

TRACZYK, Jan, dr inż.; ZOLCINSKI, Artur, mgr.

Preliminary considerations on the mutual influence of the stages in axial compressors. Inst lotn prace no.19:13-19'63.

KOLARZYK, Jerzy, mgr inż.; ZOLCINSKI, Artur, mgr inż.

Transonic compressors. Inst lotn prace no.19:3-12 '63.

Important losses of nitrogen in decay and humification of red clover. *J. Agric. Sci. Camb.* 1930, 258-261 (1932) (in German). Expts. on the humification of red clover under controlled conditions show that while the residue progressively increases in percentage of total and albuminoid N, there is an abs. loss of N which may amount to 14% in 2 weeks. This loss is believed to occur as free N, since nitrate and nitrite formation could not be demonstrated, and there was no loss in P₂O₅. The C:N ratio in the final product of humification is nearly the same as that in humus expd. from soils. Humification of plant residues is not to be considered solely biol.; physicochem. processes also play a part.

AS 4-314 METALLURGICAL LITERATURE CLASSIFICATION

ZOLCINSKI, Z.

The role and participation of Polish State Railroads in international communication. p. 68. PRZEGLAD KOLEJOWY, Warszawa. Vol. 8, no. 2, Feb. 1956.

SOURCE:

East European Accession List (EEAL) Library of Congress
Vol. 5, no. 8, August 1956.

HUNGARY

ZOLCZER, Laszlo, Dr, KAZAR, Gyorgy, Dr, MANNINGER, Jeno, Dr; National Institute of Traumatology (director: SZANTO, Gyorgy, Dr, professor) (Orszagos Traumatologiai Intezet).

"Bilateral Fracture of the Femoral Neck and Unilateral Pertrochanteric Fracture in a Patient with Parkinson's Disease."

Budapest, Magyar Traumatologia, Orthopaedia es Helyreallito Sebeszet, Vol IX, No 3, Jul 66, pages 181-185.

Abstract: [Authors' English summary modified] Fracture of the femoral neck on the left, 4 years later the same injury on the right and, after another year, a pertrochanteric fracture on the left was sustained by a 57 year old woman patient with Parkinson's disease. On the basis of the clinical features, the radiological examination and venographic studies, the transient importance of the vessel of the ligamentum teres is pointed out, on one hand, and new data are presented to verify the identical tendencies of healing in the case of bilateral fractures of the femoral neck, on the other hand. Finally, on the basis of the course of recovery of the fractures, nailing of the femoral neck is recommended in the case of Parkinson's disease as well. It is considered to be important, however, that the intervention be accompanied by a primary Voss' operation.
1 Hungarian, 4 Western references.

1/1

KULCSAR, Andor, dr.; MADOR, György, dr.; ZOLCZER, László, dr.;
FARAGO, István, dr.; MOLNAR, Edit, dr.

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

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

(BRAIN, wounds & inj.

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

ZOLCZER, László, dr.; ZOLTAN, János, dr.

Extensive injury of the forehead. *Magy. sebészet* 10 no.1:
14-19 Mar 57.

1. Az Országos Traumatológiai Intézet Közleménye Igazgató:
Kudász, József, dr. egyetemi tanár.

(HEAD, wounds & inj.

extensive inj. of temporal bone with cerebral prolapse &
open fract., recovery after plastic surg. (Hun))

HOMONNAY, Gyorgyne; ZOLD, Andras

Cooling temperature bridge of Budapest. Hulet, Hapeszet 12
no.6:237-240 D'63.

(2)

5. The effect of ions on the density of water in an aqueous solution of electrolytes -- *Ad brack kerdin a az elytralyte oldkordalak vites oldalakban* -- S. Lengyel, E. Góth and M. Árkai (Hungarian Journal of Chemistry -- *Magyar Kémiai Folyóirat* -- Vol 54 1952 No 11, pp 138-150, 12 figs, 14 tabs)

Hungarian Technical Abst.
 1953

The fact that ions increase the density of water in their environment can be inferred from the changes in volume occurring when dissolving electrolytes in water. A 2 to 3% increase in the density of water may be observed at a distance of 3 to 4 Å from the centre of the ion. Changes in the density of the water surrounding the ion can be established as a function of the distance measured from the centre of the ion. The validity of the mathematical calculation obtained in this manner was investigated for Li^+ , Na^+ , K^+ , Rb^+ , Cs^+ , SO_4^{2-} , NO_3^- , F^- , Cl^- , Br^- and J^- ions. It was proven that the water density increasing effect of the positive ions increased in proportion to the increase in valence. The effect of the alkali metal ions is roughly the same. The effect of sodium and potassium ions is considerable up to the limit of a 5 to 6 Å radius sphere and can even be observed at a radius of 20 Å, while the effect is somewhat less in the case of lithium. In the event of negative ions no equivalent correlations could be found between the radius of the ions and the density of water. It could be established however in a general sense, that the effect decreased in proportion to the increase of the radius of the ions.

- D. Vardany

ZÖLD, E.

Hungarian

CA: 47:10966

with S. LENGYEL, D. DOBOS, AND M. DÉRY

Tech. Univ., Budapest

"Effect of ions on the density of water in aqueous solutions of electrolytes."

Acta Chim. Acad. Sci. Hung. 3, 13-45 (1953) (English summary)

ZOLD, F. KISS, L.

The zinc-silver accumulator; a preliminary communication. p. 93.

(Magyar Kemiai Folyoirat. Vol. 63, no. 2/3, Feb./Mar. 1957. Budapest, Hungary)

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

ZOLD, E.

HUNGARY/Chemical Technology - Chemical Products and Their H-12
Application, Part 2. - Electrochemical Industries,
Electroplating, Chemical Sources of Electric Current.

Abs Jour : Ref Zhur - Khimiya, No 14, 1958, 47396

Author : Erno Zold, Laszlo Kiss

Inst : -

Title : Silver-Zinc Storage Cell.

Orig Pub : Magyar kem. folyoirat, 1957, 63, No 12, 334-338

Abstract : The Ag-Zn storage cell SH-12 is described. Its capacity
is 12 ampere x hours and its specific energy is 220 watts
per liter and 90 watts per kg.

Card 1/1

11.651
S/196/63/000/001/003/035
E021/E155

26.252.1

AUTHORS: Kiss, László, and Zöld, Ernő

TITLE: A method for preparing a silver-zinc cell

PERIODICAL: Referativnyy zhurnal, Elektrotehnika i energetika, no.1, 1963, 21, abstract 1 A 133 P. (Hung. pat. cl.21b, 6-14, no.148761, December 15, 1961)

TEXT: A simplified method of preparing cell electrodes is patented. Alloy sheets cut to size are assembled in a cell. 80 g of zinc powder containing 99.8% Zn is charged into a corundum crucible. 20 g of silver powder with $\geq 99.5\%$ Ag are then added to decrease the evaporation loss. After this, the crucible is heated in an argon or nitrogen atmosphere until the metal is melted. It is mixed with a corundum stirrer. The cooled alloy is rolled to the required thickness with periodic heating to prevent formation of cracks. The positive electrode made in this way contains 3 - 34% Zn and the negative 3 - 37% Ag. During formation, the Zn in the positive electrode is dissolved and the Ag remaining has a spongy structure: the Ag in the negative electrode takes no part

Card 1/2

A method for preparing a silver-zinc... S/196/63/000/001/003/035
E021/E155
in the reaction. It forms the base of the electrode. The
proposed method is suitable for mass production.
[Abstractor's note: Complete translation.]

Card 2/2

X

ZOLDANI, Z.

GEOGRAPHY & GEOLOGY

PERIODICAL: KWARTALNIK GEOLOGICZNY Vol. 2, no. 3, 1958

BRZOZOWSKA, M.: ZOLDANI, Z. Remarks on the stratigraphic range of some type of Carboniferous megaspores. p. 515.

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 5
May 1959, Unclass.

JACHOWICZ, Aleksander; ZOLDANI, Zofia

A note on the carboniferous microflora from the bore hole "Zabrak".
Kwartalnik geol. 4 no. 3:662-666 '60.

1. Główny Biuro Programowej Kwartalnika Geologicznego (for Jachowicz)
2. Górnoślaska Stacja Instytutu Geologicznego w Warszawie.

7 7 7
Chemical transformation of gases by simple discharge
at low pressure. K. A. Schuler and J. H. P. [?]
[?]

ZOLDI, Istvan

Mechanization of fruit and vegetable growing. Muzs elet 19 no.22:
13 22 0 '64.

HOLDI, Istvan

Foreign-manufactured machines at the National Agricultural
Exhibition. Muzs. élet. 19 no. 1951 10 3 '54

HUNGARY / Farm Animals. General Problems.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7283

Author : Kallai, Laszlo; Muhlrad, Andras; Zoldy, Miklos;
Kovacs, Jozsef; Bernus, Janos

Inst : Not given

Title : The American Artichoke (*Melianthus tuberosus* L.) as a Feeding Agent. 3. The Effect of the Carbohydrates of Artichoke Tubers on the *in vitro* Function of Intestinal Microorganisms

Orig Pub : Allattenyesztes, 1957, 6, No 2, 169-176

Abstract : As a result of biochemical investigations in which the method of an "artificial rumen" was applied, the authors established that the carbohydrates of the American artichoke (inulin and fructoso) influence the vital activity of the microorganisms of the rumen more

Card 1/2

HUNGARY / Farm Animals. General Problems.

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 7283

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065320019-3

favorably, represent more abundant sources for energy in the synthesis of carbamide [*urca*] and decomposition of cellulose than carbohydrates which are predominant in potatoes or in forage feeds (starch, glucose). --
B. A. Kanzyuba

Card 2/2

8/081/62/000/021/055/069
B149/B101

AUTHORS: Laschober, Ernő, Zöldi, Miklós
TITLE: Manufacture of aluminum oxide insulators
PERIODICAL: Referativnyy zhurnal. Khimiya, no. 21, 1962, 337, abstract
21K253 (Hung. patent, 148251, September 30, 1961)

TEXT: Al_2O_3 insulators as used in radio engineering industry, e.g. for heated electron tube cathodes, occasionally suffer breakdowns at high temperatures on account of impurities in the Al_2O_3 . The authors found that small admixtures of Mo (0.1 - 2%) formed complexes with the impurities and improved the insulating qualities of the product. As the coloring becomes somewhat darker the heat radiating capacity of the surface is increased. Mo can be introduced either as a powder in the ordinary process of milling, or by covering it on the grains of the ceramic mass or on the surface of the shaped articles by evaporating a Mo-containing compound in vacuo. Further treatment of the articles follows the usual course. During baking, Mo diffuses into the surface layer of the articles and creates a well insulating film. [Abstracter's note: Complete translation.]
Card 1/1

ZOLDY, Pal, dr.

Repeated screening procedures in the Sumeg District (1958, 1960).
Tuberkulozis 15 no.4:111-114 Ap '62.

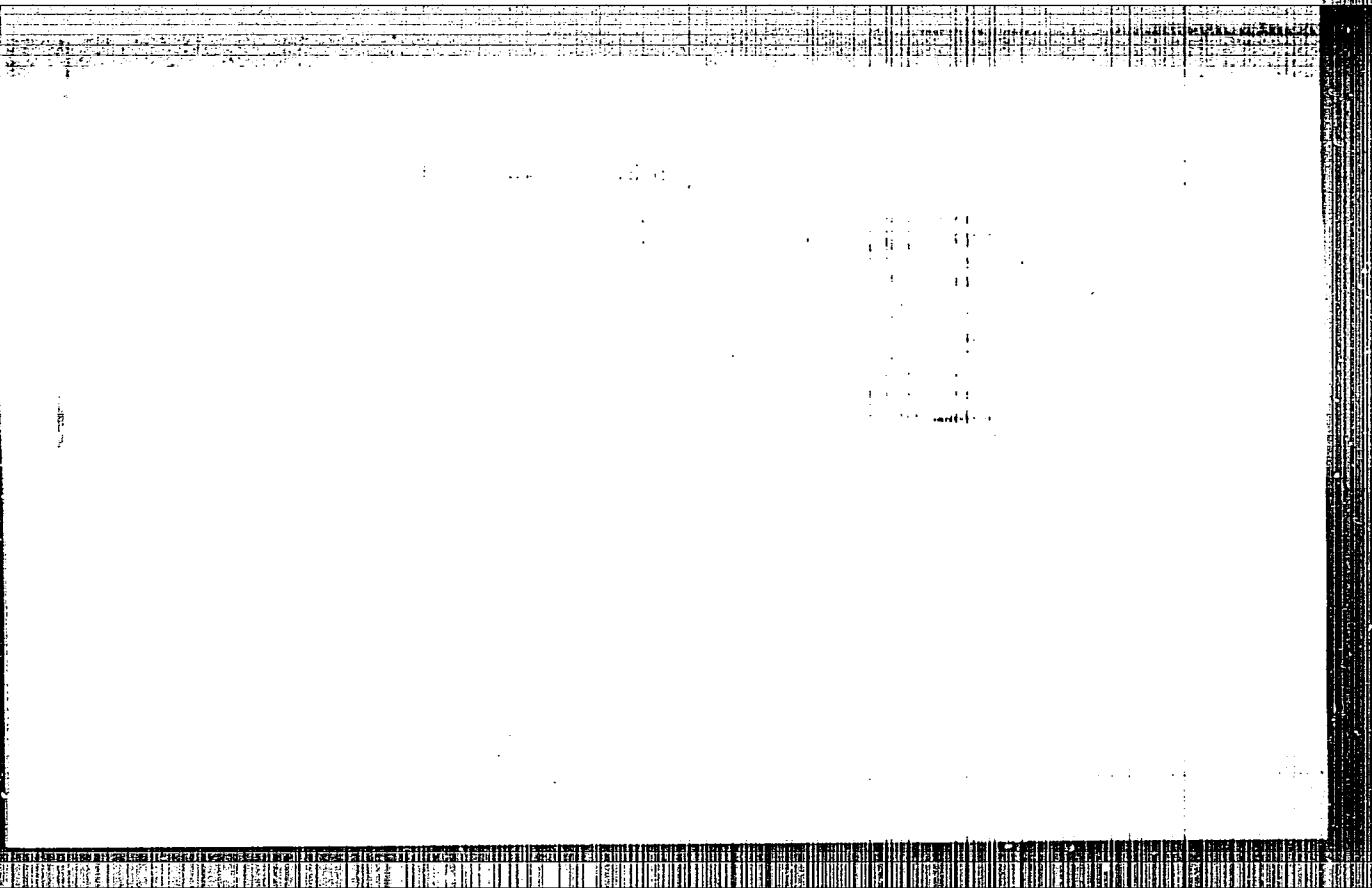
1. A Sumegi Jarasi Tanacs Tbc Gondoza Intezetenek (vezeto foorvos:
Zoldy Pal dr.) kozlemenye.

(TUBERCULOSIS prev & control)

KWIECINSKI, Lucjan, dr.; ZOLEDZIOWSKI, Wojciech, inż.

Application of petrochemical raw materials in agricultural chemistry; pentane fractions as starting raw material for the synthesis of new insecticides. Nafta Pol 18 no.6:161-163 Je '62.

1. Instytut Przemysłu Organicznego, Warszawa.



ZOJEDZTOWSKI, W.

Borosilicate glass for laboratory equipment in Poland.

p. 65 (Szklo I Ceramika. Vol. 8, no. 3, Mar. 1957. Warszawa, Poland)

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

ZOLEDZIEWSKI, S.

First mobile laboratory for routine testing of the insulation for high voltage. p. 28.

PRACE, Vol. 4, No. 10, 1954, Warsaw, Poland.

SO: East European Accessions List, Lib. of Cong., Vol. 5, No. 10, Oct. 1956.

"APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065320019-3

APPROVED FOR RELEASE: 03/15/2001 CIA-RDP86-00513R002065320019-3"

ZOLEI, Istvan

The 435 MHz receiver. Radiotechnika 10 no.8:236
Ag '60.

ZOLENKOVA, Ye.G.; NIKITINA, G.M.

Data on the orientation reflex in the early postnatal stage of the lower apes. Zhur. vys. nerv. deiat. 9 no.6:858-864, N-D '59.

(MIRA 13:9)

1. Laboratory of Comparative Ontogenesis of the Nervous System,
Institute of Normal and Pathological Physiology, U.S.S.R. Academy
of Medical Sciences, Moscow.

(ORIENTATION)

(INFANTS (NEWBORN))

ZOLENKOVA, Ye.G.; NIKITINA, G.M.

Formation and development of conditioned defensive reflexes in the young of lower monkeys, Zhur. vys. nerv. deiat. 10 no.2:207-216
Mr-Apr '60. (MIRA 14:5)

1. Laboratory of Comparative Ontogenesis of the Nervous System,
Institute of Normal and Pathological Physiology, U.S.S.R. Academy
of Medical Sciences, Moscow.

(CONDITIONED RESPONSE)

ZOLENKOVA, Ye.G.; MIRTOVA, L.M.

Functional and structural features of the cerebral cortex in
trauma during ontogenesis. Zhur. vys. nerv. delat. 10 no. 1:10-
19 Ja-F '60. (MIRA 14:2)

1. Laboratory of Comparative Ontogenesis of the Nervous System,
Institute of Normal and Pathological Physiology, U.S.S.R. Academy
of Medical Sciences, Moscow.

(CEREBRAL CORTEX--WOUNDS AND INJURIES)
(CONDITIONED RESPONSE)

ZOLETNIK, Sandor

Forgeable, pressable machine parts. Gepgyartastechn 2 no.11:
403-406 N '62.

1. GANZ-MAVAG.

ZOLIA, C., ing.; GHITESCU, D., ing.

Some economical problems connected with the design of heating
batteries made of little winged tubes. Rev constr si mat
constr 16 no. 4:190-193 Ap'64

ZOLIN, A.D.; POLYAKOV, V.A.

OPSh-30 hydraulic press for punching and compressing tires. Kauch.
i rez. 19 no.9:41-43 S '60. (MIRA 13:10)

1. Nauchno-issledovatel'skiy institut shinnoy promyshlennosti.
(Tires, Rubber--Testing)

39832
S/044/62/000/007/027/100
C111/C222

16.2500

AUTHOR: Zolin, A.F.

TITLE: On the approximative solution of boundary value problems for equations of elliptic type

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 51, abstract 7B249. ("Tr. 1-y Nauchn. konferentsii matem. kafedr ped. in-tov Povolzh'ya, 1960", Kuybyshev, 1961, 61-65)

TEXT: In the domain Ω with the piecewise smooth boundary Γ the Dirichlet problem is approximately solved for the equation of elliptic type

$$\frac{\partial^2 U}{\partial x^2} + \frac{\partial^2 U}{\partial y^2} + a(x, y) \frac{\partial U}{\partial x} + b(x, y) \frac{\partial U}{\partial y} + c(x, y) U = f(x, y),$$

for the boundary condition

$$U|_{\Gamma} = \varphi(s)$$

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On the approximative solution ...

where $\Gamma \in C(p)$, $\varphi \in C(p)$, $a, b, c, f \in C^{p-2}$, $p \geq 3$.

It is proved :

1) There exists a unique polynomial U_n which optimally approximates the rigorous solution of the considered problem in the metric $\int (U, v) = \int U - v$;

2) the polynomials U_n converge for $n \rightarrow \infty$ to the rigorous solution uniformly in every closed domain entirely lying in Ω ;

3) in every closed domain entirely lying in Ω there holds uniformly the estimation

$$|U - U_n| = O\left(\frac{\ln n}{n^{p-2}}\right)$$

where the polynomial $U_n(x, y)$ satisfies the condition

$$\mu(U_n) = \min_{P_n} \mu(P_n), \mu(P_n) = \int (U, P_n).$$

$$P_n(x, y) = \sum_{i, k=0}^n a_{ik} x^i y^k.$$

Card 2/3

On the approximative solution ...

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It is pointed to the fact that the given method of solution can be used for the solution of boundary value problems for equations of elliptic type and of higher order.

[Abstracter's note : Complete translation]

f

Card 3/3

ZOLIN, A.F.

One method of approximate conformal mappings. Izv. vya. ucheb. zav.:
mat. no.4:101-105 '60. (MIRA 13:10)

1. Melekesskiy gosudarstvennyy pedagogicheskiy institut.
(Conformal mappings)

88180

/6.3800

S/140/60/000/006/006/018
C111/C222

/6.4600

AUTHOR: Zolin, A.F.

TITLE: The Application of Polyharmonic Polynomials for the Solution of Boundary Value Problems for the Polyharmonic Equation

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1960, No. 6, pp. 82 - 92

TEXT: The paper treats the approximate solution of the boundary value problems

$$(2) \quad U|_{\Gamma} = f_0(s), \quad \frac{\partial U}{\partial \nu}|_{\Gamma} = f_1(s), \dots, \quad \frac{\partial^{p-1} U}{\partial \nu^{p-1}}|_{\Gamma} = f_{p-1}(s)$$

and

$$(3) \quad U|_{\Gamma} = \varphi_0(s), \quad \Delta U|_{\Gamma} = \varphi_1(s), \dots, \quad \Delta^{p-1} U|_{\Gamma} = \varphi_{p-1}(s)$$

for the polyharmonic equation

$$(1) \quad \Delta^p U = \sum_{\substack{\alpha, \beta=1, p \\ \alpha+\beta=p}} \frac{p!}{\alpha! \beta!} \frac{\partial^{2p} U}{\partial x^{2\alpha} \partial y^{2\beta}} = 0$$

Card 1/7

88180

S/140/60/000/006/006/018
C111/0222

The Application of Polyharmonic Polynomials for the Solution of Boundary Value Problems for the Polyharmonic Equation

The f_i and ψ_i are assumed to be continuous on Γ ; Γ consists of finitely many piecewise smooth arcs and bounds a simply connected region Ω ; ν is the direction of the exterior normal of Γ . The approximate solutions are sought in the form

(4)
$$U_{pn} = \sum_{i=0}^{p-1} \sum_{j=0}^n \rho^{i+2j} (a_{ij} \cos i\theta + b_{ij} \sin i\theta)$$

where ρ, θ are polar coordinates of the point, and a_{ij}, b_{ij} are constants. At first it is proved that the boundary conditions (2) can be replaced by the equivalent conditions

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C111/C222

The Application of Polyharmonic Polynomials for the Solution of Boundary Value Problems for the Polyharmonic Equation

for p - even

for p - odd

$$U|_{\Gamma} = \Psi_0(s),$$

$$U|_{\Gamma} = \Psi_0(s),$$

$$\frac{\partial U}{\partial \nu}|_{\Gamma} = \Psi_1(s),$$

$$\frac{\partial U}{\partial \nu}|_{\Gamma} = \Psi_1(s),$$

$$\Delta U|_{\Gamma} = \Psi_2(s),$$

$$\Delta U|_{\Gamma} = \Psi_2(s),$$

(2')

$$\Delta^{\lfloor \frac{p-1}{2} \rfloor} U|_{\Gamma} = \Psi_{p-2}(s),$$

$$\frac{\partial \Delta^{\frac{p-3}{2}} U}{\partial \nu} = \Psi_{p-2}(s)$$

$$\frac{\partial \Delta^{\lfloor \frac{p-1}{2} \rfloor} U}{\partial \nu}|_{\Gamma} = \Psi_{p-1}(s),$$

$$\Delta^{\frac{p-1}{2}} U|_{\Gamma} = \Psi_{p-1}(s),$$

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C111/C222

The Application of Polyharmonic Polynomials for the Solution of Boundary Value Problems for the Polyharmonic Equation

where $\psi_j(s)$ are certain functions which can be explained by the $f_1(s)$, and $[A]$ means the largest integer contained in A . Then the metric is chosen in which the strong solution of (1)-(2') shall be approximated by (4). The set of all regular (cf. (Ref. 2)) polyharmonic functions defined on Ω becomes a Hilbert space by introducing the scalar product

$$(5) \quad (u, v) = \sum_{k=0}^{\lfloor \frac{p-1}{2} \rfloor} \int_{\Gamma} \left(\Delta^k u \Delta^k v + \frac{\partial \Delta^k u}{\partial \nu} - \frac{\partial \Delta^k v}{\partial \nu} \right) ds$$

where the prime means that for an odd p the last summand is missing, and the norm

$$(8) \quad \|u\|^2 = \sum_{k=0}^{\lfloor \frac{p-1}{2} \rfloor} \int_{\Gamma} \left[(\Delta^k u)^2 + \left(\frac{\partial \Delta^k u}{\partial \nu} \right)^2 \right] ds$$

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S/140/60/000/006/006/018
C111/C222

The Application of Polyharmonic Polynomials for the Solution of Boundary Value Problems for the Polyharmonic Equation

The distance between the elements u and v is the norm of its difference:

$$(9) \quad \zeta^2(u, v) = \|u - v\|^2 = \sum_{k=0}^{\lfloor \frac{p-1}{2} \rfloor} \int \left[(\Delta^k u - \Delta^k v)^2 + \left(\frac{\partial \Delta^k u}{\partial y} - \frac{\partial \Delta^k v}{\partial y} \right)^2 \right] ds.$$

Theorem 1 : The set of polyharmonic polynomials (4) is closed in the space H in the sense of the metric (9). A polyharmonic polynomial (4) of degree $n + 2(p-1)$ in x, y with the property that $\|U - u_{pn}\|^2 = \zeta^2(U, u_{pn})$ becomes a minimum, where U is the strong solution, is chosen as an approximate solution of (1)-(2').

Let this polynomial be

$$(12) \quad Q_{pn} = \sum_{j=0}^{p-1} \sum_{i=0}^n \zeta^{i+2j} (\alpha_{ij} \cos i\theta + \beta_{ij} \sin i\theta).$$

Then the $(2n+1)p$ parameter α_{ij}, β_{ij} must be found from the following
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S/140/60/000/006/006/018

C111/C222

The Application of Polyharmonic Polynomials for the Solution of Boundary Value Problems for the Polyharmonic Equation

(2n + 1) p algebraic equations :

$$(13) \quad \frac{\partial \|v - u_{pn}\|^2}{\partial a_{ij}} = 0 \quad \frac{\partial \|v - u_{pn}\|^2}{\partial b_{ij}} = 0$$

$$\left(\begin{array}{l} i = \overline{0, n}, \\ j = \overline{0, p-1} \end{array} \right), \quad \left(\begin{array}{l} i = \overline{1, n}, \\ j = \overline{0, p-1} \end{array} \right).$$

Theorem 2 : The algebraic system (13) has a unique solution, i.e. there exists a single polyharmonic polynomial (12) of degree $n + 2(p-1)$ which yields a best approximation in the sense of the above metric.

Theorem 3 : For $n \rightarrow \infty$, the best polynomial Q_{pn} converges uniformly to the strong solution of the considered problem in Ω .

The problem (1)-(3) is treated with the same scheme, but the scalar product is defined by (17), and the norm is defined by (19).

Card 6/7

88180

S/140/60/000/006/006/018
C111/C222

The Application of Polyharmonic Polynomials for the Solution of Boundary Value Problems for the Polyharmonic Equation

There are 6 references : 4 Soviet and 2 French.

[Abstracter's note : (Ref. 2) concerns I.N. Vekua, New Methods for Solving Elliptic Equations, 1948]

ASSOCIATION: Melekesskiy pedagogicheskiy institut
(Melekess Pedagogical Institute)

SUBMITTED: October 14, 1958

Card 7/7

ZOLIN, A.F.

Mean convergence of trigonometric interpolation polynomials.
Dokl. AN Uz. SSR no.2:17-22 '58.

(MIRA 11:5)

1. Institut matematiki i mekhaniki im. V.I. Romanovskogo
AN UzSSR. Predstavleno akad. AN UzSSR T.A. Sarymsakovym.
(Convergence) (Trigonometric functions)

AUTHOR: Zolin, A.F.

SOV/20-122-6-4/49

TITLE: On the Approximative Solution of the Polyharmonic Problem
(O priblizhenom reshenii poligarmonicheskoy zadachi)

PERIODICAL: Doklady Akademii nauk, SSSR, 1958, Vol 122, Nr 6, pp 971-973 (USSR)

ABSTRACT: The author considers the boundary value problem

$$(1) \quad \Delta^p U = \sum_{\substack{\alpha, \beta=0, p \\ \alpha+\beta=p}} \frac{p!}{\alpha! \beta!} \frac{\partial^{2p} U}{\partial x^{2\alpha} \partial y^{2\beta}} = 0$$

$$(2) \quad U|_{\Gamma} = f_0(s), \quad \frac{\partial U}{\partial \nu}|_{\Gamma} = f_1(s), \dots, \quad \frac{\partial^{p-1} U}{\partial \nu^{p-1}}|_{\Gamma} = f_{p-1}(s)$$

where Γ is the piecewise smooth boundary of the domain Ω .
As approximating functions the author uses polyharmonic polynomials in polar coordinates

$$u_{pn} = \sum_{\substack{i=1, p \\ j=0, n}} S^{2(i-1)+j} (a_{ij} \cos j\theta + b_{ij} \sin j\theta)$$

Card 1/2

On the Approximative Solution of the Polyharmonic Problem SOV/CO-122-6-4/49

The set of all regular [Ref 2] polyharmonic functions defined in Ω is made an Hilbert space by introducing the scalar product. The approximating polynomial is chosen so that in the metric of the Hilbert space $\|U - u_{pn}\|^2$ becomes a minimum. It is proved that for $n \rightarrow \infty$ the approximating sequence uniformly converges to the exact solution of the problem.

There are 5 references, 4 of which are Soviet, and 1 is French.
ASSOCIATION: Institut matematiki i mekhaniki imeni V.I. Romanovskogo
Akademii nauk Uz SSR (Institute for Mathematics and Mechanics
imeni V.I. Romanovskiy, Academy of Sciences Uzbek SSR)
PRESENTED: June 5, 1958, by S.L. Sobolev, Academician
SUBMITTED: May 17, 1958

Card 2/2

ZOLIN, A.F.

Use of conformal mapping in solving Dirichlet's problem for a
Laplace equation by interpolation. Dokl. AN UzSSR. no. 11:3-9
'56. (MIRA 13:6)

1. Institut matematiki i mekhaniki AN UzSSR. Predstavleno akad.
AN UzSSR T.A. Kary-Muyazovym.
(Conformal mapping) (Harmonic functions) (Interpolation)

83212

S/140/60/000/004/004/006
C111/C333

16.3000

AUTHOR: Zolin, A.F.TITLE: A Method of Approximative Conformal MappingsPERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Matematika, 1960,
No. 4, pp. 101-105TEXT: The conformal mapping of a domain G on the unit circle is performed according to (Ref. 1) by

$$(1) \quad \Lambda(z) = (z-z_0)e^{\phi(z)},$$

where $z_0 \in G$ passes over into the center of the circle. Here $\phi(z)$ is an entire function analytic in G , $\operatorname{Re} \phi(z)|_{\Gamma} = -\ln r$, where Γ is the boundary of G and $r = |z-z_0|$.

The author approximates $\phi(z)$ by polynomials such that for $n \rightarrow \infty$ the modulus $|\phi(z) - P_n(z)| \rightarrow 0$ in all $z \in G$, and thereby he obtains a sequence of approximative conformal mappings of the domain G on the unit circle. The convergence of these approximative mappings to the rigorous mapping is proved. The approximation of $\phi(z)$ is carried out by separate approximation of $\operatorname{Re} \phi(z)$ and $\operatorname{Im} \phi(z)$ by harmonic polynomials. The proposed method

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C111/C333

A Method of Approximative Conformal Mappings

proves to be suitable for the mapping of polygonal domains on the unit circle.

There are 3 Soviet references.

ASSOCIATION: Melekesskiy gosudarstvennyy pedagogicheskiy institut
(Melekes State Pedagogical Institute)

SUBMITTED: October 14, 1958

X

Card 2/2

ZOLIN, A. F. Cand Phys-Math Sci -- (diss) "Solution of marginal problems
for the Laplace equation by the method of interpolation" Tashkent, 1957.
8 pp (Central Asiatic State Univ), 150 copies (KL, 42-57, 91)

ZOLIN, A.F.

Solution of the Neumann problem for the Laplace equation by
interpolation for the area included in ellipse. Dokl. AN Uz. SSR
no.1:3-7 '57. (MIRA 11:5)

1. Institut matematiki i mekhaniki AN UzSSR. Predstavleno akad.
AN UzSSR T.N. Kary-Niyazovym.
(Harmonic functions)

ZOLIN, A.F.

Using polyharmonic polynomials for the solution of boundary value problems for a polyharmonic equation. Izv. vys. ucheb. zav. ^{mat.}
no. 6:82-92 '60. (MIRA 14:1)

1. Melekesskiy pedagogicheskiy institut.
(Boundary value problems)

ZOLIN, A. F.

PLANS I MOK EKSPONATOV SOV/4796

Akademiya nauk Uzbekskey SSR, Tashkent. Institut matematiki i mekhaniki
 Issledovaniya po matematicheskim naukam i mekhanike v Uzbekstane (Research in
 Mathematical Analysis and Mechanics in Uzbekistan) Tashkent, Izd-vo AN
 Uzbekskey SSR, 1960. 279 p. Ernicia sily inserted. 1,000 copies printed.
 Sponsoring Agency: Akademiya nauk Uzbekskey SSR. Institut matematiki i mekhaniki
 imeni V.I. Brnnaurazhogo.

Reprints: I.S. Arbabov, Corresponding Member, Academy of Sciences USSR; Ed.:
 I.G. Geynshteyn; Tech. Ed.: E.F. Gur'kovaya.

FIGURES: This collection of articles is intended for mathematicians, mechanics, and
 applied mathematicians taking advanced courses in divisions of physics and
 mathematics at universities and pedagogical schools of higher education.

CONTENTS: The collection contains 17 articles dealing with the results of investi-
 gations on the theory of integrodifferential equations in mathematical
 physics and mechanics, the theory of numbers, and the problem of the best approx-
 imation of functions. Individual articles discuss elasticity, FEM, along to a
 vibrating disk, transverse vibrations of beams, motion of an automobile after a
 impact, thermal stress, etc. Biographical notes are mentioned. References
 accompany 14 articles.

6. Boorjuman, Ye.M., and Y.F. Sidorov. On the Unsteady Flow of a Viscous Incompressible Liquid Close to a Rotating Disk	26
7. Sharyov, A.I. On the Asymptotic Behavior of Solutions of Integro- Differential Equation of Volterra Type	114
8. Zaslavskiy, G.M. On the Distribution of Picard Approximation Relative to the Solution Being Sought for Equation $y'' = f(x, y)$	127
9. Zol'in, A.F. Solving Boundary Problems of Laplace Equations by an Interpolation Method	133
10. Zol'in, A.F. On the Behavior of Solutions of Sequences of Nonlinear Integro-Differential Volterra-Type Equations With a Small Parameter at the Highest Derivative	153
11. Zol'in, A.F. Volterra-Type Integral Equations for Transverse Vibrations of Beams	175
12. Zol'in, A.F. On the Motion of an Automobile After a Lateral Impact	183
13. Zol'in, A.F. The Cauchy's Method in the Proof of the Existence Theorem	203
14. Zol'in, A.F. On the Functions Connected with the Laplace Equation in Parabolic Coordinates	213
15. Zol'in, A.F. Additive Properties of Certain Sequences of Numbers	220
16. Zol'in, A.F. Solving a Nonlinear Parabolic Equation	242
17. Zol'in, A.F. On the Separation of Spatial Coordinates in Equations of Thermal Stress	254

29853
S/044/61/000/007/024/055
C111/C222

16.6500 16.8500
AUTHOR: Zolin, A.F.

TITLE: The solution of boundary value problems for the Laplace equation with the interpolation method

PERIODICAL: Referativnyy zhurnal. Matematika, no. 7, 1961, 48, abstract 7 B 210. ("Issled. po matem. analizu i mekhanika v Uzbekistane". Tashkent, AN Uz SSR, 1960, 133-152)

TEXT: The interpolation method for the solution of the Dirichlet problem in the circle consists in the following : A harmonic polynomial is formed which on the circular periphery changes to a trigonometric polynomial and which interpolates the function given by the Dirichlet condition. The knots of interpolation are chosen equidistantly. If the given function is continuous then the trigonometric interpolation polynomial converges with respect to it in the mean, and with the aid of the Green's function it can easily be shown that the harmonic polynomial in every inner sub-region converges uniformly with respect to the sought solution of the Dirichlet problem. If the given function satisfies the condition of Dini-

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The solution of boundary value problems .. S/044/61/000/007/024/055
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Lipschitz then the interpolation polynomial converges uniformly with respect to it and the harmonic polynomial converges (according to a well-known theorem of the theory of harmonic functions) uniformly to the sought solution in the whole circle. Analogous results are obtained in the case of an ellipse by choosing the generalized harmonic polynomials as interpolation polynomials. Analogous results are also obtained for the Neumann's problem if the normal derivative of the interpolation polynomial interpolates the given normal derivative of the sought function on the boundary of the region. Some indications on the solution of the same problems for regions of a general form are given.

[Abstracter's note : Complete translation.]

Card 2/2

USSR / Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95699.

Abstract: pressure and vapor expansion are placed. The capillaries are fastened by plastilene to the inside surface of the vessel cover. In the case of isotonic solutions in the vessel and capillaries, the meniscuses of the solutions in the capillaries do not change their position. If the solutions possess more vapor expansion in the capillaries than in the vessel, the water from the solutions in the capillaries evaporates and condenses over the solution or the soil in the vessel. If the solutions in the capillaries are found with less vapor expansion, the water from the solution in the vessel evaporates and condenses over the solution in the capillaries, in connection with which the meniscuses of the

Card 2/4

\ USSR / Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95699.

Abstract: solutions in the capillaries are transferred to the direction of the ends of the capillary. The position of the meniscuses of the solution in the capillaries is periodically observed under the microscope with an ocular micrometer. The basic problem of the investigation consists of the selection of such standard solutions in the capillaries as would be isotonic with the solution in the vessel or with the solution of the soil investigated; then, according to their determined concentrations, to measure the osmotic pressure of the solution investigated and the vapor expansion over it, which is necessary for calculating the evaporation rate of the water.

Card 3/4

USSR / Soil Science. Physical and Chemical Properties of Soils. J

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95699.

Abstract: Examples of determinations are cited. The simplicity of the method permits its use in controlled soil experiments for moisture capacity in the agrochemical and soil science laboratories of machine tractor stations. -- S. A. Nikitin.

Card 4/4

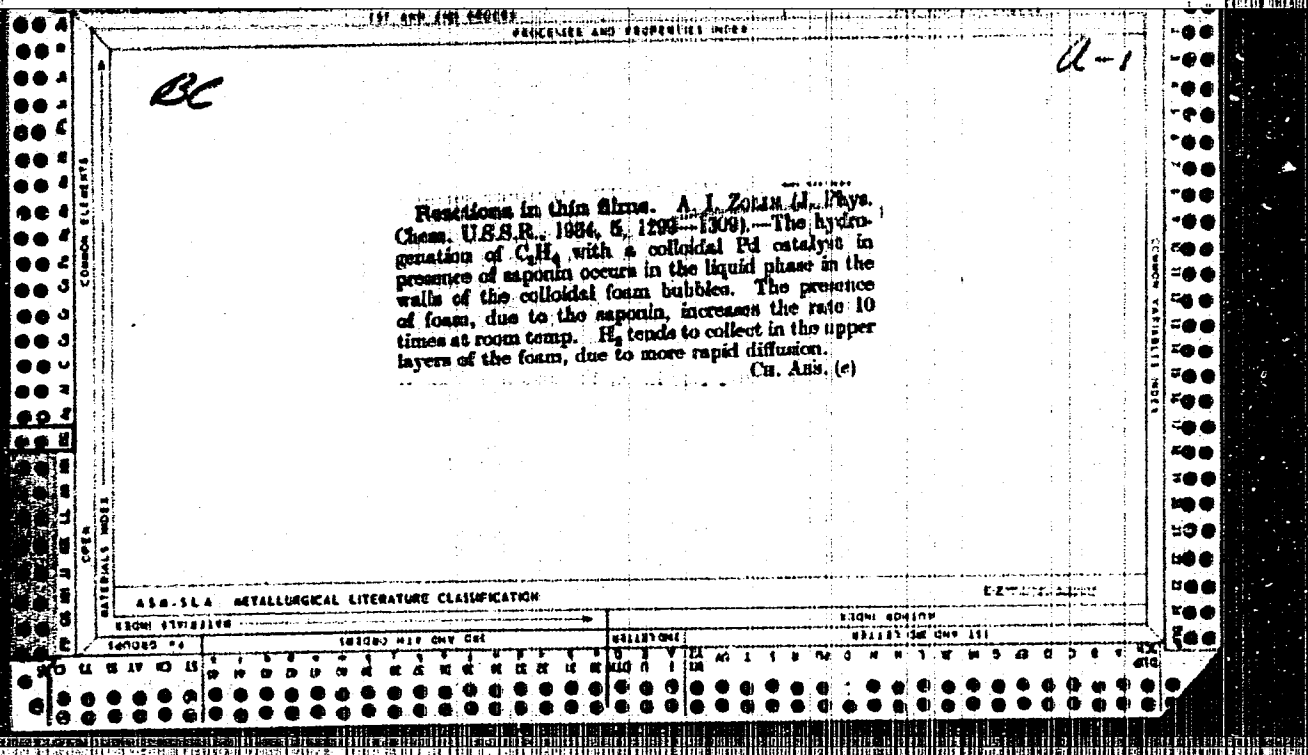
ZOLIN, A. I., and DUMANSKIY, A. V.

"On the Acclimatization and Sensibilization of Colloidal Iron Hydroxide,"
Zapiski Voronezhskogo S-kh in-ta, 15, 3, 1931; Koll-z., 59, 314, 1932.

ZOLIN, A.I.

Evaporation of aqueous solutions of some monocarboxylic acids
and monohydric aliphatic alcohols. Zhur. fiz. khim. 38 no.6:
1699-1701 Je '64. (MIRA 18:3)

1. Khar'kovskiy sel'skokhozyaystvennyy institut imeni Doku-
chayeva.



CA

PROCESSES AND PROPERTIES OF

Reactions in thin films. A. I. Zaitin, *J. Phys. Chem.* (U. S. S. R.) 3, 1200-1300 (1934). On the basis of results on the hydrogenation of C_{60} in the presence of a colloidal Ni catalyst or of sodium or of both, it is concluded that the reaction proceeds rapidly only when both are present. γ, δ , in the liquid phase in the walls of the colloidal foam bubbles. The smaller these bubbles are, the more rapid is the diffusion and hence the reaction. The presence of soap, γ, δ , foam, increases the velocity of reaction 10 times at room temp. In the case of both C_{60} + H_2 and C_{60} + H_2 mixts, the H_2 tended to collect in the upper layers of the foam owing to more rapid diffusion.

P. H. Hallmann

ASS-SLA METALLURGICAL LITERATURE CLASSIFICATION

REGISTRY

140380 P. I.

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

Ca

active substances. A. J. Zimm, *J. Chem. Phys.*, **1**, 109 (1933); *Chem. Rev.* (U. S. S. R.), **11**, 206, 211 (1935); *Chem. Rev.* (U. S. S. R.), **11**, 206, 211 (1935). *Chem. Rev.* (U. S. S. R.), **11**, 206, 211 (1935). The rate of evapn. of solns. contg. surface-active components depends on the volatility of the given component. Attempts were made to confirm exactly the supposition that in solns. contg. a nonvolatile surface-active component the rate of evapn. must decrease. The rate of evapn. was studied on a soln. of dH. sq. solns. by the micro-method of Hess. The evapn. curves for some concns. of urea, glycine, monobutyric, tributyrin, succinic, st. edulcorin and saponin solns. were studied. The rate of evapn. of solns. of nonvolatile surface-active substances is always smaller than that of solns. of surface-inactive substances (if taken in equimolar amylalcoh. concns.). The smaller the surface tension of the soln., the lower its rate of evapn. According to Levens, the vapor pressure of the soln. and the mol. wt. can be detd. directly by the micro-method of Hess only for surface-inactive substances. For surface-active substances it is necessary to introduce some corrections, depending on the surface tension of the soln.

W. R. Hess

ADD-514 DETALONACIA LITERATURE CLASSIFICATION

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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YUDOVICH, V.G.; KHLEBORODOV, A.D.; SOLONEVICH, Ye.A.; VEYTS, V.L.;
PANOV, F.S.; BELYAYEV, A.N.; ALAD'IN, O.I.; CSIFOV, V.F.;
VOROB'YEV, A.I.; PROKOP'YEV, Yu.V.; SOLOV'YEV, Yu.A.;
KUZ'MIN, A.V.; ZHIDONIS, V.Yu.; ZOLIN, A.V.; YATSIK, Ye.F.
DOBROSLAVSKIY, V.L.; TRCFIMOV, Ye.N.; DRYAGIN, Ye.R.;
KOROLEV, V.F.; KERIMOV, N.B.; KRAVCHENKO, A.S.; RYVLIN, V.A.;
GURCHENKO, A.P.; KRUGLIKOV, T.P.; CHERNYAKOV, F.A.; ARKHIPOV,
N.K.

Authors' certificates and patents. Mashinostroenié no.1:101-
103 Ja-F '65. (MIRA 18:4)

ZOLIN, B. I.

V. M. Primak, V. V. Khadorchenko. B. I. Zolin

"Scientific-Atheist Propaganda in the Teaching Process," Vestnik vysshef shkoly, No. 3, March (published in April), pp. 21-25

SO: Current Digest of Soviet Press, VII:15, p.7, 25 May 55, Unclassified.

PRIKLONSKAYA, N.V.; OSTROVSKAYA, N.M.; Prinimali uchastiye: ZOLIN, D.A.;
PANKRATOV, B.I.

Efficient mixing methods for the preparation of butadiene-styrene
based rubber compounds in the production of technical synthetic
rubbers. Kauch. i rez. 24 no.4:5-8 Ap '65.

(MIRA 18:5)

1. Nauchno-issledovatel'skiy institut rezinovoy promyshlennosti
i zavod "Kauchuk".

MOROZOVA, L.N.; DONUCHAYEVA, Z.Ye.; ZOLIN, G.A.; KULAKOVA, A.A.; NAVRATIL',
Z.A.; POSTNIKOVA, Ye.N.; SHOR, M.S. (Moskva)

Effectiveness of prolonged combined antibacterial therapy of pulmo-
nary tuberculosis, Klin.med. 37 no.12:75-82 D '59.

(MIRA 13:4)

1. Iz IV glavnogo upravleniya pri ministerstve zdravookhraneniya
SSSR (nauchnyy rukovoditel' - prof. A.Ye. Babukhin).
(TUBERCULOSIS)

ZOLIN, G.A.

POSTNIKOVA, Ye.N.; ZOLIN, G.A.; MARINA, L.V.; NAVRATEL', Z.A., SHEVE-
LEVICH, L.M.; SROB, W.S. (Moskva)

Effectiveness of streptomycin and PAS in treating pulmonary tu-
berculosis. Prob.tub.no.4:42-46 J1-Ag '55. (MEDRA 8:10)

(TUBERCULOSIS, PULMONARY, ther.

PAS & streptomycin)

(SALICYLIC ACID, ther. use

tuberc.puln. with streptomycin)

(STREPTOMYCIN, ther. use

tuberc.,pul.,with PAS)

MOROZOVA, L.N.; DOKUCHAYEVA, Z.Ye.; ZOLIN, G.A.; KULAKOVA, A.A.;
NAVRATEL', Z.A.; POSTNIKOVA, Ye.N. (Moskva)

Late results of antibacterial treatment of pulmonary
tuberculosis. Klin. med. 40 no.12:32-36 D '62.

(MIRA 17:2)

1. Iz 1-y i 2-y polikliniki IV Glavnogo upravleniya pri
Ministerstve zdravookhraneniya SSSR (nauchnyy rukovoditel' -
prof. A.Ye. Rabukhin).

ZOLIN, G.Ye., agronom.

Preparing buildings and equipment for receiving the new crop of
oilseeds. Masl.-zhir.prom.22 no.4:6 '56. (MIRA 9:9)

1. Trst Krasnodarzhirmasle.
(Oil industries--Equipment and supplies)

ZOLIN, G.Ye, agronom.

Storage of sunflower seeds at oil factories of the Krasnodarzhirmaslo
Trust. Masl.-shir.prom. 18 no.6:5-6 Je '53. (MLBA 6:6)

1. Trest "Krasnodarzhirmaslo". (Sunflower seed oil)

ZOLIN, G.Ye.

Practices for storing oil rich sunflower seeds in oil mills of
Krasnodar Territory. Masl.-shir.prom. 21 no.3:7-8 '66. (MLBA 9:8)

1. Trest "Krasnodarshirnaslo".
(Krasnodar Territory---Sunflower seed---Storage)

ZOLIN, I., kapitan 1-go ranga

In cities and ports of the British zone. Vypel 11 no.9:22-23
My '48. (MIRA 12:9)
(Germany, Western--Social conditions)

ZOLIN, I., kontr-admiral zapasa

"The Red Banner Caspian Fleet; a historical study" by A. Makovskii,
B. Radchenko. Reviewed by I. Zolin. Komm. Vooruzh. Sil 2 no. 20:
88-91 0 '61. (MIRA 14:9)
(Russia--Navy) (Caspian Sea region--Revolution, 1917-1921)

ZOLIN, I. I. (Capt 1st Rank)

Listed as Chief Editor of Sovetskiy Flot, organ of the Ministry of Defense
USSR (concerned with Soviet naval matters.) Sovetskiy Flot, Moscow, 16 Oct 54

SO: SUM 291, 2 Dec 1954

ZOLIN, I. I.

Zolin, I. L. and Shevchuk, Yu. I. "The PKA-5 and PKA-10 ropeway", Azerbaydzh. neftekhoz-vo, 1948, No. 12, p. 17-18.

So: U-3261, 10 April 53, (Letopis 'Zhurnal 'nykh Statey, No. 12, 1949).

42552

S/089/62/013/005/004/012
B102/B104

27,4000
24,6830
AUTHORS:

Zolin, L. S., Lebedev, V. N., Salatskaya, M. I.

TITLE:

Use of nuclear emulsion of type K (K) for individual fast-neutron dosimetry

PERIODICAL: Atomnaya energiya, v. 13, no. 5, 1962, 467-471

TEXT: K-type nuclear emulsions 20 μ thick on triacetate backing designed for recording protons of 0.3-150 Mev were used to check 0.15-15-Mev neutron doses. An individual method was devised using a system of 13 layers: cellulose cardboard (58), Al (83); triacetate film (34.4); Al (27.7); black cellulose paper (13.3); emulsion backing (17.2); emulsion (6.9); triacetate film (17.2); black cellulose paper (13.3); Al (27.7); triacetate film (34.4); Al (83), and cellulose cardboard (58). The data in the brackets are the layer thicknesses in mg/cm². On each side the emulsion is covered by 6 layers, arranged symmetrically, the arrangement being so chosen that the dependence of the number of tracks in the emulsion on the neutron energy is analogous to the dose absorbed in the biological tissue. This was checked by determining the contribution of

Use of nuclear emulsion of type ...

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each layer to the total number of tracks. A comparison of the dose curves as calculated shows that in the case of perpendicular irradiation, and for $E_n > 3$ Mev, the curve of the layer packet lies higher. The

calculations were verified experimentally with monochromatic neutrons (2.5, 3.6, and 14 Mev). It was found that in the case of perpendicular neutron irradiation the number N of tracks per cm^2 of emulsion is equal to the calculated number within the error limit. In the case of parallel irradiation N is by 50% smaller than with perpendicular irradiation. If a rotating packet of layers is irradiated, then N is 25% smaller than with perpendicular irradiation; in this case $N(E_n)$ agrees with the dose

curve of biological tissue to within $\pm 15\%$. The dose D (in rad) is calculated according to $D=AN$ where $A=(1.11\pm 0.08)\cdot 10^{-5}$ rad/mrek. cm^{-2} . The photoemulsions were treated according to the NIKFI standards, the films were scanned with an MGN-3 (MBI-3) microscope (950x). The nuclear emulsion was rendered sensitive to thermal neutrons by the presence of nitrogen; $N^{14}(n,p)C^{14}$ has a $\sigma=1.75$ b which decreases as $E_n^{-1/2}$ with increasing E_n . At 200 kev $\sigma=1.5$ mb and $E_p=0.56$ Mev. Hence this method

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Use of nuclear emulsion of type ...

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makes it possible to measure the total thermal and the fast neutron dose; a Cd-filter is used to separate the two components. The γ -background becomes important only at doses above 5 r. At high γ -intensity the emulsion types D(D), T-3 (T-3) or Ya-2 (Ya-2) are used that are less sensitive to γ -radiation. The track regression was studied on K-type emulsions in a 70-day Po-Be-irradiation and it was found to lie within the error limits. It is the higher the less sensitive an emulsion to (recoil) protons. The K-type emulsion in the "correction packet" proves to be rather reliable (root-mean-square error in the determination of the monthly admissible dose $\pm 20\%$) and allows comparatively rapid scanning (85 films can be scanned by 1 person within 36 hrs). At present these packets are used for dosimetric monitoring of personnel in the Laboratoriya vysokikh energii Ob'yedinennogo instituta yadernykh issledovaniy (High-energy Laboratory of the Joint Institute of Nuclear Research). There are 3 figures and 2 tables.

SUBMITTED: February 10, 1962

Card 3/3

ZOLIN, L.S.; LEBEDEV, V.N.; SALATSKAYA, M.I.

Use of a type "K" nuclear emulsion in individual fast
neutron monitoring. Atom. energ. 13 no.5:467-471 N '62.
(MIRA 15:11)

(Radiation—Dosage)
(Neutrons)

ACC NR: A16006795

0

amplitude by means of an experiment involving registration of slow recoil deuterons from a film target of deuterated polyethylene 0.5-0.6 μ thick. The investigated range of the squared momentum transfer was $0.3 < |t| < 1.2 \text{ (GeV/c)}^2$. Plots are presented of the differential cross section $d\sigma/d\Omega$ at the angles of the momentum transfer $\theta = 15^\circ$ and 30° versus the squared momentum transfer $|t|$. The experimental data are compared with the theoretical calculations of the scattering amplitude of the deuteron on the deuteron. The experimental data are in good agreement with the theoretical calculations. The results are compared with the data obtained from the experiment on the scattering of elementary particles, Colorado State University, Fort Collins, Colorado, 1974.

SUBJECT: SCATTERING OF DEUTERONS ON DEUTERONS. DATE: 11 Nov 74. ORG: REP: OOS/ OTH: RIF: OOS

ZOLIN MIKHAIL K.
AGAGUSEYNOV, Yusif Abas ogly; ~~ZOLIN, Mikhail L'vovich~~ AMIROV, A.D.,
redaktor; SHTEYNGEL', A.S., redaktor izdatel'stva

[Lengthening the interval between repairs of wells] Udlinenie
mezhpromontnogo perioda raboty skvazhin. Baku, Azerbaidzhanskoe
gos.izd-vo neft. i nauchno-tekhn.lit-ry, 1957. 39 p. (MLRA 10:9)
(Oil wells--Maintenance and repair)

ZOLIN, Mikhail L'vovich; SHEVCHUK, Yuriy Ivanovich; AMIROV, A.D., redaktor;
GONCHAROV, I.A., tekhnicheskiiy redaktor

[Pumping jack beam hangers] Kanatnye podveski dlia stankov-kachalok.
Baku, Gos. nauchno-tekhn. izd-vo nefiianoi i gorno-toplivnoi lit-ry,
Azerbaidzhanskoe otd-nie, 1954. 34 p. [Microfilm] (MLBA 10:1)
(Oil well pumps)

IBAD-ZADE, Yusif Alikulu ogly; ZOLIN, H.L.; SAFAR-ZADE, A.K.; ORLOVA,
V.P., red.; BALLOD, A.P., tekhn.red.; MAKHOVA, N.H., tekhn.red.

[Raising the level of ground water for irrigation and water
supply] Pod'em podzemnykh vod dlia obvodneniia i orosheniia.
Pod red. IU.A.Ibad-Zade. Moskva, Gos.izd-vo sel'khoz.lit-ry,
1959. 247 p. (MIRA 13:2)

1. Deystvitel'nyy chlen Akademii sel'skokhoz.nauk Azerb.SSR
(for Ibad-zade).
(Water, Underground)

GIDIYEV, S.M.; ZHARKOVSKIY, G.M.; ZOLIN, M.L.

SKS-136 explosive shell for drilling second shafts. Nefteprom.
delo no.10:31-34 '63. (MIRA 17:6)

1. Institut geologii i razrabotki goryuchikh iskopayemykh
AN SSSR i Ramenskoye otdeleniye Vsesoyuznogo nauchno-issledovatel'-
skogo instituta geofizicheskikh metodov razvedki.

ZOLIN, M.L.; SHEVCHUK, Yu.I.; AMIROV, A.D., red.; GONCHAROV, I.A.,
tekhn. red.

[Increasing the productiveness of pumping jacks] Uvelicheniye
proizvoditel'nosti stankov-kuchalok. Baku, Azneftizdat,
1954. 26 p. (MIRA 16:10)

(Oil well pumps)

ZOLIN, M. L.

Neftepromyslovye klinoremennye peredachi [Wedge-shaped belt drive in petroleum industry]. Baku, Aznefteizdat, 1953. 92 p.

SO: Monthly List of Russian Accessions, Vol. 6 No. 8 November 1953

POL'KIN, S.I., prof. doktor; ZOLIN, S.N.

Present state of flotation techniques for dressing wolframite,
ferberite, and hubnerite ores. *Biul. TSIIN* *tevet. mat.* no.8:14-20
'58. (MIRA 11:6)

(Flotation) (Tungsten)

KUZ'KIN, S.F.; ZOLIN, S.N.

Phenomena of the aggregation of mineral particles in the pulp.
Izv. vys. ucheb. zav.; tsvet. met. 4 no.4:24-29 '61. (MIRA 14:8)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra obogash-
cheniya rud redkikh metallov.
(Flotation)

KUZ'KIN, S.F.; ZOLIN, S.N.

Flocculating action of polyacrylamide compounds on certain ore pulp components. Izv. vys. ucheb. zav.: tsvet. met. 5 no.2:45-49 '62.

(MIRA 15:3)

1. Krasnoyarskiy institut tsvetnykh metallov, kafedra obogashcheniya rud redkikh i radioaktivnykh metallov.
(Flotation) (Acrylamide)

KUZ'KIN, S.F.; NEBERA, V.P.; YAKUBOVICH, I.A.; ZOLIN, S.N.

Studying the mechanism of the action of polyacrylamide
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