lines, surfaces, and volumes designated as
affinity regions.   The method suggested in the paper is suitable for
the design of lower-pair mechanisms which is to fulfill a prescribed
Card 1/1   law of motion of the driven link.   V. N. Geminov

TYSHKEVICH, V.A., kand.tekhn.nauk.

Nomographic method used in the kinematic analysis of four-link
mechanisms. Trudy OMI no.1:9-20 '56.   (MIRA 11:2)
              (Machinery, Kinematics of--Graphic methods)

TYSHKEVICH, V.A.

"Analogy domain" of mechanisms used as a technique for studying the properties of hinged four-bar mechanisms. Trudy Sem. po teor. mash. 16 no.62:11-25 '56.   (MLRA 9:10)

(Links and link-motion) (Mechanics, Analytic)

TYSHKEVICH, V. A.

"A Study of the Properties of a Four-Throw Crankshaft and
Directions for Compiling a Manual Listing Their Characteristics."
Cand Tech Sci, All Union Correspondence Polytechnic Inst, Moscow,
1955. (KL, No 8, Feb 55)

SO: Sum. No. 631, 26 Aug 55-Survey of Scientific and Technical
     Dissertations Defended at USSR Higher Educational Institutions
     (14)

GOL'BINDER, A.I.; TYSHEVICH, V.F.

Channeling effect in the detonation of explosives. Dokl. AN
SSSR 156 no. 4:905-908 Je '64.   (MIRA 17:6)

1. Moskovskiy khimiko-tekhnologicheskiy institut im. D.I.
Mendeleyeva. Predstavleno akademikom Ya.B.Zel'dovichem.

ACCESSION NR: AP4041158   S/0020/64/156/004/0905/0908

AUTHOR: Gol'binder, A. I.; Ty*shevich, V. F.

TITLE: Channel effect in the detonation of explosives

SOURCE: AN SSSR. Doklady*, ~. 156, no. 4, 1965, 905-908

TOPIC TAGS: detonation, explosive, channel effect, shock wave,
luminosity, shock wave propagation, trotyl, hexogen, lead nitrate

ABSTRACT: High-speed photography (500,000—1,000,000 frames per sec)
and x-rays were used to study the channel effect in the detonation of
explosives. The experiments were carried out in organic glass shells
using fine ground trotyl and hexogen charges with densities of 0.5 g/cc
and fine ground mixtures of trotyl and lead nitrate (10—20%) with den-
sities of 0.6—0.7 g/cc. Analysis of the experimental data and published
data showed that in all cases the boundary of the expanding detonation
products is sharply delineated and never overtakes the detonation front.
The luminosity observed in the channel is not connected with the motion
of the detonation products. Special experiments showed that the lumi-
nosity depends on the type of gas in the channel. Maximum luminosity

Card 1/2

ACCESSION NR: AP4041158

was observed when the channel was filled with argon; minimum luminosity was observed with carbon dioxide. The detonation products generate a shock wave (in the channel) which overtakes the detonation front and has a compacting effect on the charge. The detonation ceases when the shock wave overtakes the detonation front at a distance permitting a prolonged action of the shock wave on the charge. Equations are given for calculating the thickness of the layer of the charge compacted by the shock wave and the compacting time. The calculated data on the thickness of the compacted and uncompacted layers agree closely with that obtained by measuring the layers by x-ray pictures. Depending on the sensitivity of explosives, the shock wave may also initiate detonation. The effect of baffles in the charge and the effect of compression of gas inclusions on the attenuation of detonation are also discussed. Orig. art. has: 3 figures.

ASSOCIATION: Moskovskiy khimiko-tekhnologicheskiy institut im. D. I. Mendeleyeva (Moscow Institute of Chemical Technology)

SUBMITTED: 08Feb64   ATD PRESS: 3042   ENCL: 00

SUB CODE: WA   NO REF SOV: 005   OTHER: 003
Card 2/2

TYSHKEVICH, Yu.I., inzh.; ZUSSER, A.P., inzh.

Heating and drying unfinished buildings. Biul.tekh.inform. 5
no.1:25-26 Ja '59.   (MIRA 12:4)
    (Building--Cold weather conditions) (Drying apparatus)

TYSHKEVICH, Yu.I.

Laying and plasterin brick walls at the same time.   Biul.tekh.inform.
3 no.7:4-8 Jl '57.   (MIRA 10:10)

1. Glavnyy inzhener tresta N.19.
              (Plastering)   (Bricklaying)

TYSHKO, A.G.

Study of serum protein fractions obtained after a simultaneous
introduction of a mumps and smallpox vaccine. Vrach. delo no.1:
100-102 Ja'64   (MIRA 17:3)

1. Kafedra mikrobiologii (zav. - prof. S.S. Dyachenko) Kiyevsko-
go meditsinskogo instituta.

Tyshko, A.I.

PHASE I BOOK EXPLOITATION   SOV/3778

Ukrainian SSR. Gosudarstvennaya planovaya komissiya

Avtomatizatsiya i priborostroyeniye; sbornik nauchnykh trudov, vyp. 1.
(Automation and Instruments Making; Collected Scientific Works, No. 1)
Kiyev, Gostekhizdat USSR, 1959. 107 p. 3,000 copies printed.

Ed.: V. Demskiy, Tech. Ed.: E. Osenov; Editorial Board: P.M. Mel'nik
(Chief Ed.), M.T. Zharov, O.S. Kryshtak, I.A. Orlov, (Resp. Ed.),
L.L. Shorbet, and N.V. Larin.

PURPOSE: This collection of articles is intended for scientific and technical
workers and for students of schools of higher education specializing in
automation, telemechanics, and computing.

COVERAGE: The collection contains papers on the automation of metallurgical,
chemical and power engineering and on the development of new instruments,
telemechanical units, and a program control system for turret lathes.
A bibliography on automatic analysis of solutions containing 86 items:
42 Soviet, 34 English, 5 German, 4 French and 1 Polish, is included. No perso-
alities are mentioned.

AUTOMATION OF INDUSTRIAL PROCESSES

Korobko, M.I., A.G. Strel'chenko, V.N. Korobkevich, V.I. Kozlyuk,
I.T. Tyshko, V.M. Artynskiy. Automation System for Open-Hearth
Thermal Processes   9

Korobko, M.I., V.I. Kozlyuk. Open-Hearth Control System   14

Bendfey, K.A., B.G. Nikprukur. Automatic Inspection and
Control of Blast Distribution in Open-Hearth Turrets   17

Pursk, A.I. New Indirect Method for the Automatic Analysis of
Multicomponent Solutions   22

Rytva, O.A., Kult. Rovar, V.Ya. Gitlin, V.N. Afanas'yev. Program
Control System of Turret Lathe 1341 P   29

Rytva, O.A., and O.V. Portitskiy. Shift Pickup Called "Magnetic
Stops"   35

AUTOMATION EQUIPMENT

Innatov, V.L. Comparison of Methods of Selecting Telemechanic
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Shirat, B.K. and V.I. Tupes. Circuitry for Synchronous Reception
of Telemechanic Frequency Codes (Synchronous Generator-Filters)   34

Bishist, L.S., V.P. Kovalenko. Calculator "Ekran-2" for the
Economic Distribution of Active Load in Power Systems   50

Sim'nov, V.M. and Fel'baum, K.M. Basis for Selecting Criterion
With Regard to the Necessity of Registering Net Losses During
Distribution of Load Among Electric Power Stations.   55

Nechau, V.I. and V.A. Lapiy. Electronic Level Controller   61

Wagner, I.V., A.I. Borosel'skyy, L.P. Titarenko.
Concentration Meter for Potassium Salt Solutions   64

Ianovich, V.S., K.M. Kolovets, N.M. Altarskiy. Highly
Sensitive Germanium Phototriode   69

Nechbo, V.A. and B.I. Vasiliyev. Gold-Welded Germanium
Pulse Diode   71

AUTOMATIC CONTROL

Shirakhov, O.D. New Principle of Control Using High-Speed Nonlinear
Controllers for Industrial Processes With Considerable Lag   75

Ostachuk, V.P. and Yu.I. Samoylenko. Approximate Methods for
Selecting Optimum Adjustments of Discontinuous Control Systems   80

Lediyev, R.Ya., and A.V. Ogorodnik. Selection of Control
Parameters for a Mercury-Pool Electrolytic Bath   87

KOROBKO, M.I.; STREL'CHENKO, A.G.; KOROTKEVICH, V.N.; KOZLYUK, V.I.;
    TYSHKO, A.I.; ARTYNSKIY, V.M.

Automatic control of thermal processes in an open-hearth furnace.
Avton.i prib. no.1:9-14 '59.   (MIRA 13:10)
    (Electronic control)   (Open-hearth furnaces)

SERDYUK, S.M., inzh.; TYSHKO, A.I., inzh.

Using photorelays in open-hearth process. Mekh.i avtom.proizv.
17 no.7:23 Jl '63.   (MIRA 16:8)
(Open-hearth furnaces) (Photoelectric measurements)

KOSTOGRYZOV, V.S., kand. tekhn. nauk; TYSHKO, A.I.; BUZNITSKIY, L.A.

Effect of regulating the heat conditions of a holding furnace on fuel consumption and the quality of ingot heating. Met. i gornorud. prom. no.6:29-32 N-D '65.

(MIRA 18:12)

KRIVOSHEY, D.; DRAGUNOV, V.; TYSHKO, V.; KORENYAK, A., starishiy inzh. po
tekhnike bezopasnosti; MOLCHANOV, A., rabochiy syr'yevogo tsekha;
POVOLOTSKIY, B.; LOBACHEV, L.; SUKHANOV, A.; ZEMLYACHENKO, I.;
KOZLOV, A.; POPENKO, F., inzh. (Moskva); SHAPIRO, A.

Editor's mail. Okhr.truda i sots.strakh. 5 no.8:32-33 Ag '62.
                                                        (MIRA 15:7)

1. Glavnyy inzh. shakhty "TSentral'naya", Krivoy Rog (for Kirvoshey).
2. Pomoshchnik glavnogo inzh. po tekhnike bezopasnosti shakhty
"TSentral'naya," Krivoy Rog (for Dragunov). 3. Nachal'nik ventilyatsii
shakhty "TSentral'naya," Krivoy Rog (for Tyshko). 4. Tomskiy
podshipnikovyy zavod 5-GPZ (for Korenyak). 5. Kabluchnaya fabrika,
g. Nerekhta (for Molchanov). 6. Predsedatel' zavodskogo komiteta
Moskovskogo zavoda zhelezobetonnykh izdeliy No.7 (for Lobachev).
7. Transportnaya kontora tresta "Sterlitamakstroy", g. Sterlitamak
(for Sukhanov). 8. Predsedatel' mestnogo komiteta gorodskoy
tipografii, g. Michurinsk (for Zemlyachenko). 9. Predsedatel'
komissii okhrany truda gorodskogo komiteta professional'nogo soyuza
meditsinskikh rabotnikov, g. Yevpatoriya (for Kozlov). 10. Vneshtatnyy
tekhnicheskiy inspektor Voronezhskogo oblastnogo soveta professio-
nal'nykh soyuzov (for Shapiro).
                    (Industrial hygiene)

TYSHKO, V.I.

Once more on dust control in mines of the Krivoi Rog
Basin. Bezop.truda v prom. 4 no.8:31 Ag '60.
(MIRA 13:8)

1. Nachal'nik ventilyatsii Shakhty "TSentral'naya"
rudoupravleniya "Ingulets" tresta Dzerzhinskruda.
(Krivoi Rog Basin—Mine dusts—Safety measures)

TYSHKO, V.I.; DRAGUNOV, V.P.

Ventilation of stopes at the TSentral'naia mine of the
Ingulets Mining Administration. Met. i gornorud. prom.
no.2:55-56 Mr-Ap '65.

(MIRA 18:5)

DUNAYEV, A.N.; TYSHKOVSKIY, S.M.

      Modernization of an amplitude pickup. Stan.i instr. 33 no.7:40
      Jl '62.   (MIRA 15:7)
               (Vibration—Measurement)

SOV/3-58-12-23/43

AUTHOR: Tyshkovskiy, V.M., Candidate of Historical Sciences

TITLE: The Scientific-Methodical Council at the University (Nauchno-metodicheskiy sovet v universitete)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 12, pp 67 - 70   (USSR)

ABSTRACT: In 1956, the Council of the Kiyevskiy universitet (Kiyev University) established a Scientific-Methodical Council at the university. It is the Council's task "to examine and work out the organizational and teaching-methodical problems on training pedagogic and scientific personnel". For this purpose the council studies and generalizes the experiences gained in schooling, and proposes measures for its improvement. Among its 39 members are 8 professors. The Council has 5 sections. Last year the Section on General Methodical Problems arranged its first scientific methodical conference. The first plenary meeting was attended by 357 persons while 500 persons participated in the work of the sections. The University Rector and Member of the AS UkrSSR, I.T. Shvets, delivered a lecture on increasing the quality of the intro-

Card 1/2   ductory lecture. The Scientific-Methodical Council solved

The Scientific-Methodical Council at the University

SOV/3-58-12-23/43

a number of organizational and scientific-methodical pro-
blems, and is in close touch with all the universities of
the Ukraine and other republics. There are 2 Soviet refer-
ences.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko
(Kiyev State University imeni T.G. Shevchenko)

Card 2/2

TURKUMAN, D.M.; TYSHKUL, F.P.

Work education on a school collective farm. Politekh.obuch.
no.6:33-37 Je '59.   (MIRA 12:12)

1. Direktor sredney shkoly, selo Kerzhautsy, Lipkanskogo rayona
Moldavskoy SSR (for Turkuman). 2. Predsedatel' kolkhoza, selo
Kerzhautsy, Lipkanskogo rayona, Moldavskoy SSR (for Tyshkul).
           (Kerzhautsy--Student activities)
           (Agriculture--Study and teaching)

TYSHLER, I., zaveduyushchiy; YALANSKIY, A., inzhener.

Regulation of working capital norms for tree nurseries. Zhil.-kom. khoz.
3 no.5:20 My '53.
(MLRA 6:7)

1. Planovo-ekonomicheskiy sektor Stavropol'skogo kraykomkhoza (for Tyshler).
2. Blagoustroystvo Stavropol'skogo kraykomkhoza.
(Nurseries (Horticulture))

TYSHLYAR, I.S.; AKULINCHEVA, G.V.; MAKOVETSKIY, O.Ye.; KLYUSHNIKOV, V.I.

Gas equipment of a kiln for ceramic tiles. Gaz. prom. 10
no.7:34-35 '65.   (MIRA 18:8)

TYSHNYUK,Ya., inzhener; YANSA,B.V., inzhener

Efficiency promoters in machine building plants strive to satisfy
the needs of agriculture. Sel'khozmashina no.10:28-29 0'55.
(Machine shop practice)   (MIRA 8:12)

KLYUCHKO, P.V., inzh.; ROZIN, V.A., kand. tekhn. nauk; TYSHOVA, Ye.N., inzh.

Land improvement in Poland. Gidr. i mel. 17 no.7:49-55
Jl '65.   (MIRA 18:12)

1. Kaliningradskoye oblastnoye upravleniye vodnogo khozyaystva
(for Klyuchko). 2. Severnyy nauchno-issledovat'skiy institut
gidrotekhniki i melioratsii (for Rozin). 3. Respublikanskiy
gosudarstvennyy institut po proyektirovaniyu vodokhozyaystvennogo
i meliorativnogo stroitel'stva RSFSR (for Tyshova).

TYSKA, Maria

An international exhibition of books and maps concerning problems of the quarternary. Przegl geolog 10 no.2F:87-88 '62

TYSKA, M.

Warsaw, Przeglad Geologiczny, Vol 10, No 2 (107), February 1962.

1. "Plan of Geological Works for 1962," Ewa KIPRIANOW-BYSTRZYCKA of the Central Geological Office; (Continuing) Urzad Geologii); pp 65-67.

2. "Geological Exploration of Deposits for Sources of Construction Ceramics," Ryszard WYRWICKI of the Chair of Geology and Strata Formation (Katedra Geologii i Surowcow Skalnych) of the Warsaw University (Uniwersytet Warszawski); pp 67-72. (English summary).

3. "Prospects of Kaolin Occurrence in the Strzelin Massif Region," Lech RUMBOWSKI of the Geological Institute (Instytut Geologiczny); pp 72-73. (English summary).

4. "Deposits of Clay for Construction Ceramics in the Wojwodztwo of Lublin," Zdzislaw KOZYDRA, Zbigniew KILIAN, and Marian RADO; pp 73-78. (English summary).

5. "Prospects for the Exploitation of Quartzite in the Zdziechowice Region," Jerzy NILEWICZ of the Geological Institute; pp 79-85. (English summary).

6. "Sixth Congress of INQUA," Romuald RYLKA of the Geological Institute; pp 85-87.

7. "International Exhibition of Rocks and Maps (LKGA)," Maria TYSKA; pp 87-89.

8. "Some Problems of Mineralogical Phase Analysis of Ores," Witold MARKISZ of the Academy of Mining and Metallurgy (Akademia Gorniczo-Hutnicza); pp 89-94. (English summary).

9. "Seismic Velocities in the Lodz-Szczecin Synclinorium in the Light of the Vertical Time Analyses of Deep Bore-Holes," Zygmunt SLIWNIC of the Office of Oil Exploration (Poszukiwania Naftowe); pp 94-96. (English summary).

10. "Use of Patterns in Following Geological-Engineering Processes," Antoni KIDYBINSKI of the Main Institute of Mining (Glowny Instytut Gornictwa); pp 97-101. (English summary).

— 1/2 —

S/250/62/006/005/007/007
I001/I002

AUTHORS: Yerofeyev, B. V., Naumova, S. F. and Tyskalo, L. G.

TITLE: Formation of benzene in themic polymerization of cyclohexadiene-1,3

PERIODICAL: Akademiya nauk Belaruskay SSR. Doklady, v. 6, no. 5, 1962, 313-315

TEXT: This is a continuation of a previous work on polymerization of cyclohexadiene-1,3 at temperatures 160°-200°C (B. V. Yerofeyev, S. F. Naumova, L. G. Tyskalo, Sb. nauchnykh trudov IFOKh, no. 9, 1961). In the present work the spectrophotometric investigation was applied to menomers obtained in experiments with different degrees of polymerization at various temperatures. It was established, that in the process of the chemical changes of cyclohexadiene-1,3 dimerization and polymerization to higher degrees are accompanied by a disproportionation. A formula is given for calculation of the amount of benzene in the monomeric products. There are 2 figures and 1 table.

ASSOCIATION: Institut fiziko-organicheskoy khimii AN BSSR (Institute of Physical-Organic Chemistry AS BSSR)

SUBMITTED: February 28, 1962

Card 1/1

TYSKI, S.

Outlines of the history of geologic research in northwestern Poland.   p. 544.
(PRZEGLAD GEOLOGICZNY. Vol. 4, no. 12, Dec. 1956, Warszawa, Poland)

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

TYSKI, Stanislaw

New data from geological borings in Bartoszyce and Goldap.   Przegl
geol 10 no. 4/5:177-181. Ap-My '62

1.   Instytut Geologiczny, Warszawa.

L 07086-67   EWT(d)/FSS-2/EWT(1)
ACC NR: AP6018991   SOURCE CODE: UR/0109/66/011/006/0971/0982

AUTHOR: Tyslyatskiy, G. S.

ORG: none

TITLE: Sequential detection in a system of many independent receiving channels
with noise

SOURCE: Radiotekhnika i elektronika, v. 11, no. 6, 1966, 971-982

TOPIC TAGS: signal detection, sequential detection, signal noise separation,
communication channel, multichannel communication

ABSTRACT: The problem of sequential detection (C. Helstrom, IRE Trans.,
IT-8, 1962, 43) is considered. The optimum-detection procedure consists of two
parts: (1) Setting up the algorithm for processing sampling data and
(2) Establishing thresholds and the law of their variation. The theoretical
detection procedure includes calculation of a likelihood ratio, at each sampling

Card 1/2   UDC: 621.391.16:621.391.82

L 07086-67
ACC NR: AP5018991   3

step, and comparison of this ratio with two constant thresholds. Approximate
formulas for the average number of steps show that the energy expenditure in the
multichannel system is logarithmic. This inference was corroborated by the
results of numerical calculations on digital computers. These results are in good
agreement with those obtained by M. V. Marcus and P. Swerling (IRE Trans.,
IT-8, 1962, 3). As the number of channels increases, the relative spread of the
number of steps (the ratio of the standard deviation to the mean number of steps)
decreases, while the distribution law comes somewhat closer to the normal law.
Only the signal detection is analyzed; no identification of the signal-carrying
channel is attempted. "The author wishes to thank A. Ye. Basharinov for his
attention to the work, and also G. A. Ososkov and G. L. Artem'yeva for the
numerical simulation work." Orig. art. has: 5 figures, 44 formulas, and 1 table.

SUB CODE: 09 / SUBM DATE: 23Feb65 / ORIG REF: 004 / OTH REF: 005

Card 2/2

TYSZKIEWICZ, Stanislaw; JEMIELITY, Franciszek

Myomatous leicmyosarcoma. Pat. Pol. 16 no.3:373-376 Jl-S ' 65.

1. Z Zakladu Anatomii Patologicznej AM w Bialymstoku (Kierownik:
prof. dr. med. L. Komczynski).

TYSKIY, A. V.

20

The production of "activated" concrete. A. V. Tyskii. Sakhar 18, No. 10-11, 17-19(1940); Chem. Zentr. 1941, II, 2985.—The various possibilities for the utilization of the large amts. of boiler slag produced in Russian sugar refineries are discussed. In addn., processes for activating these slags by the addn. of slaked and unslaked lime in various doses during the milling or by the addn. of blast-furnace slag or Portland cement are discussed in detail. It is essential that the slag be subjected to suitable preliminary treatment in order to render the unburned C residue harmless. E. g., a slag of the following compn. gave good results when tested: SiO_2 39.40, Al_2O_3 33.72, FeO 5.6, CaO 11.6, SO_3 3.0, S 0.45 and ignition loss 12.50%. Concretes of exceptional properties were obtained with these activated slags. Treatment of the activated concrete with steam improved the strength.

M. G. Moore

The production of high-alloyed steel from a charge with vanadium pig iron according to the method of the silicon-manganese reduction process. V. I. Tyshnov. *Ural. Mt.* 1937, No. 6, 8-16; *Chem. Zentr.* 1918, II, 1853. — The production of Cr-V and Cr-V-Mo steels contg. about 0.4-1% Cr, 0.15% V, and 0.36% Mo in acid Martin furnaces with Cr-V pig iron (0.45-0.64% Cr and 0.52-0.78% V) together with 73% ferromanganese as a deoxidizing agent is described. Operating data are given on the compn. of the charge, smelting procedure and properties of the steel produced. M. G. Moore

TYSKIEJ, MARII

(3)

Raw materials of the world. Edwarda Rühle and Maril
Tyskiel. Panstwowy Inst. Geol., Prace specjal. No. 3,
Vol. 1, 478 pp.(1952).—This contains data on Fe, Mn, Cr,
Ni, Co, W, Sn, Mo, V, Ti, Cu, Pb, Zn, Cd, and pyrite.
Coal   Ibid. no. 3, Vol. 3, Pt. 1, 331 pp.(1952).
Michael Fleischer

Ca

20

PROCESSES AND MATERIALS INDEX

The production of "activated" concrete. A. V. Tyskii.
Sakhar 15, No. 10-11, 17-19(1940); Chem. Zentr. 1941,
II, 2985. —The various possibilities for the utilization of
the large amts. of boiler slag produced in Russian sugar
refineries are discussed. In addn., processes for activating
these slags by the addn. of slaked and unslaked lime in
various doses during the milling or by the addn. of blast-
furnace slag or Portland cement are discussed in detail.
It is essential that the slag be subjected to suitable pre-
liminary treatment in order to render the unburned C
residue harmless. E. g., a slag of the following compn.
gave good results when tested: SiO_2 39.40, Al_2O_3 33.72,
FeO 5.6, CaO 11.0, SO_3 3.0, S 0.45 and ignition loss
12.50%. Concretes of exceptional properties were ob-
tained with these activated slags. Treatment of the
activated concrete with steam improved the strength.
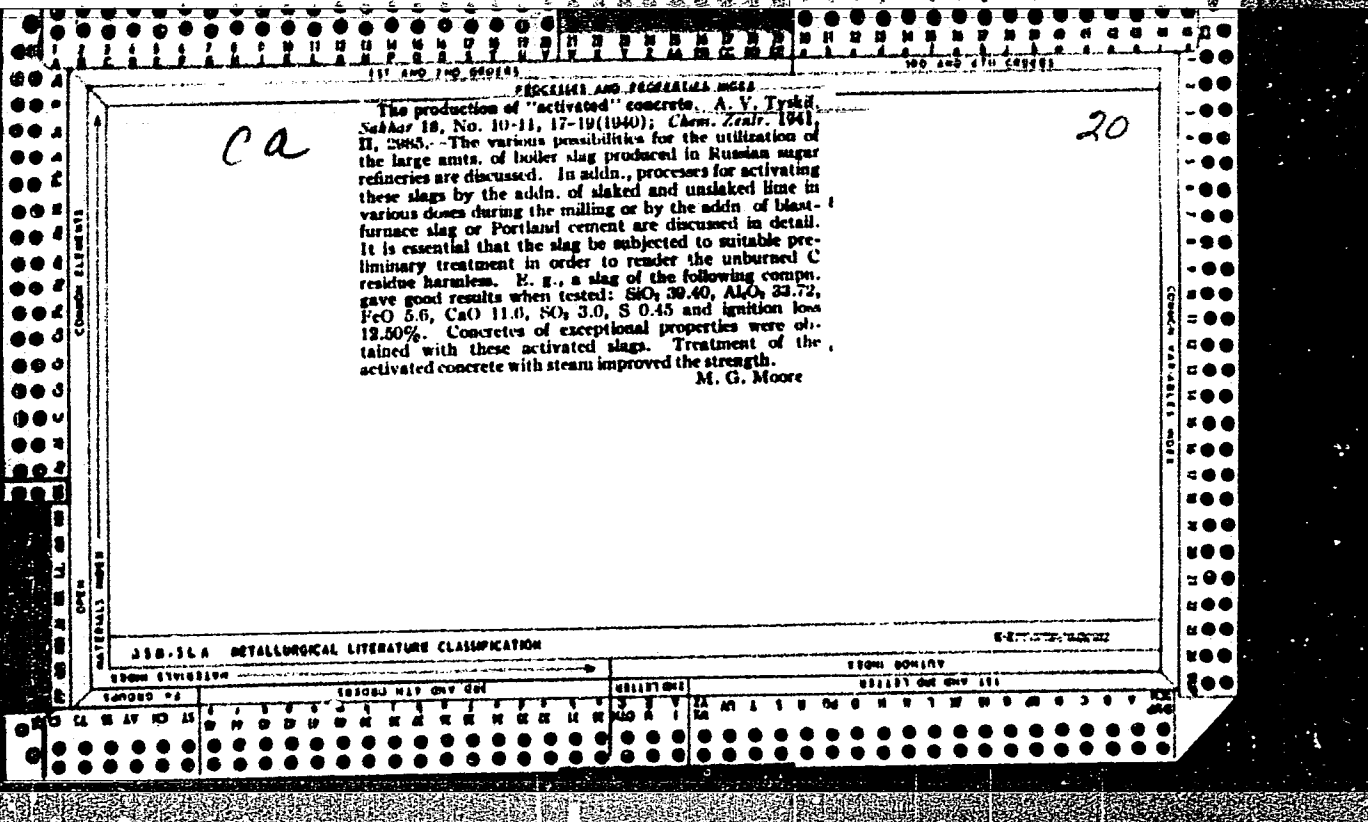
M. G. Moore

J S B - S C A   METALLURGICAL LITERATURE CLASSIFICATION

Z/059/61/022/003/002/006.
23670
E192/E382

9,/300

AUTHOR: Tysl, Václav, Engineer

TITLE:.   Design of Cavity Resonators of Circular Cross-section

PERIODICAL: Slaboproudý obzor, 1961, Vol. 22, No. 3,
             pp. 148 - 152

TEXT: Several aspects of the design of circular cavity
resonators are considered. The quality factor of a cylindrical
resonator operating in the TE_{omp}-mode is expressed by
(Ref. 1 - SNTL, Prague, 1957, J. Kvasil; .Ref. 2 - Tysl, V.,
Slaboproudý obzor, 1955, Vol. 16, No. 5, pp. 237-248):

$$Q = \frac{\omega \mu_0}{2\sqrt{\frac{\omega \mu_v}{2\sigma}}} \cdot \frac{a\alpha^2 (\alpha'^2 l^2 + p^2 \pi^2 a^2)}{\alpha'^2 l^2 + 2 p^2 \pi^2 a^2 \alpha^2 l^{-1}}, \quad (1)$$

where Q is the quality factor of the resonator with no-load
       a is the radius of the resonator,
Card1/6 ℓ is its length,

23670

Z/039/61/022/003/002/006
E192/E382

Design of Cavity Resonators ....

α is a root of the Bessel functions,
σ is the conductivity of the resonator walls,
μ_o is the permeability of free space and
μ_v is the permeability of the resonator walls.

The resonator frequency is given by:

$$f = \frac{1}{2\pi} \cdot \frac{1}{\sqrt{\mu_o \epsilon_o}} \cdot \left(\frac{\alpha^2}{a^2} + \frac{p^2\pi^2}{l^2} \right)^{\frac{1}{2}},$$ (2)

so that Eq. (1) can also be expressed as:

$$Q \cdot \sqrt{f} = \frac{\sqrt{\frac{\mu_o}{\epsilon_o}}}{2\sqrt{\frac{\pi\mu_v}{\sigma}}} \cdot \frac{\alpha \left(1 + \frac{p^2\pi^2}{4\alpha^2} \cdot \frac{D^2}{l^2} \right)^{\frac{3}{2}}}{1 + \frac{p^2\pi^2}{4\alpha^2} \cdot \frac{D^2}{l^2}}.$$ (4)

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where $D = 2a$. Eq. (4) is represented graphically in Fig. 1 for TE_{01p}-mode for air dielectric and silver-plated resonator walls having a conductivity

$\sigma \doteq 6.1 \times 10^7$ S/m . For a given frequency, the ratio of Q and volume of the resonator V can be expressed by:

$$\frac{Q}{V} = K \cdot \frac{\frac{D}{l}}{a' + \frac{p'^2 \pi^2}{4}\left(\frac{D}{l}\right)^2} \qquad (6)$$

It can easily be seen that this expression has a maximum at

$$\frac{D}{l} = \sqrt{\frac{2a'}{p'^2 \pi^2}} \qquad (7)$$

Eq. (7) gives D/l at which the resonator has a maximum Q/V , regardless of the magnitude of Q . The points corresponding to Eq. (7) are illustrated by the dashed line in Fig. 1.

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