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Z/038/61/000/008/003/003
D218/D306

Electronic equipment as ...

by electric machines can be varied continuously and within a wide range of energies; (6) X-rays can be obtained from any accelerator by a simple modification. The following electrical machines usable as radiation sources are listed and briefly described: [Abstracter's note: Except for the two machines specifically listed here, all machines described in the original article are of Western production]: (1) Van de Graaff electrostatic accelerators: A laboratory prototype of a van de Graaff accelerator was built in the German Democratic Republic. Both the high-voltage supply and the accelerating tube are horizontally arranged so that the accelerator can be installed in a room of normal height; (2) Linear accelerators: A 3 MEV linear accelerator is being developed in the USSR; (3) Linear electron accelerators using a resonance transformer as high-voltage supply; (4) X-ray apparatus are especially suitable for laboratory research into radiation chemical processes. The USSR produces the TRP model of such an apparatus operating with 90 kv and 200 ma; (5) Electrical discharge machines, using either corona, or spark, or glow, or r-f discharge, provide accelerated

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Electronic equipment as...

Z/038/61/000/008/003/003
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electrons of several tens kv and are suitable for surface irradiation;
(6) Ultra-violet rays can under certain conditions produce effects similar to those of ionizing radiation (cross-linking; grafting). Mercury discharge lamps of various designs are used as ultra-violet ray sources. There are 17 figures, 2 tables and 15 references: \sphericalangle Abstractor's note: Although indicated by numbers in brackets, the references are not listed anywhere in the article \sphericalangle .

ASSOCIATION: Výzkumný ústav gumárenské a plastikářské technologie, Gottwaldov (Research Institute of Rubber and Plastics Technology, Gottwaldov)

X

Card 3/3

SIMORDA, Josef

Electric equipment as radiochemical irradiation source. Jaderna energie 7 no.9:301-309 S '61.

1. Vyzkumny ustav gumarenske a plastikarske technologie, Gottwaldov.

SIMORDA, Josef

Cobalt irradiation source with 2000 c in the Rubber and
Plastic Technology Research Institute. Jaderna energie 9
no.9:285-292 . S'63.

1. Vyzkumny ustav gumarenske a plastikarske technologie,
Gottwaldov.

SIMORDA, Josef

Radioisotope irradiation sources for radiation chemistry.
Jaderna energie 9 no. 12: 379-385 D '63.

1. Vyzkumny ustav gumarenske a plastikarske technologie,
Gottwaldov.

SMILIA, Josef

Dr 90
the laboratory irradiation source. Jaierna energie 10
no. 3:78-81. Mr 164.

1. Research Institute of Rubber and Plastic Technology,
Gottwaldov.

SIMORIN, A.M.; NEKHOROSHEV, V.P., doktor geologo-mineralogicheskikh nauk,
otvetstvennyy redaktor; LESHOY, A.G., tekhnicheskiy redaktor

[Brachiopoda of the Karaganda Basin] Brachiopody Karagandinskogo
basseina. Alma-Ata, Izd-vo Akademii nauk Kazakhskoi SSR. Pt.1.
Spiriferacea. 1949. 83 p. (MIRA 10:1)
(Karaganda Basin--Brachiopoda, Fossil)

СИМРИН, А. Н.

2h8h7. СИМРИН, А. Н. Стратиграфический Разрез Paleozoyskikh Osadocanykh Otlozheniy Karagandinskogo Rasseyana. Vestnik Akad. Nauk Kazakh. SO, 19h9, 5 S. 75-81.--
Bibliog: 7 Nazv.

SO: Letopis' No. 33, 19h9

SIMQRIN, Aleksey Mikhaylovich; BYKOVA, M.S., kandidat geologo-mineralogicheskikh nauk, otvetstvennyy redaktor; KOZLOVA, I.V., redaktor; KOROTKOVA, Ye.A., redaktor; ROROKINA, Z.P., tekhnicheskii redaktor

[Stratigraphy and Brachiopoda of the Karaganda Basin] Stratigrafiia i brakhiopody Karagandinskogo basseina. Alma-Ata, Izd-vo Akademii nauk Kazakhskoi SSR, 1956. 299 p. (MLA 10:1)
(Karaganda Basin—Brachiopoda, Fossil)

EXCERPTA MEDICA Sec 7 Vol 10/12 Pediatrics Dec 56

2643. SIMORIN A. M. and MARKOV I. A. Centr. United Hosp. , Magadan, USSR.
The content of ascorbic acid in the milk of women after
delivery in the Far North (Russian text) AKUS.I GINEK.
1955, 5 (32-36)

Proceeding from the results of human milk analyses, the authors come to the following conclusions: The content of ascorbic acid in the milk and colostrum fluctuates, depending on the time of the year. The decrease of the ascorbic acid content starts in November, and the lowest level is reached in June (0-5 mg.%); it begins to rise again in July, and the maximum is reached in October (3-10 mg.%)

- (2) The prescription for nursing mothers of an additional amount of ascorbic acid - 150-200 mg. daily in powder or dragées - considerably raises the amount of ascorbic acid in the milk and colostrum without altering the seasonal fluctuations.
- (3) There is no difference in the content of ascorbic acid in the milk of primi- and multiparae.

Vissotzkaja - Leningrad

SHOLOT, N. I. Cand Med Sci -- (disc) "On the plastic properties of spleen vessels
~~under~~ under conditions of collateral and reduced blood circulation (Experimental
morphological study)." L'vov, 1958. 18 pp (L'vov State Med Inst), 200
copies (AL, 30-58, 116)

VIL'KHOVOY, V.F., SIMOROT, N.I.

Characteristics of the arterial network of the foot in trophic ulcer. Ortop.travm. i protez 19 no.2:69-79 Mr-Ap '58 (MIRA 11:5)

1. Iz kafedry anatomii (zav. - prof. A.P. Lyubomudrov) L'vovskogo meditsinskogo instituta.
(FOOT, ulcers,
trophic, arterial changes in amputated specimens (Rus))

SIMOROT, N.I.,—kand.med.nauk

Role of vessels in adhesions in restoring the blood supply to
spleen in disorders of direct and collateral circulation.
Nov.khir.arkh. no.11:14-18 '61. (MIRA 14:12)

1. Kafedra normal'noy anatomii (zav. - prof. A.P. Lyubomudrov)
L'vovskogo meditsinskogo instituta.
(SPLEEN—BLOOD SUPPLY) (BLOOD—CIRCULATION, DISORDERS OF)

SHMAL', G. (Kiyev); KRIVOSHEYEV, S. (Kirovogradskaya obl.); RAPCHINSKIY, A.
(Dnepropetrovskaya obl.); SIMOROT, Z.; VOL'TMAN, V. (g.Kalyazin,
Kalininskoy obl.); KOLGANOV, I., yurist

Replies to our readers. Sov.profsoiuzy 17 no.11:41 Je '61.
(MIRA 14:5)

1. Konsul'tant yuridicheskogo sektora Ukrainskogo republikanskogo
soveta profsoyuzov (for Simorot).
(Wage payment systems) (Vacations, Employee)

ANTONIU, R.; POPA, M.; WISNER, M.; SIMOTA, H.; GHEDERIM, V.; MARCULESCU, I.

Research work carried out in 1962 on Tuzla-Constanta experiment fields in connection with conditions of sewage for irrigation purposes. Studii port epur apelor 5:195-262 '64.

BULGARIA / Organic Chemistry. Synthetic Organic
Chemistry. G

Abs Jour : Ref. Zhur. - Khimiya, No.15, 1958, No. 50416

Author : Simov Antonov, D.

Inst : -

Title : Preparation and Structure of Several Chloro-
derivatives of Phenthiazine. III. Preparation
and Structure of N-methyl phenthiazine Dichloro
Derivatives.

Orig Pub : Dorl. Bolg. An, 1957, 10, #1, 21-24.

Abstract : N-methyl-2-chlorophenthiazine was oxidized
with a solution of NaNO_2 in CH_3COOH into N-
methyl-2-chlorophenthiazine oxide, 73% yield,
m.p. 96° (fr. dil. alc). Upon heating for 1.5
hr with conc. HCl, the latter was transformed

Card 1/2

SIMOV, D. ; SPASOVA, M.

Dialkylaminoacyl derivatives of the phenothiazine group; dialkylaminoacyl derivatives of 10-methyl and 10-ethyl-2-amino-phenothiazine dioxides. p.89.

GODISHNIK. KHIMILA. Sofia, Bulgaria, Vol. 50, No. 2, 1955/56 (published 1958)

Monthly List of East Accessions (EEAI) LC, Vol. 9, No. 1 January 1960

Uncl.

SIMOV, D

Distr: 4E3d/4E2c(j)/4E3b

Preparation and structure of some chlorine substituted compounds of the phenothiazine group. V. Structure of tetrachlorophenothiazine. D. Simov and A. Petrova. *Compt. rend. acad. bulgare sci.* 10, 293-6(1957)(in Russian). —The locations of the Cl atoms in "tetrachlorophenothiazine" (I) were detd. I (1 g.), m. 231-3°, prepd. according to Page and Smiles (*C.A.* 4, 2937), was reductively desulfurized by refluxing 5 hrs. in 50 cc. abs. EtOH with 10 g. "special" Raney Ni (no H was used, cf. Bougaut, *et al.*, *C.A.* 33, 2055^g; 36, 2198^g). The soln. was filtered, concd. by evapn., and cooled to yield 0.230 g. crystals, m. 139.5-41°, shown to be 2,2',4,4'-tetrachlorodiphenylamine by mixed m.p. This proved I to be 1,3,7,9-tetrachlorophenothiazine. N. J. Birkholz

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SIMOV D

1
 / Dialkylaminoacyl derivatives of the phenothiazine group.
 III. Dialkylaminopropionyl derivatives of 2,7-dichloro-
 phenothiazine. D. Simov and D. Khristov. *Compt. rend. acad. bulgare sci.* 11, 431-4 (1958) (in Russian) (German summary); cf. *C.A.* 52, 14823c; 53, 9227h.—Acylation of 2,7-dichlorophenothiazine gave 10-propionyl-2,7-dichlorophenothiazine (I) and 10-(α -bromopropionyl)-2,7-dichlorophenothiazine (II); I m. 112-14°, yield 43%; II m. 121-3°, yield 65%. The Br in II was replaced by R₂N- by direct interaction with R₂NH. The products were isolated as HCl salts; 10-(α -dimethylaminopropionyl)phenothiazine-HCl m. 224°, yield 80%; 10-(α -diethylaminopropionyl)phenothiazine-HCl m. 202-3°, yield 58%; 10-(α -piperidinopropionyl)phenothiazine-HCl m. 205-7°, yield 85%.

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M. I. Newlands

SIMON, D.

1

✓ The preparation of sulfones of the phenothiazine group.
 D. Simov and N. Mitrovaka. *Compt. rend. acad. bulgare*
~~Sci. 11: 485-8 (1958) (in Russian) (German summary).~~
 A new method for the conversion of sulfoxides of the phenothiazine group to the sulfones was described. The reagent used was H_2O_2 in dioxane. The following conversions were carried out: phenothiazine oxide to phenothiazine dioxide (yield 87%); phenothiazine to phenothiazine dioxide (yield 80%); 2,7-dichlorophenothiazine oxide to 2,7-dichlorophenothiazine dioxide (yield 89%).

3
 4E3d
 29.9 (W3)

CTK

M. J. Newlands

gg

SIMOV, D.; SPASOVA, M.; SIMOVA, Ek.; NESHEVA, Iv.

The N-acylation in the phenothiazine group. Pt. 1. Godishnik
khim 53 no.3:87-97 '58/'59 [publ. '59].

SIMOV, D.; KALCHEVA, V.

On certain derivatives of benzoxazine, new method for obtaining
2-aminophenol -4-sulfonamid. Doklady BAN 14 no.7:675-678 '61.

1. Predstavleno chl.-korr. B. Kurtevym.

(Amines) (Phenols) (Sulfons)

SIMOV, D.; KALCHEVA, V.

On some derivatives of naphtho-1',2':4,5-oxazolones. Preparation of 1, 2, 4-aminonaphtholsulfonamide and 1, 2, 4-aminonaphtholsulfonanilide. Doklady BAN 16 no.6:617-620 '63.

1. Predstavleno chl.-korr. B. Kurtevym.

KALOEVA, V. (Kalcheva, V.); SIMOV, B.

Preparation of some N-substituted 2-aminopropyl-4-sulfonamide derivatives. Doklady BAN 17 no.13 913-916 '64.

1. Submitted March 16, 1964.

SHAW, D.; KILBWA, J. (author, et al.)

Extraction of N-(o-hydroxyphenyl)-N'-methylurea. Doklady Akad. Nauk SSSR 17 no.9:225-226 1964.

1. Submitted March 16, 1964.

BABINOV, L.; SIMOV, M.

On lithiasis of the common bile duct. Suvrem med., Sofia no.4:88-96
'60.

1. Iz I gradska obed. bolnitsa, Sofia (Glaven lekar: L.Tenev)
(CHOLELITHIASIS case reports)

SIMOV, P.

SIMOV, P. Low frequencies in spectrum of combination scattering of carbon tetrachloride. I-II In Russian. p. 5. Vol. 8, no. 1, Jan./Mar. 1955. DOKLADY, Sofia, Bulgaria.

SOURCE: East European Accessions List (EEAL) Vol. 6, No. 4 April 1957

SIMOV, P.

Airplanes without airports. Nauki i tekhnolozhiya 16 no.12:13-
17,61 '64.

SIMOVA, D.

Experience with oil coating as a means of preserving eggs.

p. 171
Vol. 6, no. 4, 1955
PRUMYSL POTRAVIN
Praha

So; Monthly List of East European Accessions (EEAL), LC, VOL. 9, no. 3
March 1956

SIMOV, D.; SPASOVA, M.; SIMOVA, Ek.; NESHEVA, Iv.

The N-acylation in the phenothiazine group. Pt. 1. Godishnik
khim 53 no.3:87-97 '58/'59 [publ. '59].

BRNO, CZECHOSLOVAKIA

BERANEK, I.; KUBISOVA, J.; SIMOVA, H.

Second Internal Medicine Clinic of Professor Herles
(II vnitřní klinika prof. Herles), Prague (for all)

Prague, Vnitřní lékařství, No 9, 1964, pp 376-385

"Chybná srdeční činnost a akutní selhání srdce."

SIMOVA, I

BUCHKOV, Petur; SIMOVA, I.; TABAKOVA, M.

Experience with the treatment of inflammatory form of ~~amphodontosis~~ with novocain-procaine block at a regional stomatologic clinic; a preliminary communication. Stomatologiya no.2:81-90 '54. (REAL 3:7)

1. Iz Otdel terapevtichna stomatologiya. Zavezhdazhch: Anna Pesheva.
(PERIODONTIUM, diseases,
*ther., penicillin with procaine)
(PENICILLIN, therapeutic use,
*periodontal dis., with procaine)
(PROCAINE, therapeutic use,
*periodontal dis., with penicillin)

1. The first part of the report is a summary of the work done during the period covered by the report.

2. The second part of the report is a detailed description of the work done during the period covered by the report.

3. The third part of the report is a summary of the work done during the period covered by the report.

SIMOV, J.

Application of complexions for the preparation of some amino acids or their concentrates from albumen hydrolysates. p. 314.

(Prumysl Potravin. Vol. 8, no. 6, 1957. Praha, Czechoslovakia)

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

L 31150-66 EWP(t)/ETI IJP(c) JD.

ACC NR: 276026044

SOURCE CODE: CZ/0034/66/000/003/0205/0207

AUTHOR: Simova, Jana

ORG: none

TITLE: Spectral analysis of thin surface layers

SOURCE: Hutnicke listy, no. 3, 1966, 205-207

TOPIC TAGS: spectrum analysis, metal surface; alloy steel, electrode, spectrophotometry

ABSTRACT: In spectral analysis of alloy steels the irregular content of metals in the surface layer may distort the results of the determination. The fact may be used, however, for the analysis of the thin surface layers. Ruzicka's method using silver electrode, and Jankevic's and Bezruckov's using a magnesium electrode are described. The author suggests using a modified method, based on the latter process, having a rectangular electrode 0.9 x 1.7 x 13 mm fixed to an 8 mm diameter cylinder. Analysis is made by evaluating spectrophotographic pictures of the waves. The quantitative data are based on comparison with tested samples containing known amounts of the analyzed metals. Orig. art. has: 13 figures. [JPRS: 36,646]

SUB CODE: 11, 20 / SUM DATE: none / ORIG REF: 001 / SOV REF: 001
OTH REF: 001

Card 1/1

37
B

SIMOVA, P.; POPOVA, M.; DIMITROV, KH.; PETSEV, N.

Studies in alkyl phenol spectra. Pt.1. Doklady BAN
17 no.2:113-116 '64.

1. Submitted by Corresponding Member E.Dzhakov.

DIMITROV, KH., SIROVA, I., PERLEV, N.; BEZHANOVA, IS.; SAVATINOVA, I.

Chemical composition of the Dolni Duznik petroleum. Doklady BAN
17 no.3:255-258 '64.

I. Chair of Organic Chemistry, University of Sofia, and Institute
of Physics and Atomic Scientific Experiment Station, Bulgarian
Academy of Sciences. Submitted by Academician D.Ivanov.

ACC NR: AP7000396

SOURCE CODE: UR/0386/66/004/009/0355/0358

AUTHOR: Stefanov, V.; Simova, P.; Kircheva, P.

ORG: none

TITLE: Polarization of anthracene fluorescence excited by two photons

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 9, 1966, 355-358 (and insert)

TOPIC TAGS: anthracene, fluorescence, light excitation, photon, laser application, light polarization

ABSTRACT: The authors present some new results of an investigation of the polarization of fluorescence of anthracene single crystals excited with red light from a ruby laser with output energy 0.04 J (Fig. 1). The anthracene single crystals were produced by sublimating pure anthracene in air. The polarization of the two-photon absorption was investigated by placing a polarizer in the path of the laser beam. The single crystal, whose optical axes were determined beforehand, was placed in a special holder, which made it possible to align one of its optical axes with the oscillation direction of the laser beam by rotating

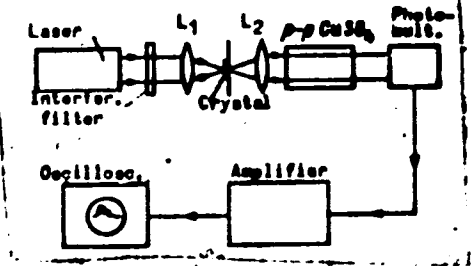


Fig. 1. Diagram of test setup

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ACC NR: AP7000396

the crystal. To investigate the influence of the temperature, the crystal was placed in a cryostat. Measurements at room temperature have shown that the fluorescence intensity is 1.8 times larger when the b axis of the crystal coincides with the laser beam oscillation direction. From this it is concluded indirectly that in the case of the two-photon mechanism the anthracene crystal absorbs more strongly in the same direction (b axis) as in the case of the single-photon mechanism. Measurements of the polarization of the fluorescence excited by two-photon absorption have shown that at room temperature the fluorescence polarized along the b axis was 2.5 time more intense than the fluorescence also shows that as the temperature decreases to -196C the fluorescence of different anthracene single crystals obtained by sublimation in air can exhibit different variations, with some samples exhibiting an increase in the "fast" fluorescence, and others a decrease. This can be attributed to the presence in the anthracene crystals of O-centers obtained by photooxidation of the anthracene as the latter is sublimated in air. To check on this interpretation, the authors are continuing the investigation of the temperature dependence of two-photon fluorescence of anthracene. Orig. art. has: 2 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 20Jul66/ ORIG REF: 001/ OTH REF: 010
ATD PRESS: 5107

Card 2/2

CA

6

Hydrogen bond in formic, acetic, and trichloroacetic acids. V. M. Chulanovskii and P. D. Simova. *Doklady Akad. Nauk SSSR* 68, 1031 (1940). -An attempt is made to derive the vibration frequencies of the hydrogen bond not from Raman spectra, as is commonly done, but from the fine structure of infrared absorption spectra; the method presents the advantage of detn. of intensity with the aid of a thermocouple which ensures better contrast than evaluation of photographic d. The infrared absorption curves, between ~ 2000 and 3500 cm^{-1} , of dil. solns. in CCl_4 show all a complex structure. In all 3 curves, a peak at 3500 cm^{-1} corresponds to the monomer. The curve of HCO_2H (0.013 M, 20°) shows 2 peaks corresponding to C-H vibrations, a great no. of peaks equidistant by 35 cm^{-1} , and a diminishing peak distance series 200, 194, 180, and 178 cm^{-1} ; the 200 cm^{-1} distance is close to the observed Raman frequency of 190. The absorption curve of AcOH (0.004 M, 20 and 70°) shows a less distinct structure. Peaks, other than C-H (the latter identified by comparison with EtOH and Me_2CO), show the diminishing large distance series ~ 170 , 150, and 145 cm^{-1} , and the small equidistance of ~ 30 cm^{-1} . At the higher temp., the intensity of the band of the monomer is increased, that of the associated acid, decreased. In $\text{CCl}_3\text{CO}_2\text{H}$ (at 20° , 0.001 and 0.006 M), C-H bands are absent, other peaks are less distinct than in HCO_2H . The small

equidistance between peaks is again ~ 35 cm^{-1} , the diminishing large intervals are 120, 114, 100, two unsplit intervals, and 78 cm^{-1} . In each case, the largest of the diminishing intervals evidently corresponds to the very strongly anharmonic longitudinal O-H vibration. Inasmuch as its frequency decreases with increasing mol. wt., it is interpreted as a vibration of 2 mols., as a whole, relative to each other. The anharmonicity coeff. could be detd. only for HCO_2H , $x_2 = 8$ cm^{-1} . The increase of the large intervals in the direction of increasing frequency is linked, in terms of Stepanov's (C.A. 40, 5995) theory, with the lowering of the upper level of the O-H vibration on excitation of the OH group. The frequency of 35 cm^{-1} , independent of the nature of the acid, cannot be explained by any scheme of difference of higher frequencies, and thus cannot but correspond to a new type of vibration, possibly a vibration of the bonding H atom perpendicular to the plane of the dimer. In the absence of an influence of O atoms of the 2 mols., this vibration may go over into free rotation around the O-H axis. This frequency should change if H is replaced by D, in contrast to the frequency of O-H.

CA

Structure of bands close to the exciting line in the Raman spectra of formic acid and methyl alcohol. P. D. Simova. *Doklady Akad. Nauk S.S.S.R.* 69, 278 (1961).—In excitation with Hg 435 Å, the previously reported (Gupta, *C.A.* 30, 6283; Sakuma, *C.T.* 35, 3372) broad band of HCO₂H, with max. at 830 cm.⁻¹ shows, on closer exam., diffuse lines at approx. 118, 170, 201, and 206 cm.⁻¹. This structure of the band appears more distinctly at higher temp. In MeOH, and only, within the 200 cm.⁻¹ band, lines at 255, 294, and 200 cm.⁻¹. In both cases, the difference between neighboring lines is approx. 30 cm.⁻¹, i.e. of the same order as in the previously reported absorption spectra of org. acids (*C.A.* 44, 1064). This frequency can, consequently, be ascribed to vibrations of the hydrogen bonding H atom, perpendicular to the plane of the acid dimer, or in the case of MeOH, perpendicular to the O—O bond. The observed frequencies may be combinations of that transverse vibration and the longitudinal O—H vibration. N. Floer

Leningrad State Univ.

B.U.L.G.

Spectroscopic investigation of molecular association in formic and acetic acids, P. Simova, *Issed. Bulg. Akad. Nauk., Otdel. Fiz.-Mat. i Tehn. Nauki, Ser. Fiz.* 3, 107-40 (1951) (Pub. 1952) (German summary).—The infrared and Raman spectra of HCO_2H , AcOH , and $\text{CCl}_3\text{CO}_2\text{H}$ were studied in the range $100\text{--}3600\text{ cm}^{-1}$. The structure of the diffuse Raman bands at 190 , 157 , and 109 cm^{-1} for HCO_2H , AcOH , and $\text{CCl}_3\text{CO}_2\text{H}$, resp., showed a series of max. at intervals of 80 cm^{-1} . The infrared spectra of HCO_2H and AcOH at $8\ \mu$ also showed 3 series of max.: at large intervals (approx. 100 to 160 cm^{-1}) corresponding to the Raman bands of the compds. and at intervals of $30\text{--}35\text{ cm}^{-1}$ for all 3 compds. This system of absorption max. results from the combination of OH vibrations with those of the intermol. O—H bonds. A study of the effect of temp. and diln. upon the C:O band showed that the bands with frequencies 1770 , 1660 and 1730 , and 1710 cm^{-1} , resp., belong to the free, dimeric, and polymeric mols.

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MS 10/11

Simova, P. D.

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✓ 247. INVESTIGATION OF THE SPECTRA OF COMBINATION SCATTERING OF LIGHT BY LIQUIDS IN THE HIGH-FREQUENCY REGION. P. D. Simova.
C. R. Acad. Bulg. Sci., Vol. 5, No. 1-3, 6-8 (April-June, Oct.-Dec., 1952). In Russian.
Frequencies exceeding 3600 cm^{-1} were found in liquids with or without hydrogen bonds. These were interpreted as overtones and combinations of normal frequencies. J. Jacobs

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SIMOVA, P.

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539.433

4571. On a new case of molecular diffraction of light observed during the dissolution of two limitably miscible liquids. P. SIMOVA. *Izv. Bulg. Akad. Nauk.*

3, 3-12 (1952; publ. 1954) In Bulgarian. Summaries (1 p.) in Russian and (1 p.) in German.

The causes of the occurrence of intense molecular diffraction of light during the dissolution of the liquids were investigated on 50% and 30% aqueous solutions of chemically pure formic acid. After vacuum distillation of the solution ordinary Raman spectra of the solution are obtained during the cooling process at 10-15°C. If, however, the vessel containing the solution is cooled sharply during the distillation process by solid carbon dioxide so that the distillate is instantly solidified, an intense diffraction lasting many hours and producing continuous blackening is observed. This intense diffraction

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stops after a certain period and ordinary Raman spectra are obtained again. However, the intense diffraction effect may be obtained any number of times by repeating the distillation procedure described. This phenomenon is not fluorescence caused by impurities, but seems to be a case of classical molecular diffraction. Its temperature dependence and the dependence of the diffraction intensity on the time elapsed after solidification of the solution were also investigated. The phenomenon must be due to the phase structure of the solution solidification and the kinetics of the dissolution process.

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B. F. KRAUS

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SIMOVA, P.

BULG :

Quantitative spectroscopic analysis of colored melts by means of standard solutions. P. Simova, N. Vasileva, Tsv. Bonchev, and St. Budurov. *Izv. Bulg. Akad. Nauk, Otdel. Fiz.-Mat. i Tehn. Nauki, Ser. Fiz.* 9, 13-22 (1952) (Pub. 1954) (German summary).—From spectroscopic data of metal salts adsorbed on charcoal, charts were prepd. relating line intensities with concn. The following pairs of metals were studied at the given wave lengths: Pb 2833 in Zn 2771; Zn 3202.6 in Cu 3307; Pb 2833 in Cu 3324; and Sn 3840 in Cu 2824 A. When inorg. salts were used line intensities were independent of the length charcoal was soaked in the soln. When the b.ps. of the metals in a mixt. differ widely, a fractionation occurred; in such cases the spectrum was taken immediately after the arc was started. G. Meguerian

SIMOVA, P. D.

PA

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✓ The appearance of an intramolecular hydrogen bond in Raman spectra. P. D. Simova and B. Skorchev. *Izv. Bulg. Akad. Nauk, Otd. Fiz.-Mat. i Tekh. Nauki Ser. Khim.*, 47-48 (Russian and German summaries 69-72) (1954).

—The Raman spectra of salicylaldehyde, Me salicylate, and solns. of these compds. in EtOH, MeOH, dioxane, fluorobenzene, and CCl₄ are given. For comparison, the Raman spectra of BzH and its solns. in MeOH and of solns. of *p*-hydroxybenzaldehyde in EtOH and MeOH were also studied. The frequency for the OH group which takes part in intramol H bonding was not observed in the spectra for the first 21 substances. Besides the intense line at 3070 A., which is due to the valence vibration of the C—H bond of the benzene nucleus, several weak lines and bands were observed in the region above 3000 A. in the spectra for salicylaldehyde and Me salicylate. These lines are related to the overtones and the combination frequencies of the basic vibrations of the mol. It was found that the only significant change due to the formation of intramol. H bonds was for the carbonyl frequencies. The behavior of the frequency for the C:O group in the spectrum of salicylaldehyde led to the conclusion that, besides the existence of the monomeric form in which C:O and the OH groups are assocd. in an intramol. H bond, there also exists a dimeric assocn. of its mols. Study of the carbonyl frequencies shows that the intramol. H bond has an energy which is close to the energy for the intermol. H bond in the dimers of formic and acetic acids. The interaction of the solvents on substances with a strong intramol. H bond is significantly weaker than for those substances with intermol. H bonds. The intramol. H bond significantly changes the frequency in the low-frequency region.

(1)

J. R. Leach

MM
Simova
Atk

Bulgaria/Optics - Spectroscopy, K-6

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 35828

Author: Stanova, P. D., Minchev, Ya. Khr.

Institution: Physics Institute, Bulgaria Academy of Sciences

Title: Low Frequencies in the Spectrum of the Combination Scattering of Liquid Tetrachloride

Original
Periodical:

Dokl. Bolgar. AN, 8, No 1, 5-8; German resumé 1953

Abstract: The photographic method, employing the ISP-51 spectrograph and a visual microphotometer was used to investigate the contour of the 459 cm^{-1} band of the combination scattering of CCl_4 . Three maxima were observed for the first time in the region of the wings of the bands symmetrically on both sides of the band; The maxima had relative frequencies of 11, 18, and 26 cm^{-1} . The wings of the mercury lines of 4108 and 4916 Å, commensurate in intensity with the 459 cm^{-1} band, do not contain such maxima. This leads the authors to conclude that the maxima observed by them are not due

Card 1/2

Category : USSR/Optics - Spectroscopy

K 6

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 5074

Author : Simova, P.D., Minchev, Yaŝ Khr.

Title : Low Frequencies in the Raman Spectrum of Liquid Carbon Tetrachloride.

Orig Pub : Dokl. Bolgar. AN, 1955, 8, No 1, 9-12

Abstract : An extension of an earlier work (Referat. Zh. Fizika, 1956, 34828). The influence of solvents on the previously observed maxima of 11, 18, and 26 cm^{-1} in the region of the wings of the band of a fully-symmetrical oscillation with a frequency of 459 cm^{-1} of carbon tetrachloride has been investigated. It is shown that when dissolved in methyl alcohol, the molecules of which have a considerable dipole moment, the frequencies of the maxima increase somewhat. This effect, in the author's opinion, is a natural result of the increase in the intermolecular interaction. An investigation was also made of the effect of temperature on the fine structure of the 217, 314, and 459 cm^{-1} bands of carbon tetrachloride. It is shown that when the substance is heated, the relative intensities and the half widths of the maxima at the wings change, while their

Card : 1/2

Category : USSR/Optics - Spectroscopy

K 6

Abs Jour : Ref Zhur - Fizika, No. 2, 1957, No 5074

positions remain constant and are approximately multiples of six for the fully-symmetrical oscillation. Thus, the results obtained do not contradict the previously-made assumption concerning the intermolecular nature of the maxima in the wings of the Raman-spectrum bands.

Card : 2/2

SIMOVA, P.

"Studying the dissolving process and the structure of solutions by means of light scattering."

IZVESTIIA. SERIJA FIZICHESKA, Sofia, Bulgaria, Vol. 6, Jan./Dec. 1956
(published 1957).

Monthly List of East European Accessions Index (EEAI), The Library of Congress, Volume 8, No. 8, August 1959.

Unclassified

SIMOVA P.D.

4

Chit

✓ The rotation structure of the 217-cm.⁻¹ line in the Raman spectrum of carbon tetrachloride. P. D. Simova (Bulgarian Acad. Sci. Sofia). *Compt. rend. acad. bulgare. sci.* No. 2 9-12 (1953) (in German).—In the Raman spectrum of liquid CCl₄ (cf. C.A. 50, 12653c) fine structure was observed for the 217- and 314-cm.⁻¹ lines. For the 217-cm.⁻¹ line at 60°, the sepn. of the O and S branch max. was 29 cm.⁻¹. The rotation const. B was calcd. to be 0.057 cm.⁻¹, and I₀ = 490 × 10⁻⁴⁰ g. sq. cm. Agreement with the known moment of inertia of CCl₄ confirmed the interpretation of the fine structure as due to rotation.

G. J. C.

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SINOVA, P.

Low frequency Raman spectra of stannic chloride, carbon tetrabromide and chloroform.
III. In Russian. p.9.
(DOKLADY, Vol. 9. no. 3. July/Sept. 1956, Sofia, Bulgaria.)

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

BULGARIA/Physical Chemistry - Solutions. Theory of Acids and Bases. B.

Abs Jour : Ref Zhur - Khimiya, No 9, 1958, 28021

Author : Simova, P.D. and Simconov, S.D.

Inst : Bulgarian Academy of Sciences.

Title : Investigation of the Dissolution Process and of the Structure of Solutions by Ligh-Scattering Effects.

Orig Pub : Izvest Bulgar Akad Nauk, Otdel fiz-metem i tekhn nauki, Ser fiz, 6, 423-433 (1957) (in Bulgarian with summaries in German and Russian)

Abstract : In continuation of previous work (P.D. Simova, Izvest Bulgar Akad Nauk, Ser fiz, 3, 3 (1952) aqueous solutions of formic acid have been investigated by the light-scattering (LS) method and by the depolarization of scattered light. Curves are given showing the change in intensity of the scattered light as a function of the time elapsed

Card 1/2

14

SIMOVA, P.; SKOPCHEV, B.

Mercury electric lamps. p. 72

Bulgarska akademija na naukite. Fizicheski institut. FIZIKO-MATEMATICHESKO SPISANIE.
Sofia, Bulgaria. Vol. 2, no. 2, 1959 BULGARIA.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, no. 11, Nov. 1959
Uncl.

ALEXANDROW, K.; SIMOVA, P.; SAWATINOWA, I.

Potentially carcinogenic substances in the cigarette smoke. Presence of 3,4-benzopyrene. *Neoplasma* 8 no.6:575-576 '61.

1. Onkologisches Forschungsinstitut und Institut für Physik der Bulgarischen Akademie der Wissenschaften Sofia, Bulgarien.

(BENZOPYRENES) (SMOKING)

SOKOLOVSKAYA, A.I.; SIMOVA, P.D.

Studying the Raman scattering indicat^{ing} in certain liquids.
Opt. i spektr. 15 no.5:622-624 N '63. (MIRA 16:12)

SIMOVA, P.; POPOVA, M.; SEMEROV, AN.; MURAV, N.

Study of alkyl phenol spectra. Pt. 4. Doklady BAN 17 no. 3:227-230
'64.

1. Predstavleno chl.-korr. S. Dzhakovym.

SIMOVA, P.; POPOVA, M.; DIMITROV, Kh.; PETSEV, N.

Study of alkyl phenol spectra. Pt. 3. Doklady BAN 17 no.4:353-356
'64.

1. Predstavleno chl.-korr. E. Dzhakovym.

L 07228-67 MF(j) RM/WE

ACC NR: AT6023982

(A)

SOURCE CODE: BU/2509/63/058/000/0051/0061

AUTHOR: Dimitrov, Khr.; Simova, P.; Dimitrova, Kr.

ORG: Department of Organic Chemistry, Chemistry Faculty, Sofia University (Katedra po organichna khimiya, Khimicheski fakultet, Sofiyski Universitet)

TITLE: Chemical composition of naphtha obtained by coking of a topped residue from naphthenic-aromatic Tyulenovo crude. 6. Individual and structural group composition of unsaturated hydrocarbons in the 60 to 150C fraction

SOURCE: Sofia. Universitet. Khimicheski fakultet. Godishnik, v. 58, 1963/1964. Sofia, 1965, 51-61

TOPIC TAGS: chemical composition, hydrocarbon, olefin, molecular structure

ABSTRACT: The analysis of a coking distillate from residual Bulgarian oil comprised the identification of C₆-C₈ aliphatic and cyclic mono- and diolefins in the 60-110C cut and study of the group composition of a 110-144C cut from the 60-150C fraction. Rectification and Raman spectroscopy of the lighter cut showed the presence of 21 olefins and 5 unsaturates in measurable and trace amounts, respectively. The spectra indicated relatively large quantities of 1-methyl-1-cyclopentene, trans-4,4-dimethyl-2-pentene, 2,4-dimethyl-1-pentene, 2,4-hexadiene, cyclohexene, 2-methyl-1-hexene, 1-heptene, and 2,4-heptadiene. The amount of branched hydrocarbons and aliphatic olefins exceeded normal structures and cycloolefins, respectively, with cyclopentene derivatives prevailing in the group of cyclic unsaturates. Alkenes represented

Card 1/2

L 07228-67

ACC NR: AT6023982

approximately 50% of olefins in the 110—144C cut and an equal amount of cyclic compounds was detected; more cyclopentenes than cyclohexenes were shown to be present in the latter group. Orig. art. has: 4 tables and 3 figures.

SUB CODE: 07/ SUBM DATE: 18Dec64/ ORIG REF: 005/ OTH REF: 004

MS
Card 2/2

KIULEVA, Ek.; SIMOVA, V.

Methodic elaboration of the theme "Analytic Chemistry." Biol i khim
4 no.2:25-34 1964.

3-1

COUNTRY : USSR
 CATEGORY :
 ABS. JOUR. : AZKhim., No. 1959, No. 3:17
 AUTHOR : Shayk, D. I. Khim., M. S. K.
 INST. : Inst. of Chem. Acad. Sci. USSR
 TITLE : Interaction of 10-ethyl-2-hydroxy-5-bromo-
 benzothiazine with aromatic amines
 ORIG. PUB. : Dokl. Akad. Nauk, 1959, 11, No. 5, 807-810

ABSTRACT : On interaction of 10-ethyl-2-hydroxy-5-bromo-
 benzothiazine (I) with aromatic amines, 2-hydroxy-
 5-bromo-10-ethylbenzothiazine (II) is obtained in
 quantitative yield. 0.002 mole I dissolved with heating in
 10 ml alcohol, added 0.002 mole aromatic amine, heated
 10-15 minutes at about 100°, cooled, to get 10-ethyl-2-(2-
 hydroxy-5-bromo-10-ethylbenzothiazine) amine (II).
 mp 102-103°, yield 98%, mp 102-103° (from di-
 ethyl ether). Analogously, from 0.002 mole I and 0.002 mole
 aromatic amine, is obtained 10-ethyl-2-(2-hydroxy-5-bromo-
 benzothiazine) amine (II), yield 98%, mp 102-103° (from diethyl ether).
 IR (KBr) 3400 (OH), 1600 (C=N), 1500 (C=C), 1450 (C-N), 1350 (C-N),
 1250 (C-N), 1150 (C-N), 1050 (C-N), 1000 (C-N), 950 (C-N),
 900 (C-N), 850 (C-N), 800 (C-N), 750 (C-N), 700 (C-N),
 650 (C-N), 600 (C-N), 550 (C-N), 500 (C-N), 450 (C-N),
 400 (C-N), 350 (C-N), 300 (C-N), 250 (C-N), 200 (C-N),
 150 (C-N), 100 (C-N), 50 (C-N), 0 (C-N).

CARD: -

5(3)

AUTHORS:

Kurtev, B. Y., Mollov, N. M.,
Simova, Ye. M.

SOV/62-59-4-41/42

TITLE:

Configuration of α,β -Diphenyl- β -Anilinepropionic Acids (Konfiguratsiya α,β -difenil- β -anilinopropionovykh kislot)

PERIODICAL:

Izvestiya Akademii nauk SSSR. Otdeleniye khimicheskikh nauk, 1959, Nr 4, p 758 (USSR)

ABSTRACT:

In this letter to the editor the authors write: "In the work on the synthesis of 2,3-diphenyl- β -methylaminopropionic acid (Ref 1) the intention was expressed of investigating the configuration of β -amino acids obtained from the Schiff's bases and arylacetic acids. We investigate this question. In the alkali hydrolysis of the ethyl ester of α,β -diphenyl- β -anilinepropionic acid which was obtained from benzalaniline and ethylphenylacetate in the presence of anhydrous aluminum chloride (Ref 2) we previously separated a single free β -aniline acid with the melting point $171-172^\circ$ (I). According to the configuration it corresponds to the initial ester (Ref 3). Now we have also separated the second racemate with the melting point $157-158^\circ$ (II). This is identical with the α,β -diphenyl- β -anilinepropionic acid obtained from benzal-

Card 1/2

Configuration of α,β -Diphenyl- β -Anilinepropionic Acids SOV/62-59-4-41/42

aniline and metal-organic phenylacetic acid derivatives (Ref 4-6). In alkali medium, (II) and benzene sulfochloride give a 89 % 1,3,4-triphenylasetidinone-(2) yield (Ref 7) as is confirmed by us. It did not prove successful to obtain lactam from (I) in the same way. We separated up to 90 % of the initial acid from the reaction medium. Since the β -lactam formation by this method has to be a cis-cyclization it may be assumed on account of the conformation assumptions (e.g. Ref 8) that (I) has erythro- and (II) treo-configuration." There are 8 references, 3 of which are Soviet, 4 Bulgarian and 1 English.

ASSOCIATION: Sofiyskiy gosudarstvennyy universitet (Sofia State University)

SUBMITTED: January 17, 1959

Card 2/2

KAGAN, G.A.; KOPELOVA, Ye.I.; PROZOROVSKIY, S.V.; MIKHAYLOVA, V.S.
DZHIKIDZE, E.K.; AKBROYT, Ye.Ya.; DOROFTIYENKO, S.F.; CHIRKOVICH,
Ye.M.; SIMOVONYAN, V.G.; DZOBAKHIDZE, L.V.

Results of experimental infection of *Macacus speciosus* monkeys
with L-forms of *Streptococcus haemolyticus*. Vest. AMN SSSR 20
no.8:54-60 '65. (MIRA 18:9)

1. Institut epidemiologii i mikrobiologii imeni N.F. Gamalei
AMN SSSR, Moskva i Institut eksperimental'noy patologii i
terapii AMN SSSR, Sukhumi.

L 12812-66 EWT(1)/EWA(j)/T/EWA(b)-2 JK

ACC NR: AP5028184

SOURCE CODE: UR/0248/65/000/008/0054/0060

AUTHOR: Kagan, G. Ya.; Koptelova, Ye. I.; Prozorovskiy, S. V.; Mikhaylova, V. S.;
Dzhikidze, E. K.; Akbroyt, Ye. Ya.; Dorofit'yenko, S. F.; Chirkovich, Ye. M.;
Simovonyan, V. G.; Dzubakhidze, L. V. 35
6

ORG: Institute of Epidemiology and Microbiology im. I. F. Gamalei, AMN SSSR, Moscow
(Institut epidemiologii i microbiologii AMN SSSR); Institute of Experimental Pathol-
ogy and Therapy, AMN SSSR, Sukhumi (Institut experimentalnoi patologii i terapii AMN
SSSR)

TITLE: Experience with experimental infection of *Macacus speciosus* monkeys with L-
forms of hemolytic streptococcus b.d.H. 55

SOURCE: AMN SSSR. Vestnik, no. 8, 1965, 54-60

TOPIC TAGS: infective disease, bacteriology, microbiology, experimental animal

ABSTRACT: Prior work by the authors with small laboratory animals failed to estab-
lish adequate criteria for determining pathogenicity of the L-form of bacteria. In
order to resolve this problem the present study was carried out on 20 *Macacus*

Card 1/3

UDC: 616.981.214-092.9-093.23
2

L 12812-66

ACC NR: AP5028184

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speciosus. The infective organisms employed were a stable culture of L-forms of β -hemolytic streptococci obtained from *in vitro* sources (L), and a strain of β -hemolytic streptococci isolated from the blood of a rheumatism patient (S). Of 12 animals (11 infected through the paratonsillar cellular tissue -groups 2 and 3-, and 1 infected i.v. -group 1-) 8 developed catarrhal anginas after two doses of the L-form. Three of these animals developed particularly severe cases with suppurative patches. The disease lasted from 3-22 days with the majority of the animals being sick 10 days or longer. Of the 5 animals receiving 3 doses of L-forms (Group 2) the most severe reaction occurred after the second injection in 2 animals, whereas in the third animal the reaction was more severe after the last injection. Of the 6 monkeys receiving 2 L-form doses followed by an injection of streptococci (Group 3) one animal developed a severe and one a slight case of angina following the third injection. Only one animal that had shown no reaction to the preceding L-injections developed a grave angina after the S injection. In neither group 2 or 3 did suppurative patches develop following the third injection. Of the 4 animals receiving 3 doses of S (Group 4) only 2 developed slight anginas of short duration after the first injection. The 2 subsequent injections produced no response. Roentgenokymographic examination revealed changes in the tonic and contractile functions of the myocardium in 7 animals (2 fr. gr. 1, 3 fr. gr. 2, 1 each fr. gr. 3 + 4). In all

Card 2/3

L 12812-66

ACC NR: AP5028184

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cases the observed changes coincided with development of angina, the most profound changes being noted in 2 animals who had developed suppurative patches. The roentgenokymographs slowly returned to normal following the second injection. The only changes in the EKG were found in one animal from group 1 which had received one injection of L followed by one of S. The changes were interpreted as being the result of necrotic foci produced in the myocardium by the infection. Increases in the indexes characterizing the severity of inflammatory reactions (ESR, leucocytosis and C-reactive blood protein) coincided with periods of sustained angina in groups 2, 3, and 4. Those of groups 1 and 5 could not be measured due to the development of pneumonia and dysentery. The titre of antistreptolysin "O" was used as an immunological indicator. An increase in titre was found to be directly correlated with the severity of the disease present, although an increase was observed in one animal (group 4) that had no angina. Orig. art. has: 1 table.

SUB CODE: 06/ SUBM DATE: 29May65/ ORIG REF: 004/ OTH REF: 002

jw

Card 3/3

31.0710, 9.

Calculating the size of nursery for reforestation purposes. p. 19.

Polana. Povernictvo lesov a divarstvenno prievyslu. LES
Vol. 15, no. 4, Apr. 1959. Polana, Czechoslovakia

Monthly list of East European Accessions (SEAI) IC Vol. 9 no. 2
Feb. 1960. Uncl.

SIMOVIC, Luka, dr.

Food poisoning in Bosnia and Herzegovina caused by staphylococci.
Med. arh., Sarajevo 8 no.4:83-99 July-Aug 54.

1. Centralni Higijenski zavod, Sarajevo; Mikrobiolosko odjeljenje,
sef. Dr. Simovic Luka.

(FOOD POISONING, bacteriol.
micrococcus pyogens)

(MICROCOCCUS PYOGENES, infect.
food pois.)

SIMOVIC, Luka, d-r

Epidemic of *Salmonella* bredeney infection (Gredice-Brcko).
Med. arh., Sarajevo 13 no.5:49-51 S-0 '59.

1. Centralni higijenski zavod u Sarajevu, direktor: d-r
Ante Jaminicki.

(*SALMONELLA* INFECTIONS statist.)

MORVAT-GRUBAC, Ana; SIMOVIC, Radmila; GRULOVIC, Gojko

Effectiveness of BCG vaccination in a massive intra-familial
tuberculous infection. Tuberkuloza 15 no.1:21-23 Ja-Mr '63.

1. Dacji dispanzer Zvezdare i CATD [Centralni anti-tuberkulozni
dispanzer], Beograd - Upravnik: dr Radojka Pavicevic.
(BCG VACCINATION) (TUBERCULOSIS IN CHILDHOOD)
(TUBERCULOSIS, LYMPH NODE) (TUBERCULOSIS, PULMONARY)
(EPIDEMIOLOGY)

S

RUZICIC, U., prof. dr.; PAVICEVIC, R., dr.; SIMOVIC, R., dr.

Sulkovicev's test and vitamin D dosage. Med. glas. 17 no.10:
411-413 0 '63.

(VITAMIN D) (DOSAGE FORMS)

S

SIMOVIC, Veselin, inz. (Zagreb)

A method of computing folded constructions with three disks
in a single edge. Gradevinar 16 no.12:421-424 D '64.

USSR/General Problems of Pathology - Tumors. Human Tumors.

U.

Abstr Jour : Ref Zhur - Biol., No 2, 1959, 8877

Author : Slavich, M.R.

Inst : Smolensk Medical Institute

Title : The Problem of Treating Verrucous Lesions of the Skin

Orig Pub : Tr. Smolenskogo med. in-ta, 1957, 7, 497-500

Abstract : X-ray therapy was unsuccessful in one of 10 patients with common warts; it was successful in all of 20 patients with flat warts. The therapeutic effect was quicker when the flat warts were localized on the skin of the face. The method is reported. -- L.N. Mashkilleyson

Card 1/1

SIMOVIC, Milan, inz.

A small automatic digital computer in the calculation center.
Tech praca 14 no.8:598-602 Ag '62.

1. Hydrostav, Bratislava.

SIMCIVIJEVIC, J.

Determination of the moment of beginning and end of the solar eclipse
of June 30, 1954. P. 125, ZBURNIK RADOVA, No. 42, 1954

SOURCE: East European Accessions List (EEAL), LC, Vol. 5, No. 2, Feb. 1956

S. 11. 7. 74
SURNAME (in caps); Given Names

Country: Yugoslavia

Academic Degrees:

Affiliation:

Source: Belgrade, Visiona, No 4, 1960, pp 94-101.

Data: "Total Solar Eclipse on February 15, 1961."

Authors:

DANIC, R., DR.

JANKOVIC, N.

SIMOVljeVIC, J. I.

DJURKOVIC, Pero M.

18

KULAKOV, G.P.; MENDEL'SON, M.M.; SIMOVSKIY, R.S.; GORBOVITSKIY, Ye.B.
KOZLOV, Yu.M.

Use of the artificial kidney in acute renal insufficiency
following abortion. Akush. i gin. 39 no.3:9-15:17-18-19-20-21-22-23-24-25-26-27-28-29-30-31-32-33-34-35-36-37-38-39-40-41-42-43-44-45-46-47-48-49-50-51-52-53-54-55-56-57-58-59-60-61-62-63
(MIRA 17:2)

1. Iz kafedry urologii (zav. - zasluzhennyy deyatel' nauki
prof. A.P. Frumkin [deceased]) Tsentral'nogo instituta usover-
shenstvovaniya vrachey Bol'nitsy imeni S.P. Botkina (glavnyy
vrach - dotsent Yu.G. Antonov) i Nauchno-issledovatel'skogo
instituta eksperimental'noy khirurgicheskoy apparatury i in-
strumentov (direktor M.G. Anan'yev).

KULAKOV, G.P. (Moskva); MENDEL'SON, M.M. (Moskva); GORBOVITSKIY, Ye.B.
(Moskva); SIMOVSKIY, R.S. (Moskva)

Combined use of the artificial kidney and peritoneal dialysis.
Klin. med. 41 no.7:111-116 J1'63 (MIRA 16:12)

1. Iz kafedry urologii (zav. - prof. A.P.Frumkin [deceased]
TSentral'nogo instituta usovershenstvovaniya vrachey, Bol'nitsy
imeni S.P.Botkina (glavnyy vrach - dotsent Yu.G.Antonov) i
Nauchno-issledovatel'skogo instituta eksperimental'noy khirurgicheskoy apparatury i instrumentov (dir. M.G. Anan'yev).

SIMOVSKIY-VIYTKOV, R.S.

~~Urologia 23 no.6:~~
A sliding inguinoscrotal hernia of the bladder. Urologia 23 no.6:
54-56 N-D '58. (MIRA 11:12)

1. Iz kafedry urologii (zav. - zasluzhemnyy deyatel'nauki prof. A.P. Frankin) Tsentral'nogo instituta usovershenstvovaniya vrachey i urologicheskogo otdeleniya bol'nitsy imeni S.P. Botkina.

(HERNIA

bladder, sliding inguinoscrotal (Rus))

(BLADDER, dis.

sliding inguinoscrotal hernia (Rus))

GOLUB, A.M.; SIMOYLENKO, V.M.

Thiocyanates complexes of lead. Part 1: Formation of the simplest complexes. Ukr. khim. zhur. 23 no.1:17-21 '57. (MIRA 10:6)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G. Shevchenko.
(Thiocyanates) (Lead) (Complex compounds)

PA - 3575

AUTHOR:
TITLE:

SIMOYU, M.P. (Moscow)
Determination of Transfer Function Coefficients of Linearized
Units and of Control Systems. (Opredeleniye koeffitsiyentov
peredatochnykh funktsiy linearizovannykh zven'iyev i sistem avto-
regulirovaniya, Russian)
PERIODICAL: Avtomatika i Telemekhanika, 1957, Vol 18, Nr 6, pp 514 - 528
(U.S.S.R.)

ABSTRACT:

This paper deals with the determination of transfer function coefficients according to experimental transient curves of linearized units and of controls. The way of using the suggested method for approximating complicated transfer functions by more elementary ones is described.

It is at first proved that every transfer function can be approximated with sufficient accuracy by means of a transfer function of a system in which the transfer function is rationally fraction-like (which corresponds to the solution of a differential equation with constant coefficients). Next, the coefficients of decomposition are determined according to the experimental transfer functions. The equation derived is a multiple integral, but the possibility is shown to confine computation to a single integration. The coefficients of the transfer function are determined according to known surfaces and the value of the function in point 0^+ and

Card 1/2

PA - 3575

Determination of Transfer Function Coefficients of Linearized
Units and of Control Systems.

some cases for the application of the method worked out here
are dealt with. A special chapter critically deals with the method
of the moments found by the Burmese scientist BA-KHLI. Carrying
out of the work is explained by means of an example.
(4 illustrations, 5 tables, and 3 Slavic references)

ASSOCIATION: Not given
PRESENTED BY:
SUBMITTED: 23.10.1956
AVAILABLE: Library of Congress

Card 2/2

SIMOYU, M. P.

119-3-3/14

AUTHOR: Simoyu, M. P.

TITLE: Determination of the Transmission Functions From the Time Characteristics of Linearized Systems (Opredeleniye pereda-tochnykh funktsiy po vremennym kharakteristikam linearizovannykh sistem)

PERIODICAL: Priborostroyeniye, 1958, Nr 3, pp. 8 - 12 (USSR)

ABSTRACT: When projecting and calculating automatic regulation processes the respective differential equations or the transmission functions of the single members and of the whole regulation system must be known. Here it is theoretically shown how the transmission function can be determined in a relatively easy way.
The process in the single members of the regulation system to be automatized can be expressed by a differential equation with constant coefficients up to a certain exactness:

Card 1/2

119-3-3/14

Determination of the Transmission Functions From the Time Characteristics of Linearized Systems

$$a_n \frac{d^n \varphi}{dt^n} + a_{n-1} \frac{d^{n-1} \varphi}{dt^{n-1}} + \dots + a_1 \frac{d\varphi}{dt} + a_0 \varphi =$$

$$= b_m \frac{d^m \mu}{dt^m} + \dots + b_1 \frac{d\mu}{dt} + b_0 \mu$$

where μ are inlet magnitudes

φ - outlet magnitudes

$a_n \dots a_0, b_m \dots b_0$ - constant coefficients.

For the type of equation the simple, the complex and the multiple roots are deduced. Furthermore an approximation and determination of the transmission function is shown.

It is shown by three examples of calculation how the courses of calculation developed can be used. There are 15 figures.

AVAILABLE: Library of Congress

Card 2/2 1. Functions-Theory

SOV/96-59-9-6/22

AUTHORS: SIMONOV, K.P., Volkov, E.A. and Startseva, S.A.
(Engineers) As Calculated

TITLE: The Thermal Design of a Boiler/On a 'Ural' Computer

PERIODICAL: Teploenergetika, 1967, No 9, pp 32-39 (USSR)

ABSTRACT: In designing an automatic control system for a boiler it is necessary to know its static characteristics, which is equivalent to making a thermal design at each of several different loads; this involves so many calculations that a great number of variants cannot be worked out. It was accordingly decided to programme a boiler design on a 'Ural' type computer. The 'Ural' is a small universal electronic digital computer which can carry out 100 operations a second. The main characteristics of the computer are briefly explained. The basic material in drawing up the best sequence of operations was derived from the standard design method of the All-Union Thermotechnical Institute and the Central Boiler Turbine Institute. From the mathematical standpoint this method consists in solving a complicated system of non-linear algebraic equations by a method of successive approximations. The form of the system of equations used for calculating the convective heating surface is given as an

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The Thermal Design of a Boiler/ on a 'Ural' Computer

example. Because of the nature of the 'Ural' computer it is inconvenient to feed it much data in the form of tables, and the methods by which the usual tables were replaced by equations are explained. The use of enthalpy diagrams is avoided by making direct calculations of heat content every time that it is required. The heat transfer coefficients and temperature heads were not taken from nomograms but from the equations from which the nomograms are constructed. The boiler design programme was then coded on perforated tape. Once the programme is drawn up a modern boiler of any construction can be designed, provided only that certain tables of initial data are filled. The initial data required for the design are of three kinds: numerical data for the boiler as a whole; numerical data for individual heating surfaces; and numerical data governing the sequence of design and the type of heating surface. Thus to make a thermal design it is necessary to complete the data called for in Table 1 for design of the boiler as a whole, in order to provide the data called for in Table 2 to determine the order of calculations and the type of heating surface. The method

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The Thermal Design of a Boiler/On a 'Ural' Computer
of filling up these tables is explained. Approximate temperatures of gas and working substance at different parts of the boiler are entered in Table 1. The accuracy of the initially selected values greatly influences the computing time. Then Tables 3 and 4 must be completed with the initial data for each heating surface, characterising its geometry, excess-air factors, working-medium pressures and so on. The particular course of the design on the 'Ural' computer is then explained, and a block diagram of the programme is shown in Fig 2. The results of the calculations are provided in the form shown in Table 5. If the design is not in balance the calculations recommence automatically, using the intermediate temperatures determined at the first attempt. If the initial estimate of temperatures was a good one the operating time of the computer is about 30 minutes. A repeat calculation requires about 50 minutes, and a further approximation another 30-50 minutes. Hydraulic, aerodynamic and other calculations can easily be included in the design. If the computer is used for boiler design in this way the designers are freed to consider

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The Thermal Design of a Boiler, on a 'Ural' Computer
constructional features of the boiler and to evaluate
the different variants. It will also be possible to
design a great many variants, and so to design boilers
more economically.

Card 1/4 There are 2 figures, 6 tables and 4 references, 3 of
which are Soviet and 1 English.

ASSOCIATION: TsNIIKA

STREYTS, Vladimir [Strejc, Vladimir], inzh.; SHALAMON, Miroslav [Salamon, Miroslav], inzh., doktor; KOTEK, Zdenek, inzh., kand.tekhn.nauk; BALDA, Milan, dotsent, inzh., kand.tekhn.nauk; GOL'DENBERG, G.M., inzh. [translator]; SIMOTU, M.P., inzh., red.; GOR'KOVA, A.A., vedushchiy red.; TROFIMOV, A.V., tekhn.red.

[Fundamentals of the theory of automatic control] Osnovy teorii avtomaticheskogo regulirovaniia. Moskva, Gos.nauchno-tekhn.izdat. nef. i gorno-toplivnoi lit-ry, 1960. 332 p. Translated from the Czech. (MIRA 13:6)

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SIMYU, M.P. (Moskva)

Iterative method for matrix inversion. Zhur. vych. mat. i mat.
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MOGA, A., acad.; ZAGREANU, I., dr.; SUCIU, I., dr.; SIMPLACENAU, A.; SAVU, I.,
conf.

Considerations on the contribution of environmental physical factors
to the distribution of rheumatic heart disease. Med. intern. 14 no.4:
599-602 My '62.

1. Lucrare efectuata in Clinica I medicala si la Catedra de geografie
a Universitatii "Babes-Bolyai", Cluj.

(RHEUMATIC HEART DISEASE) (WEATHER) (CLIMATE)
(HOUSING) (CLOTHING)

RUMANIA/Chemical Technology - Chemical Products and Their
Application - Fermentation Industry.

H-27

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, 9556

Author : Teodorescu Stefan C., Simpa ~~Leary~~ Emil

Inst : -

Title : Rumanian Wines at the International Competition and
Exposition at Ljubljana (Federal People's Republic of
Yugoslavia, 1956).

Orig Pub : Gradina, via si livada, 1957, 6, No 8, 53-57

Abstract : No abstract.

Card 1/1

§

SUCIU, I.; SIMJ, G.; SIMPLACMANU, L.; ORHA, I.

The antistreptolysin O titer (ASLO) in rheumatism and other diseases. Probl. ter., Bucur. 10 no.3:51-62 '59.

(ANTISTREPTOLYSIN, blood)

(RHEUMATISM, blood)

(STREPTOCOCCAL INFECTIONS, blood)

(ENDOCARDITIS, BACTERIAL, blood)

BRUDA, P., conf.; BERARIU, T., dr.; SIMPLACEANU, L., dr.; GOSA, C., dr.;
CHIOREANU, V., chim.; CAPINA, S., chim.

Contribution to the study of the metabolism disorders in urinary
lithiasis. Med. intern., Bucur 12 no.12:1795-1804 D '60.

1. Lucrare efectuata la Clinica urologica Cluj (director, conf.
P. Bruda), catedra de biochimie Cluj (prof. I. Manta), catedra de
anatomie patologica Cluj (prof. A. Muresanu), catedra de bacteriologie
Cluj (prof. Gh. Badenschi), catedra de fizica medicala Cluj (conf.
R. Opreanu).

(URINARY CALCULI etiology) (NEPHRITIS complications)
(KIDNEY metabolism) (BLOOD PROTEINS)

1. 02732-66 EMT(d)/EMT(m)/EMP(v)/EMP(l)/EMP(r)/EMP(h)/EMT(i)/EMT(n) JD

ACC NR: AP6002900

SOURCE CODE: UR/0286/65/000/024/0063/0064

AUTHORS: Yamshchikov, S. V.; Vykhukholev, V. F.; Musiyachenko, A. S.; Osipov, V. Ya.; Kuznetsov, L. M.; Simpura, P. M.; Stebakov, Ye. S.

ORG: none

TITLE: Method for casting thin-walled parts. Class 31, No. 177050

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 24, 1965, 63-64

TOPIC TAGS: metal casting, pressure casting

ABSTRACT: This Author Certificate presents a method for casting thin-walled parts in an apparatus consisting of two chambers (for the mold and pouring crucible) in which the filling of the mold with metal takes place due to the pressure difference between the chambers (see Fig. 1). To increase the quality of the parts, the mold chamber is raised to above-atmospheric pressure during metal pouring, while the crucible chamber is pressurized above the pressure of the mold chamber.

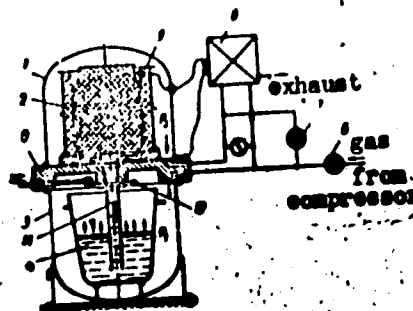
UTS: 621.746.043.3

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L 22732-66

ACC NR: AP6002900

- Fig. 1. 1 - Chamber; 2 - mold;
3 - chamber; 4 - crucible;
5 - base; 6 and 7 - valves;
8 - automatic controller;
9 - transducer; 10 - cut-off;
11 - metal guide.



Orig. art. has: 1 figure.

SUB CODE: 13/ SUBM DATE: 09Feb63

Card 2/2 *DUR*