

SHAKHBAZIAN, G.

Color and light. Sov. profsoiuzy no.17:30-31 S '61.

(MIRA 14:8)

1. Chlen-korrespondent Akademii meditsinskih nauk SSSR.
(Color—Psychology)
(Factories—Design and construction)

SHAKHEAZYAN G. K. and VITTE N. K.

Principles of standardization of an artificial 'micro-climate' Hygiene and Public Health, Russia 1948, 3 (22-29) illus. 4

6407 The ideal climatic conditions vary with the work being done. Thus the heat balance was maintained during light work with an external temperature of 25° C, but for heavy work 10°C was ideal, and for extremely heavy work the freezing point was most suitable. It is pointed out that a 'climate' undergoes variations under many headings, and that physical output decreases with rising temperature, at least above a certain point. Corresponding with the rise in temperature is an increase in pulse rate and greater fatigue with lesser efficiency of the heart. (The article is a review of factors already well known).
Pether - (B.F.A.)

SO: Section II Vol. 1² No. 7-12

SHAHBAZIAN, G. Kh.

37551. Printsii Sostavleniya Meteorologicheskikh Norm Na Proizvodstve. V SB: ~~№~~1
Vsesoyuz. S'yezd Gidriyentov, Epidemiologov, Mikrobiologov. I Infektsionstov. T. I,
M., 1949. s. 191-96

SO: Letopis' Zhurnal'nykh Statey Vol. 37. 149

SHAKHBAZYAN, G. KH.

PA 59/49T55

USSR/Medicine - Microclimate Feb 49
Medicine - Labor Hygiene

"Microclimate as a Problem for Hygienists," G. Kh. Shakhbazyan, Kiev Inst of Labor Hygiene and Occupational Diseases, 5 pp

"Gig 1 San" No 2

Study of the microclimate of cities and industrial enterprises is the groundwork for establishing healthier working and living conditions for peoples of the USSR. Indicates decrease in number of cases of occupational diseases (miners, metallurgical workers, etc.) due to introduction of measures recommended by hygienists.

59/49T55

^H
SHAKBAZIAN, G. K.

Combination of convective and radiant heat for body comfort.
Gig. sanit., Moskva no.9:17-22 Sept. 1950. (GML 20:1)

1. Of Kiev Institute of Labor Hygiene and Occupational Diseases.

SHAKHBAZIAN, G. Kh.

Contribution of the Kiev Institute of Industrial Hygiene and Occupational Diseases to the introduction of the Pavlovian theory into hygienic studies. Gig. sanit., Moskva no.6:45-47 June 1952. (GLML 23:2)

SHAKHBAZIAN, G.Kh.

Control of air circulation in industrial plants. Gig. sanit., Moskva
no.3:30-32 Mar 1953. (GIML 24:3)

1. Of the Department of Labor Hygiene of Kiev Order of the Red Banner
of Labor Medical Institute imeni A. A. Bogomolets.

SHAKHBAZIAN, G.Kh.;SPYNU, Ye.I.

Apparatus for the study of dust toxicity on animals. Gig. sanit., Moskva
no.6:26-30 June 1953. (GIML 25:1)

1. Of Kiev Institute of Labor Hygiene and Occupational Diseases.

KALYUZHNIY, D.N.; SHAKHBAZIAN, G.Kh.

O.M.Marzeev; on his 70th birthday. Medych. zhur. 23 no.4:86-88 '53.
(MIRA 8:2)

(MARZEEV, ALEKSANDR NIKITOVICH, 1883-)

Shakhbazian, G. KH.

6.9-305 551.586:615.8
 Shakhbazian, G. KH. and Shleifman, F. M., Meteorologicheski komfort dlia liudei, vyoiniatushchiki i tlicheskuiu rabotu srednei tlazhesti. [Meteorological comfort for individuals performing moderately heavy work.] *Gigiena i Sanitariia*, Moscow, No. 10:22-25, Oct. 1954. 3 figs. DLC—The upper line of the zone of microclimatic comfort for individuals performing moderately heavy work (2.5-3.5 cal/min) is formed by air temperatures of 15-16°C. The upper line of comfort is increased to 24-25°C by air movement of 1.5 m/sec and to 26-28°C by air movement of 3m/sec. Further increases in air movement do not extend the zone of comfort. *Subject Headings:* 1. Comfort climate 2. Heat tolerance.—I.L.D.

Kiev Inst Work Hygiene & Professional Diseases

SHAKHBAZIAN, Prof. G.KH., MEDVED', L.I., MARZEYEV, A.N. (deceased)

"Modern Hygiene Problems in the Field of Rural Welfare, Agricultural Labor Hygiene, Nutrition, and in Providing Sanitary ~~Service~~ Service for Kolkhozes, Tractor Stations, and Sovkhozes," a report presented at the 13th All-Union Congress of Hygienists, Epidemiologists, Microbiologists, and Infectionists, Leningrad, 1956 (June). Zhur, Mikrobiol., Epidemiol. i Immunobiol., pp. 3-5, 1956

Sum. 1003, 20 Jul 56

SHAKHBAZYAN, G.Kh., professor, doktor meditsinskikh nauk; TRAKHTENBERG, I.M., dotsent, kandidat meditsinskikh nauk

Review of O.F.Makarchenko's monograph on "Changes in the nervous system and characteristic of the higher nervous activity in manganese poisoning." Fiziol.zhur. [Ukr.] 2 no.5:131-134 S-0 '56. (MLRA 10:1)
(MANGANESE--TOXICOLOGY) (NERVOUS SYSTEM--DISEASES)

SHAKIBAZYAN, G.Kh., professor (Kiyev); KULIK, G.I. (Kiyev); VUL'FSON, R.Kh.
(Kiyev)

Preventing caries in adolescents by increased vitamin intake.
Probl. stom. 3:19-22 '56 (MLRA 10:5)
(TEETH--DISEASES) (VITAMIN THERAPY)

MARZEYEV, A.N., prof., akademik [deceased]; SHAKHBASYAN, G.Kh., prof.;
MEDVED', L.I., dotsent (Kiyev)

Current problems in the field of rural planning, labor hygiene,
nutrition and public health care for the rural population. Vrach.
delo no.12:1291-1295 D '56. (MIRA 12:10)

1. AMU SSSR (for Marzeyev).
(PUBLIC HEALTH, RURAL)
(HOUSING, RURAL--HYGIENIC ASPECTS)
(AGRICULTURAL LABORERS--MEDICAL CARE)

SHAKHBAZIAN, G.Kh., professor

Data on hygienic standards of air movement in industrial plants.
Gig. i san. 21 no.5:7-12 My '56. (MLRA 9:8)

1. Iz kafedry gigiyeny truda Kiyevskogo ordena Trudovogo krasnogo
Znameni meditsinskogo instituta
(VENTILATION,
indust. (Rus))
(INDUSTRY AND OCCUPATIONS,
ventilation in indust. (Rus))

SHAKHBAZYAN, G., professor (Kiyev)

"Microclimat" in the workshop. Nauka i zhizn' 23 no.10:30-32
0 '56. (MLRA 9:11)

(Industrial hygiene)

SHAKIBAZYAN, G.Kh., prof.,

"Dynamics of Agricultural Traumatism,"
Paper presented at the 11th Session of AMS USSR on Trauma, April 1957.

SO: Sum. 1644

GABOVICH, Rafail Davidovich [Habovich, R.D.]; SHAKHBAZYAN, Gaik
Khachaturovich [Shakhbazian, H.Kh.], red.

[Hygiene; a manual for physicians and students] Higiena,
posibnyk dlia likaria ta studentiv; pod red. H.Kh. Zhakhba-
ziana. Kyiv, Derzhmedvydav, URSS, 1958. 641 p. (MIRA 12:6)
(HYGIENE) (PUBLIC HEALTH)

SHAKHBAZYAN, G.Kh., prof. (Kiyev)

In Peking and Pyongyang. Vrach.delo no.7:771-773 J1 '58 (MIRA 11:9)

1. Chlen-korrespondent AMN SSSR.
(CHINA--PUBLIC HEALTH)
(KOREA, NORTHERN--PUBLIC HEALTH)

SHAKHBAZIAN, G. KH, MEDVED', L. I., MARZBYEV, A. N.

"Modern Tasks of Hygiene in the Field of Rural Planning, Hygiene of Agricultural Labor, Nutrition, and Sanitary Services to the Population in Kolkhozes, Machine and Tractor Service Stations and Sovkhozes."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists and Infectionists, 1959.

LESHCHENKO, P.D., red.; KALIUZHNYI, D.N., red.; GRANDO, A.A., red.;
SHAKHBAZIAN, G.Kh., red.; TRAKHTENBERG, I.M., red.; GITSHTEYN,
A.D., tekhn.red.

[Materials for a history of public health and sanitation in the
Ukrainian S.S.R.] Materialy k istorii gigeny i sanitarnogo
dela v USSR. Pod red. P.D.Leshchenko, D.N.Kaliuzhnogo i A.A.
Grando. Kiev, Gos.med.izd-vo USSR, 1959. 255 p. (MIRA 13:3)

1. Ukraine. Ministerstvo zdravookhraneniya.
(UKRAINE--PUBLIC HEALTH)

EXCERPTA MEDICA Sec 2 Vol 12/9 Physiology Sept 59

1054. EFFECTS OF HIGH ENVIRONMENTAL TEMPERATURE ON METABOLIC PROCESSES (Russian text) - Shakhbazyan G. A. and Shleifman F. M. - GIG.I SAN. 1959, I (30-35) Graphs 2

Exposure to high temperature (40°C.) for 3 hr. daily for a period of 4 weeks caused changes in the titrated alkalinity of plasma, the alkaline reserve of blood and the blood sugar. Hypoglycaemia was probably provoked by an increased utilization of sugar by the tissues. The above-mentioned indices had not yet returned to their normal values on the 5th, 10th and 15th days after the discontinuance of exposure to high temperature. In problems connected with hygienic standards for the microclimate of working premises, it is necessary to consider possible effects on the processes of metabolism.

SHAKHBAZYAN, G.kh., prof.; ERMAN, I.M., dots. (Kiyev)

Labor conditions and the health of workers. Vrach. delo. no.1:
59-63 '59. (MIRA 12:4)

1. Chlen-korrespondent AMN SSSR (for Shakhbazyan).
(INDUSTRIAL HYGIENE)

SHAKHBAZIAN, G.Kh., prof.

Lenin's theory of reflection and the role of sensation in the
examination of hygienic problems. Nek.filos.vop.med.i est.
no.2:41-52 '60. (MIRA 15:7)

1. Kafedra gigiyeny truda i professional'nykh zabolevaniy Kiyevskogo
meditsinskogo instituta imeni Bogomol'tsa. Chlen-korrespondent
AMN SSSR.

(SENSES AND SENSATION)

(HYGIENE—EXAMINATIONS, QUESTIONS, ETC.)

SHAKHBAZYAN, G.Kh., prof.; SHLEYFMAN, F.M., kand.med.nauk

Change in some biochemical indexes following action on the body
of alternating high and low air temperatures. Vrach.delo no.4:
399-401 Ap '60. (MIRA 13:6)

1. Kafedra gigiyeny truda Kiyevskogo meditsinskogo instituta.
2. Chlen-korrespondent AMN SSSR (for Shakhbasyan).
(METABOLISM) (TEMPERATURE--PHYSIOLOGICAL EFFECT)

SHAKHBAZIAN, G.Kh., prof.

Contemporary problems in the hygienic standardization of the industrial microclimate. Vrach.delo no.10:86-89 0 '60. (MIRA 13:11)

1. Chlen-korrespondent AMN SSSR.
(INDUSTRIAL HYGIENE)

SHAKHBAZYAN, G.Kh., prof.; SHLEYFMAN, F.M., kand.meditsinskikh nauk;
VEKSLER, I.G.

Hygienic significance of drops of air temperature. Vest. AMN
SSSR 15 no. 5:62-66 '60. (MIRA 14:2)

1. Chlen-korrespondent AMN SSSR (for Shakhbazyan).
(TEMPERATURE—PHYSIOLOGICAL EFFECT)

SHAKHBAZYAN, Gaykh Khachaturovich, prof.; TRAKHTENBERG, Issak Mikhaylovich,
kand. med. nauk; NEYMAN, M.I., red.; BEL'CHIKOVA, Yu.S., tekhn.
red.

[Hygiene of mental labor] Gigiena umstvennogo truda. Moskva, Gos.
izd-vo med.lit-ry Medgiz, 1961. 70 p. (MIRA 14:7)

1. Chlen-korrespondent Akademii meditsinskikh nauk (for Shakhbazyan)
(MENTAL HYGIENE)

BRATUS', V.D., dots., red.; BARCHENKO, I.P., prof., zam. red.;
VERZHIKOVSKAYA, M.V., dots., red.; GROMASHEVSKIY, L.V.,
prof., red.; SHAKHBAZYAN, G.Kh., prof., red.; PARANNIK,
P.I., prof., red.; SHMAL', D.D., dots., red.; POZNAISKIY,
S.S., dots., red.; KALUZHNYY, D.N., red.; CHUCHUPAK, V.D.,
tekh. red.

[Hygienic norms and the sanitation of the external environ-
ment]Gigienicheskie normativy i ozdorovlenie vneshnei sredy;
sbornik nauchnykh rabot. Kiev, Gosmedizdat USSR, 1961. 268 p.

(MIRA 15:11)

1. Kiev, Medychnyi instytut. 2. Deystvitel'nyy chlen Akademii
meditsinskikh nauk SSSR (for Gromshevskiy). 3. Chlen-
korrespondent Akademii meditsinskikh nauk SSSR (for Shakhbazyan).
4. Direktor Kiyevskogo meditsinskogo instituta (for Bratus').
5. Kafedra gigiyeny pitaniya Kiyevskogo meditsinskogo instituta
im. A.A.Bogomol'tsa (for Barchenko). 6. Kafedra obshechey gigiyeny
Kiyevskogo meditsinskogo instituta Kiyevskogo meditsinskogo in-
stitutu im. A.A.Bogomol'tsa (for Verzhikovskaya, Shmal').

(PUBLIC HEALTH)

SHAKHBAZIAN, G. Kh.; LIKHTENSHTEYN, Ye. I. (Kiyev)

Principles of organization and curriculum of the occupational diseases course taught at the Kiev Bogomolets Medical Institute. Gig. truda i prof. zab. 5 no.7:6-9 J1 '61.
(MIRA 15:7)

1. Kiyevskiy meditsinskiy institut imeni Bogomol'tsa.

(KIEV...MEDICINE...STUDY AND TEACHING)
(OCCUPATIONAL DISEASES)

BARANNIK, P.I., red.; BARCHENKO, I.P., red.; GABOVICH, R.D., red.;
KAGAN, S.S., red.; KALYUZHNYI, D.N., red.; KRIVOGLAZ, B.A.,
red.; POZNANSKIY, S.S., red.; SUPONITSKIY, M.Ya., red.;
TRAKHTENBERG, I.M., red.; ~~SHAKHBAZIAN, G.Kh.~~, red.; SHMAL',
D.D., red.; OSETRV, V.I., red.; CHUCHUPAK, V.D., tekhn.red.

[Problems of general and specialized hygiene] Voprosy obshchei
i chastnoi gigeny. Kiev, Gosmedizdat USSR, 1963. 308 p.
(MIRA 16:10)

1. Ukraine. Ministerstvo zdravookhraneniia.
(PUBLIC HEALTH)

SHAKHBAZIAN, G.Kh.; SAVITSKIY, I.V.

Combined action of thiol poisons and high atmospheric
temperature on the body. Vest. AMN SSSR 18 no.2:38-42 '63.
(MIRA 17:5)

1. Kafedra gigiyeny truda Kiyevskogo meditsinskogo instituta.

SHAKHBAZIAN, G.Kh., prof.; TRAKHTENBERG, I.M., dotsent (Kiyev)

"Data on the history of hygiene and sanitation in the Ukraine."
Reviewed by G.Kh.Shakhbazian, I.M.Trakhtenberg. Vrach.delo no.3:
153-155 Mr '63. (MIRA 16:4)

(UKRAINE--PUBLIC HEALTH)

SHAKHBAZIAN, G.Kh; TRAKHTENBERG, I.M.

Problems of the hygienic evaluation of chemical factors in an industrial environment. J.hyg.epidem. 7 no.3:3710386 '63.

1. Kiev Medical Institute, Kiev.

*

MEDVED', D.I., prof., otv. red.; YEVUSHENKO, G.I., dots., zam. otv. red.; KUNDIYEV, Yu.I., dots., red.; KRIVOGLAZ, B.A., prof. red.; NOVITSKIY, V.K., prof., red.; SUPONITSKIY, M.Ya., dots., red.; SHAKHBAZYAN, G.Kh., prof., red.

[Industrial hygiene; interdepartmental collection of scientific papers] Gigiena truda; mezhdedomstvennyi sbornik nauchnykh rabot. Kiev, Zdorov'ia, 1964. 268 p. (MIRA 18:3)

1. Kiev. Institut gigiyeny truda i professional'nykh zabo-
levaniy. 2. Kiyevskiy institut gigiyeny truda i profes-
sional'nykh zabo-levaniy (for Medved', Krivoglaz).

GABOVICH, Rafail Davidovich, prof.; POZNANSKIY, Semen Semenovich,
dots.; SHAKHBAZYAN, Gayk Khachaturovich, prof.; PETROVSKIY,
K.S., red.

[Manual of hygiene] Uchebnik gigeny. Meditsina, 1964.
471 p. (MIRA 17:11)

1. Chlen-korrespondent AMN SSSR (for Shakhbazyan).

I 41074-66 EWT(1) SCTB DD

ACC NR: AP6027593

SOURCE CODE: UR/0248/66/000/008/0008/0012

AUTHOR: Shakhbazyan, G. Kh.; Shleyfman, F. M.

22
B

ORG: Kiev Scientific-Research Institute of Industrial Hygiene and Occupational Diseases (Kiyevskiy nauchno-issledovatel'skiy institut gigiyeny truda i profzabolevaniy)

TITLE: The problem of adaptation of the organism to ²temperature fluctuations

SOURCE: A:MN SSSR. Vestnik, no. 8, 1966, 8-12

TOPIC TAGS: rat, rabbit, temperature adaptation, body temperature, hyperthermia, hypothermia, biochemistry

ABSTRACT: Rabbits and white rats were studied to determine whether frequent and sudden alternation of temperature stresses (40C to 5C alternating four times in 3 hr) can bring about full development of thermoregulatory mechanisms and whether the organism can adapt to conditions of alternating thermal stress. Intensified thermoregulatory activity (abnormal body temperatures, polypnea, general excitation) was observed. The maximum ambient temperature raised body temperature 0.8 to 1.7C above normal; the minimum lowered it to normal and below. Changes in body temperature over a four-week exposure to alternating temperature extremes showed a well-defined pat-

Card 1/2

UDC: 612.59.017.2

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ACC NR: AP6027593

tern: hyperthermia in the heat chamber was less pronounced than during continuous exposure to high ambient temperatures, hypothermia in the cold chamber became more extreme as the experiment continued (especially in the second and third weeks), and abnormal temperature reactions were seen in some animals. By the third week of exposure to alternating temperature stresses, the 5-degree values of biochemical indices had changed as follows: serum albumin dropped from 6.74% to 6.1% and amino acid nitrogen from 14.1 mg% to 11.1 mg%. This is consistent with the occurrence of detraining shifts and impaired protein formation in the liver. Blood sugar and alkaline reserve fell off. By the end of the third or fourth week some of the animals showed dystrophic changes in the brain and parenchymatous organs (chromatolysis of neurons, cloudy swelling of liver, kidney, and cardiac muscle cells), indicating that the changes observed in biochemical indices have a structural morphological origin. Functional loading tests placing extra stress on the thermoregulatory apparatus (exposure for 2 hr to 52C, equivalent to LD₅₀ for intact animals) were used to determine whether prior exposure to heat and cold stresses induces adaptation of the organism. Adaptation was assessed in animals exposed for 1 day and 1, 2, 3, and 4 weeks to high temperatures (Group I, 40C for 3 hr daily), low temperatures (Group II, 5C for 3 hr daily), and alternating heat and cold (Group III, 30 min at 40C alternating with 15 min at 5C for 3 hr daily). Prior exposure to high ambient temperatures strengthened the thermoregulatory apparatus and improved heat resistance; prior exposure to cold or to alternating heat and cold lowered thermal resistance. It was concluded that exposure to alternating temperature extremes does not bring about effective adaptation of the organism. [DP]

SUB CODE: 06/ SUBM DATE: 12Jul65/ ORIG REF: 021/ OTH REF: 006/ ATD PRESS: 5055
Card 2/2 11b

SHAKHBAZYAN, G.L., prof., civ. red.; TRAKHTENBERG, I.M., dots.,
red.; SAVITSKIY, I.V., kand. med. nauk, red.;
GABOVICH, R.D., red

[Problems of industrial and agricultural toxicology]
Voprosy promyshlennoi i sel'skokhoziaistvennoi toksiko-
logii. Kiev, Zdorov'e, 1964. 197 p. (MIRA 18:2)

1. Kiev. Medychnyi instytut. 2. Chlen-korrespondent
AMN SSSR (for Shakhbazyan).

SHAKHBAZIAN, I.Ye. (Moskva)

All-Russian Congress of Pediatricians. Pel'd. i akush. 25
no.3:54-55 Mr '60. (MIRA 13:6)

(PEDIATRICS--CONGRESSES)

SHAKHBAZIAN, I. Ye.

Use of arterioplezography in various infectious-allergic diseases.
Pediatría 38 no.2:40-44 F '60. (MIRA 13:12)
(RHEUMATIC FEVER) (PULSE)

SHAKHBAZIAN, I.Ye.

Functional state of the vascular system in the acute period
of scarlet fever in children. *Pediatrics* 39 no.1:49-52 '61.
(MIRA 14:1)

1. Iz kliniki detskikh bolezney I Moskovskogo meditsinskogo
instituta imeni I.M. Sechenova (zav. kafedroy - deystvitel'nyy
chlen AMN SSSR prof. Yu.F. Dombrovskaya).
(SCARLET FEVER) (CARDIOVASCULAR SYSTEM)

USSR .

1 - P/W

3

Levitkii, N. I., and Šahbazyan, K. H. The synthesis of spatial four-link mechanisms with lower pairs. Trudy Sem. Teor. Mašin i Meh. 14, no. 54, 5-24 (1954). (Russian)

The four-bar mechanism made of two skew shafts carrying cranks joined by a connecting-rod through ball-and-socket joints can be specified by eight parameters. By analytical geometry, the relations between these parameters and the variable angles are derived. These equations may be used for approximating a desired curve by calculating the required parameters to pass the curve through selected points or by other curve-fitting processes (least squares or other criteria). The equations are used in a numerical example in which eight parameters are calculated. Special cases are considered in which fewer parameters, down to only three, are subject to calculation.

M. Goldberg.

SHAKHBAZVAY KKh
LEVITSKIY, H.N., SHAKHBAZVAYAN, K.Kh.

Analytical method of designing spatial four-bar linkages with two rotating and two ball couples. Izv. AN Arm.S.S.R. Ser. fiz.-mat. nauk (MLRA 10:9)
10 no. 4: 97-99 '57.

(Links and link-motion)

SHAKHBAZIAN, K. Kh.

K. Kh. Shakhbazyan, "The Synthesis of Spatial Mechanisms."

paper presented at the 2nd All-Union Conf. on Fundamental Problems in the
Theory of Machines and Mechanisms, Moscow, USSR, 24-28 March 1978.

SHARHDAZYRA, K. KH.

PHASE I BOOK EXPLOITATION

Akademiya nauk SSSR. Institut mashinovedeniya. Seminar po teorii mashin i mekhanizmov

Trudy, tom 20, vyp. 78 (Transactions of the Institute of Mechanical Engineering, Academy of Sciences USSR. Seminar on the Theory of Machines and Mechanisms, Vol. 20, No. 78) Moscow, 1960. 59 p. Errata slip inserted. 2,700 copies printed.

Editorial Board: I. I. Artobolevskiy (Resp. Ed.), Scientific Supervisor of the Seminar, Academician; G. G. Baranov, Professor, Doctor of Technical Sciences; V. A. Gavrilenko, Professor, Doctor of Technical Sciences; V. A. Zinov'yev, Professor, Doctor of Technical Sciences; A. Ye. Kobrinskiy, Doctor of Technical Sciences; N. I. Levitskiy, professor, Doctor of Technical Sciences; N. P. Ravavskiy, Candidate of Technical Sciences; L. N. Reshetov, Professor, Doctor of Technical Sciences; Ed. of Publishing House: M. M. Knoroz; Tech. Ed.: I. F. Koval'skaya.

Card 1/4

Transactions of the Institute of (Cont.)

SOV/4571

PURPOSE: This book is intended for scientific research workers and engineers concerned with the theory and design of mechanisms.

COVERAGE: The collection contains articles dealing with theoretical problems of mechanisms and machines. Included are discussions on the simplification of various solutions, experimental methods of investigation of dynamic systems, the application of the Bode [?] and Chebyshev points to solution of some problems of synthesis, and an article describing an analytical method of design. Academician I. I. Artobolevskiy, scientific supervisor of the seminar, wrote the preface to this collection. No personalities are mentioned. References accompany each article.

TABLE OF CONTENTS:

Preface	3
<u>Shakhbaryan, K. Kh.</u> Analytical Method of Design of Slider-Crank Space-Mechanism With Lower Pairs (Submitted March 25, 1958)	5
The author simplifies the calculating operations for determining unknown parameters and facilitates design of the mechanism in orthogonal projections by selecting a proper system of coordinates. This article is a continuation of works previously published by the author together with N. I. Iavitskiy.	

Card 2/4

Transactions of the Institute of (Cont.)

SOV/4571

<u>Sasskiy, K. F.</u> Some Problems of Design of Spherical Hinged-Link Mechanisms (Submitted March 26, 1958)	10
The author gives convenient formulas for determining angular and linear velocities and accelerations of links of spherical hinged-link mechanisms and formulas for kinematic and kinetostatic design of n-link spherical mechanisms.	

<u>Bogolyubov, A. N.</u> On the History of Development of the Theory of Mechanisms and Machines (Submitted March 24, 1959)	20
The author reviews one period of the above-mentioned history. For this purpose he has studied the original scientific and technical literature of the late 18th and early 19th centuries. A detailed review of the works of the founders of the theory of mechanisms and machines is given with critical analysis and historical evaluation of these works.	

Card 3/4

Transactions of the Institute of (Cont.)

SOV/4571

Bykheveliy, M. L., V. A. Zinov'yev, and T. T. Pavlova. Experimental Investigation of Electrically-Driven Dynamic Systems (Submitted April 1, 1959)

33

The authors make a theoretical and experimental investigation of the effect of electromagnetic inertia of a motor on the performance of a motor-machine unit. Also discussed is a resonance method for determination of the dynamic parameters of the motor, which was developed by the authors.

Genonimus, Ya. L. Application of the Boll and Chebyshev Points to the Solution of Some Problems of the Synthesis of Mechanisms

43

The author gives graphical and analytical solutions of the problem of synthesizing straight-line mechanisms in which any given point of the connecting-rod has a third-order (Boll's point) or fifth-order (Chebyshev's point) contact, with the straight-line segment. This solution is based on Burmester's theory and uses a number of transformations which have not been applied before in the synthesis of mechanisms.

AVAILABLE: Library of Congress

Card 4/4

VK/wrc/fal
12-14-60

SHAPURAYAN, K. V.

"The Pharmacological Activity of a Culture Solution of Tea Fungus (Bacteriokinin)." Cand Biol, Sci Yerevan Zooveterinary Inst, Min Higher Education USSR, Yerevan, 1954. (RL, No 9, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of the Scientific and Technical Dissertations Defended at the USSR Higher Educational Institutions (14)

SHAKHBAZYAN, K. V., Cand Vet Sci -- (diss) "Pharmacological characteristics of the action of the bactericide (culture fluid of tea mushroom) on the organism." Yerevan, 1960. 27 pp; (Committee of the Council of Ministers Armenian SSR on Higher and Secondary Specialist Education, Yerevan Zootechnical-Veterinary Inst); 120 copies; price not given; (KL, 19-60, 137)

SHAKHBAZYAN, L.Kh., prof.; SHLEYFMAN, F.M., kand.med.nauk

Changes in certain biochemical processes in the organism following exposure to high air temperature [with summary in English]. Gig. i san. no.1:30-35 Ja '59. (MIRA 12:2)

1. Chlen-korrespondent AMN SSSR (for Shakhbazyan). 2. Iz Kiyevskogo instituta truda i professional'nykh zabolevaniy.

(HEAT, effects,
on tissue metab. in animals (Rus))

(METABOLISM, TISSUE,
eff. of heat in animals (Rus))

S/517/62/066/000/002/006
B172/B112

9.7000

AUTHOR: Shakhbazyan, K. V.

TITLE: Calculation of programs for functional operations

SOURCE: Akademiya nauk SSSR. Matematicheskiy institut. Trudy.
v. 66. Moscow, 1962. Raboty po avtomaticheskomu
programmirovaniyu, chislennym metodam i funktsional'nomu
analizu. 45-76

TEXT: The general method of automatizing calculations within various
classes of objects, described in several papers of the Steklov Institute
(DAN, v. 113, no. 4, 1957, 738-744; Izv. AN Armyanskoy SSSR, v. X, no. 2,
1957, 3-16; Zhurn. vychislit. matematiki i matem. fiziki, v. 1, no. 3,
1961, 513-522), is now applied to any given class of programs written in
a standard form. Calculations developed for that class lead to an
automatic setup of programs. First, a class of algorithms is
introduced which consists of functional operations as constructive
objects. These are obtained by the application of generating rules. The
arguments of the functional operations are assumed to be numbers, or

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Calculation of programs for ...

S/517/62/066/000/002/006
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algorithms for numbers. The values of the functional operations are numbers. The solution of the problem under consideration is reduced to establishing a computation program, i.e., to the setup of a process for so arranging a functional operation as to form a pattern. The values emerging from the functional operations constitute the solution to the problem. It then follows that each functional operation can be represented by an agreed programming notation. This leads to the definition of the concept reduced writing of representing a functional operation by abridged writing.

✓
AS

Card 2/2

MAKARENKO, I.P. (Leningrad); SOKHRANSKAYA, V.S. (Leningrad); SHAKHBAZIAN, K.V.
(Leningrad)

Master plan for computer programming. Zhur. vych. mat. 1
mat fiz. 3 no.6:1134-1137 '63. (MIRA 17:1)

SHAKHBAZIAN, M.A.

Ayrumyan, K., Khrimlyan, S.I. and Shakhbazyan, M.A. "The economics of Arzni-Shariram irrigation" (On the plan for a ricultural reconstruction of the area), Izvestiya (Akad. nauk Arm. SSR), Obshchestv. nauki, 1948, No. 11, p. 3-32

SC: U-3461, 10 April 53, (Ietopis 'zhurnal 'nykh Statey No. 12, 1949)

STEPANYAN, L.A., red.; ARUTYUNYAN, A.B., red.; BAGDASARYAN, A.B., prof.,
doktor geogr. nauk, glav. nauchnyy red.; DAVTYAN, G.S., red.;
MARTIROSYAN, G.M., red.; MARUKHYAN, A.O., red.; MKRTCHYAN, S.S.,
red.; URUSOV, V.V., red.; SHAKHBAZYAN, M.S., red.; ALLAKHVERDYAN,
G.O., kand. ekonom. nauk zam glav. nauchnogo red.; ARUTYUNYAN,
N.Kh., akademik, red.; VALESYAN, L.A., kand. geogr. nauk, red.;
DUL'YAN, S.M., kand. geogr. nauk, red.; YEREM'YAN, S.T., red.;
• ZOGRABYAN, L.N., kand. geogr. nauk, red.; KOCHARYAN, G.A., prof.,
red.; POGOSYAN, Kh.P., prof., doktor geogr. nauk, red.;
RUTKOVSKAYA, M.S., starshiy red.; SAVELO, A.F., tekhn. red.;
YAROSHEVICH, K.Ye., tekhn. red.

[Atlas of the Armenian Soviet Socialist Republic] Atlas Armianskoi
Sovetskoi Sotsialisticheskoi Respubliki. Erevan, Akad. nauk Armi-
anskoi SSR; glav. upr. geodez. i kartografii MG i ON SSSR, 1961. 111 p.
(MIRA 15:2)

1. Minskaya kartograficheskaya fabrika Glavnogo upravleniya geodezii
i kartografii Ministerstva geologii i okhrany nedr SSSR (for Urusov).
2. Akademiya nauk Armyanskoy SSR (for Arutyunyan).
3. Chlen-korrespondent AN Armyanskoy SSR (for Yeremyan).
(Armenia--Maps)

ACC NR: APO033473

1965/016/007/000

INVENTOR: Gurovits, L. S.; Khaydarov, S. G.; Tashkentskiy, S. O.; Shpichinetskiy, Ye. S.

ORG: None

TITLE: Method for connecting a piezoelectric transducer to the acoustic conductor of an ultrasonic delay line. Class 21, No. 185984 [announced by the State Scientific Research and Design Institute of Alloys and Nonferrous Metal Processing (Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut splavov i obrabotki tsvetnykh metallov)]

SOURCE: Izobret prom obraz tov zn, no. 18, 1966, 59-60

TOPIC TAGS: piezoelectric transducer, ultrasonic wave, circuit delay line

ABSTRACT: This Author's Certificate introduces a method for connecting a piezoelectric transducer to the acoustic conductor of an ultrasonic delay line by using a metallic matching layer. The bandwidth and thermal stability of the delay line are increased, and mechanical and acoustic contact between the piezoelectric transducer and acoustic line is improved by using an indium alloy for the joint containing 0.5-25% thallium under a pressure of 20-25 kg/cm² at a temperature of 145-150°C and holding under these conditions for 3-6 hours.

SUB CODE: 09/ SUBM DATE: 16Aug65

Card 1/1

UDC: 621.374.5

KIRAKOS'YANTS, M.; SHAKHBAZIAN, R.

Using the MKh latex for leather finishing. Prom. Arm. 6 no.6:
39-41 Js '63. (MIRA 16:8)

(Erivan---Tanning materials)

SHAKHBAZIAN, R.K.

Determination of the integral color of the Milky Way in the vicinity
of the Sun. Dokl. AN SSR 18 no.3:65-68 '54. (MLRA 8:3)

1. Byurakazanskaya astrofizicheskaya observatoriya Akademii nauk
Armenyanskoj SSR. Predstavleno V.A. Ambartsumyanom.
(Milky Way)

→ *Исследования в области астрономии*
AMBARTSUMYAN, V.A.; SHAKHBAZYAN, R.K., akademik.

Multiple galaxies and radio galaxies. Report No.2. Dokl. AN Arm.
SSR 25 no.4:185-192 '57. (MIRA 13:2)

1. Byurakanskaya astrofizicheskaya observatoriya AN ArmSSR.
(Nebulae)

SHAKHBAZIAN, R.K.

A star cluster in Ursa Major. Astron. tsir. no.177:11-12 P '57.
(MLA 10:6)

1. Byurakanskaya astrofizicheskaya observatoriya.
(Stars--Clusters) (Ursa major)

AMBARTSUNYAN, V.A., akademik; SHAKHBAZIAN, R.K.

Multiple galaxies and radio galaxies. Dokl. AN Arm. SSR 26 no.5:
277-279 '58. (MIRA 11:7)

1. Byurakanskaya astrofizicheskaya observatoriya AN ArmSSR.
(Nebulae)

SHAKHBAZIAN, R.K.; ISKUDARYAN, S.G.

Blue objects in the vicinity of elliptical galaxies. Dokl. AN
Arm. SSR 28 no.2:53-56 '59. (MIRA 12:6)

1. Byurakanskaya astrofizicheskaya observatoriya AN ArmSSR.
Predstavleno akademikom V.A. Ambartsumyanom.
(Stars)

S/035/62/000/003/007/053
A001/A101

AUTHOR: Shakhbazyan, R. K.

TITLE: Observations of Supernova (1959) in the Coma cluster prior to its discovery

PERIODICAL: Referativnyy zhurnal, *Astronomiya i Geodeziya*, no. 3, 1962, 29, abstract 3A221 ("Soobshch. Byurakansk. observ.", 1960, no. 28, 33-35, Armenian summary)

TEXT: The author presents stellar magnitudes of Supernova on the basis of photographs taken with the 21" Schmidt telescope at the Byurakan Observatory in April-May 1959. The Supernova was also discovered on the photograph of February 8 of the same year and its stellar magnitude in photographic light was equal to $\sim 18^m.5$. Hypotheses are expressed: 1) in February the rise in Supernova luminosity was observed; in maximum its brightness exceeded considerably $18^m.5$; 2) the Supernova had a flat and extended (~ 3 months) maximum. It is less probable that the maximum took place before 8 February.

M. Savel'yeva

[Abstracter's note: Complete translation]

Card 1/1

SHAKHBAZIAN, R.K.

Prediscovery observations of a supernova in NGC 4921. Astron.
tsir. no.216:1-2 D '60. (MIRA 14:4)

1. Byurakanskaya astrofizicheskaya observatoriya.
(Stars, New)

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 fizi-
ko-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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D218/D301

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 loca-

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S/022/61/014/005/007/007

D218/D301

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 БАО (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) lx

SUBMITTED: July 4, 1961

Card 3/3

L 16386-65 EWG(v)/EWT(1)/EEC(t) Pe-5/Pae-2 SSD/AFWL/AFETR/ESD(t) GW
ACCESSION NR: AR4040393 S/0269/64/000/005/0042/0042

SOURCE: Ref. zh. Astron. Otd. vy*p., Abs. 5.51.339

AUTHOR: Ambartsumyan, V. A.; Iskudarvan, S. G.; Shakhbazyan, R. K.; Saakyan, K. A.

TITLE: Superassociations in remote galaxies

CITED SOURCE: Soobshch. Byurakansk. observ., vy*p. 33, 1963, 3-18

TOPIC TAGS: stellar association, stellar superassociation, galaxy, irregular galaxy, Large Magellanic Cloud, Small Magellanic Cloud, Ursa Major, supergiant, nebula

TRANSLATION: The complex 30 Dor in the Large Magellanic Cloud considerably exceeds other associations in luminosity ($M = -15^m.0$) and diameter (600 parsecs). The authors assign it to a special class of objects — superassociations. Searches have been made for superassociations in distant galaxies on photographs taken with the use of a 21" Schmidt reflector. Data are presented which were obtained in a study of 68 galaxies from the Shapley-Ames catalogue, mostly of type Sc and with known radial velocities. In the determination of absolute values it was assumed that $H = 75$ km/sec·Mps. Superassociations have been discovered in 12 galaxies; in most cases these are supergiant

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ACCESSION NR: AR4040393

galaxies with $M_{\text{c}} - 20^{\text{m}} \cdot 5$. Often one galaxy contains several superassociations. The luminosity of the latter is less than the luminosities of galactic centers and superassociations are bluer than galactic centers. Superassociations are also found in irregular galaxies. Maps of the Palomar Atlas were also used for finding superassociations. A review of 250 objects with known radial velocities from the Shapley-Ames catalogue, after exclusion of 100 galaxies with overexposed images, made it possible to detect superassociations in 21 galaxies. In addition, superassociations were discovered in 13 of the 137 galaxies with diameters exceeding $1'' \cdot 1$ in the cluster in Ursa Major. In estimating the lower boundary of the age of the complex 30 Dor from the diameter of the complex and the velocity of expansion ($6 \cdot 10^7$ years) the authors conclude that during the period of development of the complex some ten generations of supergiants should have appeared in it and thousands of stars of high luminosity should have developed. The authors speculate on the mechanism of development of stars and nebulae in the Large and Small Magellanic Clouds and postulate that the stars and nebulae develop in associations and superassociations jointly from prestellar bodies whose nature is, for the time being, unknown. Bibliography with 7 items. B. Fesenko.

SUB CODE: AA

ENCL: 00

Card 2/2

SHAKHAZIAN, Sh.A.

Standardizing the predictability curves of daily mean flow of
rivers of the Armenian SSR. Izv. Arm. SSR. Ser. FMET nauk 9
no.10:71-85 '56. (MLRA 10:4)

1. Vodno-energeticheskiy institut AN Armyanskoy SSR.
(Armenia--Rivers)

SHAKHBAZYAN, Sh.A.

Plotting the predictability curves of daily mean flow of unexplored rivers in the Armenian S.S.R. Izv.AN Arm.SSR, Ser.tekh.nauk 10 no.4:43-51 '57. (MIRA 10:10)

1. Vodno-energeticheskly institut AN Armyanskoy SSR.
(Armenia--Rivers)

SHAKHBAZIAN, Sh.A.

Using stochastic modeling of hydrological series in
investigating perennial variations of flow. Izv. AN Arm.SSR.
Ser.tekh.nauk 15 no.5:59-66 '62. (MIRA 15:12)
(Hydrology)

SOLOV'YEV, Lev Nikolayevich; SHAKHBAZYAN, Sh.A., retsenzent; MALIYEV,
D.A., red.; ZHEREBKOV, I.V., red.izd-va; MARINYUK, M.V.,
tekhn.red.

[For young grinding-machine operators] V pomoshch' molodomu
shlifovshchiku. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo,
1959. 73 p. (MIRA 13:5)
(Grinding and polishing)

SHAKHBAZIAN, Shavarsh Abramovich; ZHEREBKOV, I.V., red.; MARINYUK, M.V.,
tekhn.red.

[Manual for young milling-machine operators] V pomoshch' molo-
domu frezerovshchiku. Rostov, Rostovskoe knizhnoe izd-vo, 1959.
94 p. (MIRA 12:12)

(Milling machines)

SHAKHBAZYAN, Sh. A

Shakhbazyan, Sh. A. -- "Annual Distribution of the Flow of the Rivers of the Armenian SSR and the Methodology of Calculating It." Min Higher Education USSR, Leningrad Hydrometeorological Inst, Leningrad, 1955 (Dissertation for the Degree of Candidate of Technical Sciences)

SO: Knizhnaya Letopis', No. 24, Moscow, Jun 55, pp 91-104

SHAKHBAZIAN, Sh.A.; SAAK'YAN, Yu.A., red.; BOROVINSKAYA, L.M.,
tekh. red.

[An aid for the young lathe operator]V pomoshch' molodomu to-
kariu. Rostov-na-Donu, Rostovskoe knizhnoe izd-vo, 1962. 93 p.
(MIRA 15:10)

(Lathes)

(Turning)

TORGOMYAN, M.S., kand. tekhn. nauk; CHILINGARYAN, L.A., kand. tekhn. nauk; SHAKHBAZYAN, Sh.A., kand. tekhn. nauk; AGAKHANYAN, G.A., kand. sel'khoz. nauk; KULOYAN, L.T., kand. tekhn. nauk; ARSHAKYAN, D.T.; BARKHUDARYAN, I.G.; SARKISYAN, S.G., kand. tekhn. nauk; MKHITARYAN, S.A.; OSEPIYAN, A.M., doktor ekon. nauk, prof.; BEK-MANMARCHEV, B.I., kand. geogr. nauk, red.; AYVAZ'YAN, V.G., otv. red.; FEL'DMAN, M.P., otv. red.; AVETISYAN, A.A., tekhn. red.; CHAKHAIYAN, TS.P., tekhn. red.

[Results of the combined studies of the Sevan problem] Rezul'taty kompleksnykh issledovaniy po Sevanskoj probleme. Erevan, Izd-vo Akad. nauk Armyanskoi SSR. Vol.3. [Water resources and power engineering] Vodnoe khoziaistvo i energetika. 1962. 330 p. (MIRA 15:11)

1. Akademiya nauk Armyanskoy SSR, Erivan. Institut vodnykh problem.

(Sevan Lake region--Water resources development)

(Sevan Lake region--Power engineering)

SHAKHBAZYAN, Sh.A.

Hydrochemical method for determining the underground runoff
of spring fed rivers. Izv. AN Arm. SSR. Ser. tekhn. nauk 17
no.2215-52 '64 (MIRA 17:7)

1. Institut vodnykh problem AN ArmSSR.

SHAKHBAZYAN, Sh.A.

Determination of the subterranean runoff of rivers of the Aragats
Massif. Izv. AN SSSR. Ser. tekhn. nauk 17 no.6:41-46 '64.

(MIRA 18:3)

1. Institut vodnykh problem AN ArmSSR.

SHAKHBAZYAN, T., inzhener.

Coating the walls of a rotary kiln with heat resistant paint.
TSement 17 no.5:21-22 S-0 '51. (MLRA 9:8)

1. Armyanskiy tsementnyy zavod.
(Kilns, Rotary) (Paint, Fireproof)

SHAKHBAZIAN, T. O.

Metallization and water cooling of rotary kilns. T. O.
Shakhbazian and A. Manovyan. *Tsment* 17, No. 6, 7-9
(1951).—In the Armenian cement works the outside shell
was sand-blasted, then sputter-coated with Al, and after-
wards, cooling troughs were installed for cooling the shell.
M. H.

SHAKHBAZYAN, T. O.

Fuel Abstracts
May 1954
Industrial
Furnaces, Kilns,
Etc.: Combustion

✓ 3957. DESIGN OF MODERN ROTARY KILNS. Shakhbazyan, T.O. and
Manovyan, A.K. (Tsement (Cement, Moscow), 1952, Vol. 18, (5), 6, 7; Sci.
Museum Libr. transl. 53/229).

9-3-54

SHAKHBAZIAN, T. O.

Reject

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Cement, Concrete, and Other
Building Materials

② initial
~~Plasticized pozzolan portland cement.~~ T. O. Shakhbazian and L. F. Agareva. *Tsement* 19, No. 6, 14-16 (1953).
Pozzolan portland cement having a plasticity of up to 180 mm. (as detd. by Russian Standard 310-41) was prepd. from clinker + 25% pumice + 0.10-0.15% sulfite alc. wash water. Clinker analyzed: SiO₂ 21.40, Al₂O₃ 0.79, Fe₂O₃ 4.61, CaO 65.45%; pumice SiO₂ 66.12, Al₂O₃ 10.08, Fe₂O₃ 10.07, H₂O 2.72, MgO 1.15%. D. Z. Kunich

SHAKHBAZIAN, T.O., inzhener; MANOVYAN, A., inzhener.

Metallization and water cooling the surface of rotary kiln walls.
TSement 17 no.6:7-9 M-D '56. (MLRA 9:8)
(Armenia--Kilns, Rotary) (Metal spraying)

SHAKHBAZIAN, T.O., inzhener; KULIKOV, N.S., inzhener.

Peripheral feeding of raw material mixture to a rotary kiln.
TSement 22 no.6:13-14 N-D '56. (MLRA 10:2)
(Kilns, Rotary)

SOV/101-59-3-1/10

'25(

AUTHOR: Shakhbazyan, T.O.

TITLE: The New Administration System of the Building Material Industry (From the Work Experience of the Sovnarkhoz of Armenia)

PERIODICAL: Tsement, 1959, Nr 3, pp 1-3 (USSR)

ABSTRACT: The article deals with 2 years of experience of the Armenian Sovnarkhoz in the management of the production of building material. It is pointed out that the industrial output is now 50 times bigger than it was in 1913. It is expected that the total industrial output will increase 2.2 times during the Seven Year Plan. At present the Upravleniye promyshlennosti stroitel'nykh materialov SNKh Armyanskoy SSR (Administration of the Building Material Industry of the Armyanskaya SSR) incorporates 17 industrial and mining enterprises, a non-state-financed design and construction office and a central scientific and research laboratory. When the Upravleniye promysh-

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SOV/101-59-3-1/10

The New Administration System of the Building Material Industry

lennost'yu i stroitel'stvom (Administration of Industry and Building) was reorganized into the Administration of the Building Material Industry of the Sovnarkhoz, the latter took over a number of installations which formerly were controlled by ministries and departments. It included the Armenian cement and slate plants, the Yerevanskiy mulitovyy zavod (Yerevan Mulite Plant), The Tumanyanskiy zavod ognepornogo kirpicha (Tumanyan Firebrick Plant), the Arzninskiy and Yerevanskiy stekol'nyy i steklotarnyy zavod (Arzni and Yerevan Glass and Glassware Plants), the Yerevanskiy fayansovyy zavod (Yerevan Faience Plant) and others. The Administration of the Building Material Industry (UPSM) embraces enterprises of ferrous metallurgy, light industry and industry of building materials, producing, in addition to cement, slate and lime, also articles of basalt, marble, granite, tuff, etc. The gross production of these enterprises exceeds by 150% that of 1956. To improve the administration, the Armenian cement and slate factories, the lime

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SOV/101-59-3-1/10

The New Administration System of the Building Material Industry

plant of the former Ministry of Industry and Building Material of the Armyanskaya SSR, and a number of open pits for the recovery of limestone have been amalgated into the Araratskiy tsementno-shifernyy kombinat (Ararat Cement and Slate Combine). Within the Artik group and the Pemzashenskoye kar'yeroupravleniye (Pemzashen Pit Administration) the enterprises have been united into the Artiktufskoye kar'yeroupravleniye (Artiktufskoye Pit Administration), and within the Yerevan group, the firebrick and glassware plants, into the multitovo-steklotarnyy zavod (Firebrick and Glassware Plant). This and other measures resulted in reducing the management organization by 54 units. The Yerevan Firebrick and Glassware Plant will be specialized for the output of electrosmelting refractory material for the USSR glass industry. The Yerevan kombinat stroitel'nykh izdeliy (Yerevan Combine of Building Products) will concentrate on the production of ceramic blocks, earthenware pipes and sanitary-technical articles. Speaking of the equip-

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SOV/101-59-3-1/10
The New Administration System of the Building Material Industry

ment used by the UPSM, the author mentions among others 15 stone cutting machines of various makes, of which SM-39a and SM-518 are the best. The author points out that all installations have been modernized, and the power sources increased. In the Armyanskaya SSR, for the Seven Year Plan, the capital investments will amount to 12 billion rubles. The author concludes that Armenia is justly called a "stone" republic, and that the realization of the Seven Year Plan will create a base for the industrial and habitation building industry.

Card 4/4

SHAKHBAZIAN, T.O., inzh.

Metal coating of a rotary kiln casing at the Ararat Cement Slate
Combine. Nauch. soob NIITsmenta no.9:30-31 '60. (MIRA 14:5)

1. Sovnarkhoz Armyanskoy SSR.
(Ararat, Armenia—Kilns, Rotary)
(Metal spraying)

SHAKHBAZIAN, T.O.; PILOYAN, G.A.; GEVORKYAN, Kh.O.; MARTIROSYAN, O.A.

Using forsterite refractory material. Tsement 29 no.6:10-11 N-D
'63. (MIRA 17:3)

1. Sovet narodnogo khozyaystva Armyanskoy SSR, Shorzhinskiy kera-
micheskiy zavod i Yerevanskiy politekhnicheskiy institut.

SHAKHBEZIAN, V.A.

USSR/Nuclear Physics - Penetration of Charged and Neutral
Particles Through Matter.

C-6

Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8842

Author : Shakhbezyan, V.A.
Inst : Institute of Physics, Academy of Sciences, Armenian SSR.
Title : Concerning the Energy Losses of Fast Charge Particles in
an Absorbing Medium.

Orig Pub : Izv. AN Arm SSR. Fiz.-matem., Yestesto. i tekhn. N.,
1956, 9, No 5, 91-98

Abstract : The total energy losses are subdivided into those going
for excitation and ionization and those for Cherenkov
radiation for an absorbing medium in the general case of
arbitrary values of the attenuation constants. The pro-
blem of the definition of the concept of Cherenkov radi-
ation in the case of an absorbing medium is discussed.
A detailed analysis is made of the ratio of the values
of the Bohr and Cherenkov losses of energy near the tra-
jectory of the particles and at infinity for various va-
lues of the attenuation constant.

Card 1/1

S/022/59/012/06/09/009

AUTHOR: Shakhbazyan, V. A.

TITLE: On the Improvement of the Perturbation Theory in Quantum
Electrodynamics of the Spin 0-Particles

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR. Seriya fiziko-
matematicheskikh nauk, 1959, Vol. 12, No. 6, pp. 133-146

TEXT: In the present paper the author describes the application of the method of the renormalization group to scalar electrodynamics. The investigation is carried out in the β -formalism. The author constructs the renormalization group of scalar electrodynamics with the aid of (Ref. 10, 11). From the matrix structure of the Green function of the meson, of the vortex particle and of the contact force the author obtains the asymptotic behavior of these functions. He sets up the Lie differential equations of the renormalization group. The author thanks D. V. Shirkov, Doctor of Physico-Mathematical Sciences, for the guidance of the paper and J. F. Ginzburg for discussions.

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S/022/59/012/06/09/009

On the Improvement of the Perturbation Theory in Quantum Electrodynamics
of the Spin 0-Particles

There are 2 figures, and 11 references: 4 Soviet, 6 American and
1 English.

ASSOCIATION: Matematicheskiy institut imeni V. A. Steklova AN SSSR
(Mathematical Institute imeni V. A. Steklov AS USSR)

SUBMITTED: June 25, 1959

✓ B

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SOV/56-37-6-38/55

AUTHOR: Shakhbazyan, V. A.

TITLE: Two-Charge Renormalization Group in Scalar Quantum Electrodynamics

PERIODICAL: Zhurnal eksperimental'noy i teoreticheskoy fiziki, 1959, Vol 37, Nr 6, pp 1789-1793 (USSR)

ABSTRACT: Equations were derived describing the behavior of Green's single-particle functions in the high momentum region. Also an analysis was made of some asymptotic values of the vertex part and four-vertex diagram in the quantum electrodynamics of zero spin particles. The method was based on the renormalization group procedure (cf., N. N. Bogolyubov, D. V. Shirkov, Introduction to the Theory of Quantum Fields, State Tech. Publ., Moscow, 1957). The lagrangian of the starting interaction had this form:

$$\mathcal{L}^0(x) = c : \bar{\psi}(x) \hat{A} \psi(x) : + h : (\bar{\psi} X \psi)^2 : \quad (1)$$

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where, $\psi(x)$, $\bar{\psi}(x)$ are the operators of the scalar field according to Kemmer's formalism (cf., Proc. Roy. Soc., A173, 91, 1939):

$$\lambda = \sum l^k A_k.$$

(here, Γ^k is Kemmer's five-row matrix; $k = 0, 1, 2, 3$). The derivation of group equations had the following form:

$$\begin{aligned} G_2 &= zG_1, & D_2 &= z_3 D_1, & \Gamma_2 &= z^{-1} \Gamma_1, & \square_2 &= z_4^{-1} \square_1, \\ c_2 &= z_1^{-1} c_1, & h_2 &= z_1 z^{-2} h_1, & d_l^{(2)} &= z_3^{-1} d_l^{(1)}. \end{aligned} \quad (2)$$

(where, G is Green's function of meson; D is photon; Γ is vertex portion; \square is four-vertex operator describing the interaction of two mesons; h is second charge; $d_l^{(0)}$ is arbitrary coefficient according to

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Green's longitudinal function of the photon). The invariant charges were obtained in the following way:

$$\begin{aligned} a(x, y, e^2, h) &= v^2 d(x, y, e^2, h), \\ \rho(x, y, e^2, h) &= h\varphi(x, y, e^2, h) = d_M^2(x, y, e^2, h, e^2 d_1^0) \square_1(x, y, e^2, h, e^2 d_1^0) \quad (4) \end{aligned}$$

In the infrared region according to the perturbation theory, $a = b = d_M$. In the ultraviolet region, when $|p^2| \gg m^2$, the function "a" can be assumed to be equal to d_M . The ultraviolet and infrared asymptotic functions $d(x, y, e^2, h)$; $\varphi(x, y, e^2, h)$; $s(x, y, e^2, e^2 d_1^0, h)$ were found by solving Lee's differential equation of the renormalized group with the aid of the perturbation theory. A detailed analysis of the corresponding diagrams leads to the conclusion that in the considered approximation, the Green functions of meson

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and photon as well as the vertex part do not depend on the second charge ρ . Therefore, the asymptotic momenta of these functions can be obtained by the limits of the one-charge approximation. This work was performed under the guidance of D. V. Shirkov. There is 1 graph; and 14 references, 6 Soviet, 2 Japanese, 2 U.K., 4 U.S. The U.S. and U.K. references are: M. Neumann, W. H. Furry, Phys. Rev., 76, 1677 (1949), P. T. Matthews, Phys. Rev., 80, 292 (1950); D. C. Pesslee, Phys. Rev., 81, 731 (1952); A. Salam, Phys. Rev., 88, 731 (1952); Proc. Roy. Soc., A211, 276 (1952).

ASSOCIATION: Institute of Mathematics Academy of Sciences, USSR
(Matematicheskii institut Akademii nauk SSSR)

SUBMITTED: July 24, 1959

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SHAKHBAZYAN, V. A., Cand Phys-Math Sci -- (diss) "Research into the quantum electrodynamics of particles with zero spin." Moscow, 1960. 6 pp; (Mathematics Inst of the Academy of Sciences USSR im V. A. Steklov, Moscow State Univ im M. V. Lomonosov, Physics Faculty); 170 copies; price not given; (KL, 50-60)131)