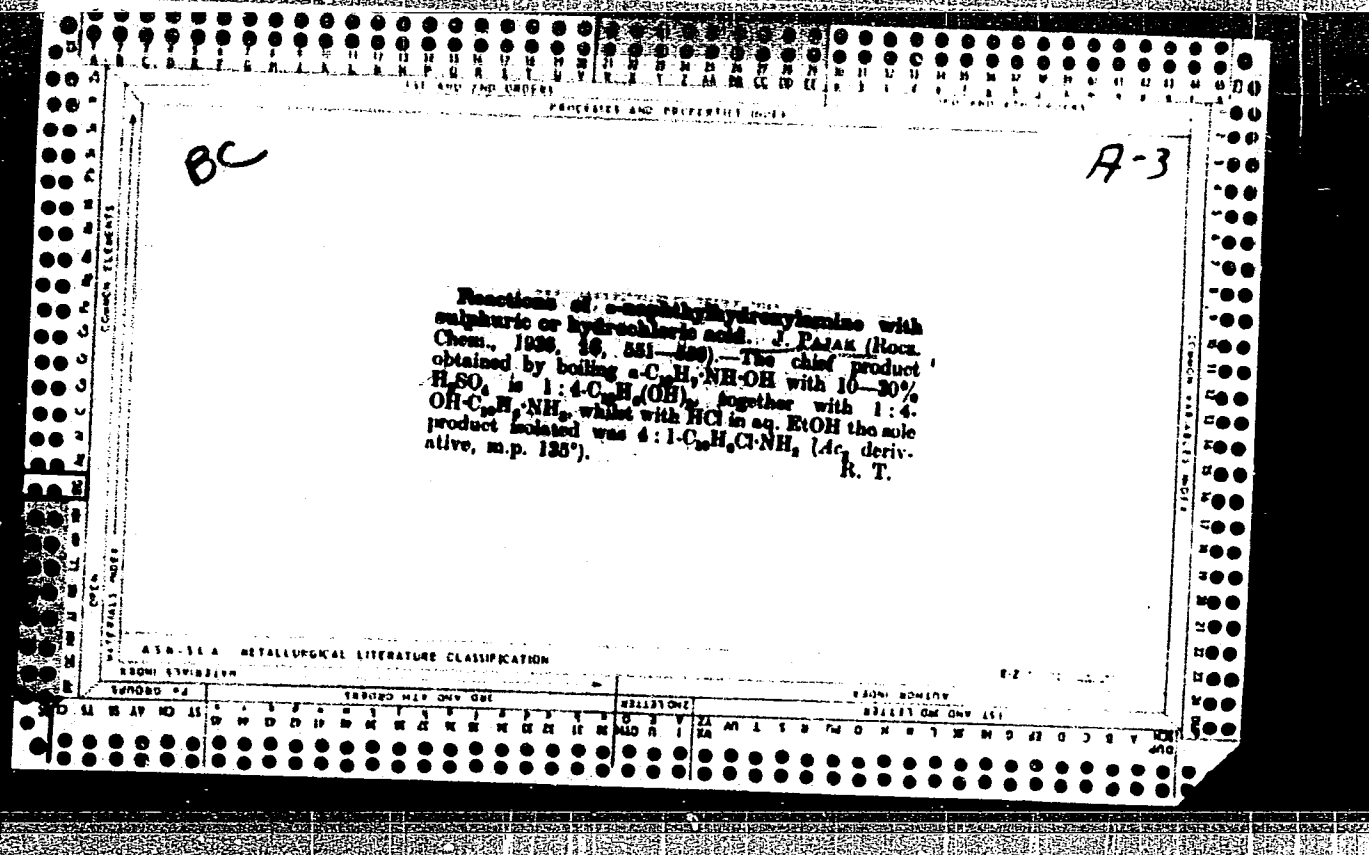


Page 4 - Some Technological and Econonical Indices of Displacer
Compressors

„Niektóre wskaźniki technologiczne i ekonomiczne sprężarek W.S. ...
Wyd. Instytut Mechaniki ...

Reactions of 1-hydroxyaminonaphthalene in the presence of sulfuric and hydrochloric acids. J. Pajak.

Russki Chem 10, 351 (in German MS(1)100) --
1-C₁₀H₇NH(OH) (I) heated with H₂SO₄ gives principally
1,4-C₁₀H₆(OH), with a small amt. of 1,4-C₁₀H₆NH(OH),
considerable tar is formed. HCl with alc. I yields 1,
4-C₁₀H₆(NH)Cl. M. Wojschowski



10

PROCESSES AND PROPERTIES INDEX

Linear diacanthracidonequinone. Jan Pajak. *Roczniki Chem.* 12, 507-17 (517 in German)(1932).--1,4-Quinone of-2,8,8',8''-dinaphthacridone (2,2'-dibenz-acridine-5,8,14(13)-trione), $C_{24}H_{16}O_4N$ (I), is prepd. by condensation of 2-hydroxy-1,4-naphthoquinone, m. 105-6°, with 2-amino-3-naphthoic acid, $C_{11}H_7O_2N$, m. 272° (279° cor.). If the latter splits off H_2O under action of H_2SO_4 , partial sulfonation takes place at low temp. and on boiling of the sulfonation product in H_2O the sultam $C_{24}H_{16}O_4NS$ (II) is formed. In order to perform the ring closure without sulfonation, P_2O_5 may be applied. Best yields of I are obtained on treating 1-naphthoquinone-2-aminonaphthoic acid in 89% H_3PO_4 with P_2O_5 . I forms deep red scales, m. about 410°, insol. except in pyridine, partly sol. in dil. KOH on heating; hence it

80 g. of a mixt. of low-melting picrates; 144.5 g. of the HCl salt of the $C_{24}H_{16}N$ base, 735.8 g. of non-aromatic bases (4 fractions, n_D^{20} 1.4991 to 1.5175). Cumulative extr. of the 273° fraction, the ready soly. of the HCl salt of 2,4,8-trimethylquinoline (I) in H_2O and of its sulfate in Me_2CO facilitate the sepn. of I from the 2,3,8-isomer; I, b.p. 280° (cor.), n_D^{20} 1.5855; the picrates of I, yellow, m. 282°. A new base, $C_{24}H_{16}N$, of unknown structure has been isolated. A search for the common coal tar bases, quinoline, isoquinoline, quinoline and lepidine, has given only neg. results. V. Use of sulfur dioxide in the separation of petroleum bases. Bernard S. Biggs and James R. Hailey. *Ibid.* 4141 2.--The additive reaction of SO_2 on amines has been applied to the isolation of 2,3- and 2,4-dimethylquinoline from a distn. fraction of kero bases in the 283-7° range. The SO_2 process is unsatisfactory, in that it does not effect quant.

METALLURGICAL LITERATURE CLASSIFICATION

CLASSIFICATION

a H_2SO_4 soln., gives a green hyposulfite lake. It is transformed into II on prolonged boiling in H_2O ; red, does not melt, insol. in H_2O . Boiling in NaOH gives quinonesulfonic acid, $C_{21}H_{17}O_6NS$, from the soln. of I in H_2SO_4 with HNO_3 (1:4) below 30° ; yellow needles. Na-salt, red, sol. in H_2O . Reduction in alk. solns. with $NaHSO_3$ gives a green soln. which, on treatment with O_3 , leads to aminodinaphthacridonequinonesulfonic acid, $C_{21}H_{17}O_6NS$, greenish black ppt. It stains cotton greenish black from an acidic bath. Dinitrodinaphthacridonequinone, $C_{21}H_{15}N(NO_2)_2$, obtained by slow introflc. tion of I into concd. H_2SO_4 + HNO_3 at 65° ; bright yellow, m. 375° (decompr.) H_2SO_4 soln. yellow-brown. Cotton is stained gray-black (after oxidation) by the Feen hyposulfite lake, accompanied by reduction of the dinitro to a diamino compd. Diamino-dinaphthacridonequinone, black powder. Its H_2SO_4 soln. is brown. J. W.

PAJAK, Jan, mgr., inż.

Air and refrigerating compressors at the 30th International Poznan
Fair. Przegl mech 20 no.18:560-564 S '61.

1. Centralne Biuro Aparatury Chemicznej, Krakow.

BERNAS, Stefan; PAJAK, Janusz

Network analyser determining automatically the power
distribution and voltage level. Przegl elektrotechn 40
no. 2:96-98 F '64.

1. Politechnika, Warszawa.

PAJAK, JAN L.

Zarys chowu bydla. [Wyd. 1.] Warszawa, Panstwowe Wydawn. Rolnicze i Lesen, 1954
456p. [Outline of cattle breeding. 1st ed.]

Not in DLC

DA

SO: Monthly List of East European Accessions (EEAL) LC, Vol. 6, No. 10, October 1957. Uncl.

PAJAK, K.

Management of packing, p. 4. (ROLNIK SPOLDZIELCA, Warszawa, Vol. 8, no. 1, Jan. 1955.)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 6, Jan. 1955,
Uncl.

PAJAK, Mieczyslaw, inz.

Universal layout of city distribution networks. Energetyka Pol
19 no.1:9-13 Ja '65.

1. Power Plants of the Southern District, Katowice.

PAJAK, Teodor

Sinusoidal tables. Mechanik 34 no.1:49-51 '62.

1. Fabryka Wyrobow Precyzyjnych im.Ger.K.Swierczewskiego, Warszawa.

PAJAK, Z.

(3)

9

Effect of electric field on dielectric constant of ferroelectric titanates. A. Piekara and Z. Pajak (Inst. Technol. Gdansk). *Acta Phys. Polon.* 12, 170-80 (1953).—The dielec. const. of polycryst. Ba and Ba Sr titanates was obtained as a function of d.c. biasing field for quasistatic states above and below the Curie point. Particularly the effect of preliminary polarization of Ba titanates on time-variation behavior of dielec. const. below the Curie point, depending on direction of applied field, was observed.

Sylvia Nowinska

116

PAJAK, Z.
PAJAK, Z.

PIEKARA, A.; PAJAK, Z.

"Thermal pseudohysteresis of the dielectric constant of ferroelectric titanates"
p. 256 (acta physiologica polonica, Vol. 11, No. 3/4, 1951/52, Warszawa)

SO: Monthly List of East European Vol. 3, No. 3
Russian Accessions / Library of Congress, March ⁴ 1953, Uncl.

KN-011, 57

Chem Abs V48
1-25-54

General + Physical
Chemistry

Thermal pseudohysteresis of the dielectric constant of ferroelectric titanates. A. Piekara and Z. Palak (Gdansk Inst. Technol., Gdansk, Poland). *Acta Phys. Polon.* 11, 255-82 (1953).—The dielec. const. of BaTiO₃ and of 73.6% BaTiO₃, 21.4% SrTiO₃ disks, fired 2 hrs. at 1300°, was measured with 2 kc./sec. and 5 kc./sec. in a field of 20 v./cm. during consecutive heating cycles of 1-5 hrs. duration.

(3)

The dielec. const. was always higher during cooling than during heating, with a difference of up to 10%. This thermal hysteresis was appearing whether or not the cycles enclose the Curie temp. or lie above or below it. The Curie temp. for BaTiO₃ during heating was 127° and during cooling 125° (corresponding values for BaTiO₃-SrTiO₃ 80° and 54°). Stopping of the cooling process caused a spontaneous drop of the dielec. const. A previous cooling does not produce thermal hysteresis and shifting of a certain preestablished value, as realized by a cycle for Ba Sr titanate between 45 and 20°. There exists only a high-temp. memory, no low-temp. memory.

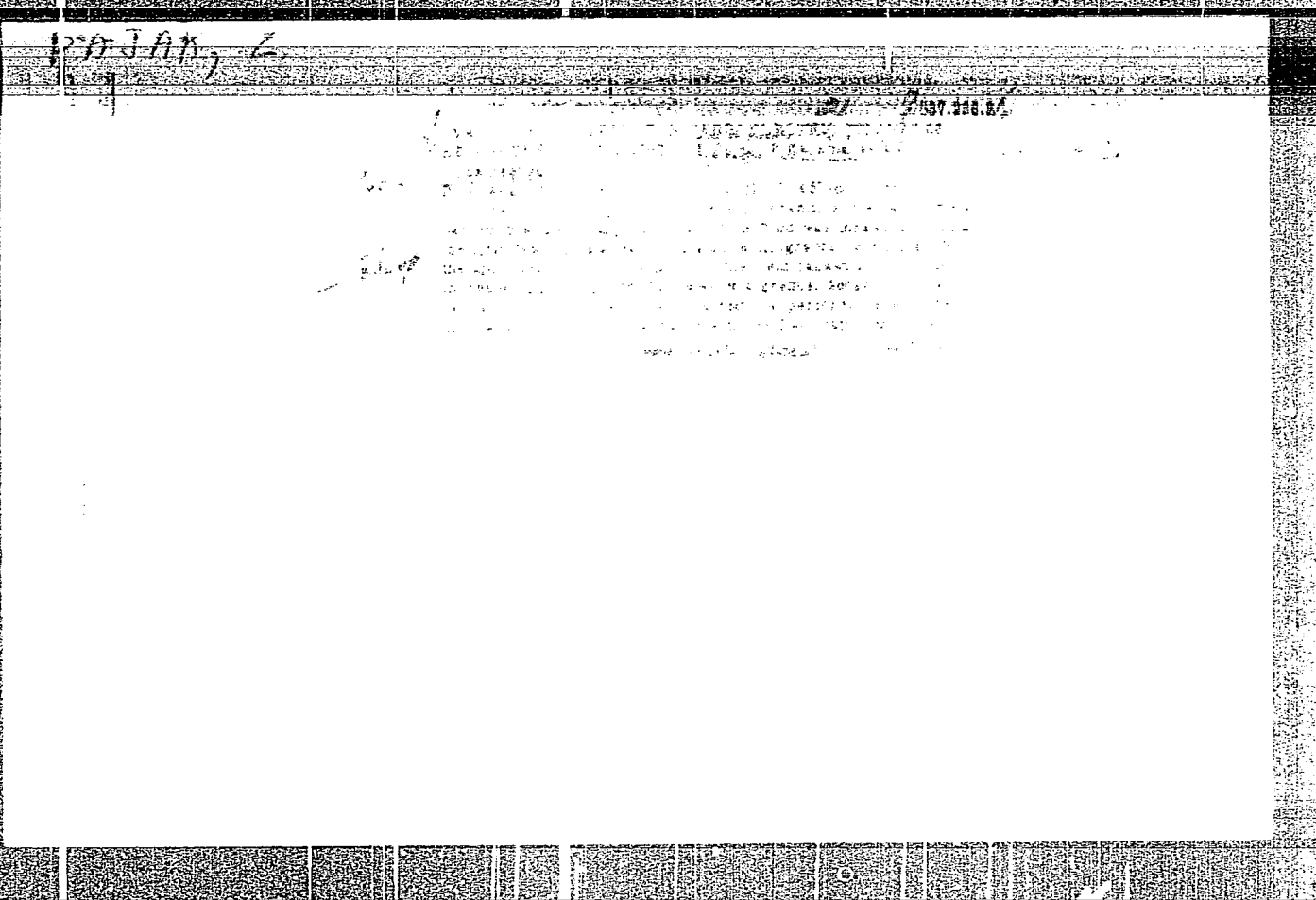
Herbert B. Sachse

NF
7-28-54

PAJAK, Z.; PIEKARA, A.

Thermal independence of permittivity of ferroelectric heterogeneous systems.
In English. p.83
BULLETIN. Varsovie
Vol. 4, no. 2, 1956

So. East European Accessions List Vol. 5, No. 9 September 1956



PAJAK, Z.

✓ Polarization changes during the process of aging in ferro-
electrics of the BaTiO₃ type. Z. Pajak and J. Stankowski
(Polish Acad. Sci., Poznan). *Proc. Phys. Soc. (London)*
72, 1144-6(1958).—In comparative measurements of freshly
prep. and aged samples of dielec. hysteresis loops of Ba
metatinate ceramics, it was shown that the high values of
spontaneous polarization P_s , total polarization P , coercive
force E_c , and hysteresis losses A observed in "young" sam-
ples decrease rapidly with time, that finally P_s , E_c , and A
vanish, and the aged ferroelects. exhibit a behavior similar to
that of the usual dielects., with a nearly linear P/E de-
pendence. H. R. Pool.

21
3
alt
MH

"Synthesis of ferroelectrics of the BaTiO₃ type."
Postepy Fizyki, Warsaw, Vol 5, No 2, 1954, p. 212

SO: Eastern European Accessions List, Vol 3, No 10, Oct 1954, Lib. of Congress

L 35574-65

ACCESSION NR: AP4047631

2

fizyki PAN (Physics institute, PAN) is 1963 whose departments cooperate closely with many university departments. The Physics committee of the PAN is the main coordinator of investigations in the solid state field which are now active and

The main scientific areas of research in the world war II are completed.

ASSOCIATION: Zespól fizyki ciała stałego Komitetu fizyki PAN (Solid state physics Physics Committee, PAN) Institute of Physics PAN, Puzoski 47, 01-465 Warszawa, Poland

PAN

SUBMITTED: 00

OTHER: 000

NO REF SOV: 000
Card 2/2

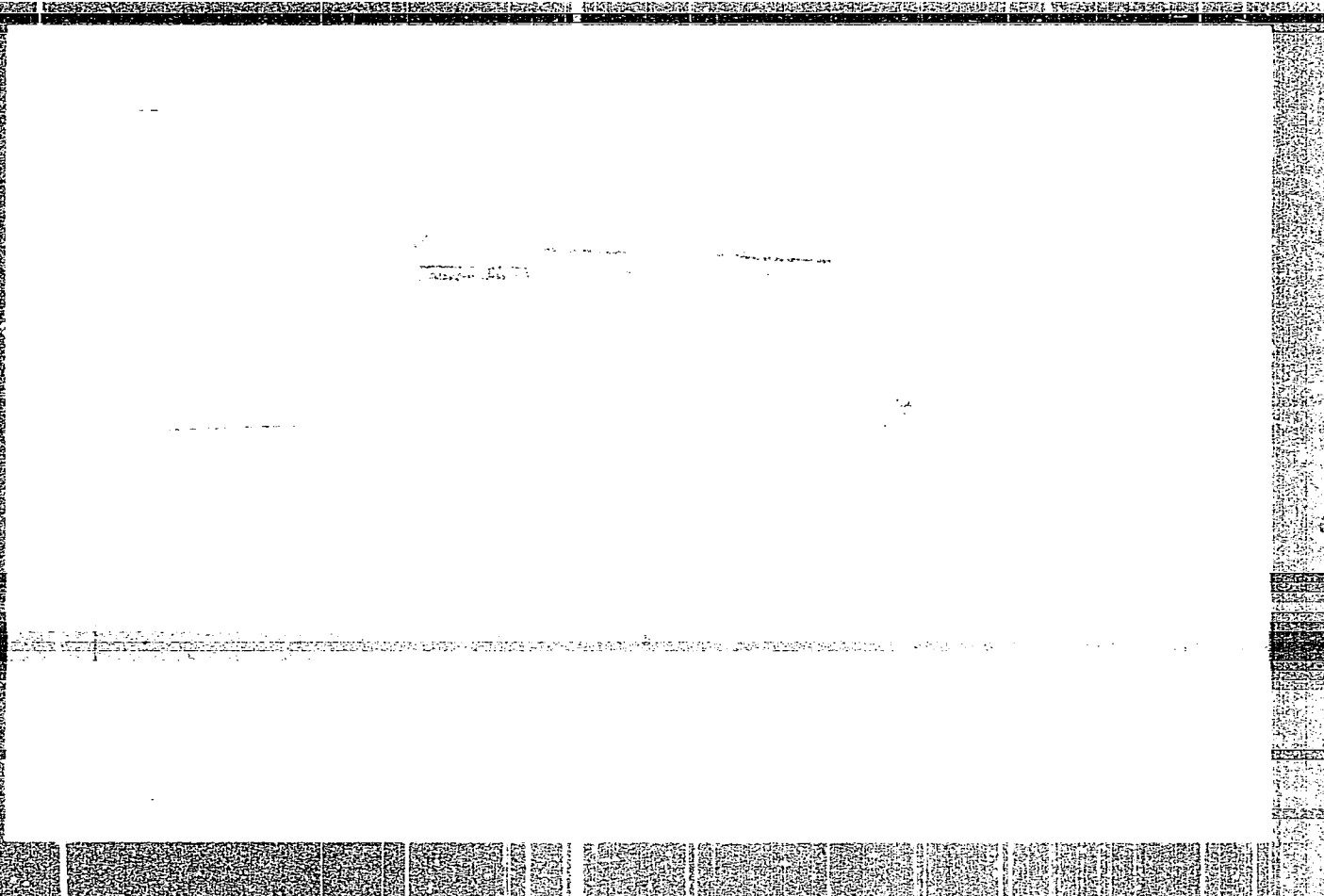
POLAND

PAJAK, Z.; STANKOWSKI, J.

PAN Institute of Physics, Dept. of Nonconductors
(Instytut Fizyki PAN, Zakład Dielektryków), Poznań
(for both?)

Craków, Postępy fizyki, No 3, May-June 1965, pp 313-324

"Ageing process in ferroelectric substances."



PAJAK, Zdzislaw

Dielectric investigation of Perovskite type ferroelectrics. Pt. 1.
Ferroelectric systems with small temperature coefficient of permittivity.
Pt. 2. Aging process in ferroelectrics. Acta physica Pol 18 no.5:
473-520 '59.

1. Polish Academy of Sciences, Institute of Physics, Dielectric
Laboratory, Poznan.

67146

POL/45-18-5-6/11

24.7800
~~24 (3), 24 (6)~~

AUTHOR:

Pajak, Zdzisław

TITLE:

Dielectric Investigation of Perovskite Type Ferroelectrics.
Part I: Ferroelectric Systems With Small Temperature
Coefficient of Permittivity

PERIODICAL:

Acta Physica Polonica, 1959, Vol 18, Nr 5, pp 473-506 (Poland)

ABSTRACT:

In the introduction the author gives a short survey on facts characterizing ferroelectrics. They can be classified into two groups, the first containing crystals with various so-called hydrogen bonds, the second comprising crystals with oxygen octahedra; a third group seems to be represented by the recently examined dicalcium-strontium propionate (Ref 16). Ferroelectricity results from spontaneous polarization, i.e. from dipole interaction which is due to off-centered protons in the H-bond or to off-centered metal ions in the oxygen octahedra, respectively. A satisfactory theory of ferroelectricity does not exist as yet. In his investigations the author used samples of BaTiO₃ and BaTiO₃-SrTiO₃ solid solutions of different composition as well as BaTiO₃-MgSnO₃ solid solutions. Impurities were detected by applying

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Dielectric Investigation of Perovskite Type Ferro-
electrics. Part I: Ferroelectric Systems With Small Temperature Coefficient
of Permittivity

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POL/45-18-5-6/11

spectrography. The influence of the sample support on the properties of the samples is considerable. Reaction rate depends on grain size; thus, before sintering, the reagents were milled in order to develop the largest active surface. Low porosity and consequently high degree of homogeneity were attained by applying pressures of up to 3500 kg/cm^2 . Technical difficulties, however, concerning impurities limited the pressure to about 1000 kg/cm^2 in most of the cases. The pressure was exerted by a large oil hydraulic press of up to 100 tons (put at the disposal by Professor W. Kuczyński, A. Mickiewicz University at Poznań). The samples were twice milled, pressed and sintered whereby, when passing through the process for the second time they were sifted through a finely meshed sieve. To obtain the heterogeneous mixtures solid solutions, recrystallized during the second stage of preparation, were crushed and sifted and afterwards sintered under pressure. Two and in some cases three different solid solutions of the

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specimens whose permittivity temperature

67166

POL/45-18-5-6/11

Dielectric Investigation of Perovskite Type Ferroelectrics. Part I: Ferroelectric Systems with Small Temperature Coefficient of Permittivity

same grain size were used to prepare a heterogeneous system. The homogeneous systems were prepared in nearly the same way. The samples were pressed and sintered in the shape of tablets, carefully polished and coated with a silver paste (chiefly silver oxide thoroughly milled together with glycerol), thus forming a ferroelectric condenser. For preparation, reagents produced by The British Drug Houses Ltd., Poole, England (titanium dioxide) and by The Laboratory Chemicals Factory, Gliwice, Poland (the other compounds being barium, strontium and magnesium carbonates and stannic dioxide) were used. Radio-graphical analysis (carried out by Mr. J. Janko to whom the author expresses his gratitude) showed only the desired perovskite structure in the finished reaction products. The capacity of the samples was measured by the resonance method; figure 1 shows the wiring. Dielectric power factor and hysteresis were also measured (Figs 2, 3). Three methods were used for compensating the temperature coefficient of the sample permittivity. The first consists in connecting in parallel two ferroelectric capacitors whose permittivity temperature

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Dielectric Investigation of Perovskite Type Ferro-
electrics. Part I: Ferroelectric Systems With Small Temperature Coefficient
of Permittivity

POL/45-18-5-6/11

coefficients have opposite sign. The second method suggests to compose a heterogeneous system of two or three simple BaTiO_3 - SrTiO_3 solid solutions. Two solid solutions with different Curie temperatures but the same grain size are chosen and react on the grain surfaces in the process of sintering forming an intermediate boundary layer of a new Curie point. Thus, the result was a material consisting of three or more solid phases and, moreover, a gaseous phase owing to the porosity. The third method consists in composing BaTiO_3 - MgSnO_3 solid solutions. This method presents the best advantages yielding a permittivity temperature coefficient smaller than $2 \cdot 10^{-2} \text{ deg}^{-1}$ and a rather high value of permittivity. The temperature dependence of the temperature coefficient of permittivity near the ferroelectric transition point is discussed. There are 28 figures, 2 tables, and 41 references, 9 of which are Soviet.

ASSOCIATION: Polish Academy of Sciences, Institute of Physics, Dielectric Laboratory, Poznań

Card 4/5

67146

Dielectric Investigation of Perovskite Type Ferro-
electrics. Part I: Ferroelectric Systems With Small Temperature Coefficient
of Permittivity

POL/45-18-5-6/11

4

SUBMITTED: February 16, 1959

Card 5/5

24.7800
~~24 (3), 24 (6)~~
AUTHOR:

Pajak, Zdzisław

67147

POL/45-18-5-7/11

TITLE:

Dielectric Investigation of Perovskite Type Ferroelectrics^γ
Part II: Ageing Process in Ferroelectrics

PERIODICAL:

Acta Physica Polonica, 1959, Vol 18, Nr 5, pp 507-520 (Poland)

ABSTRACT:

The author of this paper found that permittivity and power factor of $\text{BaTiO}_3\text{-MgSnO}_3$ solid solutions undergo ageing, too.

In order to observe the alterations over a greater temperature range, measurements of permittivity as a function of temperature were carried out for young samples and for samples aged at room temperature (Fig 1). For aged samples, the Curie point is shifted towards higher temperatures. All these effects are not typical properties of the material but depend on the sample's history. Spontaneous polarization, coercive force and hysteresis losses vanish as a result of ageing. As secondary effects (theoretically explained by Mason, 1955), the drop or vanishing of spontaneous polarization involves a decrease in permittivity, power factor and mechanical coupling factor. The author suggests a domain mechanism of ageing, leading to the formation of domain-antiferroelectrics. He also investigated

Card 1/2

PAJAK, Zdzislaw

Study on molecular interactions by magnetic nuclear resonance. The π
complexes. Acta physica Pol 21 no.2:131-144 F '62.

P/045/62/021/002/003/007
B102/B101

AUTHOR: Pajak, Zdzisław

TITLE: Study of molecular interactions by nuclear magnetic resonance. The π complexes

PERIODICAL: Acta Physica Polonica, v. 21, no. 2, 1962, 131 - 144

TEXT: The nuclear magnetic resonance method was used for determining the hydrogen bond type and the π complexation in aromatic compounds as benzene and naphthalene with different acceptors (halogen derivatives of methane and ethane). Induction technique (6 koe, 25 Mc) and a Trüb-Täubner spectroscopie ($2 \cdot 10^{-8}$ resolution) were used. Molecular complexation is due to chemical bond or Van der Waals binding; hydrogen bonds, investigated here, are somewhat between these two types. They are stronger than the latter, but weaker than the former (e.g. 109 kcal/mole for O-H, 6 kcal/mole for O..H in C_2H_5OH). The binding parameters depend on the acidity or basicity of the agent. The π -complex bond forms when the molecular π -electrons act as proton acceptors, e.g. between benzene and a cation.

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Study of molecular interactions...

P/045/62/021/002/003/007
B102/B101

The interaction between the acceptor protons and the π -electrons of an aromatic compound in π -complexes is thus considered as a particular case of hydrogen bond. The effect of a π -donor on different acceptors was studied by proton magnetic resonance. As has been shown already (Pajk, C. R. Paris, 249, 1211, 1959), when chloroform interacts with benzene, the proton band is shifted toward stronger fields. The same was found to hold for bromoform and iodoform. The chemical shift δ was measured for various mixtures. Though the π -effect for the acceptor proton causes a positive variation ($\Delta\delta(\pi) > 0$) of the shift, it is assumed to be a case of complexation. The experimental results speak in favor of this. The existence of a π -effect was proven for benzene with the homolog series CH_2X_2 and CH_3I . A correlation exists between the π -effect and the chemical shift of the acceptor proton. $\Delta\delta(\pi)$ decreases with the shift of the acceptor band toward the stronger fields. Also the correlation between acidity and acceptor structure exists. For naphthalene and heterocyclic compounds the existence of π -complexes was proven. In the latter case, the free doublet of the heteroatoms forms an "aromatic sextet" with the four π -electrons of the double bond. Professor R. Freymann and Professor A. Piekara are thanked for help and advice. There are 7 figures,

Card 2/3

PAJAK, Zdzislaw

Physics of solids on the twentieth anniversary of the Polish Peoples Republic. Postepy fizyki 15 no.4:375-383 '64.

1. Working Collective of Physics of Solids, Polish Academy of Sciences, and Institute of Physics, Polish Academy of Sciences, Poznan.

HANIGKI, Z;PAJAKOWA, E.

Biological tests in diagnosis of hemophilia. Przegl. leg., Krakow
8 no.1:10-11 1952. (CLML 22:2)

1. Of the Second Clinic of Internal Diseases (Head--Prof. Tadeusz
Tempka, M. D.) of Krakow Medical Academy.

PAJAKOWA, J.

J

Distr: 4E207

✓ Indium, its preparation and application in Poland. Adamczka and J. Paikowa. *Rudy i Metale Niezelazne* 1, 3-4(1956).—A method for In isolation from Pb is described. It involves treatment of Pb with KOH in presence of KNO₃ as oxidizing agent, at 600-700° for ~1.5 hrs. In passed into slag which was treated (after cooling and crushing) several times with H₂O and dild. H₂SO₄, whereafter In cemented with Zn. About 75% of the In of 90-95% purity was obtained from Pb contg. 0.0018% In. Consumption of reagents was: KOH, 7.3%, and KNO₃, 1.2% of the Pb. Subsequently In was electrolytically refined in a sulfate bath contg. In 50, NaCl 100, and clay 1 g./l. at cathodic c.d. about 1.5 amp./sq. dm. and pH 2.0-2.5. The refining did not lead to complete sepn. of In from Zn, Sn, Cd, and Tl. Better results were obtained by soln. of crude In and removal of contaminations from soln. by cementation with a mixt. of crude In and Zn contg. 1% In and 0.3% Cd. The pure soln. was cemented with Zn or Al and 99.99% In was obtained. Purification of In by the zone melting method was also investigated. The rate of transport of material was 5-10 cm./hr. Melting 15 times gave 99.999% In. Z. Kurtyka

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36
1/1

2

WILCZEK, Marian, prof. dr. med.; KRZYSTKOWA, Krystyna, dr. med.;
PAJAKOWA, Janina

Results of up-to-date methods in squint therapy. Klin. oczna
35 no.2:297-302 '65.

Results of squint surgery. Ibid.:303-307

1. Z Kliniki Chorob Oczu Akademii Medycznej w Krakowie
(Kierownik: prof. dr. med. Wilczek) i z Oddziału Leczenia
Zeza w Wojew. Dziecięcym Szpitalu Okulistycznym w Witkowicach
(Ordynator: dr. med. K. Krzystkowa; Konsultant naukowy: prof.
dr. med. Wilczek.

WILCZEK, Marian; KRZYSTKOWA, Krystyna; PAJAKOWA, Janina

Results of the treatment in alternating strabismus. Klin.oczna 31 no.4:
389-392 '61.

1. Z Kliniki Chorob Oczu AM w Krakowie Kierownik: prof. dr med.
M. Wilczek Z Oddziału Leczenia Zeza w Woj. Dziecięcym Szpit.
Okulistycznym w Witkowicach Ordynator: dr med. K. Krzystkowa.

(STRABISMUS ther)

KRZYSTKOWA, Krystyna; PAJAKOWA, Janina

Diagnosis and therapy of oblique strabismus. Klin. oczna 33
no.3/4:417-426 '63.

1. Z Kliniki Chorob Oczu AM w Krakowie Kierownik: prof. dr med.
M. Wilczek Z Oddziału Leczenia Zeza w Wojew. Dziecięcym Szpitalu.
Okulist. w Witkowicach Ordynator: dr med. K. Krzystkova.
(STRABISMUS)

KRZYSTKOWA, Krystyna; PAJAKOWA, Janina

Intensive therapy of amblyopia with the pleoptophore and
euthyscope. Klin. oczna 33 no.3/4:427-431 '63.

1. Z Kliniki Chorob Oczu AM w Krakowie Kierownik: prof. dr
med. M. Wilczek Z Oddzialu Leczenia Zeza w Wojew. Dzieciecym
Szpit. Okulist. w Witkowicach Ordynator: dr med. K. Krzystkowa.
(AMBLYOPIA) (THERAPEUTICS) (LIGHT)
(EQUIPMENT AND SUPPLIES)

PAJALIC-RADIC, Alenka

PAJALIC-RADIC, Alenka, major, dr.

Van Der Hoeve's syndrome. Voj. san. pregl., Beogr. 11 no.3-4:
111-115 Mar-Apr 54.

1. Oeno odjeljenje Vojne bolnice, Zagreb.

(SCLERA, dis.

*van der Hoeve's synd.)

(OTOSCLEROSIS

*van der Hoeve's synd.)

(OSTEOGENESIS IMPERFECTA

*van der Hoeve's synd.)

PAJANOVIC, R.

Problems of feeding cattle in the region of Gacko. p. 395.

Periodical: POLJOPRIVREDNI PREGLED.

Vol. 7, no. 9/10, Sept./Oct. 1958,

AGRICULTURE

SO: Monthly List of East European Accessions (EEAI) LC

Vol. 8, No. 4
April 1959, Uncl.

STOJANOVIC, Svetislav, prof., dr.; DORIC, Ljubisa, doc., dr.; PAJANTIC, Srecko

Central traumatic dislocation of the hip. Voj.san.pregl. 18 no.5:
461-465 My '61.

1. Medicinski fakultet u Beogradu, Klinika za ortopedsku hirurgiju i
traumatologiju.

(HIP fract & disloc)

BIJKUROV, JOVANOVIĆ, Teodora; PAJANTIĆ, Srećko

Hand-Schueller-Christian disease in a 2-year-old child. Srpski arh. celok. lek. 89 no.10:1189-1195 0 '61.

1. Klinika za ortopedsku kirurgiju i traumatologiju Medicinskog fakulteta Univerziteta u Beogradu Upravnik: prof. dr Svetislav Stojanovic.

(HAND-SCHUELLER-CHRISTIAN SYNDROME in inf & child)

ACCESSION NR: AP4022283

Z/0037/64/000/002/0132/0150

AUTHOR: Pajas, Petr

TITLE: Polarizability in nuclear physics and in the physics of elementary particles

SOURCE: Ceskoslovensky casopis pro fysiku, no. 2, 1964, 132-150

TOPIC TAGS: polarizability, electromagnetic structure, electromagnetism, polarization, scattering, Thomson scattering, nuclear scattering, Schwinger scattering, meson, pi-meson, pion, photon, nucleon, positron, deuteron, elementary particle, Dirac nucleon, photonuclear reaction, photonuclear effect, electric field, Coulomb field, dipole moment, quadrupole moment, Hamiltonian interaction, Born approximation, magnetic moment, nuclear moment, spin orientation, orientation polarization, photon absorption, Compton effect

ABSTRACT: The author presents a survey of the application of the theory of polarizability in connection with a study of the structure of the atomic nucleus and the electromagnetic structure of nucleons. In addition to theoretical considerations, the paper gives a historical survey of experimental estimates

Card 1/2

ACCESSION NR: AP4022283

of the electric and magnetic polarizability of the proton and neutron. In conclusion it discusses the possibility of the existence of electron polarizability. "The author warmly thanks J. A. Smorodinsky for assigning the subject of these problems and for a number of valuable discussion." Orig. art. has: 108 formulas and 4 figures.

ASSOCIATION: Ustav jaderneho vyzkumu, Rez (Institute of Nuclear Research).

SUBMITTED: 02Sep63

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: NS

NO REF SOV: 014

OTHER: 024

Card 2/2

PAJAS, Vladimir, dr.

Electric block using Bernard's current in sciatica. Our modification. Reumatizam 12 no.3:88-94 '65

1. Medicinski centar Sisak.

PAJCHEL, W.

PAJCHEL, W. Repair of an arch road bridge by the method of additional horizontal counterstress bracing. p. 156

Vol. 11, no. 7, July 1956

DROGOWNICTWO

TECHNOLOGY

Warszawa, Poland

So: East European Accession, Vol. 6, no. 2, Feb. 1957

PAJCHEL, W.

"Organization of economic drilling groups." p. 16, (DROGNICTWO Vol. 10, No. 1
Jan. 1955. Warszawa, Poland)

SO: Monthly List of East European Accessions. (EEAL). LC. Vol. 4, No. 4.
April 1955. Uncl.

PAJCHLOWA, M.

Problems of Stratigraphy and facial development of the Devonian formation in Poland. p.73

Warszaw, Poland. PRZEGLAD GEOLOGICZNY. Wydawnictwa Geologiczne.
Vol.7, no.2, Feb.1959

Monthly List of East European Accessions Index, (EEAI) 10; Vol.8, no.6
June 1959
Uncl.

PAJCHLOWA, Maria

Reef formations in the Devonian of Europe and Poland.
Kwartalnik geol 6 no.4:730-731 '62.

1. Zaklad Stratygrafii, Instytut Geologiczny, Warszawa.

L 9515-66 EWP(j)/T/EWP(t)/EWP(b) IJP(c) JD/JG/RM
ACC NR: AP6002231 SOURCE CODE: CZ/0043/65/000/003/0192/0199

AUTHOR: Pajdowski, L. 44

ORG: Department of Inorganic Chemistry, University of Wroclaw, Poland 44

TITLE: Structure of vanadium (III) hydroxo complexes / Paper presented at the Symposium on the Structure and Properties of Coordinated Compounds held in Bratislava from 2 to 4 September 1964] 44 36
E

SOURCE: Chemicke Zvesti, no. 3, 1965, 192-199

TOPIC TAGS: vanadium compound, hydroxyl group, intermolecular complex, coordination chemistry 47

ABSTRACT:

Absorption spectrum of V(III) in slightly acid solutions (pH > 2) has a strong band at 436 nm, which is supposed to belong to VOH^{2+} ion. Molar absorptivity increases with increasing metal concentration and with pH increase up to 3.5; at higher pH values it decreases. Visible absorption spectrum of V(III) in pH range 2-3.5 was found to be a charge transfer spectrum of the binuclear hydroxo complex. The vanishing absorption at the 436 nm band at higher pH values and the normal magnetic behavior of the binuclear complex are explained by a change into a new polynuclear complex with an increased ratio of OH groups for each V atom. The author wishes to thank Professor B. Jezowska-Trzebiatowska, Dr. A. Bartek, Dr. S. Wajda and Dr. W. Wojciechowski for valuable discussions and helpful comments on the manuscript. Orig. art. has: 7 figures. [JPRS]

SUB CODE: 07 / SUBM DATE: none / ORIG REF: 006 / OTH REF: 013

Card 1/1

PADJEN, L., and others.

Construction and development of the electric-power network in Zagreb and its supply by electric power. p. 357.

ENERGIJA. (Zajednica elektroprivrednih poduzeca Hrvatske i Institut za elektroprivredu u Zagrebu) Zagreb, Yugoslavia. Vol. 7, no. 10, 1958.

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

Uncl.

~~Lech~~ PAJPOWSKI, L.

Dist: 4452c(1)

Polynuclear vanadium(III) complexes. II. Structure of vanadium(III) complexes with monochloroacetic acid, Bogusława Jezowska-Trzebiatowska and Lech Pałowski (Univ. Wrocław, Poland). *Roczniki Chem.* 52, 1001-73 (1958) (English summary); cf. *C.A.* 52, 3588c.—Only one OH group can be replaced in soln. by an NH, mol. in the complex $V_2(CICH_2COO)(OH)_2 \cdot 4H_2O$ (I). The mol.-wt. detns. by dialysis confirmed the trinuclear structure of I. Potentiometric titration showed that NH, but not H_2O takes the place of the OH group. The magnetic moment of I is 2.80 B.M., whereas for the complex with NH, it is 2.77 B.M./atom at 293°K.; this indicates identical symmetry of V in both complexes. The configurations corresponding to Werner's and Kuntz's formulas are extreme cases, whereas in soln. a kind of tautomerism occurs which depends on pH and concn. New configurational formulas are suggested. The lowering of magnetic moment of trinuclear Fe complexes (II) in soln. is attributed to the presence of OH bridges in tautomeric form. The explanation of Werbel, et al. (*C.A.* 38, 694) is criticized. Crystn. of II would require considerable deformation of structure; therefore, in the solid state only Werner's tautomeric form can exist.

A. Kreglewski

5 May 1

CATEGORY :
ABS. JOUR. : RZKhim., No. 21 1959, No. 74473
AUTHOR :
INST. :
TITLE :
ORIG. PUB. :
ABSTRACT : cuss critically the explanation of the lowering of the μ of trinuclear complexes of Fe(3+) in solution presented in an earlier paper (B. Werbel et al, J Amer Chem Soc, 65, 2329 (1943)). The authors explain the lowering of μ by the formation in the solution of complexes with tin bridges. For Communication I see RZhKhim, 1959, No 1, 703.
Yu. Kharitonov
CARD: 3/3
67

PAJDOWSKI, L.; JEZOWSKA-TRZEBIATOWSKA, B.

Polynuclear vanadium III complexes. II. Structure of vanadium III complexes with monochloroacetic acid. p. 1061.

ROCZNIKI CHEMII. (Polska Akademia Nauk) Warszawa. Vol. 32, no. 5, 1958.

Monthly List of European Accessions (EEIA) LC, Vol. 8, no. 7, July 1959.

Uncl.

"APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R001238

APPROVED FOR RELEASE: Tuesday, August 01, 2000

CIA-RDP86-00513R0012387

PAJDOMSKI, Lech

"Complex formation in solution" by H.L. Schäfer. Reviewed by Lech
Pajdowski. Przem chem 41 no.11:670 II '62.

PAJDOWSKI, Lech; JEZOWSKA-TRZEBIATOWSKA, Boguslawa

Polynuclear vanadium(III) complexes. IV. Determination of the stability of polynuclear complexes. Roczniki chemii 34 no.3/4:775-785 '60. (EEAI 10:3)

1. Katedra Chemii Nieorganicznej Uniwersytetu, Wrocław i Instytut Chemii Fizycznej Polskiej Akademii Nauk, Wrocław
(Vanadium) (Potentiometer)

JEZOWSKA-TRZEBIATOWSKA, Boguslawa; PAJDOWSKI, Lech

Polynuclear vanadium(III) complexes. V. Determination of the instability and equilibrium constants in the nonbuffered system VCl_3-ClCH_2COOH . Roczniki chemii 34 no.3/4:787-797 '60. (EAI 10:3)

1. Katedra Chemii Nieorganicznej Uniwersytetu, Wrocław i Instytut Chemii Fizycznej Polskiej Akademii Nauk, Wrocław
(Vanadium) (Chemical equilibrium)

PAJDOWSKI, Lech

Polynuclear vanadium (III) complexes. III. Potentiometric investigations of equilibrium and stoichiometric coefficients of hydroxy complexes in solution. Rocz chemii 34 no.3/4:763-774 '60. (EEAI 10:3)

1. Katedra Chemii Fizycznej Polskiej Akademii Nauk, Wroclaw
(Vanadium) (Potentiometer) (Stoichiometry)
(Chemical equilibrium) (Hydroxy compounds)

PAJDOWSKI, Lech

Vanadium (III) hydrolysis. Pts. 1-2. Roczniki chemii 37 no.11:1371-1377 '63.

1. Department of Inorganic Chemistry, University, Wrocław, and Institute of Physical Chemistry, Wrocław Branch, Polish Academy of Sciences.

P/016/61/000/007/001/001
D239/D301

AUTHOR: Pajdowski, Lech, Doctor

TITLE: Stability of metal ion complexes in solution. II. Potentiometric methods for investigating polynuclear binary complexes ($A_p B_q$)

PERIODICAL: Wiadomości chemiczne, no. 7, 1961, 463 - 481

TEXT: A review of recent methods of investigating equilibrium constants is given, based on predominantly Western sources. Methods described in the first article of this series (Ref. 1: L. Pajdowski Wiad.Chem., 1961, 15, 369) for studying the equilibrium and stability constants of mononuclear complexes are unreliable due to the possible presence of polynuclear complexes. Methods for studying formation reactions and stabilities of polynuclear complexes are:

- 1) Purely mathematical, where the compositions and equilibrium constants are calculated from the concentrations of components, no assumption being made as to the composition, reaction mechanism or

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Stability of metal ion ...

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D239/D301

number of complexes formed. 2) Equilibrium and stability constants are evaluated on the bases of proposed composition and reaction mechanism. The obtained constants act as evidence for the proposed mechanism (Ref. 15: L. Pajdowski, B. Jeżowska-Trzebiatowska, Roczniki Chem., 1960, 34, 775); (Ref. 16: B. Jeżowska-Trzebiatowska, L. Pajdowski, Roczniki Chem., 1960, 34, 787) and (D.D. Perrin, J. Chem. Soc., 1959, 1710). Equilibrium studies of a system A-B require the knowledge of the total concentrations of A and B, and one or both concentrations of the ions a, b, where one, e.g. [B] is kept constant for the sake of simplicity. Method 1) requires all four concentrations, method 2) only that of A, B and that of one of the ions. Values for a and b are found by potentiometric methods which require reversible electrodes. These are not always available so a purely mathematical method for finding the fourth concentration a, was evolved by Hedström (Ref. 2: B.O.A. Hedström, Acta Chem. Scand. 1955, 9, 613). According to Hedström, this method gives reliable and reproducible values for the constants. It is very similar to Lefebvre's method (to be discussed in the next pa-

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P/016/61/000/007/001/001
D239/D301

Stability of metal ion ...

per). The author then points out that L.G. Sillen (Ref. 8: Acta Chem. Scand. 1954, 8, 299) doubting the accuracy of measuring a and b, worked out a method using approximate values of a and b. The accuracy of this method is found by comparing experimental curves with curves derived from appropriate equations. Application of the Sillen method to mononuclear complexes is illustrated. It is pointed out that it is applicable to more complicated systems of complexes (Ref. 29: J.C. Speakman, J. Chem. Soc., 1940, 855). Examples of its application to hydrolysis of metal ions is briefly discussed. Due to the theoretical treatment of the method it is suggested that although the results are formally correct, they may or may not correspond to the reality. The author suggests that the best system of symbolizing constants is that given by J. Bjerrum, G. Schwarzenbach. L.G. Sillen (Ref. 31: Stability constants, London, 1957). This system is briefly explained. There are 7 figures and 31 references: 3 Soviet-bloc and 28 non-Soviet-bloc. The references to the English-language publications read as follows: D.D. Perrin, J. Chem. Soc., 1959, 1710; D.L. Leussing, J. Am. Chem.

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23891

P/016/61/C00/008/002/002
D261/D303

5.2620

12 09 12 82 12 73

AUTHOR:

Pajdowski, Lech, Doctor, Docent

TITLE:

Stability of metallic complexes in solution III. Potentiometric methods of computing stability constants in polynuclear, 3-component complexes $Mq(OH)_p A_z$

PERIODICAL: Wiadomości chemiczne,

no. 8, 1961, 529 - 542

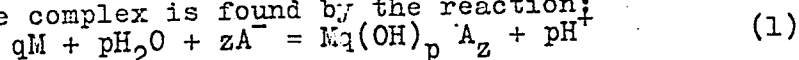
TEXT: The present paper is a continuation of previous work (Ref. 18: Wiadomości Chem., 1961, 15, 369) aimed at discussing available methods for calculating equilibria and stability of complexes, since no comprehensive review of this field is to be found in technical literature. The complexes considered are of general formula $Mq(OH)_p A_z$, common in both transition and main group elements. Work on these compounds has showed that in general, for a given concentration, temperature and pH, only one complex of a definite formula predominates in solutions containing both M and A ions. Examples of such compounds are quoted. D.D. Perrin's method of examining

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P/016/61/000/008/002/002
D261/D303

Stability of metallic ...

heteronuclear complexes of this type (Ref. 2: J. Chem. Soc., 1959, 1710) may be applied when M forms a reversible electrode in solution of its ions, or if its concentration may be determined in a redox system. In the latter case some of the liquid A will combine with M, in an oxidation state depending on the applied redox potential. Assuming the complex is found by the reaction;



the stability constant

$$\beta_{qpz} = \frac{[M_q(OH)_p A_z] h^p}{m^q a^z} \quad (2)$$

($q \geq 1$; $p, z \geq 0$), where M and A are total ion concentrations in solution, m and a the concentrations of uncomplexed ions and h is the concentration of H^+ . From

$$M = \sum q[M_q(OH)_p A_z] = \sum q \beta_{qpz} m^q h^{-p} a^z, \quad (3)$$

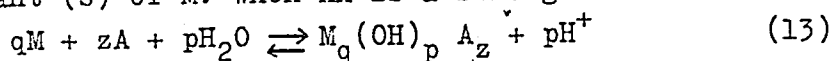
Card 2/6

23891

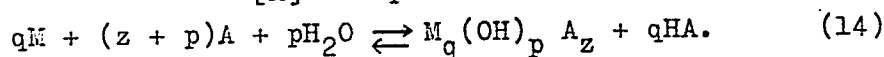
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D261/D303

Stability of metallic ...

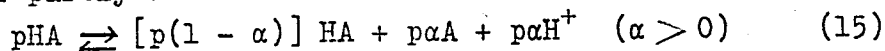
level of oxidation. Determination of p and z is simple if A forms a reversible electrode, since z (or Z) may be derived by a method analogous to the above. In the absence of a reversible electrode, p and z are found potentiometrically by measuring m and the pH. Latest research has shown that Perrin's Eq. (1) does not give a true representation of the reaction since the equilibrium largely depends on the dissociation constant of the parent acid of A (HA) and the hydrolysis constant (s) of M. When HA is a strong acid



and $\frac{[M]}{[A]} = \frac{q}{z}$. For weak acids $\frac{[M]}{[A]} = \frac{q}{z+p}$ since



In the case of partly dissociated acids



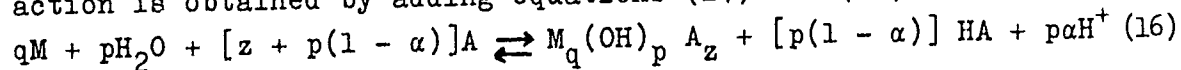
Card 4/6

Stability of metallic ...

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D261/D303

where α (>0) is the degree of dissociation of HA. The overall reaction is obtained by adding equations (14) and (15):



and the ratio $\frac{[M]}{[A]} = \frac{q}{z + p(1 - \alpha)}$. Investigations of the stability of complexes are seen to be based on the measurement of concentrations of all components, but it is often difficult to determine more than 1 component (M or pH) and reference is made to an alternative method, suggested by J. Lefebvre (Ref. 6: J. Chim. Phys., 1957, 54, 553) in an attempt to solve this problem. The author illustrates the use of the method in investigating simple reactions in solution, dissolution of complexes and the equilibria and stability of successive complexes. In conclusion, it is pointed out that the method of potentiometric surfaces can sometimes only be used in conjunction with other methods, most frequently that of I. Leden (Ref. 22: Z. Phys. Chem., 1941, A188, 160). Investigation of 3-component complexes is usually performed by keeping one component, e.g. [Z]

Card 5/6

PAJDOWSKI, Z: ROGOZINSKI, J

"Food" or "consumers" industry. p. 436

DZIENNIK URZEDOWY

Wiadomości

Warszawa

Vol. 22, no. 7, July 1955

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, no. 3, March 1956

Pajdowski, Z

5178

637.52 : 664.91.036.2

Frączek R., Pajdowski Z. The Decomposition of Sulphydrylic Groups during Thermal Meat Processing.

„O rozkładzie grup sulphydrylowych pod wpływem obróbki termicznej w mięsie”. Przemysł Spożywczy. No. 8, 1955, pp. 334—336, 1 fig., 3 tabs.

A definition of the quality and quantity of the process of decomposition of sulphydrylic groups in beef during thermal processing together with the definition of changes in brittleness and the quantity of meat juice lost during processing. The functional dependence of the decomposition of sulphydrylic groups on the duration and temperature of thermal action is confirmed. In conclusion, the critical temperature for the decomposition of the group SH=80°C is stated. Meat brittleness and loss of juice are seen to be dependent on the duration and temperature of thermal processing.

PAJDUSAKOVA, L.

CZECHOSLOVAKIA

No academic degree indicated

Department of Dermatology and Venerology of the Slovak Institute
for Postgraduate Medical Training (Dermatovenerologicka katedra
SUDL), Trencin
Head of the Department: I. EMANUEL, MD.

Bratislava, Lekarsky Obzor, No 10, Oct 62, pp 579-587

"A Contribution to the Problems and Treatment of Skin Tuberculosis."

L 17574-66 FCC
ACC NR: AP6009473

SOURCE CODE: CZ/0085/65/000/002/0048/0048

AUTHOR: Pajdusakova, Ludmila

ORG: AU SAV Sk. Pleso

25
B

TITLE: Solar activity and winter periods in Bratislava

SOURCE: Meteorologicke zpravy, no. 2, 1965, 48

TOPIC TAGS: climate, solar activity

ABSTRACT: The article presents a correlation of solar activity and winter weather at Bratislava since 1850: The author thanks P. Forgacova for valuable assistance. Orig. art. has: 1 figure. [JPRS]

12,44,55

SUB CODE: 04, 03 / SUBM DATE: none

Card 1/1 nst

UDC: 523.74"324"(437.6)

2

PAJDUSAKOVA-MRKOSOVA, L.,dr. (Czechoslovakia)

Observatory in the Tatra Mountains. Elet tud 17 no.10:300-
303 Mr '62.

PAJORT, Miloslav, ins.

Deriving transistor equivalent circuits from the frequency curves
of the Y or Z parameters. Slaboproudý obzor 22 no.6:342-346
Je '61. (EEAI 10:9)

1. Vyzkumny ustav telekomunikaci, Praha.

(Transistors)

EMANUEL, L.:PAJDUSAKOVA, L.

One year observations on occupational dermatoses. Cesk. dermat. 27 no.
10:141-120 Dec 1952. (GLML 23:5)

1. Of the Skin Department (Head--E. Emanuel, M.D.) of the State District Hospital in Trencin.

PAJDUSAKOVA-MRKOSOVA, L.

"Distribution of Types of Sunspot on the Solar Disk." p. 176.
(Biulleten Astronomicheskikh Institutov Chekhoslovakii. Bulletin of the Astronomical
Institutes of Czechoslovakia. Vol. 4, no. 6, Dec. 1953. Praha).

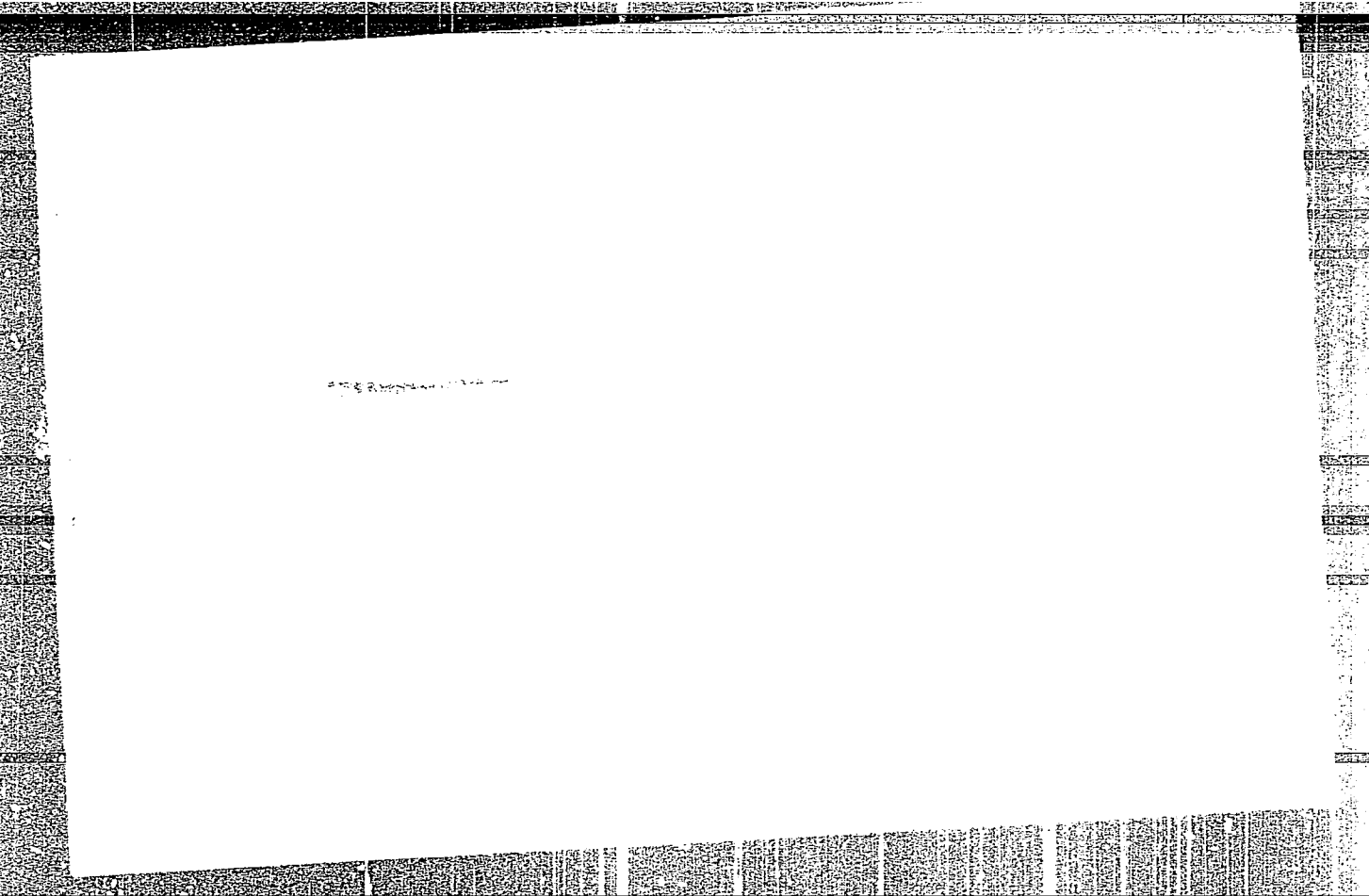
SO: Monthly List of ~~Russian~~ Accessions, Library of Congress, June ⁴195~~3~~, Uncl.

MAJUSIKOVA-LINCSOVA, L.

"The Reduction Of The Relative Number Of Spots In The Center Of The Disk."
p. 109. (Biuletén Astronomického Ústavu Československa. Bulletin
Of The Astronomical Institutes Of Czechoslovakia. Vol. 4, No. 5, Sept. 1953,
Praha.)

Vol. 3, No. 3.

SO: Monthly List of East European Accessions, Library of Congress, March 1954, Uncl.



PAJDUŠAKOVÁ-MRKOSOVÁ, Ludmila
SURNAME, Given Names

(1)

Country: Czechoslovakia

Academic Degrees: Dr

Affiliation: Director of the SAV /Slovenka akademie ved; Slovak Academy of Sciences/ Observatory, Skalnaté Pleso.

Source: Bratislava, Nasa Veda, Vol VIII, No 5, 1961, pages 268-271.

Data: "Observation of the Sun Eclipse."

000 901643

PAJDUSAKOVA-MRKOSOVA, Ludmila

Hviezdy a jadrova energia. (Stars and the Nuclear Energy. illus., bibl., notes)
Martin, Osveta, 1957. 63 p. Vol. 5, No. 31-32, series 2 of Veda ludu (Popular science).

The well known Slovak woman-astronomer explains the radiation of stars, the importance of solar radiation and the new knowledge of the universe in connection with the discovery of the mystery of the atomic nucleus.

Bibliograficky katalog, CSR, Slovenske Kihy, Vol. (None)

CZECHOSLOVAKIA

PAJED, I; BIELEKOVA, K.

Kraj Hygienic-Epidemiological Station of the East-Slovakian KVV (Krajaska hygienicko-epidemiologicka stanica Vychodoslovenskeho KVV), Kosice (for both)

Prague, Ceskoslovenska Hygiene, No 7, 1964, pp 395-398

"River Protection against Pollution Caused by the Operation of Eastern Slovakia Iron and Steel Works."

3

CZECHOSLOVAKIA

MICHALUS, M.; IVANOVA, O.; PAJED, I.; GIBODA, M.

Regional Hygiene and Epidemiology Station, Eastern Slovakian Region
(Krajaka hygienicko-epidemiologicka stanica Vychodoslovenskeho kraja),
Kosice (for all ?)

Prague, Ceskoslovenska hygiena, No 10, December 1966, pp 609-11

"Mass incidence of [gastric] disorders resulting from ingestion of
smoked tuna in Kosice."



PAJEK, Kazimierz

The first in action. Przegl techn 86 no.4:8 24 Ja '65.

PAPER, Intro, 10mavack

Tasks of engineering construction in the 20-year plan in the
field of the Ministry of Construction. Epítés szemle 3. nos. 61
171-176 '64.

1. Department of Technical Development, Ministry of Construction,
Budapest.

PAJER, Josef

Friction welding of leather drawing-knives. Zvaranie 11 no.1:
15-17 Ja '62.

1. Sazavan, n.p., Zruc nad Sazavou.

PAJESTKA, J.

"Sytwarzanie i podział dochodu narodowego w społeczeństwie socjalistycznym"
(Production and division of national income in the socialistic population),
by J. Pajestka. Reported in New Books (Nowe Książki), No. 13, July 1, 1955

HAJDANOVIC, B.; PAJEVIC, J.; SIMONOVIC, B.D.; BOCINA, B.

Studies on the survival in recipients of the erythrocytes
with the aid of radioactive chromium. I. Life of frozen
erythrocytes. Voj.san.pregl., Beogr. 17 no.3:247-250 Mr '60 .

1. Bolnica D-r Dragisa Misovic u Beogradu, Interno odeljenje.
(ERYTHROCYTES)
(CHROMIUM radioactive)
(BLOOD PRESERVATION)

PAJEVIC, M.

PAJEVIC, M. Twelve-channel telephone systems of the SOJ-12 type in the telephone network of Yugoslavia. p. 18

Vol. 4, No. 5, May 1955

TELEKOMUNIKACIJE

TECHNOLOGY

Beograd

SO: MONTHLY LIST OF EAST EUROPEAN ACCESSIONS, (EEAL), VOL 4, no. 9
Sept. 1955

PAJEVIC, M.

Servomechanisms in high-frequency telephony. p. 1623

TEHNIKA, Beograd, Vol 10, No. 11, 1955

SO: EEAL, Vol 5, No. 7, July 1956

PAJEVIC, M.

Analysis of the first forged aluminum pistons made in Yugoslavia. p. 575.
Vol 10, no. 12, Dec. 1955. KOHASZATI LAPOK. Budapest, Hungary.

So: Eastern European Accession. Vol 5, no. 4, April 1956

PAJEVIC, M.; PASTROVIC-ČIKARA, D.

Determination of effects of thermal treatments on changes in structure and hardness of aluminum alloys of the Dural type. p. 1156.

(TEHNIKA. Vol. 12, No. 7, Beograd, Yugoslavia)

SO: Monthly List of East European Accessions (EEAL) Lc. Vol. 6, No. 10, October 1957. Uncl.

BAJALOVIC, Ivan; PAJEVIC, Milan

Distribution of potentials in galvanic-cell electrolytes. Gl.hem.dr.
23/24 no.1/2:7-10 '58/59. (HEAI 9:5)

1. Faculty of Pharmacy, Institute for Physical Chemistry, Beograd.
(Electrolytes) (Electric batteries) (Electric potential)

YUG/1-59-1-12/67

15(6)

AUTHOR: Pajević, Milaš, Engineer, Associate (Beograd)

TITLE: Light Porous Concrete - Contemporary Building Material

PERIODICAL: Tehnika, 1959, Nr 1, pp 25-31 (YUG)

ABSTRACT: The author cites various types of light concrete (monogranular aggregate concrete, light-aggregate concrete and porous concrete). He pays special attention to the porous concrete processed in autoclaves, gives a brief description of porous concrete properties (volumetric weight, compressive strength, heat conductivity, shrinkage, water absorption), cites the advantages of porous concrete and emphasizes its wide use and high production abroad (also in USSR, Bulgaria and Poland). There is 1 porous concrete plant in Bulgaria, capacity 100 cu m daily, and 2 research laboratories, one attached to the plant

Card 1/2

PAJEVIC, M. B., inz.

Thirtieth International Foundry Congress, 1963.
Livarstvo 10 no. 51/52: 37-43 '63.

PAJEVIC, M.B.

Thirtieth International Foundry Congress, Prague, September
1-6, 1963. Ljevarstvo 10 no. 5/6:143-145 '63.

1. Faculty of Technology, University of Belgrade.

PAJEVIC, Milan B., prof. inz.

Used molding and core sands. *Liviarstvo* 9 no.48:130-131 J1 '62.

1. Institut za ispitivanje materijala NRS, Beograd.

PAJEVIC, Milan B., inz., saradnik; DORDEVIC, Zoran, tehn., saradnik

Effect of annealing on the growth of brass crystals.
Saop Inst isp mat Srb 11 no.20:60-65 Ag '63.

1. Institut za ispitivanje materijala SR Srbije, Beograd.

KRUSPEL, Jovan A., tehn., saradnik; PLJIVIC, Milan B., inz., saradnik

Possibility of producing shell molds without resins.
Saop Inst isp mat Srb 11 no.20:76-88 Ag '63.

1. Institut za ispitivanje materijala SR Srbije, Beograd.

PAJEVIC, R.; ROGULIC, J.

Operational analysis as a means for the management of large agricultural farms. p. 1409.
(Tehnika, Vol. 11, no. 9, 1956. Beograd, Yugoslavia)

SO: Monthly List of East European Accessions. (EEAL) LC, Vol. 6, No. 7, July 1957. Uncl.

PAJEWSKI

"Paints, varnishes, and coatings." p. 377. (MATERIALY BUDOWLANE, Vol. 8, no. 12, Dec. 1953, Warszawa, Poland)

SO: Monthly List of East European Accessions, L. C., Vol. 3, No. 5, May 1954, Uncl.