

ZELMANOV, I.

V. P. BERDENNIKOV, Zhur Fiz Knim, 1934, 5 (5), 584-590

COMMON ELEMENTS		PRINCIPLES AND PROPERTIES INDEX		COMMON VARIABLE INDEX																																																																																																						
CA		The structure of metallic layers formed by condensation of metallic vapor on a cold surface. M. Ya. Gen. I. Zelmanov and A. I. Shelnikov. <i>Physik. Z. Sowjetunion</i> 6, 825-34 (1933) (in German).--Investigation of layers of Ni, Fe, Cd and Hg by electron refraction by the reflection method show that the layers consist of small crystals differing from the ordinary metals only in having a higher degree of dispersion. The lower-melting metals form the larger crystals. Louis Goldman		2																																																																																																						
ASB-5LA METALLURGICAL LITERATURE CLASSIFICATION																																																																																																										
<table border="1"> <thead> <tr> <th>GROUP</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th> <th>15</th> <th>16</th> <th>17</th> <th>18</th> <th>19</th> <th>20</th> <th>21</th> <th>22</th> <th>23</th> <th>24</th> <th>25</th> <th>26</th> <th>27</th> <th>28</th> <th>29</th> <th>30</th> <th>31</th> <th>32</th> <th>33</th> <th>34</th> <th>35</th> <th>36</th> <th>37</th> <th>38</th> <th>39</th> <th>40</th> <th>41</th> <th>42</th> <th>43</th> <th>44</th> <th>45</th> <th>46</th> <th>47</th> <th>48</th> <th>49</th> <th>50</th> <th>51</th> <th>52</th> <th>53</th> <th>54</th> <th>55</th> <th>56</th> <th>57</th> <th>58</th> <th>59</th> <th>60</th> <th>61</th> <th>62</th> <th>63</th> <th>64</th> <th>65</th> <th>66</th> <th>67</th> <th>68</th> <th>69</th> <th>70</th> <th>71</th> <th>72</th> <th>73</th> <th>74</th> <th>75</th> <th>76</th> <th>77</th> <th>78</th> <th>79</th> <th>80</th> <th>81</th> <th>82</th> <th>83</th> <th>84</th> <th>85</th> <th>86</th> <th>87</th> <th>88</th> <th>89</th> <th>90</th> <th>91</th> <th>92</th> <th>93</th> <th>94</th> <th>95</th> <th>96</th> <th>97</th> <th>98</th> <th>99</th> <th>100</th> </tr> </thead> </table>						GROUP	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	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	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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ROMADINA, V., vetvrach; ZEL'MANOV, I., vetvrach

Histological research method in the meat industry. Mias. ind.
SSSR 30 no.3:26-27 '59. (MIRA 12:9)

1. Moskovskiy myasokombinat.
(Moscow--Meat inspection)

PAL'MIN, V., kand. khim. nauk; TETERNIK, D., prof.; AVSHYUKEVICH, V.;
ZEL'MANOV, I.

Effect of the adrenalin treatment of animals on the course of
some biochemical processes. Mias. ind. SSSR 34, no. 4: 53-54, 1963.
(MIRA 16:10)

1. Moskovskiy tekhnologicheskii institut myasnoy i molochnoy
promyshlennosti (for all except Zel'manov). 2. Moskovskiy
ordena Lenina myasnoy kombinat (for Zel'manov).

ZELMANOV, I.

V. P. BERDENNIKOV, ZhFKh, 5, 584-90(1934)

ZEL'MANOV, I.; ROMANDINA, V.

More about the trichinosis of swine. Mias.ind. SSSR 31 no.6:26-27
'60. (MIRA 13:12)

1. Moskovskiy myasokombinat.
(Swine--Diseases) (Trichina and trichinosis)

ZELEMANOV, I.

V. P. BERDENNIKOV, ZhFKh 1934, 5, 584-590

ZELMANOV, I.L.,
BERKMAN, B.E., Russ. 39, 751, Nov., 30, 1934.

A microfiche card with a header, a main text area, and a classification table at the bottom. The header contains the text "1st AND 2nd SERIES" and "PROCESSES AND PROPERTIES INDEX". The main text area contains a handwritten "A" in the top left corner, a handwritten "H53g" in the top right corner, and a paragraph of text in Russian and English. The paragraph discusses the peculiarities in the liquefaction of Helium, mentioning the work of I. L. Zelmanov and the well-known T-S diagram published by Keesom and Hanthoff. The classification table at the bottom is divided into several columns, including "METALLURGICAL LITERATURE CLASSIFICATION", "SIGNATURE", "DATE", and "VOLUME". The table contains various numbers and letters, likely representing the classification and location of the document.

30

CA

Catalytic polymerization of butadiene in the presence of highly dispersed metallic sodium. I. I. Zelmanov and A. I. Shalnikov. *J. Phys. Chem.* (U. S. S. R.) 4, 353 G6 (1960). The catalyst was prepared by simultaneous condensation of Na and butadiene on a cooled surface. With 0.001 to 0.3% Na by wt., solid polymers were obtained in from 2 to 36 hours at 10-15°. Butadiene rubber from use of 0.001% colloidal Na seems possible. P. H. Rathmann

ASAC-SEA METALLURGICAL LITERATURE CLASSIFICATION

ZELMANOV, I. I.

Mbr., Leningrad Inst. Physical Chemical Res., -1939-44-.

Mbr., Inst. Physical Problems, Dept. Physico-Math. Sci., Acad. Sci., -1940-.

"A New Method of Helium Liquefaction by Means of the Joule-Thomson Effect,"

Dok. AN, 22, No. 1, 1939;

"The Joule-Thomson Effect in Helium at Low Temperatures," Zhur. Eksper. i

Teoret. Fiz, 10, No. 6, 1940;

"The Entropy Diagram for Helium at Low Temperatures," Journal Phys., 8, No. 3,

1944;

"Specific Heat and Enthalpy of Helium at Low Temperatures," ibid.

A method of obtaining organosols of alkali metals. M. Ya. Gen, I. L. Zelmanov
 and A. I. Shal'kov. *J. Phys. Chem.* (U. S. S. R.) 4, 367-72(1933); cf. C. A. 27,
 8151.—Diagrams are shown for app. for the prepn. of organosols by shaking molten
 Na in hot xylene, benzene, etc., or by passing Na vapors at reduced pressure into the
 cooled liquid, or butadiene, at -50° . F. H. Rathmann

1ST AND 2ND GROUPS										3RD AND 4TH GROUPS									
PROCESSES AND PROPERTIES INDEX																			
Some peculiarities observed in the liquefaction of helium. I. L. Zel'manov. <i>Compt. rend. acad. sci. U. R. S. S. 19, 469-70 (1938) (in English)</i>.—It is shown that the discrepancy between actual results and the T-S diagram may be only apparent, and due to an inaccurate calcn. of the liquefaction coeff. The ideal heat exchange demanded by the assumptions under which the coeff. is calcd. is not always possible. The introduction of throttle valves to make this exchange possible is discussed. A. L. Gerhard																			
ASTM-51A METALLURGICAL LITERATURE CLASSIFICATION																			
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SEARCH SYMBOLS										CLASSIFICATION									

117 AND 118 SERIES

PROCESSING AND PROPERTIES INDEX

1

ca

Liquefaction of helium by means of the Joule-Thomson effect. J. L. Zeldmanov. *Compt. rend. acad. sci. U. R. S. S. 20, 627-8 (1938)* (in English); cf. C. A. 23, 8217. The liquefaction coefficient, calculated as a function of the initial pressure for a simple liquefier, consisting of a heat-exchanger and a throttling-valve, agree approx. with the liquefaction coeffs. obtained by expt. George Ayers

ASME-31A METALLURGICAL LITERATURE CLASSIFICATION

FROM NOMIN

RECORD #1

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 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 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

ZEL'MANOV, I.; ROMADINA, V.

Enforce the control of traumatism. Mias.ind.SSSR.33 no.5:32-33 '62.
(MIRA 15:12)

1. Moskovskiy myasokombinat.
(Veterinary hygiene)

COMMON ELEMENTS		PROCESSING AND PROPERTIES INDEX		COMMON VARIABLES INDEX	
<i>A</i>		<i>A-1</i>			
New method of helium liquefaction by means of the Joule-Thomson effect. I., L. ZELMANOV (Compt. rend. Acad. Sci. U.R.S.S., 1939, 22, 25—26; cf. A., 1939, 1, 189).—The difficulties referred to in the previous paper can be overcome by means of an additional throttle-valve. L. J. J.					
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION					
SUBJECT INDEX		CROSS REFERENCE			
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 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 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 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 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100			

Joule-Thomson effect in helium at low temperatures.
 1. L. Zel'manov. *J. Exptl. Theoret. Phys.* (U. S. S. R.)
 10, 541-51 (1945) *J. Phys.* (U. S. S. R.) 9, 43-52 (1940) (in
 English); *Foreign Petroleum Tech.* 9, 429-43 (1941) (in
 English).—The Joule-Thomson effect of He was meas-
 ured betw. the b. p. of He and of He_2 and up to a pres-
 sure of 60 atm. in order to complete the T-S diagram of
 Kamerlingh Onnes (C. A. 25, 2637). The accuracy is
 sufficient for tech. purposes (He liquefier) and for approx.
 theoretical evaluations. Two different app. are used:
 one for measurements at the b. p. of hydrogen, the other
 for temps. between 6 and 20°K. The temps. are meas-
 ured with gas thermometers of const. vol., the errors in-
 volved being less than 0.1°. Expts. were made for initial
 temps. of 6°, 8°, 10°, 12°, 15.5°, 17.5° and 20.4°K. For
 all these temps., curves of the integral Joule-Thomson
 effect show a max., corresponding to the inversion of the
 differential effect. The inversion pressure is a function of
 temp.; the figures are 18.5, 20.5, 25.0, 33.0, 35.5 and
 37.5 kg./sq. cm. for the above 6 last temps. The corres-
 ponding reduced temps. and pressures were calcd. and com-
 pared with those for other gases. It appears that the law
 of corresponding states is not applicable to the Joule-
 Thomson effect of helium. M. Magat

ASME-A METALLURGICAL LITERATURE CLASSIFICATION

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ZEL'MANOV, I.L.; KOMPANEYETS, A.S.; SAYASOV, Yu.S.

Phase motion of particles in accelerators with fluctuating parameters. Dokl. AN SSSR 143 no.1:72-73 Mr. '62.

(MIRA 15:2)

1. Institut khimicheskoy fiziki AN SSSR. Predstavleno akademikom V.N.Kondrat'yevym.

(Particle accelerators)

24.6730
AUTHORS:

TITLE:

PERIODICAL:

TEXT: The phase oscillation equation of particles in an accelerator whose parameters have negligible random disturbances is in linear approximation (1).

$\frac{d^2 q}{dt^2} + \omega^2(t) q = a(t) \psi(t),$
q is the distance between the particle observed and an "ideal" synchronous particle, ψ is a random quantity characterizing the phase deviation of the synchronous particle from the "ideal" particle, $\omega^2(t)$ and $a(t)$ are known functions slowly changing with time. The phase oscillations in an "ideal" accelerator are described by (2),

$$\frac{d^2 q_0}{dt^2} + \omega^2(t) q_0 = 0,$$

Card 1/3

S/020/62/143/001/012/030
B104/B108

Phase motion of particles ...

where $Q = q - q_0$ and $\dot{Q} = \dot{q} - \dot{q}_0$ characterize the deviations of the position and velocity of the particle observed from the "ideal" one. Assuming that $\overline{\psi(t)} = 0$, $\overline{\psi(t)\psi(t')} = \psi_0^2 \delta(t - t')$ and that the solutions of (1) and (2) may be found in Wentzel-Kramers-Brillouin's approximation,

$$\frac{\partial \Phi}{\partial t} + \dot{Q} \frac{\partial \Phi}{\partial Q} - \omega^2 Q \frac{\partial \Phi}{\partial \dot{Q}} = v(t) \left(\frac{\partial^2 \Phi}{\partial Q^2} + \omega^2(t) \frac{\partial^2 \Phi}{\partial \dot{Q}^2} \right), \quad (3)$$

$$v(t) = \frac{\psi_0^2}{2\omega(t)} \left(\frac{a^2(t)}{\omega(t)} + \omega^2(t) \int_0^t \frac{a^2(\tau)}{\omega(\tau)} d\tau \right).$$

is obtained for the probability density $\Phi(t, Q, \dot{Q})$. As a solution of (3),

$$\Phi = \frac{1}{4\pi \int_0^t v\omega dt} \exp \left(- \frac{Q^2}{\frac{4}{\omega} \int_0^t v\omega dt} - \frac{\dot{Q}^2}{4\omega \int_0^t v\omega dt} \right), \quad (9)$$

Card 2/3

Phase motion of particles ...

S/020/62/143/001/012/030
B104/B108

is obtained. This solution holds for any dynamic system which has a potential $\frac{1}{2}\omega^2(t)q^2$ slowly changing with time, and which is affected by random forces $a(t)\psi(t)$. The reference to the English-language publication reads as follows: S. Livingstone, Accelerators, 1956.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR
(Institute of Chemical Physics of the Academy of Sciences USSR)

PRESENTED: October 16, 1961, by V. N. Kondrat'yev, Academician

SUBMITTED: October 10, 1961

Card 3/3

X

PAL'MIN, V.V.; TETERNIK, D.M.; AVSYUKEVICH, V.S.; ASLANOV, V.G.; GOL'DMAN,
Ye.I.; ZEL'MANOV, I.S.; STEFANOV, A.V.; KHOLODNova, O.S.

Studying the possibility of applying preslaughter adrenal treatment
in the meat industry. Izv.vys.ucheb.zav.; pishch.tekh. no.1:66-71
'63. (MIRA 16:3)

1. Moskovskiy tekhnologicheskiy institut myasnoy i molochnoy
promyshlennosti i Moskovskiy myasokombinat.

(Adrenalin) (Slaughtering and slaughterhouses)

TIKHONIN, I.Ya., prof.; FEL'DSHTEYN, M.A., dotsent; MART'YANOV, S.N., dotsent;
ZEL'MANOV, I.S., veterinarnyy vrach; ROMANDINA, V.P., veterinarnyy vrach;

Losses in the meat industry from hidden injuries in cattle.
Veterinariia 36 no.9:49-51 S '59. (MIRA 12:12)

1.Moskovskiy tekhnologicheskii institut myasnoy i molochnoy
promyshlennosti.

(Meat industry and trade)

TIKHONIN, I.Ya.; FEL'DSHTEYN, M.A.; MART'YANOV, S.N.; ZEL'MANOV, I.S.;
ROMANDINA, V.P.

Injuries in cattle raised for meat. Izv.vys.ucheb.zav.;pishch.
tekh. no.5:79-83 '58. (MIRA 11:12)

1. Moskovskiy tekhnologicheskij institut myasnoy i molochnoy
promyshlennosti, kafedra khirurgii i akusherstva,
(Cattle),*sp.*

ZEL'MANOV, I.V.

Measures for lowering costs of housing construction. Transp.
stroil. 10 no.7:33-35 J1 '60. (MIRA 13:7)

1. Nachal'nik arkhitekturno-stroitel'nogo otdela Sibgiprotransa.
(Apartment houses)
(Construction industry--Costs)

KRESHKOV, A.P.; YAROVENKO, A.N.; ZEL'MANOVA, I.Ya.

Differential titration of salts in nonaqueous solutions. Izv.-
vys.ucheb.zav.;khim.i khim.tekh. 6 no.1:15-23 '63. (MIRA 16:6)

1. Moskovskiy khimiko-tehnologicheskoy institut imeni
D.I.Mendeleyeva, kafedra analiticheskoy khimii.
(Salts) (Titration)

ZEL'MANOV, R.B.

Use of antibiotics in dermatological outpatient practice. Eksp. i
klin. issl. po antibiot. 1:424-426 '58. (MIRA 15:5)
(ANTIBIOTICS) (DERMATOLOGY)

ZEL'MANOV, R.B.

Microbial pollution of serum as a source of errors in the luminescence
study of adrenalinelike substances. Eksp. i klin. issl. po antibiot.
2:225-228 '60. (MIRA 15:5)

(SERUM)

(SYMPATHOMIMETICS)

L 29558-66 EWT(1)

ACC NR: AP6015153

SOURCE CODE: UR/-142/66/009/002/0250/0252

AUTHOR: Zel'manov, S. S.

ORG: none

TITLE: Energy-type amplitude detector ⁷⁵

SOURCE: IVUZ. Radiotekhnika, v. 9, no. 2, 1966, 250-252

TOPIC TAGS: signal detector, energy detector, amplitude detector

ABSTRACT: The possibility of materializing the new detector (D. V. Agoyev and S. S. Zel'manov, "Energy amplitude detector", Authors' Certificate 171027, Byull. izobr., 1965, no. 10) is discussed. In this type of detection, the law of the oscillatory-system energy variation corresponds to the law of the modulating function. A fundamental equation and a block diagram show that the energy-type detector (a) does not introduce any frequency distortion, (b) only slightly depends on the relation between the modulating and carrier frequencies of the AM-signal being detected, and (c) has a nonlinear distortion lower than that of the conventional square-law detector. The energy detector can be constructed without reactive components; hence, the frequency and nonlinear distortions involve only those which are due to the preceding oscillatory circuit. Orig. art. has: 1 figure and 14 formulas

SUB CODE: 09 / SUBM DATE: 30Jun64 / ORIG REF: 001

UDC: 621.376.23

Card 1/1 *CC*

KRESHKOV, A.P.; YAROVENKO, A.N.; ZEL'MANOVA, I.Ya.

Quantitative determination of salts and their mixtures
with acids and bases by potentiometric titration in a
methyl ethyl ketone medium. Dokl. AN SSSR 143 no.2:348-
350 Mr '62. (MIRA 15:3)

1. Predstavleno akademikom I.V. Tanahayevym.
(Salts)
(Potentiometric analysis)

BC

A I 6

Entropy diagram for helium at low temperatures. J. Zelmanov (J. Physics U. S. S. R., 1944, 8, 135-141). Experimental results due to the author (see preceding abstract) and Onnes et al. are combined to construct a T-S diagram in the range 3--20° K. for pressures from 0.5 to 60 atm.

H. J. W.

ASUSLA METALLURGICAL LITERATURE CLASSIFICATION

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THE ENTROPY DIAGRAM FOR HELIUM AT LOW TEMPERATURES. Zelnanov, J. J. Phys., USSR, 8 (No. 3) 135-41 (1944)-Results of the previous paper (Abstr. 324 1947) are used to calculate and make an entropy diagram in the tem- perature-pressure range, 3-20°K and 0.5-60 atmos. This is an improvement on the 1928 diagram of Keesom and Houthoff. For practical purposes the diagram with isobars, isochores and lines of constant enthalpy is convenient; this is the type constructed. The calculations are nowhere in error by $> 3\%$.																																			
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Specific heat and enthalpy of helium at low temperatures. J. Zelmanov (J. Physics U. S. S. R., 1944, 8, 129--134). Direct measurements of the enthalpy at temp. from 4.44° to 23° K. at a pressure of 1 atm. are in good agreement with vals. calc. from the Joule-Thomson effect (cf. A., 1941 I. 459).																																																																																																																											
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Brit. Abst.

AI-IV, Physical Properties
of Substances

Specific heat and enthalpy of helium at low temperatures. 1. Debye (J. Chem. Phys., 1935, 3, 1241). 2. Direct measurements of the enthalpy at temp. from 1.1° to 3°K. at a pressure of 1 atm. are in good agreement with vals. calc. from the Debye-Hugoniot effect. (R. A., 1961, 1, 449).

Brit. Abst.

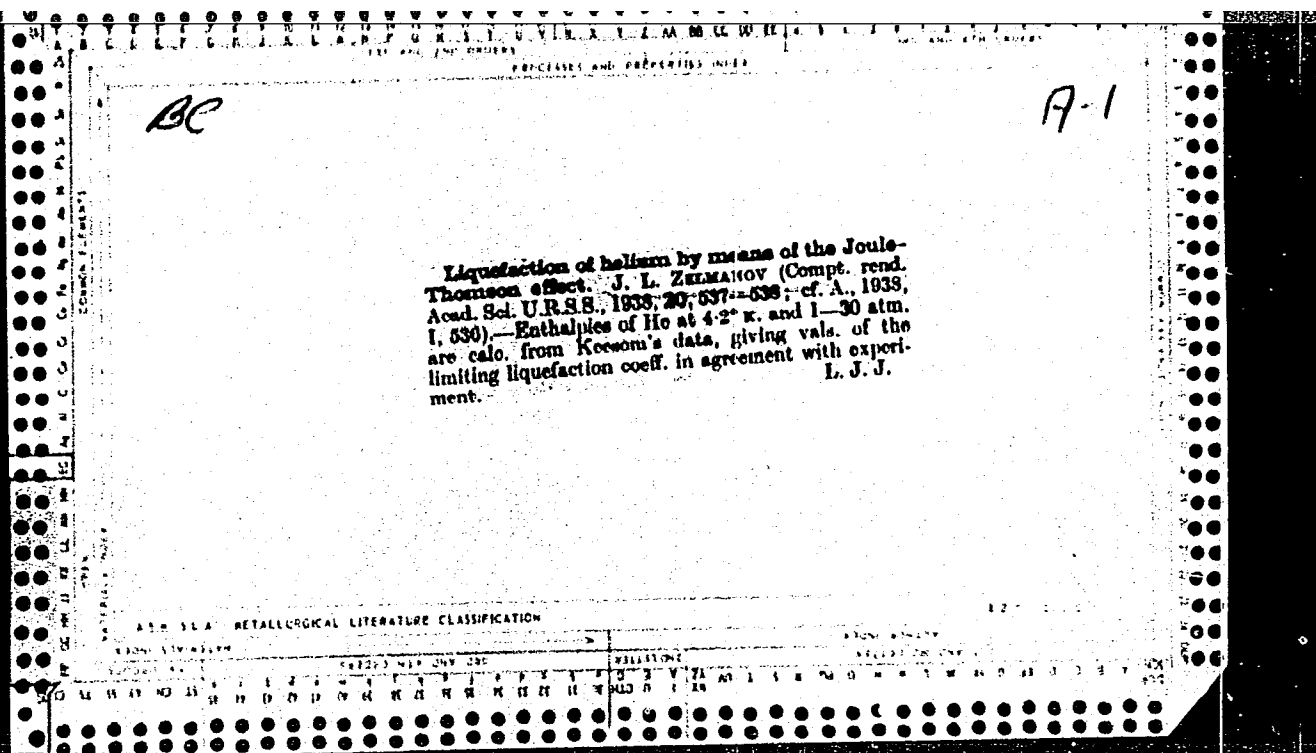
AI-IV. The 1961-1962
Abstracts

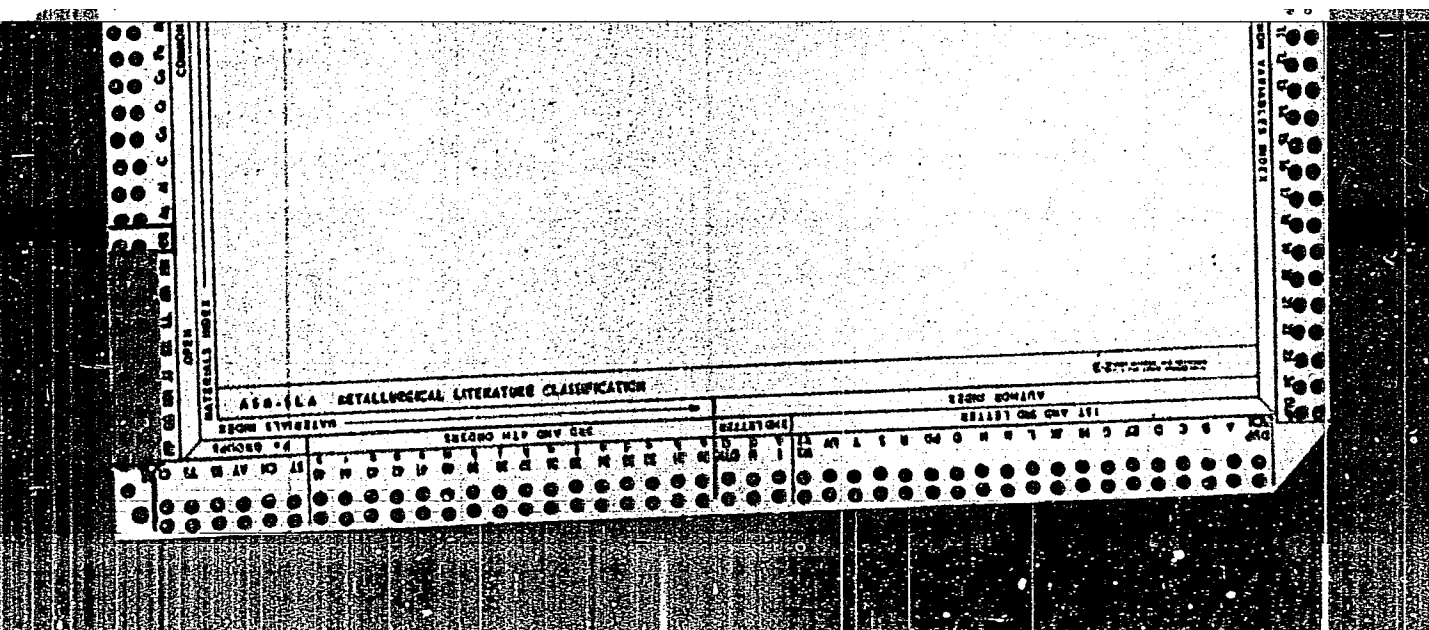
Entropy diagram for helium at low temperatures. J. G. Zimm
(J. Physics U.S.S.R., 1964, 8, 135-141). Experimental results due to
the author (see preceding abstract) and Gines et al. are used to
construct a T-S diagram in the range 3-20° K. for pressures from 0.5
to 100 atm. R.S.S.

BC

A-1

Study of the Joule-Thomson effect in hydrogen. J. L. ...
The Joule-Thomson effect in H_2 has been investigated at 0-
100° K., and pressures up to 60 atm. The curves have a max.
corresponding with the inversion of the differential effect.
The inversion Joule-Thomson varies almost linearly with the inver-
sion temp. The inversion curve of H_2 is compared with that
for other gases, and it is shown that the law of corresponding
states does not hold for H_2 , at least with respect to the
Joule-Thomson effect. A. J. M.





SHTREYNLUKHT, L.A.; SAVEL'YEVA, T.L.; FROLOVA, M.A.; ZEL'MANOV, R.B.

Treatment of dermatomycoses with griseofulvin; survey of the literature and personal observations. Vest.derm.i ven. [35]
no.2:39-46 F '61. (MIRA 14:3)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta anti-
biotikov (dir. - dotsent A.V. Loginov).
(DERMATOMYCOSIS) (GRISEOFULVIN)

CA 116

PROCESSES AND PROPERTIES INDEX

Gastric secretion as an expression of the change in the reactivity of the gastric glands during anaphylactic shock. I. E. S. Zelmanova. *Bull. biol. med. expil. U. R. S. S.* 4, 513-16(1937)(in English).—The sensitization of dogs with Pavlov gastric pouches with normal horse serum causes an increase in 2 out of 3 cases in the vol. of gastric juice secreted contg. increased amts. of org. and inorg. residue and free HCl. The same 2 animals suffered a pronounced shock upon the reinjection of normal horse serum. No profound changes in the quantity and quality of gastric secretion were observed in the 3rd dog, nor was shock observed upon reinjection of serum. II. *Ibid.* 517-20(In English).—Similar results were obtained in the secretion of gastric juice after serum injection and re-injection into dogs with completely isolated gastric pouches, isolated by Ivy's method. S. A. Karjala

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

116

CO

ZELMANOVA, F. G. PROCESSES AND PROPERTIES INDEX

Importance of fluorine content in drinking water. F. G. Zelmanova, B. K. Forst and A. I. Shahr. *Hyg. Serv. Sbornik* (Moscow) 1937, No. 4, 3 (English summary, 3); *Dept. Sci. Ind. Research, Water Pollution Research, Summary Current Lit.* 12, 39.—The waters of Lake Imandra were examd. near Khibiny, U. S. S. R., in an effort to trace the cause of nebulae on the dental enamel and friability of the teeth which is a general complaint in the neighborhood. Waste waters from mines working apatite-nephelite ores are discharged into rivers which flow into the lake. 193 analyses showed F contents varying from 0.02 to 0.9 mg. per l. These amounts of F are held to be insufficient to account for the observed conditions. Six % of 4000 children were affected. About half of the children had teeth coated with "ivorylike tarnish" due to a chromogenic fungus and some had calcareous spots resulting from decalcification of the dentine. The last condition is found where the mineral content of the water is insufficient. C. L. H.

14

KRESHKOV, A.P.; YAROVENKO, A.N.; ZEL'MANOVA, I.Ya.

Analysis of salts in nonaqueous solutions. Zhur. anal. khim. 17
no. 7:781-784, 0 '62. (MIRA 15:12)

1. Mendeleev Moscow Chemico-technological Institute.
(Salts)

KRESHKOV, A.P.; YAROVENKO, A.N.; ZEL'MANOVA, I.Ya.

Analysis of mixes of salts and acids by the potentiometric
method in nonaqueous solutions. Zav.lab. 29 no.3:295-298
'63. (MIRA 1612)

1. Moskovskiy khimiko-tekhnologicheskii institut imeni
Mendeleyeva.

(Acids, Organic)
(Potentiometric analysis)
(Salts)

PASETSKIY, V.M., kand. ist. nauk; TRESHNIKOV, A.F., doktor geogr.
nauk, otv. red.; BOYKOVA, A.G., red.; ZEL'MANOVA, L.A.,
red.; RUSAKOVA, G.Ya., red.

[Twelve exploits] Dvenad't' podvigov. Leningrad, Gidro-
meteor. izd-vo, 1965. 320 p. (MIRA 18:10)

RUSIN, Nikolay Petrovich, doktor geogr. nauk; ZEL'MANOVA, L.A.,
red.

[From Havana to "Treasure Island"] Ot Gavana do "Ostrova
Sokrovishch." Leningrad, Gidrometeoizdat, 1964. 161 p.
(MIRA 18:2)

ADAMOV, Pavel Nikolayevich; FREYDZON, A.I., otv. red.; ZEL'MANOVA,
L.A., red.

[Life devoted to a favorite work] Zhizn' otdannaya lyubimomu delu. Leningrad, Gidrometeorologicheskoe izd-vo, 1965. 110 p. (MIRA 19:1)

VOLCHEK, Ol'gerd [Wolczek, Olgierd]; BRYNSKIY, Ye.S. [translator];
KOGAN-BELETSKIY, G.I., kand. tekhn. nauk, nauchn. red.;
ZEL'MANOVA, L.A., red.

[Secrets wrung from heaven. Translated from the Polish]
Tainy pokhishchennye u neba. Leningrad, Gidrometeoizdat,
1965. 167 p. (MIRA 18:8)

USSR/General Problems of Pathology. Neoplasms.

Abs Jour: Ref Zhur-Biol., No 8, 1958, 37372.

Author : Zelmanovich, A.Y.

Inst :

Title : The Present Status of the Problem of Clinic and Diagnosis
of Lung Cancer.

Orig Pub: Zdravookhr. Turkmenistana, 1957, No 3, 11-14.

Abstract: No abstract.

Card : 1/1

183

ZEL'IANOVICH, A. Ya.

Diagnosis of primary cancer of the lungs. Klin. med., Moskva 28:7,
July 50. p. 54-8

1. Of the Faculty Therapeutic Clinic (Director--Prof. A. G. Gukaryan),
Sanitation Faculty of First Moscow Order of Lenin Medical Institute,
Moscow.

GLML 19, 5, Nov., 1950

ZEL'MANOVICH, A. Ya.

Morphologic peculiarities in primary pulmonary cancer. Arkh.
pat., Moskva 13 no.2:69-73 Mar-Apr 1951. (CML 21:1)

1. Of the Department of Pathological Anatomy (Head --
Academician A. I. Abrikosov) and of the Faculty Therapeutic
Clinic (Head -- Prof. A. G. Gukosyan) of the Sanitary-
Hygienic Faculty, First Moscow Order of Lenin Medical
Institute.

ZEL'MANOVICH, A. Ya.

ZEL'MANOVICH, A. Ya. - "Primary Cancer of the Lungs." Sub 15 Dec
52, First Moscow Order of Lenin Medical Inst. (Dissertation
for the Degree of Doctor in Medical Sciences).

CO: Vechernaya Moskva January-December 1952

ZEL'MANOVICH, A. YA.

Zel'manovich, A. Ya.

"The Clinical Aspects and Diagnosis of Primary Cancer of the Lungs."
First Moscow Order of Lenin Medical Inst. Moscow, 1955. (Dissertation for the Degree of Doctor in Medical Science)

So: Knizhnaya letopis', No. 27, 2 July 1955

ZEL'MANOVICH, A.Ya., kandidat meditsinskikh nauk

~~XXXXXXXXXXXXXXXXXXXX~~
All-Russian and All-Union Congresses of Theraputists and their role
in the development of Russian oncology. Terap.arkh. 28 no.8:75-78
'56. (MIRA 10:2)

(ONCOLOGY)

ZEL'MANOVICH, B. M.

"Staphylococci of the skin in the light of modern methods of determining them." Krasnodarsk State Medical Inst. Krasnodarsk, 1956.
(Dissertations for the Degree of Candidate in Medical Science)

So: Knizhaya letopis', No. 16, 1956

ZEL'MANOVICH, B.M.; DOKUCHAYEVA, N.I.

Sensitivity to certain antibiotics of staphylococci isolated in
suppurative surgical diseases. Antibiotiki 5 no. 5:89-91 S-0
'60. (MIRA 13:10)

1. Kafedra mikrobiologii (zav. - prof. V.D. Shtiben), kafedra
gospital'noy khirurgii (zav. - prof. V.F. Glivenko) Krasnoyarskogo
gosudarstvennogo meditsinskogo instituta.
(STAPHYLOCOCCUS) (ANTIBIOTICS)

ZEL'MANOVICH, B.M.; ZAYTSEVA, O.P.; SALEYEVA, N.I.

Sensitivity to antibiotics of strains of *E. coli* isolated from children with dyspepsia. Antibiotiki 5 no.3:120 My-Je '60.

(MIRA 14:6)

1. Kafedra mikrobiologii (zav. - prof. V.D.Shtiben) Krasnoyarskogo gosudarstvennogo meditsinskogo instituta.

(*ESCHERICHIA COLI*)

(ANTIBIOTICS)

(DYSPEPSIA)

SHIKHALIYEV, F.A.; AKILOV, Zh.; ZEL'MANOVICH, G.M.

Flushing slant holes. Izv. vys. ucheb. zav.; neft' i gaz '7 no.5:
27-30 '64. (ME-A 17:9)

1. Azerbaydzhanskiy institut nefti i khimii im. M. Azizbekova.

ZEL'MANOVICH, I.L.

Microstructure and transparency of snowfalls. Trudy GGO
no.100:58-64 '60. (MIRA 13:6)
(Snow) (Visibility)

6.4760

25524

S/108/61/016/008/006/006
D280/D304

AUTHOR: Zel'manovich, I.L.

TITLE: Brilliance discrimination of signals against the background of interference

PERIODICAL: Radiotekhnika, v. 16, no. 8, 1961, 75-80

TEXT: In the present article, the author considers the dependence on the threshold contrast of brilliance discrimination of the signal displayed on a background of interference. In detection of clouds on radars with brightness pips - large diameter light spots of different brightness appear on the screen and if pips from solids and clouds fill the distance between the radar station and the target or if the target is within the cloud, its detection becomes possible only if the contrast between the signals from the target and the background formed by echo-signals from clouds (solid matter) is higher than a certain brilliance threshold of the eye, i.e. the discrimination of the signals reduces to the determination of the threshold "contrast". The contrast K is determined as the difference between the higher and lower brightnesses on the screen induced by the signals from the target and clouds,

Card 1/5

Brilliance discrimination...

25524

S/108/61/016/008/006/006
D280/D304

the difference being referred to the signal pip brightness i.e.

$K = \frac{B - B_b}{B_b}$ (1) . Where B - brightness of the target signal pip,

B_b - the background or cloud signal pip brightness. If the screen radiation were within the Weber-Fechner region and the pips were wider than 30' then the discrimination between targets and interference pips would have been very near the value of the contrast sensitivity of the eye, i.e. $K \approx 0.02$. For very small brilliances as is the actual case, every light spot on the screen should be analyzed from the point of view of quantum interpretation of the sight, i.e. having a certain energy of n quanta required for observation. Owing to the specific working conditions the eyes of radar operators are not fully adapted. The author assumes, therefore, for the human eye a certain coefficient for the number n as given in A.V. Luizov (Ref. 7: "Fluktuatsionnyy predel razreshayushchey sily glaza", Trudy sessii posvyashchennoy pamyati akademika S.I. Vavilova, Oborongiz (1953)). The required number of photons

Card 2/5

Brilliance discrimination... 25524

S/108/61/016/008/006/006
D280/D304

becomes then $n = 4,1 \cdot 10^{10} p_m \vartheta D^2 \delta^2 K^2 B$ (2) where ϑ the ability of the eye to sum the light effect for a given period of time, sec., D - diameter of iris; δ - angular dimensions of the spot on the screen, radians; p_m fraction expressing the absorption coefficient of photons reaching the retina; B - brilliance in apostilbs; K - threshold contrast. The average number of photons n and n_0 actually absorbed by the retina for time ϑ is proportional to brilliance. The threshold contrast is given by

$$K = \frac{1}{2,02 \cdot 10^5 D \delta} \sqrt{\frac{n_0}{p_m \delta B}} \quad (4)$$

to $B=1$ apostilb; for $B > 1$ apost. the threshold contrast K has to be determined as the day sight one according to

$$K = \frac{1}{2,41 \cdot 10^5 \delta D} \sqrt{\frac{n_0}{p_m \delta B}} \quad (5)$$

Card 3/5

where n_0 - the average value of the number of photons required for observing a bright spot. Eq. (4) can be used up

From the energetical theory of sight $K = \frac{(1-\epsilon)\delta_1^2 + \epsilon\delta^2}{\delta^2} \quad (6)$

255211

S/108/61/016/008/006/006
D280/D304.

Brilliance discrimination...

for K is given, where ε - the threshold of contrast sensitivity of the eye; δ_1 - the smallest resolvable angle in radians for contrast K=1:

δ - same for contrast K. The following conclusions are made by the author:

1) To differentiate between the signal and the background of interference, the tube should be worked at high brilliance levels. With this level of the order of 10 apostilbs the required signal level power is 2-4% above the power at the input from interference; 2) The existing practice of decreasing the effect of interference by means of decreasing the gain of the receiver is applicable only in cases when the brilliance of the screen due to interference is near saturation and if the strength of wanted signal is several times higher than that of interference (3-5 times); 3) When using tubes with magnetic focussing to detect signals on the background of interference the power of the input signal required is less by 30-40% than that for electrostatically focussed tubes; 4) To increase the discrimination against an interference background tubes with high indices m are to be used ($m > 3$). There are 3 tables and 14 references: 10 Soviet-bloc and 4 non-Soviet-bloc.

Card 4/5

Brilliance discrimination... 25524

S/108/61/016/008/006/006
D280/D304

The references to the English-language publications read as follows:
C. Mayo, J.W. Head, Wireless Engineer, v. 33, No. 4, 1956 and U. Tiberio,
PIRE, v. 42, No. 12, 1954.

SUBMITTED: April 27, 1959

Card 5/5

S/196/62/000/008/014/017
EO32/E414

3.5150

AUTHORS: Zel'manovich, I.L., Zhuravlev, V.I.

TITLE: The luminance of the sky and the sea, and
illumination during the hours of darkness

PERIODICAL: Referativnyy zhurnal, Elektrotekhnika i energetika,
no.8, 1962, 3, abstract 8V16. (Sb. "Aktinometriya i
atmosfern. optika". L., Gidrometeoizdat, 1961,
133-143)

TEXT: In order to determine the range of visibility of objects
during the hours of darkness it is necessary to know the sky
luminance and the illumination at night. The sky luminance was
measured in the region of Ventpils in different azimuthal
directions (190, 270 and 350°) and at different angles to the
horizon (10, 40, 60 and 90°). In addition, the luminance of the
sea and the illumination in the vertical plane were also measured.
Use was made of a photometer with a caesium-oxide photocell with
correcting light filters which matched the spectral sensitivity
curve of the detector to the spectral curve of antimony-caesium
photocathodes and the eye visibility curve (daytime vision).
Card 1/2

The luminance of the sky ...

S/196/62/000/008/014/017
E032/E414

The results of measurements are presented graphically in the form $E = f(B)$, where E is the horizontal or vertical illumination in equivalent lux and B is the luminance of the sky (or the sea) in equivalent asb.
10 figures, 9 references.

[Abstractor's note: Complete translation.]

Card 2/2

ZEL'MANOVICH, I.L.

Calculating the reflection coefficient. Trudy GGO no.125:27-30
'62. (MIRA 15:6)
(Reflection (Optics))

SHIFRIN, K.S.; ZEL'MANOVICH, I.L.

Light pressure on water droplets. Opt. i spektr. 17 no.1:113-118
Jl '64. (MIRA 17:9)

BRAMSON, M.A.; ZEL'MANOVICH, I.L.; KULESHOVA, G.I.

Radiative capacity of water in the infrared spectral region.
Trudy GGO no.152:31-67 '64. (MIRA 17:7)

L 3870-66 EWT(1) GW
ACCESSION NR: AT5025227

UR/2531/65/000/170/0061/0070

AUTHOR: Shifrin, K. S.; Zel'manovich, I. L.

TITLE: Matrix for calculating the coefficients of backward scattering

SOURCE: Leningrad. Glavnaya geofizicheskaya observatoriya. Trudy, no. 170, 1965, Issledovaniye radiatsionnykh protsessov v atmosfere (Investigation of radiation processes in the atmosphere), 61-70

TOPIC TAGS: electromagnetic wave scattering, backward scattering coefficient

ABSTRACT: The authors give the elements of the matrix necessary for calculating backward scattering. The basic formula for calculating the coefficient of backward scattering was derived by one of the authors in a previous paper (K. S. Shifrin, "On Calculating the Radiation Properties of Clouds", *Trudy GGO*, No 46(108), 1955):

$$k'_p = \pi a^2 K'_p, \quad K'_p = \frac{2}{\rho^2} \operatorname{Re} \left\{ (BC^*) + \sum_{n=1}^{12, 14, 55} \eta_{n,p} \right\} + \frac{1}{2} K_p. \quad (1)$$

Here

$$B = \sum_{i=1}^{\infty} f_i b_i, \quad C = \sum_{i=1}^{\infty} f_i c_i \quad (2)$$

Card 1/3

L 3870-66

ACCESSION NR: AT5025227

$$\eta_{l,m} = x_{l,m} (c_l c_m^* + b_l b_m^*). \quad (3)$$

These formulas considerably simplify the calculations since they express the coefficient of backward scattering in a manner similar to the formula used by Mie for expressing the coefficient of total scattering through the amplitudes of the partial waves b_l and c_l , eliminating calculation of the scattering curve. There are two auxiliary quantities which appear in these formulas: the matrix $x_{l,m}$ and the column f_l . These quantities are defined by the expressions

$$f_l = \begin{cases} 0 \\ \frac{(-1)^{\frac{l-1}{2}} l!}{2^{\frac{l-1}{2}} \left(\frac{l-1}{2}\right)!} \end{cases} \quad (4)$$

$$x_{l,m} = \frac{(m+1)(l+1)}{l(l+1) - m(m+1)} \{ m f_m f_{l-1} - l f_l f_{m-1} \}. \quad (5)$$

Tables are given for these quantities for l up to 100 to seven significant figures. Orig. art. has: 5 formulas, 1 table.

Card 2/3

L 3870-66

ACCESSION NR: AT5025227

ASSOCIATION: Glavnaya geofizicheskaya observatoriya (Main Geophysical Observatory) ³

SUBMITTED: 00

ENCL: 00

SUB CODE: ES ^{44,55}

NO. REF SOV: 001

OTHER: 000

Card ^{mlr} 3/3

ZEL'MANOVICH, M.S., kandidat tekhnicheskikh nauk.

Machine parks for road surfacing operations. Mekh.stroi. 4 no.5:
6-9 My '47. (MLRA 9:2)

1. Lenfifial dorozhnogo mauchno-issledovatel'skogo instituta.
(Road machinery)

ZASHCHEPIN, A.N., kandidat tekhnicheskikh nauk; ~~ZEL'MANOVICH, M.S.,~~
kandidat tekhnicheskikh nauk; LUK'YANOV, N.K., inzhener.

[Over-all mechanization of concrete road construction] Kompleksnaia
mekhanizatsiia stroitel'stva tsementobetonnykh pokrytii. Moskva,
Izd-vo dorozhno-tekhn.lit-ry, 1953. 91 p.

(MIRA 7:2)

(Roads, Concrete)

ZEL'MANOVICH, M.S.

ZEL'MANOVICH, M.S., kandidat tekhnicheskikh nauk

On transverse joints for cement concrete road surfaces. Avt.dor.
17 no.1:17-18 JI-Ag'54. (MLRA 8:10)
(Roads, Concrete)

TELEGIN, M.Ya.; KORSUNSKIY, M.B.p ZHL'MANOVICH, M.S.; ALMESEYEV, A.P.,
redaktor; MAL'KOVA, N.V., tekhnicheskiy redaktor

[Efficiency and life characteristics of flexible road surfaces]
Rabotosposobnost' i mezhremontnye sroki sluzhby nezhestkikh dorozh-
nykh odeshd. Moskva, Nauchno-tekhn. izd-vo avtotransp. lit-ry, 1956.
164 p. (MLBA 9:11)

(Roads)

ZEL'MANOVICH, M.S.

Improving concrete paving processes. Avt.dor. 22 no.8;29-30

Ag '59.

(MIRA 12:11)

(Concrete construction) (Road construction)

ZEL'MANOVICH, M.S., kand.tekhn.nauk

Technology of and equipment for laying cement-concrete pavements.
Stroi.i dor.mashinostr, 5 no.3:20-23 Mr '60. (MIRA 13:6)
(Road machinery)
(Pavements, Concrete)

ZEL'MANOVICH, M.S.

Method of making joints in concrete pavements. Avt. dor. 24
no.7:24 J1 '61. (MIRA 14:7)
(United States--Pavements, Concrete)

CA ZEL'MANOVICH

Nitrogen metabolism in the brain in experimental gas gangrene. M. Sh. Promyslov and R. Ya. Zel'manovich, *Doklady Akad. Nauk S.S.S.R.* 80, 853-4 (1951).—Rabbits injected with toxic dose of *Clostridium perfringens* toxin and killed some 20-30 hrs. later at a stage close to death displayed enhanced cleavage of protein and N-contg. lipides of the brain. The percentage content of lipides in dry brain matter was below normal as was the ratio of lipide N to total N. G. M. Kosolapoff

ZEL'MANOVICH, R.Ya.; GOFMAN, I.L.; KOGANOVSKAYA, S.N.

Comparative effect of antibiotics in vitro on culture of bacteria
from the genus Salmonella. Antibiotiki 4 no.5:88-90 S-0 '59.

(MIRA 13:2)

1. Sanitarno-epidemiologicheskaya stantsiya (glavnyy vrach M.G.
Gilel's) Sverdlovskogo rayona Moskv.
(SALMONELLA pharmacol.)
(ANTIBIOTICS pharmacol.)

ZEL'MANOVICH, R. YA.

PA 241T19

USSR/Medicine - Immunology

Jan 53

"The Significance of Nerve Receptor Activity in the Development of Antitoxic Immunity Against Tetanus,"
R. Ya. Zel'manovich, D. F. Pletsityy, Lab of Immunity,
Inst of General and Exptl Pathol, Acad Med Sci USSR

"Zhur Mikrobiol, Epidemiol, i Immunobiol" No 1,
pp 69-71

Investigation of the comparative effectiveness of active immunization of rabbits with tetanus anatoxin introduced intravenously, subcutaneously, or intramuscularly showed that intramuscular injection is the most effective. Apparently processes due to the action of the anatoxin on muscle receptors are of importance in producing immunity.

241T19

SKVIRSKAYA, Ye.A.; ZEL'MANOVICH, R.Ya.

Role of the nervous system in the course and the outcome of
gas gangrene in guinea pigs. Trudy Inst. norm. i pat. fiziol.
AMN SSSR no.1:100-109 '58 (MIRA 16:12)

1. Iz laboratorii gistopatologii nervnoy sistemy (zav. - prof.
M.L.Borovskiy) i laboratorii infektsionnoy patologii (zav. -
chlen-korrespondent AMN SSSR, prof. A. Ya. Alymov) otдела
obshchey i eksperimental'noy patologii (zav. - akademik A.D.
Speranskiy) Instituta normal'noy i patologicheskoy fiziolo-
gii AMN SSSR.

LITINSKIY, Yu.I.; KAGANOVSKAYA, S.N.; ZHL'MANOVICH, R.Ya.; TKACHENKO,
A.M.

Exact determination of serotypes of Salmonellas in the district
laboratory. Lab.delo 6 no.3:39-41 Ky-Je '60, (MIRA 13:7)

1. Sanitarno-epidemiologicheskaya stantsiya (glavnyy vrach
M.G. Gilel's) Sverdlovskogo rayona, Moskva.
(SALMONELLA)

ZEL'MANOVICH, R.Ya.; GOFMAN, I.L.

Comparative effects of antibiotics on cultures of pathogenic *Escherichia coli* in vitro. Antibiotiki 6 no.3:281-282 Mr '61. (MIRA 14:5)

1. Sanitarno-epidemiologicheskaya stantsiya (glavnyy vrach M.G. Gilel's) Sverdlovskogo rayona Moskva.
(*ESCHERICHIA COLI*) (ANTIBIOTICS)

CS

Electrolytic chlorination of ores and concentrates of nonferrous metals. V. A. Zel'manovich. Russ. 50,635, Apr. 30, 1941. The material is chlorinated in the anode space of an electrolytic cell with a soln. of a chloride, e. g., NaCl as electrolyte.

7

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

FROM DIVISION

ZELMANOVITCH, A.

"Donnees de statistique sur le cancer primaire du pounon et des bronches"
Zelmanovitch, A. (p. 42)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) ~~1940~~ 1940, Volume 18, no. 1

ZEL'MANOVSKIY, P.

Control over the expenditure of funds in the form of service
awards to workers. Bukhg.uchet 15 no.9:12-13 S '56. (MLRA 9:11)
(Wages) (Rewards (Prizes, etc.))

ZEL'MANOVSKIY, P.

ZEL'MANOVSKIY, P.

Regulate control and inspection work in regional economic councils
of economic administrative regions. Bukhg.uchet 14 [i.e.16] no.9:17-19
'57.

(MIRA 10:10)

(Auditing)

ZEL'MANOVSKIY, P.

Business accounting in a workshop of the plant. Fin.SSSR 21
no.6:68-70 Je '60. (MIR' 13:6)
(Sverdlovsk—Metallurgical plants--Finance)

ZEL'MANZON, M. Ye.

Groups in which all subgroups are cyclic. Usp. mat. nauk 16 no.2:
109-113 Mr-Apr '61. (MIRA 14:5)

(Groups, Theory of)

ZELMANSON, M.Ye. (Taganrog)

Groups in which all subgroups are metabelian. Ukr. mat. zhur.
17 no.3:67-73 '65. (MIRA 18:6)

ZELMEN, V. N.

USSR/Organic Chemistry. Synthetic Organic Chemistry.

E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19149

Author : Zelmon V. N., Vanag G. Ya.,

Inst :

Titlo : 4-Nitro-2-phenylindandione-1,3.

Orig Pub: Dokl. AN SSSR, 1956, 109, No 3, 535-536.

Abstract: At the condensation of 3-nitrophthalino anhydride (I) with $C_6H_5CH_2COOH$ (II) a compound is formed (III), probably 7-nitro-3-benzalpthalido, which by the action of CH_3ONa isomerizes into 4-nitro-2-phenylindandione -1,3 (IV). 27 g. of II, 35.5 g. of I and 1 g. of anhydrous CH_3COONa are quickly heated to 200° , 1-3 cc of water is distilled off, cooled, poured in 150 cc of alcohol, the precipitate is treated with hot water, and III, melting at $153-154^\circ$ (from ice-cold CH_3COOH) yield 22.4% is obtained. 5 g. III in 25 cc of CH_3OH and 50 cc 3% solution

Card : 1/2

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R001964410011-4

USSR/Organic Chemistry. Synthetic Organic Chemistry.

E-2

Abs Jour: Ref Zhur-Khimiya, No 6, 1957, 19149

of CH_3ONa are heated until they are dissolved, to the filtrate is added and conc. HCl and 4.7 g. IV, m.p. $131-133^\circ$ (decomp.; from ice-cold CH_3COOH), yield 94% is obtained. Phenylhydrazone, m.p. $183-184^\circ$; semicarbazone, m.p. $229-230^\circ$; anil, m.p. $240-241^\circ$ (all decomp.; from ice-cold CH_3COOH).

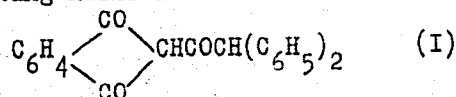
Card : 2/2

ZELMEN, V.N.; VANAG, G.Ya.

Reaction of 1-chloro-3-nitro-4-oxyisoquinoline with ammonia.
Zhur.ob.khim. 27 no.5:1353-1358 My '57. (MLRA 10:8)

1.Institut khimii Akademii nauk Latvyskoy SSR.
(Isoquinoline)

AUTHORS: Ozol, Ya.K., Zelmen, V.N., Vanag, G. Ya. SOV/79-28-11-40/55
TITLE: 2-Diphenyl-Acetyl-Indandione-1,3 (2-Difenilatsetilindandion-1,3)
PERIODICAL: Zhurnal obshchey khimii, 1958, Vol 28, Nr 11, pp 3083-3085 (USSR)
ABSTRACT: Of late scientists became interested in the 2-substituted indandione-1,3 because of their physiological activity. According to data in publications some of them show an antibacterial, others an insecticide activity. The 2-phenyl-indandione is an active preparation against blood coagulation and is already used in medicine. The 2-diphenyl-acetyl-indandione-1,3 (I) is still more efficient. It differs from other traditional blood anticoagulants (e.g. dicumarol, phenyl-indandione) by the fact that already in smaller doses it causes a considerable decrease of the prothrombin level of the blood. Besides, it was found that the diphenyl-acetyl-indandione is a valuable means in fighting harmful rodent.



Card 1/2

Compound (I) was synthesized by the condensation of the dimethyl

2-Diphenyl-Acetyl-Indandione-1,3

SOV/79-28-11-40/55

phthalate with diphenyl acetone. It is separated from acetone in good crystals that melt at 146-147°. The crystals are of prismatic nature (Figure). The goniometric data of the crystals are given in the table.-There are 1 figure, 1 table, and 2 Soviet references.

ASSOCIATION: Institut khimii i Institut organicheskogo sinteza Akademii nauk Latviyskoy SSR (Institute of Chemistry and Institute of Organic Synthesis of the Academy of Sciences, Latviyskaya SSR)

SUBMITTED: October 30, 1957

Card 2/2

VANAG, G.[Vanags, G.] (Riga); ZELMEN, V.[Zelmene, V.](Riga)

Some 4-nitro-2-phenyl-indandione-1,3 derivatives. Vestis Latv ak
no.9:103-108 '60. (EEAI 10:9)

1. Akademiya nauk Latvyskoy SSR, Institut organicheskogo sinteza.

(Nitro phenylindandione)

ZHAGAT, R.[Zagats, R.]; ZELMEN, V.[Zelmene, V.]; VANAG, G.[Vanags, G.]

Improved method for obtaining bindone. Vestis Latv ak no.6:71-76
'61.

1. Akademiya nauk Latvyskoy SSR, Institut organicheskogo sinteza.

(Bindone)

ZELMEN, Z.

Some new chloromercurifurane¹ S. Hillers and Z. Zel-
 mens, *Letsija PSR Zinaiia Akad. Vses* 1958, No. 11,
 87-101 (in Russian).—5-Chloromercuri-2-methoxyfurfural,
 m. 88-9° (EtOH) (decompn.), 5-chloromercuri-2-aceto-
 furan (I), m. 142° (decompn.), and 5-chloromercuri-2-
 methylmercaptofuran, m. 89°, were prepd.; the semicar-
 bazone of I m. 118° (decompn.).

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