

NADOLSCI, V.

A method of orbit determination by three observations. Studii mat
Iasi 12 no.2:385-392 '61.

1. Observatorul astronomic Iasi.

NADOLSKI, V.

A method for utilizing the incomplete photographic observations
of solar eclipses. Studii mat Iasi 13 no.2:389-392 '62.

NADOLSCHI, V., dr.

G.A.Tihov. Gaz mat B 13 no.4:215-217 Ap '62.

1. Director al Observatorului Astronomic, Iasi.

HADOLSKI, V.

Correction of refraction as a function of true zenithal distance.
Studia mat Iasi 14, no.1:201-204 '63.

In: Observatorul astronomic Iasi.

NADOLSCHI, V., dr.

Composition, structure, and dynamics of the atmosphere in the light of recent studies. *Natura Geografie* 15 no.2:45-52 Mr-Apr '63.

1. Director al Observatorului Astronomic al Universitatii "Al. I.Cuza", Iasi.

NADOLSKA, J.

Herdegen E., Nadolska J. Research on Ammoniacal Solutions.
"Badania nad amoniakami". Przemysł Chemiczny. No. 4, 1955.
pp. 455-457, 4 figs. 3 tabs.
Research work conducted at the Institute of Chemical Synthesis at
Chorzów and Tarnów on the systems of the type: $\text{HN}\cdot\text{NO}_2 - \text{NH}_3 - \text{H}_2\text{O}$
and $\text{CO}(\text{NH}_2)_2 - \text{NH}_3 - \text{H}_2\text{O}$. Methods are here described of preparing
solutions and of measuring the pressure of vapours. The results of the
experiments are recorded in tables and graphs and compared with
literature. It follows from the material submitted that ammonium
nitrate, or urea, added to ammoniacal water lessen the pressure of va-
pours. The pressure of the vapours of the solutions obtained is lower
than the "initial" pressure of ammoniacal water.

541.123.31

Handwritten initials

2

5

Handwritten initials

NADOLSKA, J.

Distr: 4E3d

²⁷
Ammoniates. E. Herdegen and J. Nadolska (Inst. Syntez, Chem., Tarnów, Poland). *Prace Inst. Chem.* 34, 455-7 (1955).—The systems $\text{NH}_3\text{NO}_2\text{-NH}_3\text{-H}_2\text{O}$ and $\text{CO(NH}_2)_2\text{-NH}_3\text{-H}_2\text{O}$ were investigated, by prep. the solns. in various ratios and measuring the vapor pressure at 10, 20, and 35°. The observations, e.g. with the respect to the locations of the ternary point, agreed essentially with the earlier literature data. Werner Jacobson

S/081/62/000/005/060/112
B156/B108

11.3120
116950

AUTHORS: Błasiak, Eugeniusz, Kandzia, Ryszard, Nadolska, Joanna,
Smoliński, Józef

TITLE: A method of producing a mixture of neon and helium when recti-
fying air

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 403, abstract
52105 (Zakłady Azotowe im. Pawła Fintera. Polish patent
44598, May 24, 1961)

TEXT: A method of obtaining a mixture of neon and helium from an air
separation apparatus has been patented; the feature of the method is the
use of a condensation-evaporation column. Gas from beneath the cover of
the condenser 1 in the double rectification air separation apparatus 2
flows down the line 3 into the condensation-evaporation column 4; the
pressure in this column is slightly higher than in the upper column of the
apparatus 2. The N₂ is liquefied in the tubes of the condenser 5 and flows
into the vat 4 containing the spiral tube 6. Liquid N₂ is fed into the
Card 1/2

A method of producing ...

S/081/62/000/005/000/112
B156/B108

space between the tubes in 5 from the pockets of the condenser 1, take N_2 boiling at a pressure of 0.5 at. in 5, the pressure maintained by the vacuum pump 7: owing to the reduced boiling point of the N_2 , a higher degree of condensation of N_2 is reached in the tubes of 5, and the uncondensed gas is enriched with Ne and He. A small amount of liquid N_2 is fed into 6 through the line 8; the heat delivered from the N_2 assists in evaporating the Ne and He from the liquid N_2 in the vat of the column 4. From this vat the liquid N_2 flows through the line 9 spraying the upper column of the apparatus 2. The mixture of neon and helium, also containing N_2 , is taken off through the line 10 for further processing. The indicators 11 and 12 maintain the level of liquid in 4, and are used for controlling the operation of 4. With the proposed method, extraction of Ne and He from air is high. (Abstracter's note: Complete translation. There is 1 figure.

Card 2/3

L 34712-65 EPF(c)/EPR/EPA(s)-2/EWP(j)/EWT(m)/EWP(b)/T/EWA(d)/EWP(t) Ps-L/Pr-L/
HM/WW/JD/WB

ACCESSION NR: AR4048475

S/0081/64/000/013/K011/K011

46

AUTHOR: Trebukov, P.D., Nadgl'skaya, Ye. P.

B+!

TITLE: Anticorrosive materials for chemical plants

SOURCE: Ref. zh. Khimiya, Abs. 13K85

CITED SOURCE: Vestn. tekhn. i ekon. inform. N.-1. in-t tekhn.-ekon. issled. Gos. kom-ta khim. i nef. prom-sti pri Gosplane SSR, no. 1, 1964, 24-25

TOPIC TAGS: anticorrosive material, corrosion resistance, chemical plant machinery, polymer solution, polyethylene coating, polymer packing, mastic, varnish, paint

ABSTRACT: For the protection of constructions in chemical plants against corrosion, the following new satisfactory materials are suggested: 1. chemically stable polymer solutions based on various resins (VIAM-B, F-10, ED-5); 2. combined polyethylene coatings; 3. polymer films to protect the structures; 4. packing made of polymer materials for flange joints of vinylplast or asbestos; 5. mastics based on varnish and paint materials; 6. anticorrosive materials (in plants for phthalic anhydride and nitrolic acid). For the protection of tanks with condensate in hydroelectric power stations,

Card 1/2

L 34712-65

ACCESSION NR: AR4048475

compositions based on varnish and paint materials are recommended. N. Popova

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: MT

NO REF SOV: 000

OTHER: 000

Card 2/2

NADCLSKI, B.

"The Fight for Copernican Thought and Its Fate in Poland." p. 13, (PROBLEMY, Vol. 10, No. 1, Jan. 1954, Warszawa, Poland)

SO: Monthly Lists of East European Accessions, LC, Vol. 3, no. 5, May 1954, Uncl.

Nadoiski, J.

547.381.07
Eckstein Z., Nadoiski J., Experiments on Pilot Plant Scale of Preparation of Allyl Alcohol.

„Próby półtechniczne otrzymywania alkoholu alilowego”. Przemysł Chemiczny, No. 7, 1955, pp. 371-375, 3 figs., 4 tabs.

A description of a study of the possibility of preparing allyl alcohol from glycerol and formic acid on laboratory and pilot plant scale. The method, based on thermal decomposition at a temperature of approx. 180°C of glycerol formate can, after suitable modification be used to prepare allyl alcohol for synthesizing pharmaceuticals.

Handwritten: 2

Handwritten: BM

NADOLSKI, Julian

Some remarks on organization services; reflections of a sociologist.
Przeł. techn 84 no.19:6 12 My '63.

NADOLSKI, W.

Saving cogwheels. (TO be contd.) p. 10. (TECHNIKA MOTORYZACYJNA, Vol. 4, No. 1, Jan. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

NADOLSKI, W.

Shaving cogwheels. Pt. 2. p. 124. (TECHNIKA MOTORYZACYJNA, Vol. 4, No. 4, Apr. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

NADOLSKI, Zbigniew

Thiemann's disease. Chir. narz. ruchu 21 no.2:149-152
1956.

1. Z Kliniki Ortopedycznej A.M. Poznaniu Kierownik: prof.
dr. W. Dega, Poznan, Plac Mlodej Gwardii 1 a, m. 47.
(FINGERS AND TOES, diseases,
osteochondritis (Pol))
(OSTEOCHONDRITIS,
Thimann's dis. (Pol))

NAJOLSKI, Zbigniew; JAROSZ, Wymunt

Use of pneumatic borer in orthopedic surgery. Chir. narz. ruchm 22 no.1:
57-59 1957.

1. Z Kliniki Ortopedycznej A. M. w Poznaniu. Kierownik: prof dr W. Dega.
Adres autorow: Poznan, ul. Dzierzynskiego 135.
(ORTHOPEDIC; appar. & instruments
pneumatic borer (Pol))

KROL, Jerzy; RATOMSKI, Roman; NADOISKI, Zbigniew; KABSCH, Aleksander

Importance of compensation in scoliosis. Chir. narz. ruchu 22 no.2:
215-219 1957.

1. Z Kliniki Ortopedycznej A. M. w Poznaniu Kierownik: prof. dr
W. Dega Poznan, ul. Dzierzynskiego 135.

(SCOLIOSIS,

anat. compensation & correction (Pol))

EXCERPTA MEDICA Sec 9 Vol 13/7 Surgery July 59

NADOLSKI Z

3519. (1960) PHANTOM PAIN AND CAUSALGIA IN AMPUTEES - Bóle fantomowe i bóle kausalgiczne u amputowanych - Nadolski Z. Klin. Ortop. A.M., Poznań - CHIR. NARZAD. RUCHU 1958, 23/4 (299-304)

Phantom sensations accompanied by paraesthesia or pain should be distinguished from causalgia. Based on the literature, the aetiology and pathogenesis of both conditions are discussed. Phantom pain spreads through spinal nerve paths, causalgia sensations by sympathetic nerve routes. A personal series of 66 amputees is reviewed. The therapeutic measures and results obtained are discussed. Indications for surgical treatment of causalgia are outlined. (IX, 19)

BILINSKI, Z.; HOLAK, M.; NADOLSKI, Z.; OGIELSKI, W.

Treatment of delayed union and pseudarthrosis of the long bone with the use of dermatoplasty. Chir. narz. ruchu ortop. polska 26 no.5: 593-596 '61.

1. Z Oddzialu Chirurgii Urazowej Wojskowego Szpitala Okregowego we Wroclawiu.

(FRACTURES UNUNITED surg) (PSEUDARTHROSIS surg)
(SKIN TRANSPLANTATION)

BADURA, Roman; NADOLSKI, Zbigniew; ORLOWSKI, Tadeusz

Effect of trypsin on joint components and possibilities for its use in clinical conditions. Chir. narz. ruchu ortop. polska 27 no.1:93-97 '62.

1. Z Kliniki Chirurgii Weterynaryjnej WSR Wroclawiu Z Oddzialu Chirurgii Urazowej Wojskowego Szpitala Okregowego we Wroclawiu Z Oddzialu Chirurgii Ogolnej Wojskowego Szpitala Okregowego we Wroclawiu.

(JOINTS pharmacol) (TRYPSINS pharmacol)

NADOLSKI, Tadeusz

A concept of rehabilitation of employees in metallurgical industry following locomotor injuries. Chir. narząd. ruchu ortop. Pol. 30 no.4:411-415 1985.

1. Z Kliniki Ortopedycznej AM w Poznaniu (Kierownik: prof. dr. med. W. Dogał) i z Katedry Medycyny Rehabilitacyjnej AM w Poznaniu (p.o. Kierownika: dr. med. J. Tomaszewska).

WADOL'SKIY, A.P.

TITLE: Conf. Technol. on Autoclave Processes
PERIODICAL: Tsvetnyye Metally, 1959, No. 7, pp. 84-87 (USSR)

ABSTRACT: On 23-26 February 1959 a conference was held in Moscow for summing-up and coordinating work on autoclave processes in the metallurgy of heavy, non-ferrous, rare and noble metals. The conference heard reports as follows: D.M. Yuktanov, Gintsvetmet, on progress throughout the world on the use of hydrometallurgical, particularly autoclave, non-ferrous and rare metal production; G. M. Babochko, Gintsvetmet, on autoclave leaching practice at some Soviet works; N. G. Gerasimov, Gintsvetmet, on the thermodynamics and kinetics of the selective leaching by hydrogen and carbon monoxide under pressure of nickel and cobalt from solution; I. Yu. Lesch and K. M. Shelepova, Gipronikel', on design decisions on the application of the flowsheets dealt with by G. N. Dobrokhotov at the Yuzhural'skaiel' and Severonikel' Combines and the Ural'skiy (Ural) Nickel Works; I. N. Maslennitskiy, Leningradskiy Gornyy Institut (Leningrad Mining Institute) on the advantages of a combined flotation-autoclave method for nickel-electrolysis of alloys containing lead and silver; S. I. Sobol', Gintsvetmet, on the neutral method of oxidizing leaching of nickel concentrates from converter-matte flotation; S. I. Sobol', on preliminary investigations on the development of a sulphurous-sulphuric method for leaching nickel and cobalt from oxidized nickel ores; N. N. Maslennitskiy, Mekhanobr, on the main results of investigations of the autoclave-soda process for treating tungsten-ore beneficiation products; V. I. Krasukaylo, Mekhanobr, and D. A. Malakhov, Skopinska (Skopin'sk) Tsvf, separately, on problems in the application of an autoclave-soda flowsheet to scheelite and wolframite raw material; G. A. Keyerson, K. Ya. Shupiy, B. N. Shavskiy, N. A. Pavlyuk and A. A. Gerasimov, Krasnoyarskiy Institut Tsvetnykh Metallov (Krasnoyarsk Metallurgical Institute), on the treatment of mattes with acids or caustic alkalies; V. I. Spiridonov, S. I. Sobol', Ya. I. Gul'yeva, L. Berlid, I. K. Reizer, and B. I. Rudenko, Gintsvetmet, on the treatment of prepared and unprepared sulphide molybdenum raw material by oxidizing autoclave alkaline leaching; I. M. Nelen, and S. I. Sobol', on the kinetics of oxidizing autoclave leaching; A. N. Seltman and Z. M. Lyapina, Krasnoyarsk Non-Ferrous Metals Institute, on the results of a study of conditions for the selective separation of lower oxides of tungsten and molybdenum from lead-salt solutions by hydrogen peroxide leaching; (Mineral-Metallurgical Institute) of the Sovnarkhoz (Soviet Council) of the Armenian SSR (Armenian SSR) on his investigations of ammoniacal autoclave leaching under oxygen pressure of molybdenum concentrates; S. I. Sobol', on technical-economic factors of ammoniacal leaching; A. I. Sinel'nikova and I. N. Plakino, Krasnoyarsk Non-Ferrous Metals Institute, on an oxidizing autoclave process for gold containing raw material; N. I. Tyulin, Ural'skiy politekhnicheskiy Institut (Ural Polytechnic Institute), on the behaviour of noble metals in oxidizing autoclave leaching in thiosulphate solutions; A. I. Reizer and B. A. Tereskin, and A. Yu. Pavlyuk, Krasnoyarskiy Institut Tsvetnykh Metallov (Krasnoyarsk Metallurgical Institute), on the physicochemical fundamentals of autoclave leaching; V. I. Krasukaylo, on the unsuitability of autoclave leaching for lime-containing materials; V. A. Bernanteva, VAMI, on industrial experience of a continuous autoclave leaching process for bauxite; V. V. Trubey, IOKKh AN SSSR (IOKKh AN USSR), on reports of some rare elements in various valency states under oxygen and hydrogen pressure in the presence of anhydrous ammonia; M. I. Berlin, Krasnoyarskiy Institut Tsvetnykh Metallov (Krasnoyarsk Metallurgical Institute), on autoclave leaching of lead concentrates; V. I. Krasukaylo, on metal studies on autoclaves and the development of mixers; M. A. Polyakov, K. B. Giremet, on the design of an experimental high-pressure pulp pump; G. L. Shwarts, MIIKhimMash, on the selection of steel for acid leaching of cobalt matte and matte flotation concentrate; Yu. I. Arshakov, VNIImetkhim, on concentration of types KKh-3507, KKh-3508, KKh-3509 and KKh-3510 in soda and alkaline solutions in the presence of metal salts and oxygen; M. I. Berlin, Krasnoyarskiy Institut Tsvetnykh Metallov (Krasnoyarsk Metallurgical Institute), on the study of the autoclave leaching of lead concentrates; M. I. Berlin, Krasnoyarskiy Institut Tsvetnykh Metallov (Krasnoyarsk Metallurgical Institute), on the study of the autoclave leaching of lead concentrates.

Card 1/5

Card 2/5

Card 3/5

Card 4/5

S/137/62/000/005/028/150
A006/A101

AUTHORS: Meyerson, G. A., Khavskiy, N. N., Shapiro, K. Ya., Nadol'skiy, A. P.

TITLE: Investigations of processing tungsten concentrates

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 5, 1962, 16 - 17, abstract 5G101 ("Sb. nauchn. tr. In-t tsvetn. met. im. M. I. Kalinina", 1960, v. 33, 161 - 174)

TEXT: The authors studied thermodynamical, equilibrium and kinetic fundamentals of acid processing of tungsten concentrates. The high values of equilibrium constants in the interaction reactions of scheelite (about 10,000) and tungstenite (about 700) with HCl prove the thermodynamical possibility of the practically full decomposition of these concentrates at a slight excess of HCl. The authors studied conditions of acid and alkaline decomposition of the concentrates in heated ball mills. Two-stage processes of acid and alkaline decomposition of concentrates ensuring a 99.5% stripping degree within 2 - 4 hours, were developed under industrial conditions. The behavior of main admixtures (Mo, P and As) was studied at individual stages of acid and alkaline processing of

Card 1/2

Investigations of processing tungsten concentrates

S/137/62/000/005/028/150
A006/A101

tungsten concentrates. An economical method was developed of producing chemically pure WO_3 and H_2WO_4 from standard solutions of commercial Na_2WO_4 with the use of $3(NH_4)_2O \cdot Na_2O \cdot 10WO_3$ as a semiproduct.

G. Svodtseva

[Abstracter's note: Complete translation]

Card 2/2

ZYRYANOV, M. N.; NADOL'SKIY, A. P.

Complex treatment of dusts from the lead industry with a high selenium content. Trudy Vost. Sib. fil. AN SSSR no.41:128-131 '62. (MIRA 15:10)

1. Irkutskiy nauchno-issledovatel'skiy institut redkikh metallov.

(Lead industry—By-products) (Fly ash)

ZYRYANOV, M.N.; SINAKEVICH, A.S.; NADOL'SKIY, A.P.

Investigations on the recovery of molybdenum from low-grade
ferrimolybdite ores and concentrates. Trudy IPI no.18:123-
129 '63. (MIRA 17:6)

ZHITENEVA, G.M.; RUMYANTSEV, Yu.V.; NADOL'SKIY, A.P.; OGNEVA, E.Ya.

Oxidation of lead selenide. Report No. 1. Trudy IPI no.18.
130-138 '63. (MIRA 17:5)

RUMYANTSEV, Yu.V.; NADOL'SKIY, A.P.; ZHITENEVA, G.M.

Oxidation of lead selenide. Trudy IPI no.18:139-144 '63.
(MIRA 17:6)

ACCESSION NR: ARL036254

S/0137/64/000/003/0005/0005

SOURCE: Referativnyy zhurnal. Metallurgiya, Abs. 3028

AUTHOR: Nadol'skiy, A. P.; Slavnin, G. P.; Fedorov, B. T.; Kidyarov, B. I.

TITLE: Preparation of quality-standardised titanium concentrates from titanium ores of low concentrating capacity

CITED SOURCE: Tr. Irkutskogo politekhn. in-ta, vy*p. 18, 1963, 156-159

TOPIC TAGS: Titanium concentrate preparation, ilmenite, zircon, rutile, siderite, titanium ore dressing, titanium dioxide extraction

TRANSLATION: The possibility of obtaining a Ti concentrate by using gravity concentration and electromagnetic separation was investigated. The mineralogical composition of the sample was (in %): ilmenite 0.5, zircon 0.01, rutile 0.02, etc. Ilmenite concentrates in fine clay classes. The technological process recommended includes the soaking and desliming of Ti-containing clays with a high siderite content, concentration on a table and electromagnetic separation of sands, acid leach-

Card 1/2

ACCESSION NR: AR4036254

ing of the magnetic fraction for the purpose of dissolving siderite, and magnetic separation of the solid products of hydrometallurgical processing. Quality-standardized Ti concentrates containing 26.6% TiO_2 were thus obtained. A. Shmelova.

DATE ACQ: 17Apr64

SUB CODE: ML

ENCL: 00

Card 2/2

ACCESSION NR: AP4041132

S/0149/64/000/003/0131/0132

AUTHOR: Fedosov, V. N.; Liopo, V. A.; Nadol'skiy, A. P.

TITLE: A study of the structure of scandium oxide at various temperatures

SOURCE: IVUZ. Tsvetnaya metallurgiya, no. 3, 1964, 131-132

TOPIC TAGS: scandium oxide structure, lattice constant

ABSTRACT: The structure of scandium oxide was studied at temperatures up to 880C by means of x-ray diffraction analysis. Specimens of scandium powder were heated at a rate of 2C per minute and held at each test temperature for 15 min. It was found that all diffraction lines of scandium oxide match satisfactorily with those of an Mn_2O_3 -type Bcc lattice. The lattice constant of scandium oxide increased linearly from 9.843 Å at 20C to 9.907 Å at 880C. No other changes were observed in the lattice of scandium oxide. The calculated linear expansion coefficient of scandium oxide in the 20—880C range

Card 1/2

RUMYANTSEV, Yuriy Viktorovich; KHVOROSTUKHINA, Nina Alekseyevna;
NADOL'SKIY, A.P., kand. tekhn. nauk, otv. red.; CHERNYAK,
A.I., red.

[Physicochemical principles of the pyrometallurgy of indium]
Fiziko-khimicheskie osnovy pirometallurgii indiya. Moskva,
Nauka, 1965. 130 p. (MIA 18:4)

3,1540

S/035/61/000/010/012/034
A001/A101

AUTHOR: Nadol'skiy, V.

TITLE: The space generalization of the statistical theory of sunspot groups

PERIODICAL: Referativnyy zhurnal. Astronomiya i Geodeziya, no. 10, 1961, 55, abstract 10A396 ("Byul. astron. in-tov Chekhoslovakii", 1959, v. 10, no. 5, 161-164, Engl. summary)

TEXT: The author proposes a generalization of the Kopetskiy theory of sunspot group statistics (RZhAstr, 1957, no. 7, 5807), which makes it possible to renounce the simplifying assumption on the appearance of sunspots exclusively along the solar equator. The generalization is attained by assuming central symmetry for the Minnaert function of visibility with the corresponding replacement of the visibility curve by the surface of visibility.

Author's summary

✓
B

[Abstracter's note: Complete translation]

Card 1/1

41871

S/600/62/000/029/001/001

A061/A126

126000

AUTHORS: Desov, A.Ye., Doctor of Technical Sciences, Professor, Nadol'skiy, V.I., Engineer

TITLE: Some problems concerning the technology of heavy concretes for protection against radioactivity effects

SOURCE: Akademiya stroitel'stva i arkhitektury SSSR. Institut betona i zhelezobetona, Perovo. Trudy, no. 29. Moscow, 1962. Tekhnologiya i svoystva tyazhelykh betonov, 4 - 36

TEXT: Data are given concerning the shielding properties of special concretes made from flue dust, limonite, serpentinite, magnetite, and hydro-goethite ore with cast-iron shot and boron carbide additions. Results: The strength of flue-dust concrete is somewhat higher than that of limonite concrete. The moisture loss at 18 - 20°C for concretes made from two Portland cements is 3% for magnetite concrete, 5% for serpentinite concrete, and 7% for magnetite concrete with flue dust. For concretes prepared from gypsum plaster-aluminous cement it is much less: 2% in case of magnetite concrete with flue dust. Losses in

Card 1/2

S/600/62/000/029/001/001
A061/A126

Some problems concerning the technology of

weight of limonite concrete with snot and boron-carbide additions are 3. - 3.8% at 10°C, 4.5 - 5.0% at 100°C, 5.4 - 5.5% at 150°C, and 5.9 - 6.4% at 200°C. The composition-dependent strength drop of special concretes, determined on cubic samples, was contained within 2+ - 30% at temperatures up to 200°C. The strength values determined on prismatic samples dropped more sharply. Magnetite and serpentine concretes displayed a shrinkage of 700 - 1,000 μ/m , and flue-dust concrete one of 1,200 μ/m , after 20 days. The shrinkage of limonite concrete with additions varied between 450 and 850 μ/m , depending on the type of cement used. Concretes with additions of cadmium and barium salts did not show losses in strength after a 100-day irradiation with Co^{60} (activity 2.5 gram-equivalent of radium). The addition of 2% cadmium chloride and barium sulfate to Portland cement concretes did not produce any corrosion on the reinforcement of both irradiated and non-irradiated samples. Intense corrosion was produced on the reinforcement by an addition of 2% cadmium sulfate even before irradiation. This effect was also observed in gypsum plaster-aluminous cement concretes both with and without cadmium and barium salt additions. There are 10 figures and 22 tables.

Card 2/2

NADOL'SKIY, V.I., inzh.; PAVLOV, V.A., inzh.

Molding elements of industrial buildings on a two-frequency vibro-
plate. Trudy NIIZHB no.29:92-97 '62. (MIRA 15:11)
(Vibrated concrete)

DESOV, A.Ye., doktor tekhn.nauk, prof.; NADOL'SKIY, V.I., inzh.

Effect of repeated periodic vibration of hardening concrete on its
strength and bond with the reinforcement. Trudy NIIZHB no.29:
130-142 '62. (MIRA 15:11)

(Vibrated concrete)

... .., A.Y., doktor tekhnicheskikh nauk; NADOL'SKIY, V.I., inzh.; MITNIK, G.S.,
kand. tekhnicheskikh nauk

... .. method of preparation of reinforced concrete products.
... .. no. 37-330-3... .. (MIRA 18:2)

NADOL'SKIY, YA. V

23379 Tsvetnaya Rezinovaya Smes' Dlya Obuvi Goryachey Vulkanizatsii Legkaya
Prom-st', 1949, No. 6, c. 27.

SO: LETOPIS NO. 31, 1949

1. NADOL'SKIY YA V. ...

Use of carbon black in plastic masses for hot vulcanization. M. A. VOLOCHKOVICH and YA. V. NADOL'SKIY. *Lepkaya Prom.*, 1950, No. 2, 23; *Translated Contents Lists of Russian Periodicals*, 1950, No. 13, 24. 421Cg

11.7

L 34847-65 EWT(m)/EPF(c)/EWP(J) Pc-4/Pr-4 RM S/0286/65/000/006/0061/0061
ACCESSION NR: AP5008544

AUTHOR: Vasil'yeva, N. V.; Stergiu, G. K.; Usmanov, Kh. U.; Nadol'skiy, Ya. V.; Kostyushko, G. A.; Andreyev, A. G.

TITLE: A method for vulcanizing rubber stock. Class 39, No. 169244 15

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 6, 1965, 61

TOPIC TAGS: rubber vulcanization, polychloroprene latex

ABSTRACT: This Author's Certificate introduces a method for vulcanizing rubber stock based on polychloroprene. A vulcanizing group which contains a vulcanization accelerant is used. A wider selection of vulcanization accelerants is provided by using a product of the interaction of thiourea with hydrogen peroxide.

ASSOCIATION: none

SUBMITTED: 04Aug61

ENCL: 00

SUB CODE: MT, GC

NO REF SOV: 000

OTHER: 000

Card 1/1

VASIL'YEVA, N.V.; STERGIU, G.K.; NADOL'SKIY, Ya.V.; KOSTYUSHKO, G.A.

New ultra-accelerators of vulcanization of rubber compounds
based on natural and synthetic rubbers. *Uzb.khim.zhur.* 6
no.6:79-85 '62. (MIRA 16:2)

1. Institut khimii polimerov AN UzSSR.
(Vulcanization)

NADOPTA, R. H.

AUTHORS: Kladiyenko, D. P., and Nadopta, R. A. 20-6-45/48

TITLE: Development and Metamorphosis of Rana esculenta
Tadpoles as Affected by Uranium Nitrate. (Vliyaniye
azotnokislogo urana na razvitiye i metamorfoz golovastikov
zelenoy lyagushki)

PERIODICAL: Doklady AN SSSR, 1957, Vol. 115, Nr 6, pp. 1217-1219
(USSR)

ABSTRACT: Although the biological part played by microelements was
already sufficiently investigated in publications, the
importance of uranium as microelement is for living
creatures only little studied. The highest content of
uranium compounds exists in the thyroid gland. Uranium
was also found in the embryonal organs of man. In connection
with the fact first mentioned the author decided to
examine the influence of uranium, as mentioned in the
title. The water of the breeding vessels contained 1 to
200 mg of uranium nitrate in 7 graduations per 1 liter.
As criterion of the influence served: 1) Appearance of
the bilateral symmetry in tadpoles and their liberation
from the surrounding mucilage. 2) The moment of the

CARD 1/4

Development and Metamorphosis of Rana esculenta Tadpoles 20-6-45/48
as Affected by Uranium Nitrate

transition to free movement and 3) the surviving of the developed tadpoles. 10 days tests showed that uranium is not indifferent for the animals. Although the development of the bilateral symmetry was not impaired, the transition to free movement was markedly accelerated and the capability of resistance of the test animals in later stages was increased. They survived longer even at higher temperatures of environment (30-32°C) and were still alive for a long time, when the control tadpoles had already died. This was confirmed by repeated tests. As the capability of resistance is closely connected with metabolism processes that are due to the nervous and endocrinous system, the problem rose which type of influence was exerted by the thyroid gland. Therefore the authors decided experimentally to determine the influence of various uranium concentrations on the metamorphosis of tadpoles. After 17 days the control tadpoles died, probably due to the high temperature of environment (31°C). After 10 days, just as the test

CARD 2/4

Development and Metamorphosis of Rana esculenta Tadpoles 20-6-45/48
as Affected by Uranium Nitrate

function. In the case of the artificial metamorphosis under the influence of thyroxine its action is not suppressed but increased by thio-urea. It may be assumed that in the case under review uranium is in its action equal to thio-urea. There are 1 table and 4 Slavic references.

ASSOCIATION: Cherepovets State Medical Institute (Cherepovetskiy gosudarstvennyy meditsinskiy institut).

PRESENTED: By Ye. N. Pavlovskiy, Academician, May 20, 1957

SUBMITTED: October, 1956

AVAILABLE: Library of Congress

CARD 4/4

GARY

HORVATH, Dezso; and Mrs. NADOR, Andras, Pharmacy at the University
for Medical Sciences (Orvostudományi Egyetem, Gyógyszertár) in
Pecs.

Pharmacology and Toxicology
"Pharmacological Technology of Mannite Preparations Capable of
Being Used Parenterally"

Budapest, Orvosi Hetilap, Vol 107, No 29, 17 Jul 1966, p 1365.

Abstract: The Sterile Laboratory (Steril Laboratorium) of the
Pharmacy at the University for Medical Sciences in Pecs prepares
mannite injections in 20% concentration in ampoules containing
10 and 50 ml., respectively, and 10% and 20% infusion solutions
in bottles holding 200, 300, and 500 ml., respectively. These
preparations are used as osmotic diuretics and dehydrating agents
also for intracranial and intraocular pressure reducers. The
principal characteristics and the uses of the preparations
discussed. 9 references, including 6 Hungarian and 3

Pharmacology and Toxicology

HUNGARY

HORVATH, Dezso, and Mrs. NADOR, Andras, Pharmacy at the University for Medical Sciences (Orvostudományi Egyetem, Gyógyszertár) in Pecs.

"Pharmacological Technology of Mannite Preparations Capable of Being Used Parenterally"

Budapest, Orvosi Hetilap, Vol 107, No 29, 17 Jul 1966, p 1365.

Abstract: The Sterile Laboratory (Steril Laboratorium) of the Pharmacy at the University for Medical Sciences in Pecs prepares mannite injections in 20% concentration in ampoules containing 10 and 50 ml., respectively, and 10% and 20% infusion solutions in bottles holding 200, 300, and 500 ml., respectively. These preparations are used as osmotic diuretics and dehydrating agents, and also for intracranial and intraocular pressure reducers. The principal characteristics and the uses of the preparations were discussed. 9 references, including 6 Hungarian and 3 Western.

1/1

HUNGARY

Mrs. NADOR, Andras, HORVATH, Dezso, and Mrs. DEAK, Bertalan, Pharmacy at the University for Medical Sciences (Orvostudományi Egyetem, Gyógyszertár) in Pécs.

"Preparation of Fructose Injection and Therapeutical Applications"

Budapest, Orvosi Hetilap, Vol 107, No 29, 17 Jul 1966, p 1366.

Abstract: The preparation of a 20% fructose injection solution, in ampoules containing 5 and 10 ml., respectively, and 5% and 10% infusion solutions in bottles holding 500 ml. was described. These solutions may be used in appropriate cases in lieu of glucose solutions. Their principal use is in cases of acute alcohol poisoning, liver diseases, caloric intake, and all other instances where the administration of glucose is counterindicated. 5 references, including 1 German, 1 Western, and 3 Hungarian.

1/1

HUNGARY

HOKVATH, Dezso, Mrs. NADOR, Andras, and Mrs. DEAK, Bertalan, **Pharmacy**
at the University for Medical Sciences (Orvostudományi Egyetem, Gyógyszertár)
in Pécs.

"Pharmaceutical-Technological Aspects of Infusion Solutions Containing
Sugar and Alcohol"

Budapest, Orvosi Hetilap, Vol 107, No 29, 17 Jul 1966, p 1367.

Abstract: The applications and manufacture of a so-called 'energy infusion'
technology, involving the use of a solution containing 50.0 g. glucose,
100.0 g. fructose, 50.0 g. 90% ethyl alcohol, and made up to 1000 ml.
with distilled water, were described. Clinical tests showed that the so-
lution performs satisfactorily. It has a pH of 4.8-5, a density of
1.043-1.047, a rotating ability of -12.35° to -12.52° , and a refraction
of 53° - 65° . 8 references to Hungarian publications.

1/1

W. Clark, B.

8003

✓ 1934. Georgy, L., and Nádor, B., Determination of Young's modulus for glass (in Hungarian), *Művés és Automatika* 3, 11, 349-353, Nov. 1955.

2

*W. Clark
me*

Article gives a short summary on the elasticity of glass and describes measurements and methods thus far applied in the determination of its Young's modulus. The authors' own investigations are then explained, and two methods, the statical and the acoustic, for the determination of Young's modulus are described. By perfecting the methods thus far applied abroad, the two procedures have been made suitable for determining the precision of measurement, that is, the error of measurement. Using the statical method, Young's modulus was determined from the deflection of the glass bar loaded at the middle with a precision of $\pm 150 \text{ kg/mm}^2$, so that the relative error of measurements is 2.2%. The precision attained in the measurement by the acoustic method is about 140 kg/mm^2 ; the error is thus 2%. By combining the two methods, the relative error of measurement can, in certain cases, be reduced to about 1%.

From authors' summary by L. Korányi, Hungary

fm

NADOR, BELA

15-
 5 may
 2
 1

✓ Electrical-resistance changes in graphited rubber sheets upon deformation. ¹⁵ Bela Nador. (Egitolpari Kozponti Kutato Intezet, Budapest). ~~Magyar Kem. Folyoirat~~ 61, 358-9 (1955). Rubber sheets (60 X 100 mm. and 0.75 and 0.25 mm. thick) were fitted at their shorter edges with 5 mm. thick conductor contacts; and their resistance (R) was detd. by an electronic "Orivohm" meter. The surfaces of the test specimens were graphited by spraying on of a suspension of ground graphite in benzene. The contacts were sepd. and the distances accurately measured. Measurements indicated that up to an elongation of 25%, R increases by the square; thence the increase is becoming progressively larger. By maintaining a certain elongation R will considerably decrease as the time advances, the rate of the decrease following an approx. parabolical curve, becoming asymptotic and ceasing after approx. 25 hrs. This decrease is attributed to the relaxation of the rubber mols. on the surface.

Distrs: 4E2c(j)

[Handwritten signature]

NADOR, B

Distr: 4E2c/4E2c(j)

✓ Effects of pressure on the dielectric properties of alkali silicate glass) 5 Béla Nádor (Nehézsúlyipari Kutató Intézet, Veszprém, Hung.). *Nehézsúlyipari Kutató Intézet Közleményei* 1, 325-9(1959).—The test pieces (50 × 50 mm.) were 2-6 mm. thick and were coated with Ag on both sides. Compn. of the glass was SiO₂ 71, Na₂O 14.1, CaO 9.2, Al₂O₃ 1.5, MgO 3.5, Fe₂O₃ 0.2, and SO₃ 0.5%. The specimens were compressed in an app., described in detail, to pressures up to 1000 kg., and their capacity and dielec. loss were detd. under the various loads by an audiofrequency bridge at 1 kc. frequency. Both the capacity and dielec. loss increased until the pressure reached 350-400 kg./sq. cm. and decreased thereafter. It was assumed that initially the pressure caused a decrease in the av. distance between the structural voids without appreciably affecting the potentials between the voids. This increased the cond. and the polarity caused by the oscillation of the ions between the voids. After the crit. pressure was attained, the potentials between the voids began to change, resulting in a decrease in capacity and dielec. loss.

4
2

efu
1/1

G. J. Emyel

NADOR, B.

Differential thermoanalytic equipment for investigating systems containing melting phase. p. 165.

MAGYAR KEMIAI FOLYOIRAT. Budapest, Hungary. Vol. 65, no. 4, Apr. 1959.

Monthly List of East European Accessions (EEAI), LC. Vol. 8, No. 9, September 1959
Uncl.

NADOK, B.

Distr: hE2c

334/80

689.202.017

Data on the properties of the vanadium pentoxide—phosphorus pentoxide system. I. Processes taking place when melting vanadium pentoxide and phosphorus pentoxide mixtures; the degree of reduction of the products and their specific gravities. B. Nadok, *Magyar Kémiai Folyóirat*, Vol. 85, 1958, No. 11, pp. 444—447, 10 figs.

2
(-MIC(JE))
1

The glasses obtained by melting vanadium pentoxide and phosphorus pentoxide were examined from the viewpoint of obtaining a better understanding of the structural features of vanadium glasses. The glasses produced in the course of this investigation were made of analytically pure chemicals. The mixtures were melted in a quartz crucible and in an electric furnace. Analyses revealed that the P_2O_5 content of the samples suffered no appreciable change during melting. Determinations were made by gravimetric analysis. In order to investigate the properties of the V_2O_5 — P_2O_5 system, measurements were carried out and the following conclusions were arrived at: loss of weight was measured at 900°C with a melting time of 15 min. The glasses formed in this system give off oxygen during melting, the effect being greater with increasing P_2O_5 contents. This oxygen came from the reduction of the vanadium pentoxide. Reduction was greater when the P_2O_5 content was higher. The specific gravities of the glasses decreased until a P_2O_5 content of about 10% was attained; with higher P_2O_5 contents the specific gravity became constant. The softening point of vanadium glasses was practically constant up to a P_2O_5 content of 16% and it increased proportionally with higher P_2O_5 contents. The liquidus of the system had a minimum at 16% P_2O_5 , corresponding to a liquidus temperature of 550°C .

94273

S/072/60/000/010/002/004
B021/B058

15.2120

AUTHOR: Nador, B.TITLE: Properties of Glasses of the System $V_2O_5 - P_2O_5$

PERIODICAL: Steklo i keramika, 1960, No. 10, pp. 18 - 21

TEXT: Kitaygorodskiy and Karpechenko determined the zone of vitrification in the systems $V_2O_5 - P_2O_5$ and $V_2O_5 - P_2O_5 - WO_3$. It follows from their researches that V_2O_5 increases the electrical conductivity of the glasses, and the increase of the P_2O_5 content improves vitrification and increases the glass stability. The losses in weight when melting the mixture V_2O_5 and P_2O_5 , dependent on the P_2O_5 content, can be seen from Fig. 1. The amount of oxygen which is separated during the melting of the mixture V_2O_5 and P_2O_5 , is shown in Fig. 2 as a function of the P_2O_5 content. The amount of oxygen necessary for the complete oxidation of the glasses in the system $V_2O_5 - P_2O_5$, is shown in Fig. 3. The dependence of

Card 1/2

84273

Properties of Glasses of the System $V_2O_5 - P_2O_5$ S/072/60/000/010/002/004
B021/B058

the specific weight of the glasses of this system on their composition is shown in Fig. 4. The results of the thermographic investigation are shown in Fig. 5. The fusing temperature of the glasses increases proportionally to the P_2O_5 content (Fig. 6). The liquidus curve is shown in Fig. 7, the phase diagram of the system $V_2O_5 - P_2O_5$ in Fig. 8. Figs. 9-11 show the dependence of the energy activation on composition. The author finally underlines that V_2O_5 is irreversibly decomposed during melting. The system $V_2O_5 - P_2O_5$ does not, therefore, represent a eutectic system.

ASSOCIATION: Vengriya, Nauchno-issledovatel'skiy institut khimicheskoy promyshlennosti (Hungary, Scientific Research Institute of the Chemical Industry)

Card 2/2

NADOR, Bela

Differential thermoanalytical installation for investigating systems of melting phase. Magyar Folyoir 65 no.4:165-166 Ap '54.

1. Neheszvegyipari Kutato Intezet, Veszprem.

NADOR, Bela, kandidatus

Data on the properties of vanadiumpentoxide-phosphoruspentoxide system. Pt. 1. Magyar kemfolyoir 65 no. 11:443-447 N'59.

1. Nehezvegyipari Kutato Intezet, Veszprem.

Nador, Bela, dr. (Budapest, Csepel I, Postafiook 93)

Electron spin resonance investigations in the ~~system~~ vanadium pentoxide-phosphorus pentoxide. Acta chimica Hung 40 no. 1: 1-7 '64.

1. Research Institute of Heavy Chemical Industry, Veszprem.

1950, the, szlaveles vii program. ...

Development trends of ...
... 1950-1955 ...

NADOR, Erno, fomernok; KRANITZ, Gyula, dr.

More effective control system for yarn quality at the Gyor Cotton Mill.
Magy textil 13 no.2:72-74 F '61.

1. MEO-vezeto(for Kranitz).

NADOH, F. ; CISS, T.

Ground control of air traffic. p. 165.

KOZLEKELÉSTUDOMÁNYI SZEMLE. (Közlekedés- és Közlekedésepítéstudományi
Egyesület) Budapest, Hungary, Vol. 9, no. 1, Apr. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 3, No. 4,
August 1959.
Uncla.

BARDOSI, Ferenc; MADOR, Ferenc

The probable increase in the number of airliners up to 1970.
Kozleked kozl 18 no.50:908-913 16 D '62.

NADCO, GY.

Maximum versatility with standard types of traveling and portal cranes. p.27.
HUNGARIAN HEAVY INDUSTRIES. Budapest. No. 19, Spring 1956.

SOURCE: East European Accessions List (EEAL), Library of Congress
Vol. 5, No. 12, December 1956

KULCSAR, Andor, dr.; MADOR, Gyorgy, dr.; ZOLCZER, Laszlo, dr.;
FARAGO, Istvan, dr.; MOLNAR, Edit, dr.

Clinical aspects and therapy of commotio cerebri. *Magy. Sebesszet* 10 no.1:4-13 Mar 57.

1. A Budapesti Orvostudományi Egyetem Baleseti Sebészeti Intézetének Közleménye. Igazgató: Rubanyi, Pal, dr. egyetemi tanár.

(BRAIN, wounds & inj.

concussion, ther. & other clin. aspects (Hun))

HUNNY C.

I - 2/W

Nádor, Grigory. Kepler's world view and role in the development of the notion of law of nature. Magyar Tud. Akad. Mat. Fiz. Oszt. Köz. 4, 219-227 (1954). (Hungarian)

PH

NADOR, D'YERD. [Nador, György]

Progressive characteristics of Galilei's scientific views. Ist.-
astron. issl. no.2:247-265 '56. (MLBA 10:6)
(Galilei, Galileo, 1564-1642)

USSR / General Division. History, Classics. Personnel

A-2

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 24

Author : Nador, Dverd

Inst : Not Given

Title : Leonardo, Philosopher of the Renaissance

Orig Pub : Vopr. filosofii, 1956, No 4, 65-72

Abstract : Leonardo da Vinci defended the experimental method in the study of nature, acknowledged the necessity in nature and the objectivity of its laws. The opinions of some researchers who attribute to Leonardo an inclination to magic and mysticism, are refuted.

Card : 1/1

WACR, NY

Copernicus' theorem and its effect on scientific thinking; and excerpt from a work in preparation. p. 93 Vol. 6, no. 1, 1956 KÖNYVTUDOMÁNYI Budapest, Hungary

Source: East European Accession List. Library of Congress
Vol. 5, No. 3, August 1956

NADOR, GY.

Descartes' methodology and opinion on natural law.

p. 219 (Magyar Tudományos Akadémia. Matematikai és Fizikai Bizottság. Közleményei.
Vol. 7, no. 2, 1957. Budapest, Hungary)

Monthly Index of East European Accessions (EMEA) 10. Vol. 7, no. 2,
February 1958

NADOR, D. (Vengriya)

Significance of Descartes' heuristic doctrine for the history
of science. Vop.ist.est.i tekhn. no.10:17-23 '60. (MIRA 14:3)
(Descartes, Rene, 1596-1650) (Logic)

NADOR, Gyorgy, a filozofiai tudományok doktora

Some basic problems relating to the structure and psychology of creative-inventive thinking according to the concepts of Descartes. *Magy pszichol szemle* 20 no.4:574-583 '63.

1. Magyar Tudományos Akadémia Gyermeklelektani Intézete.
Igazgató: Dr. Bartha Lajos, a pszichológiai tudományok kandidátusa.

HUNGARY

SUKOSD, Laszlo, Dr, NADOR, Gyorgy, Dr, HONIG, Vilmos, Dr; National Institute of Traumatology (director: SZANTO, Gyorgy, Dr, professor) (Orszagos Traumatologiai Intezet), Budapest.

"Statistical Analysis of Industrial Accidents Based on the 1962 Patient Material of the National Institute of Traumatology."

Budapest, Magyar Traumatologia, Orthopaedia es Helyreallito Sebeszet, Vol IX, No 2, 1966, pages 137-141.

Abstract: [Authors' English summary modified] A definition of the concept of occupational injuries, the statistical data of such patients, admitted to the Institute during 1962, are analyzed. The patients are classified according to sex, age, location of the injury and the therapeutical results. The length of treatment, the length of disability compensation and the exact time when the injuries occurred are also evaluated. It is concluded that most injuries were caused by inadequate discipline and the neglect of precautionary measures. The paper is merely an introduction; additional experiments and factory examinations are planned to correct the errors and to introduce better safety measures. No references.

1/1

C.A.

116

Callicrein content of saliva during physiological changes and in parodontosis. Kornélia Sallay and Károly Nádor (Tudományegyetemi Stomatológiai Klinika, Budapest). *Orvosi Hetilap* 89, 337-9(1948).—In saliva from 14 young men aged 8-18 and from 14 men aged 45-78 callicrein was detd. by comparing the effects on blood pressure of atropinized dogs with the effects of a standard padutin prepn. Saliva of aged men contains 4-5 times as much callicrein as saliva of young men; the mean values were 5.04 and 1.33 units, resp. Daily or hourly variations of callicrein in saliva of the same person were insignificant. The amt of callicrein was not influenced if the excretion of saliva was diminished by administration of atropine. In parodontosis the callicrein content of saliva was about 5-6 times higher than that of healthy control persons of the same age group. No significant deviation could be observed in caries or gingivitis ulcerosa. Increase of callicrein content of saliva was higher the more severe the parodontosis. I. F.

NADOR, K.
(3531)

A budapesti Tud. Stomatologiai Klinikajanar Kozlemenye. Vizsgalato a nyal
chemizmusarol The chemistry of saliva Orvosi Hetilap 1948, 89/561-576 (567-571)

Garphs 4 Tables 3

Samples of saliva obtained by normal flow and by suction from 30 healthy men of different ages had pH values between 6.90 and 7.09. The pH after administration of 50 g. of sugar was 6.32-6.46. The rate of salivary secretion had no effect on the pH. Ptyalin activity was found (Wohlgemuth's method) to be optimal at pH 6.5-7.5. It was lower after fasting and administration of sugar but higher after administration of farina or quinine. Fasting and administration of farina, sugar or quinine caused no variation in the inorganic (Ca, K, P, Cl, Na) and dry weight while CO_3 and HCO_3 are also significant. The Ca and P contents are 5-10 and 11-26 mg./100 ml. respectively.

Kesztyus - Debrecen

So: Excerpta Medica, Vol. II, No 7, Sec. II, July 1949

NADOR, K.
(6435)

Ujabb vizsgalatok a nyal kallikreinjerol Chemical investigations on the kallikrein of saliva Fogorvosi Szemle, Budapest 1949, 42/2-3 (105-103)

When saliva or purified kallikrein (padutin) is boiled for some minutes it is inactivated. Boiling for a longer time restores almost half the original activity. The substance released by boiling is not histamine, although its action is inhibited by treatment with dehistin (an antihistaminic). Kallikrein is regarded as a hormonal agent of the salivary glands, acting on intestinal secretions.

Straub-Sr ed

So: Excerpta Medica, Vol. II, No. 12, Sec. II, December 1949

CA

10

Chemistry and synthesis of compounds with antihistamine effects. Kárály-Nádor (Univ. Budapest, Hung.) *Chem. Hetlap* 90, 879-88 (1910). A review of chem. and physiol. properties of various antihistamine drugs. A new synthesis of general applicability is described avoiding the use of dialkylaminoalkyl halides or their salts to prevent the formation of piperazonium derivs. The Na derivs. of aromatic primary or secondary amines are treated with active half-esters of glycols formed with inorg. acids. The 2-hydroxyalkyl derivs. formed can be converted easily to 2-haloalkyl derivs., which after treatment with secondary amines, give compds. with antihistamine effects. 10 references. Ictvan Finlay

CA

10

Pharmaceutical chemistry of compounds paralyzing cholinesterase. Károly Nádor (Univ. Budapest). *Magyar Kém. Folyóirat* 86, 84-90(1950).—Two groups of synthetic compds. with curare effects were produced, the first consisting of simple deriva. of carbamic acid (prostigmine type) and the second of 2-substituted Et deriva. of carbamic acid (doryl type). In the 1st group, *p*-Me₂NCH₂CHPhOC(O)NMe₂ (N-46), bp 137-9°, was obtained by treating 1 mol. Me₂NCOCl with 2 mols. of the hydrol, filtering, and purifying. N-46 may be converted to its water-sol. methiodide. *p*-Me₂NCH₂CHPhOC(O)NEt₃ (N-47), bp 180-8°, was obtained in a similar manner. Other compds. produced were the dimethylthiocarbamic ester of 2-hydroxyquinoline (N-78), bp 120-3° (methiodide, m. 85-8°), and *m*-Me₂NCH₂OC(S)NMe₂ (thioprostigmine) (N-48), bp 108° (methiodide, m. 178°). The following compds. in the 2nd group were prepd. by treating the appropriate 2-iodoethyl ester in anhyd. Me₂CO with the tertiary amine at 100°: MeI.PhNMe₂CH₂CH₂OC(O)NEt₃ (N-49), m. 302°, MeI.PhNMe₂CH₂CH₂OC(O)NEt₃ (N-50), m. 305°, MeI.PhNMe₂CH₂CH₂OC(O)NIPh (N-51), m. 198°, 1-(2-phenylcarbamylxyethyl)pyridinium iodide (N-52), m. 123°, and 1-(2-phenylcarbamylxyethyl)quinolinium iodide (N-53), m. 218°. The products were not hydrolyzed by cholinesterase and showed no acetylcholine effect. A definite prostigmine-like biol. activity was observed with (N-49) and with the (2-diethylcarbamylxyethyl) ether, bp 165-7°, and the (2-phenylcarbamylxyethyl) ether, bp 141°, of 2-hydroxyquinoline. István Földi

CA

10

Experiments for the production of synthetic compounds with curare effect. I. Diphenylmethane derivatives. Károly Nagy, Livia K. Isarkutz, and Katalin P. Gibiszer (Eötvös Univ., Budapest). *Magyar Kém. Folyóirat* 56, 285-9 (1950).—The following compounds with the general formula (p -R¹XR²NC₆H₄)₂R were produced:

The following was the general method for prepng. these compds: Dissolve the tertiary base in Me₂CO, mix with the Me₂CO soln. of the salt-forming agent, place in a tightly-closed glass tube, and heat 30 hrs. at 100°. The reaction velocity diminished gradually with increasing length of the alkyl chain. When PhCH₂Br, Me₂SO, or

No	R ¹	R ²	X	R	Dose causing full paralysis in frogs, %	M.p. °C.	Solvent used for recrystn.
N-41	Me	Et	I	CH ₂	15	178-9	MeOH-Me ₂ CO
N-38	Me	Pr	I	CH ₂	7.5	197-8	MeOH-EtAc
N-97	Me	Bu	I	CH ₂	10.0	169-71	MeOH
N-142	Me	iso-Am	I	CH ₂	15.0	179-80	EtOH-EtAc
N-163	Me	CH ₂ CHCH ₂	Br	CH ₂	15	174	MeOH-Me ₂ CO
N-148	Me	PhCH ₂	Br	CH ₂	10	192	MeOH-EtAc
N-121	Me	Me	SO ₂ Me	CH ₂	10	194.6	MeOH-Et ₂ O
N-150	Me	Et	SO ₂ Et	CH ₂	30		
N-151	Me	Me	I	CMe ₂	30	176.7	MeOH
N-163	Me	PhCH ₂	Br	CMe ₂	30	160-2	MeOH-Me ₂ CO
N-170	Me	Me	I	CHPh	30	213	MeOH-EtAc
N-171	Me	Me	I	CO	60	158-60	MeOH-Me ₂ CO
N-143	Me	Me	I		30	253-4	EtOH
N-168	Et	Me	I		40	217	EtOH-Et ₂ O
N-169	Me	PhCH ₂	Br		40	228-30	MeOH-Me ₂ CO
N-144	Me	Me	SO ₂ Me		30	220	MeOH-Me ₂ CO

over

allyl bromide was used, the reaction was completed in 1-2 days even at room temp. with an almost 100% yield. The products were generally easily-sol. in water, and their aq. solns. could be sterilized at 100° without decompn. The yield of N-38 and N-97, which were apparently suitable for clinical application, was low. Another method was therefore used. Dissolve 10.4 g. MePrNPh in 10 ml. concd. HCl, add 6 ml. HCHO soln. and 1 g. paraformaldehyde. boil 6 hrs., add alkali, treat several min. with steam, dissolve the oil in Et₂O, dry with Na₂SO₄, remove the Et₂O, and distil *in vacuo*. About 14 g. N,N'-dimethyl-N,N'-dipropyl-diaminodiphenylmethane, bp 211-13°, is obtained, which gives the quaternary compd. when its Me₂CO soln. is treated with MeI. In the biol. testing of N-38 and N-97, similar effects were observed; 0.3 mg./kg. caused complete muscle paralysis in cats. For the respiratory paralysis, however, 0.6-0.8 mg./kg. was needed. Thus, they have a much greater therapeutic latitude than *d*-tubocurarine. Their effect was lasting and could not be antagonized by prostigmine. A correlation of structure with biol. activity is given.

István Finály

Bisquaternary xylene derivatives with curarine effect
 Karoly Nalov, Livia K. Tsekutz, and Mate Kovatsits
 Toxics Unit, Budapest Magyar Akad. Folyirat 50,
 140 (1950). The N atom in the hydrogenated isoquinoline
 ring of tubocurarine must be considered as an aralkylamine
 N from the point of view of pharmaceutical chemistry. Compts

contg twice the quaternary benzylamino, ArCH₂N⁺

of phenethylamino, ArCH₂CH₂N⁺ (III) group may serve
 as a basis in the synthesis of new compts with curarine
 effects. At first p-xylene derivs of type I were investi-
 gated, and a few piperidine and tropine derivs were pro-
 duced by the following method. Two mols tropine base

in Me₂CO were treated with I and p-C₆H₄CH₂Br (III
 in a 15% soln. Because of the high activity of III, quater-
 nary derivs are formed quickly at room temp. The follow-
 ing compts were produced (serial no., m.p., and dose
 in g.) causing total paralysis in frogs given 1.1 p-
 xylenebis(ethylpiperidinium bromide) (N-139), 270°
 30; 1.1 p-xylenebis(dolanitium bromide) (N-140), 217°
 18; 20; 8,8'-p-xylenebis(tropinium bromide) (N-145),
 198-200°, 20; 8,8'-p-xylenebis(homatropinium bromide)
 (N-141), 177°, 5; 8,8'-p-xylenebis(atropinium bromide)
 (N-142), 197-8°, 2.5; and 8,8'-p-xylenebis(3-benzoylato-
 tropinium bromide) (N-147), 228-30°, 2.5. Compts N-139
 and N-147 showed biol. effects twice as strong as tubo-
 curarine and had greater therapeutic latitudes. Derivs
 esterified with aromatic hydroxy acids (e.g. atropine)
 significantly paralyzed the nervous system. This effect was
 not shown by N-147, the action of which could be stopped
 by administering prostigmine. (See an Enaly

NADOR, KAROLY

6

Synthesis of compounds of 2-halazethyamine type with Adrenaline-blocking action: Károly Nádor, Máté Kovács and László Gvermek (Med. Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 2, 153-61(1952)(in English).

With the object of finding compds. with Adrenaline-blocking effects, various $ArOCH_2CH_2NRCH_2CH_2X.HX$ (I.HX) were synthesized. $RN(CH_2CH_2OH)_2$ were converted to hemiacetals and then treated with aralkyl halides to give $ArOCH_2CH_2NRCH_2CH_2OH$. These were converted with $SOCl_2$ or $SOBr_2$ to the corresponding Cl or Br derivs. The following I were prepd. [R, Ar, X, m.p., Adrenaline-blocking effect (the effect of Dibenamine = 1) given]: Me, PhCH₂, Et, —, 0.5; PhCH₂, PhCH₂, Cl, 120°, 0.5; PhCH₂, PhCH₂, Br, 98°, 1.5; 1-naphthylmethyl, PhCH₂, Cl, 180°, 1.5; PhCH₂, 1-naphthylmethyl, Cl, 195° (decolorn.), 1.0; Me, 1,4-benzodioxan-2-ylmethyl (A), Cl, 120°, 0.2; PhCH₂, A, Cl, 130°, 1.0; PhCH₂, A, Br, 110-21°, 3.0. The I were readily sol. in H₂O. The last compd. caused complete adreno-sympathic paralysis with a dose of 3-4 mg./kg. and showed L.D.₅₀ for mice on intraperitoneal application of 60 mg./kg. István Füzly.

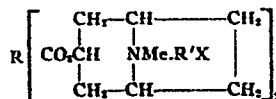
(2)

Handwritten initials or scribble.

NADGR, KAROLY

Chemical Abst.
Vol. 48 No. 4
Feb. 25, 1954
Organic Chemistry

Attempts to find new compounds with curarelike effects.
III. Quaternary derivatives of dicarboxylic tropine esters.
Károly Nádor and László Gyarmek (Munkacsy, Hungary).
Acta Chim. Acad. Sci. Hung. 2, 309-74 (1952) (in English); cf. *C.A.* 46, 7547f. — Several quaternary derivs. of succinyl- and phthaloyltropine were synthesized with the object of establishing the changes in pharmacol. effects of the quaternization of bis-quaternary compds. by aralkyl compds. which, as a rule, yield derivs. with ganglion-blocking effects. Succinyl-anti-tropine (I), b.p. 140-50°, was prepd. in 6 g. yield 82% by pouring 2.5 ml. (0.025 mole) (CH_2COCl_2) on 7.1 g. (0.04 mole) tropine-HCl, keeping the reaction mixt. 3 hrs. at 115-20° with air and moisture excluded, moistening with water when gas formation ceases, adding NH_3 to pH 8.5, shaking 8 times with eight 25 ml. portions of CHCl_3 , decolorizing with C, removing the solvent, and distg. under reduced pressure. Phthaloyl-anti-tropine (II), m. 66-7° is obtained by reesterification of tropine with *o*- $\text{C}_6\text{H}_4(\text{CO}_2\text{Et})_2$ in the presence of Na. The following



I.2R'X (R = $-\text{CH}_2\text{CH}_2-$) and II.2R'X (R = *o*- C_6H_4) were prepd. R'X and compd. no. given: (Ia), MeI (N-297); (Ib), *p*- $\text{MeC}_6\text{H}_4\text{CH}_2\text{Br}$ (N-298); (Ic), *m*- $\text{BrC}_6\text{H}_4\text{CH}_2\text{Br}$ (N-307); (IIa), MeI (N-305); (IIb), PhCH_2Br (N-306). (Ia), m. 310° (decompu.), obtained by adding MeI to I in abs. Me_2CO , allowing to stand for a day, filtering, washing the ppt. with Me_2CO to remove unreacted substance, and recrystg. from $\text{MeOH-Et}_2\text{O}$. Ib, m. 290-2° (decompu.), from I in Me_2CO with *p*- $\text{MeC}_6\text{H}_4\text{CH}_2\text{Br}$. Ic, m. 288° (de-

compn.), prepd. by adding $m\text{-BrC}_6\text{H}_4\text{CH}_2\text{Br}$ to I in Me_2CO , allowing to stand 3 days, filtering, and recrystg. from $\text{MeOH-Et}_2\text{O}$. IIa, m. 298-300° (decompn.), prepd. by quaternizing II in Me_2CO with MeI and recrystg. from water. IIb, m. 216° (decompn.), obtained by refluxing II 3 hrs. in Me_2CO with PhCH_2Br , filtering, washing the salt with Me_2CO and recrystg. from $\text{MeOH-Et}_2\text{O}$. Pharmacol. tests revealed that the curare effect is predominant in the bis-quaternary derivs. Compd. N-307 proved in frog tests to be 2.5 times and N-308 5.0-times as strong as d -tubocurarine.

John P. Finley

7-13-64

GYERMEK, L.; NADOR, K.; KOVATSITS, M.

New adrenaline-blocking compounds. Acta physiol. hung. 3 no.1:175-182
1952. (CIML 24:3)

1. Of the Institute of Pharmacology of Budapest University.

GYERMEK, L.; NADOR, K.

Studies on cholinergic blocking substances. II. Correlations between structure and effect in antimuscarine, ganglion blocking and curare-like actions of mono- and bis-quaternary ammonium compounds. Acta physiol. hung. 3 no.1:183-193 1952. (CML 24:3)

1. Of the Institute of Pharmacology of Budapest University.

NADOR, K.

②

Attempts to find new compounds with curarelike effect.
 IV. Synthesis of bis-quaternary tropines. K. Nador
 and L. Küttel Issekutz (Med. Univ., Budapest). *Acta*
Chim. Acad. Sci. Hung. 3, 71-8 (1953) (in English); cf. *C.A.*
 47, 1334; 48, 2078f. — The following *8,8'*-*p*-xylylenebis(tro-
 pinium bromides) were prepd. by heating 1 mole *p*-C₆H₄
 (CH₂Br)₂ and 2 moles of the corresponding tropine in
 Me₂CO [acid radical of the tropine, m.p., and dose (γ/g.)
 causing complete paralysis in frogs given]: none, 197°, 20;
Ac, 220°, 20; *Bz*, 228-30°, 2.5 (syn-stereoisomer, 237°, 6);
p-ClC₆H₄CO, 255-8°, 7.5; *p*-O₂NC₆H₄CO, 248-50°, 2.5; *p*-
*H*₂N₂C₆H₄CO, 210-13°, 7.5; PhCH₂CO, 218°, 2.5; Ph₂CHCO,
 210°, 7.5; mandeloyl, 177°, 6; and tropoyl, 197-8°, 2.5.
 Also prepd. were *8,8'*-*o*-xylylenebis(benzyltropinium bro-
 mide), 210-1°, 1.7; *8,8'*-*o*-xylylenebis(mandeloyltropinium
 bromide), 204-7°, 2; and *8,8'*-*p,p'*-methylenebis(*p*-phenyl-
 enemethylene)bis(benzyltropinium bromide), 276°, 90. The
 pharmacol. results show that a distance of 13-15 Å. between
 the quaternary N groups is not required for the curarine ef-
 fect (Barlow and Ing, *C.A.* 43, 2703c) and indicate that the
 structure of the cation head is of paramount importance in
 detg. the activity of such compds. J. L. O'Brien

NADOR, KAROLY

Chemical Abst.
Vol. 48 No. 4
Feb. 25, 1954
Organic Chemistry

The stereochemistry of the tropane alkaloids. I. The configuration of tropine and pseudotropine. *Carlus Heder* and *Károly Nádor* (Univ. Szeged, Hung.). *J. Chem. Soc.* 1953, 721-3. — Comparison of the rates of N → O acyl migrations has shown that the relative positions of the nitrogen bridge and the C-3 HO group in nortropine and in norpseudotropine are trans and cis resp. The stereochemical notation for these being fashioned after the steroids and triterpenes, therefore nortropine and norpseudotropine are nortropan-3 α -ol and -3 β -ol respectively. *N*-Acetylnortropan-3 β -ol (I) and 5.15*N* HCl in dioxane yield I.HCl, m. 155°. *N*-Benzoylnortropan-3 β -ol (II), m. 166°, is obtained by Schotten-Baumann benzylation of the nortropan-3 β -ol carbamate (III). *O*-Benzoylnortropan-3 β -ol-HCl (IV), m. 212°, is obtained from III, *N* HCl, and BzCl heated on a steam bath for 5 hrs. *O*-Acetylnortropan-3 β -ol-HCl (V), m. 213-14°, is prepd. by refluxing nortropan-3 β -ol-HCl with AcCl for 1 hr. *O*-Benzoylnortropan-3 α -ol-HCl (VI), m. 214-16°, is prepd. by refluxing nortropan-3 α -ol-HCl with excess BzCl for 5 hrs. *N*-Acetylnortropan-3 α -ol-HCl (VII), m. 160-3°, is prepd. from *N*-acetylnortropan-3 α -ol and 5*N* HCl in dioxane. *O*-Acetylnortropan-3 α -ol-HCl (VIII), m. 192-4°, is obtained from tropan-3 α -yl carbamate with 5*N* HCl and AcCl. II on standing for 24 hrs. at 25° with 5*N* HCl in

dioxane yields IV. IV rearranges to II on treatment with 2*N* NaOH. *N*-Benzoylnortropan-3 α -ol is recovered unchanged by treatment with HCl. VI, when treated with *N* NaOH, apparently does not react. I on heating to 100° melts and then solidifies, yielding V. V, when neutralized with 0.1*N* NaOH, gives I.HCl. VII on heating to 160° for 10 min. gives VIII. II. The configuration of the cocaine. Gábor Fodor and Odón Kovács. *Ibid.* 724-7.—The configurations of the epimers, ecgonine and pseudoecgonine and cocaine and pseudococaine, have been established by acyl migrations and other stereospecific reactions. The C-3 HO group proved to be in the α -position in ecgonine. *N*-Acetylnor-3 β -ecgonine Et ester, m. 112°, gives *O*-acetyl-3 β -ecgonine Et ester-HCl on treatment with HCl on the steam bath for 4 hrs. The reverse reaction is observed by treatment of the *O*-Ac HCl salt with NaOEt. *N*-acetyl-3 α -ecgonine Et ester, m. 150°, $[\alpha]_D^{25}$ -19.4° (c 2, EtOH) does not rearrange with HCl in dioxane. 2- α -Benzamidotropan-3- α -ol-HCl (I), m. 228°, $[\alpha]_D^{25}$ -40.5°, is obtained by Curtius degradation of (-)-benzoyl-3 α -ecgonine and treatment with HCl. I refluxed with MeOH contg. 3.5*N* anhyd. HCl gave 2 α -amino-3 α -benzoyloxytropane-2HCl, m. 214-15°, $[\alpha]_D^{25}$ -21.9° (c 2, H₂O). Reverse reaction occurs in *N* NaOH. As a by-product in the prepn. of I, 2- α -amino-

tropan-3 α -ol-2HCl was obtained. Curtius degradation of (-)-*O*-benzoyl-3 β -ecgonine yields 2 α -benzamidotropan-3 β -ol, m. 203°, $[\alpha]_D^{25}$ 82° (c 2, H₂O), which does not rearrange on heating with HCl in MeOH. Cocaine on reduction with LiAlH₄ gives, after treatment with HCl, (-)-3 α -ecgoninol (II) HCl salt, m. 270-2°, $[\alpha]_D^{25}$ -37.3°; while LiAlH₄ reduction of (+)-3 β -ecgonine Me ester gives (+)-3 β -ecgoninol m. 131-3°, $[\alpha]_D^{25}$ 58.3° (c 3, H₂O) [HCl salt, m. 232-3°, $[\alpha]_D^{25}$ 46.3°]. When II is treated with PhCHO and PhSO₃H there is obtained *O,O'*-benzylidene-3 α -ecgoninol, m. 192-4°, $[\alpha]_D^{25}$ -9.43. No benzylidene deriv. is obtained from the 3 β -compd. II dehydrates when treated with chloral hydrate and concd. H₂SO₄ at 20°, however the 3 β -compd. does not react.

K. C. Schreiber

MA
7-13-54

NADOR, K., GYERMEK, L.

"Synthesis of Compounds with Ganglion Blocking Effects." Pt. 2. Monoquaternary tropeines.
In English. p. 323 (ACTA CHIMICA, Vol. 3, No. 3, 1953) Budapest, Hungary

Ref. Univ. Budapest

SO: Monthly List of East European Accessions, Library of Congress, Vol. 3, No. 4,
April 1954. Unclassified.

Hador, KAROLY

Quaternary adducts of bromoacetic ester with local anesthetic effect. Hador, Karoly, P. Herz, and B. Lissauer (Med. Univ., Budapest, *Acta Chim. Acad. Sci. Hung. 3*, 67, 214 (1954) in English); cf. *Ch. 48*, 2286. A series of quaternary NH₄ derivs. were prepd. from known local anesthetics with α -Br carboxylic esters and their anesthetic effect stud. as compared to procaine = 1. The quaternary salts were obtained by dissolving the appropriate tertiary amine in anhyd. Me₂CO and boiling the soln. until 2-3 days at room temp. The following compds. were prepd. in this manner (same abbreviating activity given): [p-*H*, N-(Me₂CO)₂CH, N-Et, CH₂CO, CH₂CH Me, Br, m. 107-7° (decompn.) (from MeOH-Et₂O), activity 3; diethyl p-ethoxybenzoyl ethyl (cyclohexylmethyl) ammonium bromide, m. 104-1° (decompn.) (from MeOH-Et₂O), activity 0; [N-(2-pyridyl)-N-benzylaminoethyl]dimethyl (carbethoxymethyl) ammonium bromide, m. 143-5° (decompn.) (from Me₂CO-Et₂O), activity 0; 1-(1-carbamoyl-1,1-diphenyl-3-propyl)-carbethoxymethyl piperidinium bromide, m. 185° (decompn.) (from EtOH-Et₂O), activity 3; diethyl N-[1-(2-butyl)-quinolinoyl]aminoethyl (carbethoxymethyl) ammonium bromide, m. 98-100° (decompn.) (from Et₂O contg. some MeOH), activity 12. The pharmacol. examn. of these compds. showed that they act similarly to the alkyl and aralkyl quaternary compds. (see. *cit.*), but do not show the prolonged duration of the anesthetic effect typical for the alkyl and aralkyl analogs; this is probably due to the splitting of the ester bond NCH₂CO₂R in the organism.

P. W. Hoffmann]

Handwritten initials

GYERMEK, L.; NADOR, K.

Studies on cholinergic blocking substances. III. Neuromuscular blocking tropeines. Acta physiol. hung. 4 no.1-2:159-174 1953.

(CMLL 25:1)

1. Of the Institute of Pharmacology of Budapest University and of the Pharmaco-Industrial Research Institute, Budapest.

R. Nador, R

5

Cholinergic blocking substances. V. Pharmacology of monoquaternary tropines acting on vegetative ganglia. I. Gyermek and R. Nador. Med. Univ., Budapest. *Acta Pharm. Acad. Sci. Hung.* 4, 321-34 (1953) (in English); cf. *C.A.* 48, 10871-84071. — The autonomic ganglion-blocking effects, parasympatholytic, curariform, and local anesthetic activities of a series of many new quaternary tropines were studied. The compounds are acetate of 8-methyltropinium iodide (I), acetate of 8-benzyltropinium bromide, acetate of 8-(*p*-bromobenzyl)tropinium bromide, dimethylcarbamate of 8-methyltropinium iodide (II), dimethylcarbamate of 8-benzyltropinium bromide, benzoate of *trans*-8-methyltropinium iodide, benzoate of *cis*-8-methyltropinium iodide, benzoate of *trans*-8-benzyltropinium bromide, benzoate of *cis*-8-benzyltropinium bromide, benzoate of 8-(*p*-bromobenzyl)tropinium bromide, benzoate of 8-(*p*-phenylbenzyl)tropinium bromide (III), *p*-aminobenzoate of 8-benzyltropinium bromide, *p*-aminobenzoate of 8-(*p*-chlorobenzyl)tropinium bromide, *p*-aminobenzoate of 8-(1-naphthylmethyl)tropinium chloride, *p*-nitrobenzoate of 8-(*p*-chlorobenzyl)tropinium bromide, *p*-chlorobenzoate of 8-benzyltropinium bromide, phenylacetate of 8-methyltropinium iodide, phenylacetate of 8-benzyltropinium bromide, phenylacetate of 8-(*p*-bromobenzyl)tropinium bromide, phenylacetate of 8-(*p*-phenylbenzyl)tropinium bromide, diphenylacetate of 8-methyltropinium iodide, diphenylacetate of 8-benzyltropinium bromide, diphenylacetate of 8-(*p*-phenylbenzyl)tropinium bromide, tropate of 8-methyltropinium bromide, tropate of 8-benzyltropinium bromide, *D*-tropate of 8-(*p*-bromobenzyl)tropinium bromide, *L*-tropate of 8-(*p*-bromobenzyl)tropinium bromide, tropate of 8-phenethyltropinium

HUNG

bromide, and the methyl bromide, ethyl bromide, isopropyl bromide, benzyl bromide, *o*-bromobenzyl bromide, *m*-bromobenzyl bromide, *p*-bromobenzyl bromide, *p*-chlorobenzyl bromide, *p*-methylbenzyl bromide, *p*-nitrobenzyl bromide, *p*-methoxybenzyl bromide, 1-naphthylmethyl chloride, 2-naphthylmethyl bromide, *p*-phenylbenzyl bromide (IV), diphenylmethyl bromide, *o*-methylmethyl bromide, phenethyl bromide, and *p*-bromobenzoylmethyl bromide quaternary derivs. of the *dl* mandelate of tropine. The *p*-phenylbenzyl and *p*-halobenzyl quaternaries were the most active ganglion-blocking agents. IV is 40 times stronger than tetraethylammonium chloride. Compds. I and II have muscarinic action. Compd. III is a very potent sympathetic ganglion stimulant.
Harold S. Bailey

Ma

NADOR, Károly

Synthesis of Cholinergically Paralyzing and Stimulating Tropine Derivatives.
Szerves Kem. Konf., Debrecen, 1953, p. 80-85; Curr. Chem. Papers, No 12,
1954, p. 620.

~~Károly,~~
Nádor, Károly

Basic problems in drug research. Károly Nádor (Budapest; Orvostudományi Egyetem, Budapest). Magyar Tudományos Akad. Kim. Tudományok Osztályának Közleményei 6, 1-18(1954).--A discussion of correlating chemical structure and pharmacol. activity. 27 references.
C. S. Prickett

E. NADOR, K



278. Anti-nicotinic action of aminoketones. II. Issokute, Pócsasz, L. Issokute, and K. Nador. *Acta Physiol. Acad. Sci. Hung.* 1954, 8, 95-108. The inhibition of nicotine tremor in rabbits and the protection against a 100 L.D. in mice of 1-phenyl-3-dimethyl-amino-propanon-1 (I), 1-phenyl-3-diethylamino-propanon-1 (II), 1-phenyl-3-piperidino-propanon-1 (III) and of 1-phenyl-3-(2:6-dimethyl-piperidono)-propanon-1 (X), of the 14-β-aminoketones was compared with the effect of Parpanit. The actions of II were greater, of III and X equal and of I 4-6 times smaller than those of Parpanit. They have a weak spasmolytic action on rabbit and guinea pig intestine; they inhibit the nicotine spasm more powerfully than that of acetylcholine, whereas Parpanit has a reciprocal effect. While Parpanit has no effect on diuresis elicited in rats by 5 mg/100 g. water II inhibits it. When II is given 20 min. before a dose of tetracore which causes cramps in 100% of the animals but kills none, the cramps are alleviated somewhat but all the animals (rats) die. The nicotinolytic action of these compounds differs from the ones hitherto known in that they have neither atropine like, adrenolytic, ganglion-inhibiting nor antihistaminic actions. A. B. L. BERNALTE



MD

MA
MKT

3

Met ✓ 2557. Pharmacology of amino-ketones with nicotinic and anti-nicotinic effects. II. J. Pórszász, K. Nádor, K. Gibiszer-Pórszász, T. Wiesz, and R. Padányi. *Acta physiol. Acad. Sci. Hung.* 1955, 7: 139-161. The effect of more than 50 α , β , γ -aromatic and aliphatic amino-ketone deriv. (most of them newly synthesised by the authors) on circulation, respiration, and ganglia was analysed. These compounds cause, also in decerebrate cats, a rise in blood pressure without a secondary fall. The pressor effect is prevented by adrenalectomy, ganglion-blocking agents, and adreno-lytics. They contract the nictitating membrane. They have a nicotine-like action without the ganglion-blocking component. They stimulate respiration by exciting the carotid sinus. This effect of compounds A-84, A-73, A-94, N-482 and others is as strong as that of lobeline. They show reciprocal tachyphylaxis with lobeline. Their effect in counter-acting the respiratory paralysis caused by morphine is 0.3-0.6 of that of lobeline. Experiments indicate that the greater activity of lobeline is due secondarily to its depressant action on circulation. Compound A-66 causes cramps in mice, rats, and dogs which can be suppressed by severan. It has, therefore, besides its reflex action, also a central stimulating, cordiol- or tetraol-like action. The compounds do not damage either the contractile power of the heart or its impulse-conducting system. The nicotine-like effect is chiefly a property of those compounds which stimulate respiration and have the grouping

$\text{CH}_2-\text{CO}-\text{R}$ or  Compounds 

have an antinicotinic effect. The 2 types of compounds antagonise each other's effect on the guinea pig gut. Some of them have an effect twice as great as papaverine. The best stimulants of respiration are A-66, A-84, A-94, and N-482.

5
1/2

Porzanski, J., Mador, K., Eibischer-Porzanski, K.

Compound A-94 seems to be best suited for the treatment of the Parkinson-type diseases of the extra-pyramidal system because its toxicity is relatively low and its parasympathetic blocking action is only 1/100-1/300 of that of atropine. This is the only compound which contains a tertiary N and has a non-alkaloid-like nicotinic action. (German)

A. B. L. BEZNAK.

3/2