

84933

S/053/60/037/005/018/024

E052/E314

13.2740
9,5400

AUTHORS:

Smirnov, Ye.I., Stepanov, V.S. and Tovchigrechko, S.S.

TITLE:

A[∇]Solar-sidereal Synchronous Motor Type (3C₁1) (SZSD-1)

PERIODICAL:

Astronomicheskiy zhurnal, 1960, Vol. 37, No. 5,

pp. 927 - 930

TEXT: A description is given of the construction of a synchronous motor working in conjunction with a quartz clock, which can be used to obtain simultaneously one-second pulses of both solar and sidereal times. The principle of the motor is shown in Fig. 1. The stator of the motor is supplied from a 1 000 c.p.s. source and brings into motion the shaft 1 of the rotor. This motion is transmitted to the second-shaft through a 1:10 gear. The latter executes 86 400 revs. per average solar day. The rotation of the shaft 3 is transmitted to the minute-contact 7, the gear, 8, 9 and the adjusting knob 10; it is possible to obtain second-pulses of the mean solar time and also to phase them in the required fashion. The minute pulses of the mean solar time can be obtained with a similar arrangement shown at 11. Another mechanical device coupled to the main shaft 5

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S/053/60/037/005/018/024
E052/E514

A Solar-sidereal Synchronous Motor Type C3CA-1 (SZSD-1)

generates second-pulses of the sidereal time. Tests carried out in 1959 show that quartz/clock controlled synchronous motors of the above type have the following properties: second pulses of both solar and sidereal time have a spread of about

10^{-4} sec; the diurnal rate of the sidereal pulses is $+ 0.007$ sec; mean quadratic variation in the diurnal rate is 10^{-3} sec. There are 2 figures.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut metrologii imeni D.I. Mendeleyeva (All-Union Scientific Research Institute of Metrology imeni D.I. Mendelejev)

SUBMITTED: June 9, 1959, initially,
January 10, 1960, after revision

Card 2/2

WERNY, G.A.; TOVCHIRICHKO, I.P.

The VFT-600 air heater. Biol. tech. inform. Gos.
nauch.-issl. inst. nauch. i tekhn. inform. 17 no.3:05-67 '67.
(MIRA 17:9)

TOVE, P.L.

Further production and use of spiral classifiers. Gor. zhur.
no.7:7' -73 J1 '61. (MIRA 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy proyektnyy institut
mekhanicheskoy obrabotki poleznykh iskopayemykh, Leningrad.
(Ore dressing--Equipment and supplies)

KAZENNOV, M.N.; TOVE, P.L.

Number of cone-type crushers and their correlation in
industrial flowsheets. Gor. zhur no.10:77-80 O '61.
(MIR^A 15:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy
institut mekhanicheskoy obrabotki poleznykh iskopayemykh,
Leningrad.

(Crushing machinery)

TOVE, P.L., gornyy inzhener

Automatic sluices manufactured by the Kotliakov plant. Gor.
zhur. 122 no.1:34-35 Ja '48. (MIRA 8:9)
(Hydraulic mining--Equipment and supplies) (Sluices)

TOVE, P.L., starshiy nauchnyy sotrudnik

New size range of spiral classifiers. Gor.zhur. no.5:63-64
My '62. (MIRA 16:1)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut
mekhanicheskoy obrabotki poleznykh iskopayemykh.
(Separators (Machines))

TOVISSI, L., RANGU, N.

Statistical methods for current control of production quality and progress
of production proceedings. p. 68.
(Metalurgia Si Constructia De Masini, Vol. 9, No. 1, Jan. 1957, Bucuresti,
Rumania)

SO: Monthly List of East European Accessions (EFAL) Lc.Vol. 6, No. 8, Aug 1957. Uncl.

1959 / 3 Chemical Technology. Chemical Products and Their
Application. Cellulose and its Derivatives.
Paper.

7-31

Abs Jour: Ref Zhur-Klin., 1959, 2, 1959, 6041.

Author : Rancu, N.; Wissel, L.

Title : Application of Statistical Correlation Method to Study,
Control and Improvement of Technological Process of
Paper Manufacturing.

Orig Pub: Colubna at Birsic, 1959, 7, 5, 185-195.

Abstract: No abstract.

Card : 1/1

164

RANCU, N.; TOVISSI, L.

Analysis of intercorrelations between the weight of paper and the ash content of materials in water in the various stages of the manufacturing process. Cel hirtie 10 no. 5:164-172 My'61

25(6)

R/009/59/12/006/030
D0019/D3001

AUTHORS: Rancu, N. and Tövissi, L.

TITLE: Statistical Check in Case of a Systematic Displacement of the Grouping Center Towards One of the Limits of the Tolerance Field

PERIODICAL: Metalurgia și Construcția de Mașini, 1959, Nr 12, pp 1053 - 1064

ABSTRACT: There are factors in systematic production which determine a systematic increase or decrease of the characteristic values, i.e. a shifting of the control center ~~neither~~ towards the upper or the lower limit of the tolerance field. This article presents the method of applying a statistical check in such cases. The purpose of this check is to establish how long a machine tool can operate without resetting. The authors explain the calculation problems of the check

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R/009/59/12/006/030
D0019/D3C01

Statistical Check in Case of a Systematic Displacement of the Grouping Center Towards One of the Limits of the Tolerance Field

limits and the establishment of the statistical checking slips. After determining the equation of the displacement line of the grouping center and computing the time a machine tool can operate with the same tool setting, the authors calculate the check limits. Starting with the equation of the displacement line of the control center (Equation Nr 1); the value of the dispersion field (Equation Nr 2); and the characteristic values of the deviation against the control center line (Equation Nr 3), the authors establish the dispersion formula (Nr 6). If the control center moves towards the lower limit of the tolerance field, the lower limit of the dispersion field will, after a certain time, reach the lower limit of the tolerance field. This is the moment when the tools of the machine have to be reset. The time which separates 2 successive resettings can be computed by cutting the lower limit of



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R/009/59/12/006/030
D0019/D3001

Statistical Check in Case of a Systematic Displacement of the
Grouping Center Towards One of the Limits of the Tolerance Field

the dispersion field by the lower limit of the tolerance field. The measurements supplied by the parameters of the samples, taken periodically from the production of a certain machine tool can be used for the supervision and direction of the technological process. Two parameters are used: one supplying information on the accuracy, the other on the tool-setting state of the machine. The authors then describe the supervision of control by the checking diagram which is established in the following order: establishment of the equation of the displacement line of the control center; determination of the width of the dispersion field; establishment of equations of the limits of the dispersion field; calculation of the duration of a control; determination of the parameters which will be used for the characterization

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D0019/D3001

Statistical Check in Case of a Systematic Displacement of the
Grouping Center Towards One of the Limits of the Tolerance Field

of the control (arithmetic average, average value
of the samples, extreme values) and computation of
the checking limits which are traced on the checking
diagram. The authors finally present an example to
explain accurately the set-up of a diagram and the
supervision of the production process by the statis-
tical checking slip. There are 3 tables and 3 graphs.

Card 4/4

RUMANIA/Chemical Technology - Chemical Products and Their Application. Cellulose and Its Production. Paper. H-33

Abs Jour : Ref Zhur - Khimiya, No 17, 1958, 59577

Author : Rancu, N., Tovissi, L.

Inst : -

Title : Use of Statistical Methods in the Paper Industry.

Orig Pub : Celuloza si hirtie, 1958, 7, No 1, 26-32

Abstract : With an example of the statistical control of the weight of 1 m² of paper, the use of statistical methods in the paper industry is reviewed, in particular the content of such statistical inspection concepts as: center of a cluster, dispersion, base for the verification of the conformity between theoretical calculations and electrical distribution, etc.

Card 1/1

RANCU, Nicolae; TOVISSI, Ludovic

Controlled regulation by distribution gauges. Metalurgia
constr mas 13 no. 4: 322-334 Ap '61.

TOVIYEVA, M.P., ordinator

On the problem of dermatitis artefacts. Vest.derm. i ven. }1 no.1:
50 Ja-F '57. (MLBA 10:7)

1. Iz kafedry kozhnykh i venericheskikh bolezney Arkhangel'skogo
meditsinskogo instituta.
(SKIN--DISEASES)

KOTUN, Karoly; TOVIZI, Imre

A liquid separator is useful also in a large-scale plant.
Mezogazd techn 1 no.9:22-23 '61.

VUKOLOV, V.I., inzh; KUKHPIN, V.L., inzh; NISEL', Ya.S., inzh; TOVKACHEV,
V.G., inzh; PAVLOV, V.I., master-elektrotehnik

"Mercury-converter substation of electrolysis plants" by
K.G. Kazantsev. Reviewed by V.I. Vukolov and others. Vest.elektroprom.
29 no.10:74-76 0 '58. (MIRA 11:11)
(Electric substations) (Kazantsev, K.G.)

VUKOLOV, V.I., inzh.; KUKHTIN, V.I., inzh.; NESHCHIN, Ya.S., inzh.;
TOVKACHEV, V.G., inzh.; PAVLOV, V.I., master-elektrotehnik.

"Mercury-converter substation of electrolysis plants" by K.G. Kazantsev. Reviewed by V.I. Vukolov and others. Vest. elektropron.
29 no.10:74-76 0 '58. (MIRA 11:11)
(Electric substations) (Electric current rectifiers)
(Kazantsev, K.G.)

107-57-3-6/64

AUTHOR: Tovkis, T. (UF6AM), a member of the Tbilisi DOSAAF radio club

TITLE: The Start (Nachalo puti)

PERIODICAL: Radio, 1957, Nr 3, p 8 (USSR)

ABSTRACT: The author has been associated with the Tbilisi radio club since May, 1954; Berdzeneshvili has been Chief of the club radio station. She built her own 40-watt radio station, UF6AM, in February, 1956. In September, 1956, she established communication with the settlement Mirnyy, UA1KAE, and with radio station UPOL-6. She worked sixty-eight stations during the Second All-Union Female Contest. Appreciation of the work of Zoya Kurilko (UA1Bj, Leningrad) is expressed. The author promises perseverance in further training and wishes that there were more radio contests for women.

Card 1/1

TOVKIS, T. (UF6AM)

Just the beginning. Radio no.3:8 Mr '57.
(Tiflis--Amateur radio stations)

(MLRA 10:5)

TOVKUS, O. A.

Torgovlya khimiko-moskatel'nymi tovarami (Marketing of Chemical Goods, by)
A. M. Olimpiyev i O. A. Tovkus. Moskva, Gostorgizdat, 1953.
109 p. illus., Tables.

SO: N/5
711
.04

26

CA

The effect of pyroxylin of different viscosities and of various solvents on the mechanical properties of nitrocellulose films. B. I. Lyarm and S. A. Lukins. *Russ. J. Appl. Chem.* 1938, No. 9 10, 1776. *Khimiya* (Moscow, U.S.S.R.), 1938, No. 9, 1776. The solvents used were ethyl acetate, amyl acetate, benzene, gasoline and alcohol. During aging, the films were heated in a thermostat at 55-75° for 6-72 hrs. The stability was tested with Schopper's app. For a definite mass of solvents the stability of the films was the greater the less polymerized the pyroxylin. For the same pyroxylin the films obtained with solvents that produce with the same concns. the most viscous solns. were most stable. The degree of polymerization of pyroxylin did not affect the change of viscosity of the soln on standing when coated on to films. Viscosities were stable the lower the viscosity of the pyroxylin used. The initial stability of the coating did not depend on the method of lowering the viscosity of the nitrocellulose, but the stability to atm. influence was considerably lower for pyroxylin that was treated with NH_3 than for the product of thermal treatment.

W. R. Hunt

METALLURGICAL LITERATURE CLASSIFICATION

ASHCHEULOV, Andrey Tikhonovich,; TOVMA, Dmitriy Titovich,; TVERDOV, A.A.,red.;
SHCHEDRINA, N.L., tekhn. red.

[Legal regulation of wages in communal livestock raising on
collective farms] Pravovoe regulirovanie oplaty trudy v
obshchestvennom zhiivotnovodstve kolkhozov. Moskva, Gos. izd-vo
iurid. lit-ry, 1957. 98 p. (MIRA 11:12)

(Wages)
(Stock and stockbreeding)

TOVMA, D. T.

438

Obshchestvennoye Khozyaystvo Kockhoza "Trudovik" (Kurdayskiy rayon Dzhambul'skiy
obi.) Alma-ata, Kazgosizdat, 1954. 43s. stu. 20sm. 10,000 Ekz.
Na kazakh. Yaz. (54-55022) 338.1K (584.695)

SO: KNizhanaya, Letopis, Vol. 1, 1955

TOVMA, G.V.

Using jet bits based on 2D16S standard box type bits. Neft.
khoz. 41 no.6:56-58 Je '63. (MIRA 17.6)

KHAKHAYEV, B.N.; TARNAVSKIY, A.P.; TOVMA, G.V.

Establishing norms for the consumption of basic materials used
in drilling: a topic for discussion. Neft.khoz. 42 no.4:2-11 Apr '64.
(MIRA 17:9)

KHAKHAYEV, B.N.; TARNAVSKIY, A.P.; APANOVICH, Yu.G.; TOVMA, G.V.;
LIPSON, L.A.; RAKHMATULLIN, T.K.

Using fishing instruments for metal in the Ural Gas and Oil
Prospecting Trust. Burenie no.6:4-7 '64. (MIRA 18-5

1. Trest "Ural'skneftegazrazvedka" i Aral-Sorskaya ekspeditatsiya
glubokogo bureniya.

L 38436-66 EWT(m)/ENP(k)/ENP(e)/ENP(t)/ETI TJP(c) JG/ST/15
ACC-NR: AP6024389 SOURCE CODE: UR/0020/66/169/002/0316/0319

AUTHOR: Andrianov, V. V.; Zenkevich, V. B.; Sokolov, V. I.; Sychev, V. V.; Tovma, V. A.; Fedotov, L. N.

ORG: Scientific Research Institute for High Temperatures (Nauchno-issledovatel'skiy institut vysokikh temperatur); Central Scientific Research Institute for Ferrous Metallurgy im. I. P. Bardin (Tsentral'nyy nauchno-issledovatel'skiy institut chernoy metallurgii)

TITLE: A superconducting solenoid from a three-component alloy generating fields of over 75,000 Oe

SOURCE: AN SSSR. Doklady, v. 169, no. 2, 1966, 316-319

TOPIC TAGS: superconductivity, strong magnetic field, niobium alloy, titanium alloy, zirconium containing alloy, SOLENOID

ABSTRACT: A superconducting magnet has been constructed which generates magnetic fields of more than 75,000 oe using wire made from an alloy of niobium (65%), titanium (15%), and zirconium (about 9%), the remainder being other components selected for their metallurgical properties. The critical temperature of the material is 9.8-10K. Because of its relatively low brittleness, the 0.25-mm o.d. copper-plated wire could be drawn by standard methods into four-kg coils

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UDC: 537.312.62

I-38136-66
ACC NR: AP6024389

representing a total length of 12 km. After cold working in vacuum or in a helium atmosphere, both types of wire were coated with a polyester varnish to add a 0.03-mm layer to the diameter. The magnet, with a 16-mm inner diameter, consisted of 3 concentric sections wound onto aluminum-alloyed formers. The inner section alone, using 17,762 turns of vacuum cold-worked wire, generated 65,000 oe; the two other sections made of 15,210 and 10,480 turns of wire cold-worked in a helium atmosphere, and wound on a common former, generated 43,500 oe. The maximum magnetic-field intensity of the magnet was 76,300 oe. Even though the solenoid has been repeatedly driven normal, no damage has been observed. Orig. art. has: 4 figures. [ZL]

SUB CODE: 20/ SUBM DATE: 16Apr66/ OTH REF: 001/ ATD PRESS: 5042

Card 2/2

S/080/60/033/007/019/020
A003/A001

AUTHORS: Pamfilov, A. V., Kuzub, V. S., Tovmach, L. P.

TITLE: Lustrous Cadmium-Plating From Acidic Baths

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol. 33, No. 7, pp. 1669-1671

TEXT: Cadmium-plating from acidic baths by means of current reversal effected by a variant of APT-2 (ART-2) electronic breaker (Ref. 3) was investigated. The duration of the anode (t_a) and cathode periods (t_c) was regulated independently of each other. The deposition was carried out on brass samples and partially on copper samples with a total surface of 4 cm^2 . The thickness of the coatings was $10-20 \mu$. The anodes were made of chemically pure cadmium. The range of current densities was $0.5-4 \text{ amp/dm}^2$. The bath had the following composition (in g/l): CdO 19, KHSO_4 45, $(\text{NH}_4)_2\text{SO}_4$ 10. The structure of the deposit is affected by the

$$\frac{t_c}{t_a}$$

ratio and by the duration of the cycle T. Already at $T = 11 \text{ sec}$ and $\frac{t_c}{t_a} = 10$

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A003/A001

Lustrous Cadmium-Plating From Acidic Baths

the appearance of the deposits obtained by current reversal does not differ from those obtained by d-c. In the presence of naphthalene mono- or disulfoacids with gelatin, mirror-lustrous cadmium deposits were obtained. Caramelized sugar still improves these results. From a cyanide bath finely-grained, dense, light deposits were obtained, but without luster. Cadmium deposits from acidic baths have a microhardness twice higher than deposits from cyanide baths, their porosity is 5 times lower and the current density can be increased twice. There are 2 graphs, 2 tables and 5 Soviet references.

ASSOCIATION: Laboratoriya fizicheskoy khimii Chernovitskogo universiteta
(Laboratory of Physical Chemistry at the Chernovtsy University) ✓

SUBMITTED: July 3, 1959

Card 2/2

PAMFILOV, A.V.; KUZUB, V.S.; TOVMACH, L.P.

Lustrous cadmium plating in acid baths. Zhur.prikl.khim.
33 no.7:1669-1671 J1 '60. (MIRA 13:7)

1. Laboratoriya fizicheskoy khimii Chernovitskogo universiteta.
(Cadmium plating)

TOVMACH, Ye. F.

Cand Agr Sci - (diss) "Study of various systems of preserving fowls under conditions of the southern part of the RSFSR." Leningrad-Pushkin, 1961. 18 pp; (Ministry of Agriculture RSFSR, Leningrad Agr Inst); 250 copies; price not given; (KL, 7-61 sup, 253)

TOVMASYAN, A.K.

From the history of television. Iz ist.est.i tekhn. 2:77 '62.
(MIRA 18:4)

TOVMASYAN, A.K.

Multiple diffusion of light in the presence of fluorescence. Report
no.1. Dekl.AN Arm.SSR 9 no.4:145-150 '48. (MIRA 9:10)

1. Byurakanskaya Astrofizicheskaya Observatoriya Akademii nauk
Armenyanskey SSR, Yerevan. Predstavleno V.A. Ambartsumyanom.
(Reflection (Optics)) (Fluorescence)

TOVMASYAN, A.K.

Multiple diffusion of light in the presence of fluorescence.
Dokl. AN Arm SSR.. 11 no. 1:9-18 '49. (MLRA 9:10)

1. Byurakanskaya Astrofizicheskaya Observatoriya Akademii nauk
Armenyanskoy SSR, Yerevan. Predstavleno V.A. Ambartsumyanom.
(Reflection (Optics)) (Fluorescence)

Armenian, A. G.

Tomasyan, A. G. "Echinococcus, based on the findings of the surgical department of the Leninakan's 1st hospital," (Report), Trudy III Zakavkazsk. s"yeniia Khirurgov. Leningan, 1948 (on cover: 1949), p. 211-212.

SO: U-5210, 17 Dec. 53, (Letopis 'Zhurnal Inzh. Statey, No. 25, 1949).

TOVMASYAN, A.K.

Stepanos Abgarian's "Booklet called the beginning of natural sciences." Iz ist. est. i tekhn. 1:21-39 '60. (MIPA 16:12)

10/01/74

COUNTRY : USSR
 SUBJECT : Cultivated Plants - Forage Crops. M
 TITLE : ТОВМАС/АР
 AUTHOR : Academy of Sciences, Armenian SSR
 DTIC : On the Problem of Sowing Rate for Alfalfa.

DTIC No. : Izv. AN ArmSSR, biol. i s.-kh. n., 1957, 10, No. 3.
 65-73

SUMMARY : Experiments on the determination of sowing rates for alfalfa under the conditions of Ararat valley in Armenian SSR were conducted during 1951-1954 on the irrigated lands of kolkhoz Iseni Orizhonkidze (village of Sumbazashat) in Yatsenberyan'skiy rayon. Experiments were conducted on plots of 200 m² with the seed sowing rate of 8; 10; 15; 20 and 25 kg/ha which corresponded to 3.6; 4.5; 6.7; 9.9 and 11.2 million of germinating seeds on 1 hectare. In the first year after the harvest of the cover crop, 2 sowings were carried out; in the second and third years - 3-5 sowings. P₆₀ and K₃₀ were applied in spring in the second and third

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COUNTRY : USSR
CULTURE : Cultivated Plants - Forage Crops. M

IDENT. : 0000001, 0e.14, 1098, 00.63452

PLANT :
SPECIES :
VARIETY :

REF. FOR. :

ABSTRACT : years. In early spring and after each mowing, the sowings were harvested. Irrigation was performed to the necessary degree. The aggregate yield for 3 years comprised (in c/ha with the sowing rate of 3 kg - 266.3; 10 kg - 284.3; 15 kg - 336.0; 20 kg - 377; 25 kg - 401.9. The maximum yield was obtained with sowing rate of 25 kg/ha. Hay secured from plots with a high seed sowing rate was rich in nutrients. Sowings at high rate formed a large mass of roots. -- S. A. Marukyan

Card: 2/2

TOVMASYAN, A.S., kand.sel'skokhoz.nauk

A good alfalf stand guarantees a high hay yield. Zemledelie 6 no.8:
58-60 Ag '58. (MIRA 12:11)

1. Armyanskiy sel'skokhozyaystvennyy institut.
(Alfalfa)

TOVMASYAN, A.S.

Alfalfa seeding rates [in Armenian with summary in Russian].

Izv. AN Arm. SSR. Biol. i sel'khoz. nauki 10 no.3:65-73 Mr

'57.

(MLRA Y015)

(Alfalfa) (Sowing)

TOVMASYAN, A. S.

"Study of Methods for Increasing the Productivity of Lucerne Hay Under Conditions of the Oktemberyanskiy Rayon of the Armenian SSR." Cand Agr Sci, Armenian Agricultural Inst, Yerevan, 1953. (RZhBiol, No 5, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No.521, 2 Jun 55

TOVMASYAN, A.S.

Results of a study on alfalfa seeding times in Oktemberyan District,
Armenian S.S.R. [in Armenian with summary in Russian]. Izv.AN Arm.
SSR.Biol.1 sel'khoz.nauki 8 no.6:39-46 Je '55. (MIRA 9:8)
(Oktemberyan District--Alfalfa)

TOVATSIAN, A.S.; AYVATSIAN, N.A.

Effect of soil micro-organisms on the germination of alfalfa and
sainfoin seeds. Izv. AN Arm. SSR. Biol. nauki 16 no.3:9-17 Apr '63.
(MIRA 17:10)

TOVLASYAN, G.I. Cand Phys-Math Sci--(disc) "Resonance method of
signal accumulation in radio-interferometers." Yerevan, 1968. 7 pp
(Acad Sci Armenian SSR. Bureau Astrophysical Observatory. Yerevan
State U), 150 copies (RL,45-58, 141)

- 13 -

31145

S/620/58/000/025/003/004
D218/D302

3,1710
3,1700

AUTHORS: Tovmasyan, G. M. and Burunsuzyan, E. S.

TITLE: Experimental verification of the method of resonance amplification of radio signals received by a radio interferometer

SOURCE: Akademiya nauk Armyanskoy SSR. Byurakanskaya observatoriya. Soobshcheniya, no. 25, 1958, 83-89

TEXT: The present paper describes an experimental check of the method described previously by the authors. The observations were carried out on a 1.52 m wavelength, using a specially constructed experimental radio telescope. The antennas were separated by a distance of the order of 100 wavelengths and consisted of 4 rows of half-wave dipoles with 8 dipoles per row. The beam width at half-power points was 30°. The antennas could be rotated so as to cover the entire northern hemisphere and a part of the southern hemisphere (down to $\theta = -30^\circ$). The interferometer incorporated a

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Experimental verification of ...

37 cps Ryle modulator. It included a superhet. receiver with HF amplifier based on two 6C5D tubes (grounded grids). The IF amplifier contained 4 stages. The second detector (square law) made use of the crystal detector ДГ-13 (DG-TsZ). The receiver was tuned to 197 Mc/sec (bandwidth 1.7 Mc/sec, noise factor 10). The narrow band RC amplifier was tuned to the modulation frequency (bandwidth 1.5 cps, amplification 5,000). The modulated signal was rectified by a synchronous detector. The reference voltage was derived from a generator coupled to the axis of the motor driving the modulator. The time constant of the detector output of a synchronous system was fed directly into a pen recorder and in the resonance system. The ЭПН-09 (EPI-09) pen recorder was employed in both cases. It was found that the only two sources which could be reliably recorded were Cas-A and Cyg-A. However, use of the resonance method enabled the detection threshold to be increased from 10^{-23} W/cps. m² to 2×10^{-24} W/cps. m². Improvements were also found in the directivity of the interferometer and the accuracy to which the intensity and the

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Experimental verification of ...

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D218/D302

right ascension could be determined. It was concluded that these preliminary results largely confirmed the expected advantages of the resonance amplification method. There are 3 figures and 4 references: 2 Soviet-bloc and 2 non-Soviet-bloc. The references to the English-language publications read as follows: M. Ryle, Proc. Roy. Soc. 211, A, 351, 1952; T. R. Witfield, M. N., 117, no.6, 1957.

SUBMITTED: June 1958

Card 3/3

4

TOVMASYAN, G.M.

Increasing the sensitiveness of interference radiotelescopes.
Dokl. AN Arm. SSR 26 no.1:11-20 '58. (MIRA 11:5)

1. Byurakanskaya astrofizicheskaya observatoriya Akademii nauk
Armyanskoy SSR. Predstavleno V.A. Ambartsunyanom.
(Telescope, Radio)

TOVMASYAN, G.M.

Observations of point sources of radio emission. Dokl. AN Arm.
SSR 28 no.1:3-6 '59. (MIRA 12:7)

1. Byurakannkaya astrofizicheskaya observatoriya AN ArmSSR. Pred-
stavleno akademikom V.A.Ambartsunyanom.
(Radio astronomy)

AMBARTSUMYAN, Viktor Amazaspovich; ARAKELIAN, M.A. [translator]; MIRZOYAN, L.V. [translator], red.; PARSAMYAN, E.S. [translator]; TOVMASYAN, G.M. [translator]; KHACHIKYAN, E.Ye. [translator]; SOBOLEV, V.V., red.; KAPLANYAN, M.A., tekhn.red.

[Scientific works in two volumes] Nauchnye trudy v dvukh tomakh. Pod red. V.V.Soboleva. Erevan, Izd-vo Akad.nauk Armianskoi SSR. Vol.1. 1960. 428 p. Vol.2. 1960. 360 p. (MIRA 13:11)

1. Sotrudniki Byurakanskoy astrofizicheskoy observatorii (for Arakelyan, Mirzoyan, Parsamyan, Tovmasyan, Khachikyan). (Astronomy)

33526

S/022/61/014/005/007/007
D218/D301

3.1730 (1126,1127)

AUTHORS: Tovmasyan, G. M. and Shakhbazyan, R. K.

TITLE: On identifying cosmic radio sources

PERIODICAL: Akademiya nauk Armyanskoy SSR. Izvestiya. Seriya fiziko-matematicheskikh nauk, v.14, no. 5, 1961, 121-140

TEXT: The present authors are concerned with identifying Class II radio sources with individual galaxies. The review is based on published catalogues and lists of radio sources. Radio sources lying in the plane of the galaxy and also weak sources were excluded. The final list consisted of 390 objects. In order to establish the presence of a physical relation between the radio sources and clusters of galaxies, a count was made of the number of coincidences between them, and this was compared with the corresponding mathematical expectation of coincidences, assuming a uniform random distribution of both types of objects. This analysis led the authors to conclude that the majority of identified cosmic radio sources of Class II are in fact found in clusters of galaxies. Of 45

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On identifying cosmic ...

identifications with individual galaxies only 5 galaxies are single. It is, therefore, concluded that the great majority of cosmic radio sources of Class II form a special class of galaxies. They consist of close pairs of elliptical galaxies and peculiar galaxies. The latter take the form of elliptical galaxies with two closely located nuclei, galaxies which are very similar to NGC1275. etc. There is evidence to suggest that the dual nature and the peculiarity of the galaxies are not a sufficient condition for the presence of radio-emission. It appears that the division of a galaxy and the separation of the two parts, or the ejection of a satellite, occurs over a longer period of time than processes responsible for the emission of strong radio waves. If this is the case then the radio galaxies are objects, in which the division of the nucleus, or the ejection of a satellite, occurred very recently. Identification of the radiosources with clusters of galaxies has thrown some light on the distance of these sources because the radio flux density depends both on the scale of the phenomena and the stage of development of the processes responsible for the radio emission. It is shown that in most cases the radio galaxy is located

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On identifying cosmic ...

ted at the center of a cluster of galaxies and is its brightest member. This is used as an argument against the colliding-galaxies theory: It indicates that the radio galaxy plays an important role in the life and activity of the entire cluster. Acknowledgments are expressed to Academician V. A. Ambartsumyan, who directed this work, to G. Lyapunova of the staff of ИРФЭ (IRFE) and to K. A. Saakyan of BAO (BAO) for assistance in this work. There are 2 figures, 4 tables and 36 references: 8 Soviet-bloc and 28 non-Soviet-bloc. The 4 most recent references to the English-language publications read as follows: R. Minkowski, Proc. Nat. Acad. Sci., USA, 46, 13, (1960); D. W. Dewhurst, Meeting of the Royal Astronomical Society, Obs., 80, 116, (1960); F. Biraud, J. Lequeux and E. Le Roux, Obs., 80, 116, (1960); J. G. Bolton and B. J. Clark, PASP, 72, 29, (1960).

ASSOCIATION: Institut radiofiziki i elektroniki, AN Armyanskoy SSR (Institute of Radiophysics and Electronics, AS Armenian SSR) X

SUBMITTED: July 4, 1961

Card 3/3

TOVMASYAN, G.M.; SHAKHBAZIAN, R.K.

Identification of cosmic radio sources. Izv. AN Arm. SSR, 1961,
fiz.-mat.nauk 14 no.5:121-140 161. (1961)

1. Institut radiofiziki i elektroniki All Armanakoy SSR.
(Cosmic radiations, Radio-frequency)

TOVMASYAN, G.M.

Note on the presence of gas in the h and χ Persei cluster.
Izv. AN Arm. SSR. Ser. fiz.-mat. nauk 17 no.2:145-147 '64.
(MIRA 17:9)

1. Institut radiofiziki i elektroniki AN Armyanskoy SSR.

L 42309-66 EWT(1) GH

SOURCE CODE: UR/2620/6A/000/036/0031/0043

49
47
B

ACC NR: AT6013094

AUTHORS: Kalloglyan, A. T.; Tovmasyan, G. M.

ORG: none

TITLE: The nuclei of barred galaxies

SOURCE: Byurakan. Observatoriya. Soobshcheniya, no. 36, 1964, 31-43

ASTRONOMIC
OBSERVATORY

TOPIC TAGS: galaxy, astronomy, radio astronomy, photometry, calorimetry, ^{ASTRONOMIC}observatory

ABSTRACT: The results of photometric and calorimetric investigations of 50 barred galaxies are presented. The 50 galaxies included in the study are taken from all four sub-types from SBO to SBC with known radial velocities and apparent magnitudes greater than 13^m. The observations were made on a 21--21" telescope of the Schmidt system of the Byurakan Observatory. "Agfa Astro Platten" film for the blue rays and "Kodak Oa-F" film for orange rays and an OG-1 filter were used. The light system was determined by the equation $CI_{int} = 0.8 CI$, where CI is the light constant in the system used. A table is presented showing the observation data on the fifty galaxies studied. The results lead to the hypothesis that in SBO galaxies there is a strong central "bunching" in which, in all likelihood, there is a star-like center. In SBA and SBb galaxies centers of this type are frequently so bright that they are sharply defined against the background of the central agglomeration. On the other hand, the

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...-type, and the centers are quite weak. The
the development of the center occurs to a large degree independently of
the morphological structure of the galaxy. The authors thank V. G. Anghel for
his comments and interest in the work, and G. G. Markaryan for his consultations in
the process of developing the material. Orig. art. has: 1 table and 3 figures.

"APPROVED FOR RELEASE: 04/03/2001" CIA-RDP86-00513R001756420008-8

SUB CODE: 03/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 002

Card 2/2 *llk*

L 23006-66 FBD/EWT(1) GW/WS-2

ACC NRI AT6013095

SOURCE CODE: UR/2620/64/000/036/0079/0085

AUTHOR: Tovmasyan, G. M.

28
BT1

ORG: Byurakan Astrophysical Observatory (Byurakanskaya astrofizicheskaya obser-
vatoriya)

TITLE: Annular radio telescope with a high solving power

SOURCE: Byurakan. Observatoriya. Soobshcheniya, no. 36, 1964, 79-85

TOPIC TAGS: radio telescope, focal line, declination belt, main mirror, correcting mirror, directivity diagram

ABSTRACT: A new radio telescope system is described. This system consists of two annular mirror telescopes with very high effective solving power. The main mirror is a narrow spherical ring of large diameter. The normal to the ring forms a small angle with the horizon. The ring consists of individual elements. The second mirror is moved on the focal line of the main mirror, and has a diameter equal to half that of the main mirror. This telescope can examine the sky in a declination belt equal to $180^\circ - 2\phi$, where ϕ is the geographical altitude of the mirror's location. Because of its low position, the correcting mirror may be moved around the ring of the main mirror on a carriage. The ring of the main mirror can be illuminated by a restricted area of the correcting mirror and thus a very narrow horizontal directivity diagram may be obtained. Both coordinates of the discrete radio emission source can be

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L 23006-66

ACC NR: AT6013095

measured by examining the region of sky twice on corresponding azimuths. A radio emission source can be observed for two hours with a telescope whose diameter is one kilometer and which is located at 40° latitude when the source is at the southern border of the belt scanned, and for one hour if the source is at the northern border. Such a high solving power telescope is less expensive to construct than an ordinary one. A maser with cooler can be added to this telescope. This telescope may be used before construction is complete. The ring telescope has many advantages compared with other systems. Orig. art. has: 2 figures. [EG]

SUB CODE: 20/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001/ ATD PRESS: 4238

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L 06348-67 ENT(1) GW/NS-2

ACC NR: AR6013396

SOURCE CODE: UR/0269/65/000/011/0045/0045

AUTHOR: Tovmasyan, G. M.TITLE: Annular radio telescope with high resolving power

SOURCE: Ref. zh. Astronomiya, Abs. 11.51.403

REF SOURCE: Soobshch. Byurakansk. observ., vyp. 36, 1964, 79-85

TOPIC TAGS: radio telescope, radio telescope antenna, maser detection

ABSTRACT: A double reflecting annular radio telescope is proposed, guaranteeing a high resolving power with significant simplicity and low cost of construction. A fixed spherical ring of large diameter (~ 1 km) and small width, placed on a horizontal surface, is the primary mirror. The secondary (correcting) mirror is moved along the focal line of the primary mirror and allows reception from directions of constant elevation angle and varying azimuths. A survey of the sky is carried out in the interval of declinations $18^\circ - 2\varphi$, where φ is the geographic latitude of the point. If up to 20 correcting mirrors are installed, then it is possible to make simultaneous and independent observations in many directions and at various wavelengths. The diagram is knife-edge and is constant at all azimuths. The resolving power varies with varying declinations. The low position of the correcting mirror allows the use of masers with refrigerating equipment. S. Makarova [Translation of abstract]

SUB CODE: 03

UDC: 522.59

Card 1/1 *MLK*

TOVMASYAN, G.M.

Nuclei of barred galaxies. Astrofizika 1 no.2:197-202 Je '65.
(MIRA 18:10)

1. Byurakanskaya astrofizicheskaya observatoriya.

TOVMASYAN, G.M.

Origin of stellar clusters. Soob. Biur. obser. no.33:
87-93 '63. (MIRA 17:5)

TOVMASYAN, G.M.

Radioluminescence function and the distribution of radiogalaxies in space. Izv. AN Arm. SSR, Ser. fiz.-mat. nauk 17 no.1:137-145 '64.
(MIRA 17:3)

1. Institut radiofiziki i elektroniki AN Armyanskoy SSR.

ACCESSION NR: AP4026812

S/0022/64/017/001/0137/0115

AUTHOR: Tovmasyan, G. M.

TITLE: On radio emission functions and distribution of radio galaxies in space

SOURCE: AN ArmSSR. Izv. Seriya fiziko-matematicheskikh nauk, v. 17, no. 1, 1964, 137-145

TOPIC TAGS: radio emission, radio galaxy, radio source, radio magnitude, super-galaxy

ABSTRACT: A study has been made to obtain new representation for radio emission (radio luminescence) functions of 94 radio galaxies. Both single galaxy and cluster galaxy radio sources, identified during previous observations, have been used, and the distribution of their absolute radio magnitudes determined. The absolute radio magnitudes of 46 pairs of binary radio galaxies have been reviewed as a function of relative distances between the components of the binary pair and measured according to the stellar brightness magnitude scaling. This is given by the relationship

$$M_R = - (28,2 \pm 0,2) + (4,6 \pm 0,7) \lg A.$$

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ACCESSION NR: APL026812

The investigation results indicate that the majority of radio galaxies fall in the magnitude range -28 with a maximum occurring at -27. The investigation also indicates the presence of supergalaxies in the distribution of radiogalaxies at estimated distances of 80 million parsec. "The author expresses his gratitude to academician V. A. Ambartsumyan for many helpful discussions." Orig. art. has: 4 tables, 3 figures, and 1 formula.

ASSOCIATION: Institut radiofiziki i elektroniki AN Armyanskoy SSR (Institute of Radio Physics and Electronics, AN Armenian SSR)

SUBMITTED: 04Sep63

DATE ACQ: 16Apr64

ENCL: 00

SUB CODE: AS

NO REF SOV: 007

OTHER: 017

Card 2/2

TOVMASYAN, G.M.; SANAMYAN, V.A.; ASLANYAN, A.M.

New data on radio emission from the spur-shaped region near
 $l'' = 30^\circ$. Soob. Biur. obser. no.31:53-56 '62. (MIRA 16:9)

1. Institut radiofiziki i elektroniki AN Armyanskoy SSR.

TOVMASYAN, G.M.

New possible identifications of radio sources. Soob. Bur.
obs. no.31:19-29 '62. (MIRA 16:9)

TOVMASYAN, G.M.; KALLOGLYAN, A.T.

Some identifications of cosmic radio sources. Soob. Bur.
obser. no.31:31-38 '62.

Nature of double radio galaxies. 39-51 (MIRA 16:9)

1. Institut radiofiziki i elektroniki AN Armyanskoy SSR i
Byurakanskaya astrofizicheskaya observatoriya AN Armyanskoy
SSR.

RUZAVIN, I.I., and I.I. SCHAPKIN, A.A.; TOVMOYAN, G.G.

Studying the nitrate excretion of higher plants. Izv. VASKO
no.2:101-105 '68. (MIRA 18/9)

I. Kafedra agr.khm. i Moskvozkoy akademii sel'skokhozyaystvennykh
nauk imeni Tchernysheva.

2

CA

Thermographic method of determining the constant of chemical equilibrium of reciprocal-pair systems in melts. 1. K. Tomas'yan, *Doklady Akad. Nauk S.S.S.R.* 77, 429-32 (1964).—A method for the theoretical calcul. of equil. const. in reciprocal salt pairs by measurement of temp. change caused by mixing the reactants and the products in varying amts. is based on the fact that the max. temp. change arises when only the reactants are mixed, zero change when the reactants and products are mixed in amts. corresponding to the equil. concn., and an opposite change when only the products are mixed. By this method, values of the equil. const. were detd. experimentally for various salt pairs. The stable salt pair, temp. of measurement, and the equil. const. are, resp.: NaCl-KBr, 760°, 1.78; NaCl-KI, 777°, 1.62; NaBr-KI, 777°, 10.02; AgBr-KCl, 708°, 2.06; AgI-KCl, 764°, 2.89; 752°, 2.18; AgI-NaBr, 708°, 4.12; 764°, 2.89; AgI CdCl: 818°, 12.704; 883°, 7.315; 825°, 3.826. Arkl J. Miller

TOVASS'YAN, T.K.

Phase Rule and Equilibrium

Thermographic method for the determination of chemical equilibrium constants in reciprocal systems in molten state. Zhur. fiz. khim. 26, no. 2, 1952.

9. Monthly List of Russian Accessions, Library of Congress, SEPTEMBER 1952, ~~1950~~, Unclassified.

TOVMAS'YAN, I.K.; POKOTILO, K.I.

Determination of chemical equilibrium constants of reciprocal systems Ag, Na // Cl, Br and Ag, K // Br, I in melts. Zhur.fiz.khim. 27 no.10:1471-1475 0 '53. (MLRA 6:12)

1. Pedagogicheskiy institut, Rostov-na-Donu.
(Phase rule and equilibrium) (Salts)

"APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756420008-8

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APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756420008-8"

SADROYAN, V. S.; TOVMASYAN, Kh. G.

Venous pressure in malaria. Klin. med., Moskva 29 no.7:26-87
July 1951. (CML 20:11)

1. Yerevan.

SANAMYAN, V. A. and TCVMASYAN, ^{Kh.} M.

"On Increase of the Sensitivity and Directivity of Radio Interferometers."
paper presented at Symposium on Radio Astronomy, Paris, 30 Jul - 6 Aug 58.

KRENKEL', E., Geroy Sovetskogo Soyuz; VISHNEVETSKIY, F.; TARIVERDIYEV, D.,
kand. tekhn. nauk; KARAYANIY, V.; TOVMASYAN, L., nauchnyy rabotnik
(Yerevan); ROZUL, B.; VOZNYUK, V.; YEPKIN, N., radiorabitol'
(Moskva); MATLIN, S., inzh.; BORNOVOLOKOV, E., inzh.; GONCHAROV, V.;
GRIF, A.; MSTISLAVSKIY, A.

Works and needs of radio amateurs. Radio no.7:1-3 '64.

(MIRA 18:1)

1. Predsedatel' prezidiuma Federatsii radiosporta SSSR (for Krenkel').
2. Glavnyy redaktor zhurnala "Radio" (for Vishnevetskiy).
3. Chlen Bakinskogo radio-kluba (for Tariverdiyev).
4. Predsedatel' L'vovskoy oblastnoy seksii radiosporta (for Karayaniy).
5. Nachal'nik Donetskoj shkoly radioelektroniki (for Rozul).
6. Predsedatel' soveia Novosibirskogo oblastnogo radiokluba (for Voznyuk).
7. Spetsial'nyy korrespondent "Pravdy" (for Goncharov).
8. Spetsial'nyye korrespondenty zhurnala "Radio" (for Grif, Mstislavskiy).

MIRZABEKYAN, A.O.; VANTSYAN, Ye.A.; MELKUMYAN, P.B.; TOVMASYAN, M.S.

Toxic infections caused by *Salmonella brandenburg*. Vop. pit.
23 no.1:85-86 Ja-F '64. (MIRA 17:8)

1. Iz laboratorii mikrobiologii (zav. A.O. Mirzabekyan) Instituta epidemiologii i gigiyeny Ministerstva zdravookhraneniya Armyanskoy SSR, Yerevan.

DUNAYEV, Ernest Pavlovich; TOVMOSYAN, M.Ye., red.; RAKITIN, I.T.,
tekh. red.

[Development of democratism in industrial management during the
period of the building of communism] Razvitie demokratizma v
upravlenii proizvodstvom v period stroitel'stva kommunizma. Mo-
skva, Izd-vo "Znanie," 1962. 31 p. (Novoe v zhizni, nauke,
tehnike. III Seriya: Ekonomika, no.6) (MIRA 15:5)
(Industrial management)

ARAKELIAN, Artashes Arkad'yevich, akad.; TOVMOSYAN, M.Ye., red.; HAZAROVA, A.S., tekhn. red.

[Material basis of communist labor] Material'naya osnova kommunisticheskogo truda. Moskva, Izd-vo "Znanie," 1962. 31 p. (Novoe v zhizni, nauke, tekhnike. III Seriya: Ekonomika, no.4) (MIRA 15:5)

1. Akademiya nauk Armyanskoy SSR (for Arakelyan). (Labor and laboring classes)

KOLDOBSKIY, A.G.; MEDVEDEV, S.I.; PISKOPPEL', F.G.; YAKOBSON, M.G. Primali uchastiy: BERKHIN, I.B.; OSLIKOVSKAYA, Ye.S.; PEREKISLOVA, A.M.; LITVIN, V.M.; PARKHOMENKO, Ye.V.; STOTIK, A.M.; SHAPIRO, T.I.; STRUMILIN, S.G., akad., glav. red.; ALEKSENKO, G.V., red.; ANISIMOV, N.I., red.; VOLODARSKIY, L.M., red.; GERSHBERG, S.R., redaktor; red.; PETROV, A.I., red.; POSVYANSKIY, S.S., red.; HAZAROVA, G.V., kand. ekonom. nauk, starshiy nauchnyy red.; KISEL'MAN, S.M., starshiy nauchnyy red.; LIVANSKAYA, F.V., kand. ekonom. nauk, starshiy nauchnyy red.; GLAGOLEV, V.S., nauchnyy red.; NEDBAYEV, V.I., nauchnyy red.; TUMANOVA, N.L., nauchnyy red.; TOVMASYAN, M.E., red.; BLAGODARSKAYA, Ye.V., mladshiy red.; SHUSTROVA, V.M., mladshiy red.; ZENTSEL'SKAYA, Ch.A., tekhn. red.

[The economic life of the U.S.S.R.; chronicle of events and facts, 1917-1959] Ekonomicheskaya zhizn' SSSR; khronika sobytii i faktov 1917-1959. Glav. red. S.G.Strumilin. Chleny red. kollegii: Alekseenko i dr. Moskva, Gos. nauchn.izd-vo "Sovetskaya entsiklopediya," 1961. 779 p. (MIRA 14:10)

1. Tsentral'naya nauchnaya sel'skokhozyaystvennaya biblioteka Vsesoyuznoy akademii sel'skokhozyaystvennykh nauk im. Lenina (for Litvin, Parkhomenko, STOTIK, Shapiro).
(Russia--Economic conditions)

. TOVMASYAN, M.S.

Antibiotic sensitivity of Bacterium derby isolated in Erivan.
Izv. AN Arm. SSR. Biol. nauki 14 no.3:87-91 Mr '61.

(MIRA 14:3)

1. Laboratoriya mikrobiologii instituta epidemiologii i gigiyeny
Minzdrava ArmSSR.

(SALMONELLA)

(ANTIBIOTICS)

TOVMAS'YAN, N.K.

Thermographic study of melts of salts and metals. Zhur.
neorg.khim. 1 no.7:1642-1645 J1 '56.

(MLRA 9:11)

(Alloys) (Salts) (Thermometry)

TOVMASYAN, N.Ye.

Dirichlet problem for an elliptic system of two second-order differential equations. Dokl. AN SSSR 153 no.1:53-56
N '63. (MIRA 17:1)

1. Institut matematiki s vychislitel'nym tsentrom Sibirskogo
otdeleniya AN SSSR. Predstavleno akademikom I.N. Vekua.

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L 44337-66 EWT(d) IJP(c)

ACC NR: AP6019184

SOURCE CODE: UR/0376/66/002/002/0163/0171

AUTHOR: Toymasyan, N. Ye.

22
E

ORG: Institute of Mathematics, SO AN SSSR (Institut matematiki SO AN SSSR)

TITLE: The general ¹⁶boundary problem for second-order elliptical systems with constant coefficients. II

SOURCE: Differentsial'nyye uravneniya, v. 2, no. 2, 1966, 163-171

TOPIC TAGS: elliptic differential equation, Dirichlet problem, CONSTANT COEFFICIENT

ABSTRACT: A. V. Bitsadze presented earlier (Izd. AN SSSR, M., 1959) examples of elliptical systems for which the homogeneous Dirichlet problem within a circle has an infinite number of linearly independent solutions indicating that in general the problem is not a Noeterean one. On the other hand, the Dirichlet problem for second-order elliptical systems can be normally solvable despite the fact that the homogeneous Dirichlet problem may have an infinity of solutions. In this continuation of an earlier paper (Differentsial'nyye uravneniya, No. 1, 1966) the author investigates the question of whether the Dirichlet problem for the second-order elliptical system is always solvable, and whether there are Dirichlet problems for elliptic cases which are normally solvable but not Noeterean. The results show that the class of elliptical systems for which the Dirichlet problem is normally solvable is wider than the class of elliptic systems for which the problem is Noeterean or even wider

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ACC NR: AP6019184

than the entire system of elliptic systems. It is also shown that the Dirichlet problem for the inhomogeneous system with homogeneous boundaries is always normally solvable within the semi-infinite plane. Orig. art. has: 37 formulas.

SUB CODE: 12/ SUBM DATE: 23May65/ ORIG REF: 012/ OTH REF: 001

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CIA-RDP86-00513R001756420008-8"

TOVMASYAN, N. Ye.

Dirichlet problem for an elliptic system of differential equations of the second order. Dokl. AN SSSR 159 no.5:995-998 D '64
(MIRA 18:1)

1. Institut matematiki Sibirskogo otdeleniya AN SSSR. Predstavleno akademikom M.A. Iavrent'yevym.

"APPROVED FOR RELEASE: 04/03/2001

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APPROVED FOR RELEASE: 04/03/2001

CIA-RDP86-00513R001756420008-8"

AUTHOR: Tovmasyan, N. Ye. SOV/22-11-3-2/5

TITLE: On the Existence of the Solution of the Dirichlet Problem for the Laplace Equation in the Case of Non-Summable Boundary Conditions (O sushchestvovanii rosheniya zadachi Dirikhle dlya uravneniya Laplasya v sluchaye nesummiruyemykh granichnykh znacheniy)

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR, Seriya fiziko-matematicheskikh nauk, 1958, Vol 11, Nr 3, pp 23-40 (USSR)

ABSTRACT: Let D be a three-dimensional domain in which the Dirichlet Problem for the Laplace equation has a solution for arbitrary continuous boundary conditions. On the boundary σ of D let be defined a function $f(p)$ continuous everywhere on σ with the exception of the point p_0 where it has a discontinuity of arbitrary order. In a small neighborhood of p_0 let σ have a continuously variable normal. In a certain neighborhood of p_0 let the straight lines parallel to the normal in $p = p_0$ intersect the boundary only once.

Theorem: Under the given assumptions the Dirichlet problem has a solution for the Laplace equation.

Theorem: In order that the Dirichlet problem has a solution for

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On the Existence of the Solution of the Dirichlet Problem $337/22-11-3-2/5$
for the Laplace Equation in the Case of Non-Summable Boundary Conditions

the Laplace equation in a two-dimensional domain D for every function $f(p)$ only discontinuous in $p = p_0$, it is necessary:

A. the existence of a function $r(t) > 0$ tending monotonely to zero for $t \rightarrow 0$, with the property that every $z \in D$ can be combined with p_0 by a Jordan arc lying entirely in $|\bar{z}| < r(|z|)$.

Theorem: If A is satisfied and if there exists a small neighborhood of p_0 which contains no points of the complementary domains

for which p_0 is no boundary point, then the Dirichlet problem

has a solution for the Laplace equation in D for every boundary condition $f(p)$ of the above kind.

There are 5 Soviet references.

ASSOCIATION: Institut matematiki i mekhaniki Akademii nauk Armyanskoy SSR
(Institute for Mathematics and Mechanics of the Academy of
Sciences of the Armenian SSR)

SUBMITTED: February 1, 1958

Card 2/2 1. Mathematics

TOVMASYAN, N.Ye.

Existence of a solution of Dirichlet's problem for Laplace's equation in the case of nonsummable boundary values. Izv. AN Arm SSR. Ser. fiz.-mat. nauk 11 no.3:23-40 '58. (MIRA 11:9)

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