

ЛЕЙН ЛЕЯН, В. Г.

20-4-6/60

AUTHOR: Lemleyn, V.G.

TITLE: On the Spaces of a Symmetric, Almost Symplectic Connectivity (O prostranstvakh simmetrichnoy pochti simplekticheskoy svyaznosti)

PERIODICAL: Doklady Akademii Nauk SSSR, 1957, Vol. 115, Nr 4, pp. 655-658 (USSR)

ABSTRACT: The present paper examines the spaces of the symmetric, affine connectivity Γ_{jk}^1 which is associated with the non-degenerate skew-symmetric tensor a_{ij} . The fundamental defining property of these spaces is the requirement of the proportionality of the covariant differential of the fundamental tensor a_{ij} and its external differential:

$$\frac{\partial a_{ij}}{\partial x^k} - a_{ij} \Gamma_{jk}^1 - a_{lj} \Gamma_{ik}^1 = \mu(x) \left(\frac{\partial a_{ij}}{\partial x^k} + \frac{\partial a_{ja}}{\partial x^i} + \frac{\partial a_{ki}}{\partial x^k} \right).$$

By a cyclical distribution of this relation with regard to i, j, k $\mu(x) = 1/3$ is obtained. By transformation

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$$\Gamma_{jk}^1 = (1/3) a^{li} \left(\frac{\partial a_{ij}}{\partial x^k} - \frac{\partial a_{ki}}{\partial x^j} + \gamma_{ijk}(x) \right) \text{ is obtained.}$$

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On the Spaces of a Symmetric, Almost Symplectic Connectivity

In this connection a $\delta^l_{ik} = \delta^l_{ik}$ is valid and the $\gamma^{ijk}(x)$ are symmetric with regard to all index-pairs. The γ^{ijk} define a field of geometrical objects invariantly associated with the tensor a_{ij} . The Γ^l_{jk} are a symmetric, affinitive connectivity and the γ^{ijk} occurring in it define the "rig" of the manifold on which the tensor a_{ij} is assumed. A differentiable manifold with $2n$ dimensions with a non-degenerate skew-symmetric tensor a_{ij} assumed on it and with the object γ^{ijk} defining the "rig" is here designated as "space of the symmetric, almost symplectic connectivity". Thereafter the tensor of curvature $R^{\alpha}_{ijk} = \frac{\partial \Gamma^{\alpha}_{jk}}{\partial x^i} - \frac{\partial \Gamma^{\alpha}_{ik}}{\partial x^j} + \Gamma^{\beta}_{ik} \Gamma^{\alpha}_{j\beta} - \Gamma^{\beta}_{jk} \Gamma^{\alpha}_{i\beta}$

$\Gamma^{\beta}_{jk} \Gamma^{\alpha}_{i\beta}$ is investigated. In the case $B_{ij,kl} = 0$ one can go over to the Cartesian system of coordinates. The spaces corresponding to the case $B_{ij,kl} = 0$ can be called plane spaces with symmetric, almost symplectic connectivity. Every point of the plane manifold can be associated with a plane space of the type shown here. Finally the covariant vector $b_i =$

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$= (1/2)a^{pq}{}_{pq}$ is investigated.

AUTHOR: LEMLEYN, V.G. (Moscow) 20-5-7/54

TITLE: The Tensor of Curvature and Some Types of Spaces With Symmetric Almost Symplectic Connection (Tenzor krivizny i nekotoryye tipy prostranstv simmetrichnoy pochti simplekticheskoy svyaznosti)

PERIODICAL: Doklady Akademii Nauk, ^{SSSR/}1957, Vol. 117, Nr 5, pp. 755-758 (USSR)

ABSTRACT: The author continues the investigation of the spaces of symmetric almost symplectic connection previously considered by himself [Ref.1]. For their tensor of curvature $B_{ij,kl} = a_{l\alpha} R_{ij,k}^{\alpha}$ he gives the properties

(1) $B_{ij,kl} + B_{ji,kl} = 0$

(2) $B_{ij,kl} + B_{jk,il} + B_{ki,jl} = 0$

(3) $B_{lj,ik} + B_{jl,ki} + B_{ki,jl} + B_{ik,lj} = 0$ etc.

Then such spaces of symmetric almost symplectic connection are considered for which the elements of the Lie algebra of the holonomy group, which are associated to the elementary cycles, belong to the Lie algebra of the symplectic group.

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metric Almost Symplectic Connection

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For these spaces the relation

(4) $\nabla_1 \nabla_j a_{ki} = 0$ is characteristic. This relation is satisfied by the spaces with

$$T_{ijk} = \frac{1}{3} \left(\frac{\partial a_{ij}}{\partial x^k} + \frac{\partial a_{jk}}{\partial x^i} + \frac{\partial a_{ki}}{\partial x^j} \right) = 0$$

and by the spaces with $R_{ij,kl} = 0$. An example of a further space (different from the two latter special types) for which (4) is satisfied is given. Finally spaces of symmetric almost symplectic connection are considered for which

$$(5) \quad b_i = \frac{1}{2} a^{jk} T_{jki} = 0.$$

These are spaces with covariantly constant volume

$$\sqrt{\det \| a_{ij} \|} \det \| X_{(1)}^k \|.$$

From (5) it follows that the space is equiaffine but not conversely. If the dimension of the space is 2 or 4, then it follows from (5) that the space is symmetrically symplectically

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metric Almost Symplectic Connection

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connected. 1 Soviet reference is quoted.

ASSOCIATION: Municipal Pedagogical Institute imeni V.P. Potemkin, Moscow
(Moskovskiy gorodskoy pedagogicheskiy institut imeni V.P.
Potemkina)

PRESENTED: By I.G. Petrovskiy, Academician, 11 June 1957

SUBMITTED: 8 June 1957

AVAILABLE: Library of Congress

Card 3/3

Spices
almost
nearly-simplex symplectic connectivity
couplings
LEMLEYN, V.G., Cand Phys-Math Sci -- (diss) "Fields of symmetrical
"Mos, 1958. Cover, 3 pp.
(Mos City Ped Inst im V.P. Potemkin.) 100 copies.
(KL, 12-58, 96)
connectivity

16(1)

AUTHOR: Lemleyn, V.G.

SOV/20-128-4-9/65

TITLE: Generalization of Invariant Differentiation in a Fractional Linear Group and Splitting of an Affine Connectivity Object

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 128, Nr 4, pp 672-673 (USSR)

ABSTRACT: According to the usual rules the invariant differentiation in the group of broken linear transformations can be carried out for the construction of a covariant differential if instead of the affine connectivity object Γ_{jk}^p a certain object

$$(3) \quad \gamma_{jk}^p = \frac{1}{(n+1)} \delta_j^p \frac{\partial \ln a}{\partial x^k} + \frac{1}{(n+1)} \frac{p}{k} \frac{\partial \ln a}{\partial x^j}$$

is used, where a is a relative scalar with the weight 1.

The affine connectivity object Γ_{jk}^p can be split into two objects: 1) in γ_{jk}^p which introduces the invariant differentiation in the fractional linear group and which is determined only by a , and 2) in the so-called symmetrical combining object

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$G_{jk}^P = G_{kj}^P$ which with respect to the invariant differentiation in the fractional linear group plays the same part as \int_{jk}^P with respect to the ordinary differentiation.

ASSOCIATION: Moskovskiy gorodskoy pedagogicheskiy institut imeni V.P. Potemkina (Moscow City Pedagogical Institute imeni V.P. Potemkin)

PRESENTED: June 1, 1959, by P.S. Aleksandrov, Academician

SUBMITTED: May 29, 1959

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46(1) 1b. 5600

66720

AUTHOR: Lemleyn, V.G.

SOV/20-129-2-5/66

TITLE: Local Center-Projective Spaces of a Differentiable Manifold and the γ_{jk}^P Object Which Defines an Invariant Differentiation in a Fraction-linear Group

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 129, Nr 2, pp 254-256 (USSR)

ABSTRACT: A center-projective space $\{P^n\}$ is assumed to be connected with every point M of the n-dimensional differentiable manifold $\{V^n\}$, whereby the transformation $x^{i'} = x^{i'}(x^i)$ of the local coordinate systems of $\{V^n\}$ implies the transformation

$$(1) \quad u^{i'} = \frac{\frac{\partial x^{i'}}{\partial x^i} u^i}{-\frac{1}{(n+1)} \cdot \frac{\partial \ln \det \left\| \frac{\partial x^{r'}}{\partial x^r} \right\|}{\partial x^i}} u^{i+1}$$

Card 1/3 of the coordinates (u^i) in $\{P^n\}$. Here it is



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$$\frac{\partial \det \left\| \frac{\partial u^{r'}}{\partial u^r} \right\|}{\partial u^k} \Big|_{u=0} = \frac{\partial \det \left\| \frac{\partial x^{r'}}{\partial x^r} \right\|}{\partial x^k} .$$

If on $\{V_n\}$ a relative scalar $a=a(x^r)$ with the weight one is given, then (see [Ref 17]) the object $\phi_{jk}^P =$

$$= \frac{1}{(n+1)} \delta_j^p \frac{\partial \ln a}{\partial x^k} + \frac{1}{(n+1)} \delta_k^p \frac{\partial \ln a}{\partial x^j} \text{ can be constructed.}$$

To every point M of $\{V_n\}$ there exists a transformation

$$x^{r'} = \frac{a^{r'} x^r}{b_q x^q + 1}, \text{ so that } \phi_{j'k'}^{P'}(M) \equiv 0. \text{ By a fractional-linear}$$

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transformation therefore a coordinate system can always be

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Local Center-Projective Spaces of a Differentiable Manifold and the
 γ_{jk}^P Object Which Defines an Invariant Differentiation in a Fractional-linear Group

found on $\{v^n\}$ such that in a given point the invariant differentiation defined by γ_{jk}^P is identical with the ordinary differentiation in the fractional-linear group. There is 1 Soviet reference.

ASSOCIATION: Moskovskiy gorodskoy pedagogicheskiy institut imeni V.P. Potemkina (Moscow Municipal Pedagogical Institute imeni V.P. Potemkin)

PRESENTED: July 3, 1959, by I.G. Petrovskiy, Academician

SUBMITTED: June 26, 1959

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68794

S/020/60/131/01/003/060

16(1) 16.5600

AUTHOR: Lemleyn, V.G.

TITLE: Induction of Constant Curvature Connectivity in Associated Centre-Projective Spaces of a Locally Projective Manifold ¹⁰

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol 131, Nr 1, pp 17-20 (USSR)

ABSTRACT: The author continues his investigations started in [Ref 1,2]. Let a locally projective manifold be defined by non-degenerate fractional linear transformations of the local coordinate systems

$$(1) \quad x^{i'} = \frac{a_i^{i'} x^i}{b_i x^i + 1} + c^{i'}$$

and let on it the fundamental relative scalar $a = a(x)$ with weight 1 be given ; let

$$(5) \quad \det \|R_{ij}(x)\| \neq 0 .$$

The magnitude

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Induction of Constant Curvature Connectivity in $S/020/60/131/01/003/060$
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only if

$$(10) \quad \alpha = \frac{c}{c_{ij}u^i u^j + 2c_i u^i + 1}, \quad \det \|c_i c_j - c_{ij}\| \neq 0.$$

By the natural requirement

$$(11) \quad \alpha^2 = \det \|g_{ij}\|$$

α and the fundamental tensor ($g_{ij} = g_{ji}$) itself are determined up to the factors ϵ (and $\bar{\epsilon}$ respectively) which are equal to

$$n\text{-th roots of } 1; \quad c^2 = \frac{1}{K^n} \det \|c_i c_j - c_{ij}\|.$$

There are 2 Soviet references.

ASSOCIATION: Moskovskiy gorodskoy pedagogicheskiy institut imeni V.P.Potemkina (Moscow Municipal Pedagogical Institute imeni V.P. Potemkin)

PRESENTED: November 16, 1959, by P.S. Aleksandrov, Academician

SUBMITTED: November 13, 1959

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X

81391

S/020/60/132/06/10/068
C111/C222AUTHOR: Lemleyn, V.G.

TITLE: Projective and Projective - Metric Transfers in Manifolds With Affine Connectivity and in Riemannian Spaces

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 6, pp. 1261-1264

TEXT: On the differentiable manifold $\{V^n\}$ let be given the object (a_i) the components of which are transformed by the coordinate transformation $x^{i'} = x^{i'}(x^i)$ as follows :

$$a_{i'} = \frac{\partial x^i}{\partial x^{i'}} a_i - \frac{1}{(n+1)} \frac{\partial \ln \det \|\partial x^r / \partial x^{r'}\|}{\partial x^{i'}}$$

Let to every vector (ξ^i) of the central affine tangential space $\{A^n\}$ correspond the object

$$(1) \quad u^i = \frac{\xi^i}{-a_1 \xi^1 + 1}$$

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of the locally central - projective space $\{P^n\}$ (compare (Ref. 1)) ; let to every covector (ξ_i) of the space $\{B^n\}$ dual to $\{A^n\}$ correspond the object

$$(2) \quad u_i = \xi_i + a_i$$

of the space $\{Q^n\}$ dual to $\{P^n\}$. The defined correspondences are biunique since the formulas (1), (2) do not depend on the choice of the coordinates in the $\{V^n\}$ and can be written in the form

$$(3) \quad \xi_i = \frac{u_i}{a_1 u^1 + 1},$$

$$(4) \quad \xi_i = u_i - a_i.$$

The object (u_0^i) defines an invariant point in $\{P^n\}$ and in $\{Q^n\}$ it de-
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finds the invariant plane $u^i u_i + 1 = 0$ while (u_i^0) in $\{P^n\}$ defines an
invariant plane and in $\{Q^n\}$ it defines an invariant point.

If on $\{V^n\}$ an affine connection $(\Gamma_{jk}^p = \Gamma_{kj}^p)$ is given, then

$\frac{\partial \xi^i}{\partial x^k} + \xi^l \Gamma_{lk}^i = 0$ describes a parallel transfer of the vector (ξ^i) .

Substituting for this vector its value (3), then one obtains

$$(10) \quad \frac{\partial u^q}{\partial x^k} = - u^j \Gamma_{jk}^q + u^j u^q \left(\frac{\partial a_j}{\partial x^k} - a_i \Gamma_{jk}^i \right).$$

This system determines the projective transfers of the local central-pro-
jective spaces $\{P^n\}$ along a curve on $\{V^n\}$.

Then the author considers the case of a Riemannian connectivity Γ_{jk}^p and

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in Manifolds With Affine Connectivity and
in Riemannian Spaces

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similar questions.

There are 3 Soviet references.

ASSOCIATION: Moskovskiy gorodskoy pedagogicheskiy institut imeni V.P.
Potemkina (Moscow Municipal Pedagogical Institute imeni
V.P. Potemkin)

PRESENTED: March 2, 1960, by P.S. Aleksandrov, Academician

SUBMITTED: March 1, 1960

Card 4/4

X

16.5600

S/020/60/133/006/021/031XX
C 111/ C 333

AUTHOR: Lemley, V. G.

TITLE: On the Geometric Meaning of the Projective Curvature Tensor
in Manifolds With Affine ConnectivityPERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 133, No. 6,
pp. 1287-1290TEXT: Let an object of affine connection ($\Gamma_{jk}^P = \Gamma_{kj}^P$) be given
on the differentiable manifold $\{V^n\}$. Then in every local centro-
projective space $\{P^n\}$ (see (Ref.4.)) there arises the invariant
hyperquadric (see (Ref. 5))

$$(1) \left[\frac{1}{(n+1)^2} \Gamma_{ai}^a(x) \Gamma_{bj}^b(x) - \frac{\tilde{\sigma}_{ij}(x)}{(n-1)} \right] u^i u^j -$$

$$- \frac{2}{(n+1)} \Gamma_{ai}^a(x) n^i + 1 = 0 \quad ,$$

where $\tilde{\sigma}_{ij}(x)$ is the symmetric part of the Ricci tensor.

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On the Geometric Meaning of the Projective Curvature Tensor in Manifolds With Affine Connectivity

Every $\{P^n\}$ can be considered as a symmetric projective-Euclidean space (see (Ref.3)) and, if it is moreover $\det \|\tilde{g}_{ij}(x)\| \neq 0$, as a space of constant curvature.

The connection $\Gamma_{jk}^P(x,u)$ can be defined by polar correlative relation with respect to (1).

Let $P_{k,ji}^h(x) = R_{k,ji}^h(x) - 2 P_{[ij]}(x) \delta_k^{n+2} \delta_{[i}^h P_{j]k}(x)$,

where $P_{ij}(x) = \frac{1}{(1-n^2)} [(n+1) R_{ji} + V_{ji}]$ and V_{ij} is the equiaffine tensor, the tensor of the projective curvature of the initial space of affine connection. Let

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$$(6) Q_{k,ji}^h(x) = \frac{1}{2(n+1)} \left[\delta_{(j}^h v_{ik)}(x) - v_{jx}(x) \delta_{k}^h \right].$$

It is stated that then it holds

$$(7) P_{k,ji}^h(x) - Q_{k,ji}^h(x) = R_{k,ji}^h(x) - r_{k,ji}^h(x,0),$$

where

$$(4) r_{k,ji}^h(x,0) = \frac{1}{(1-n)} \delta_j^h \sigma_{ik}(x) - \frac{1}{(1-n)} \delta_i^h \sigma_{jk}(x),$$

$r_{k,ji}^h(x,u)$ is the curvature tensor in $\{P_n\}$.

Theorem: The difference of the tensor of projective curvature and the tensor (6) which only depends on the equiaffinity tensor is, in every point of the considered manifold, equal to the difference of the curvature tensor of the original affine connection and of

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On the Geometric Meaning of the Projective Curvature Tensor in Manifolds With Affine Connectivity

the curvature tensor of the local space which is calculated in the corresponding point.

The author investigates several special cases. In the case of equiaffine projective-Euclidean spaces under nondegenerate Ricci tensor of the original affine connection the author introduces a scalar magnitude $K(x)$ so that the local spaces are transformed into spaces of constant curvature $K(x)$ with a special metric tensor.

The author refers to the possibility of expressing the tensors $P^h_{k,ji}(x)$ and $Q^h_{k,ji}(x)$ by the components of the connecting object (see (Ref.7)) and their first derivatives.

There are 7 references: 6 Soviet and 1 Dutch.

[Abstractor's note: (Ref.3) is a paper of P. A. Shirokov in Tr. seminara po vekt. i tenzoru. analizu, v.8., 1950. (Ref.4) is a

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paper of the author in Doklady Akademii nauk SSSR, 1959, Vol. 129,
No. 2. (Ref.5) is a paper of the author in Doklady Akademii nauk
SSSR, 1960, Vol. 132, No. 6. (Ref. 6) is a paper of the author in
Doklady Akademii nauk SSSR, 1960, Vol. 131, No. 1. (Ref.7) is a
paper of the author in Doklady Akademii nauk SSSR, 1959, Vol. 128,
No. 4.]

ASSOCIATION: Moskovskiy gorodskoy pedagogicheskiy institut imeni
V. P. Potemkina (Moscow Municipal Pedagogical
Institute imeni V. P. Potemkin)

PRESENTED: April 13, 1960, by P. S. Aleksandrov, Academician

SUBMITTED: April 20, 1960

Card 5/5

LEMLEYN, V.G.

Spaces with center-projective connectivity $(\Gamma_j, i_k, \Gamma_{lm})$ as manifolds immersed in the space of representation of an extended pseudogroup of analytical transformations. Dokl. AN SSSR 138 no.6:1291-1294 Je '61.
(MIRA 14:6)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V.I. Lenina. Predstavleno akademikom P.S. Aleksanrovym.
(Geometry, Projective)

LEMLEYN, V.G.

One property of alternative quasi-groups with an invariant finite measure. Dokl. AN SSSR 164 no.4:740-742 0 '65.

(MIRA 18:10)

1. Moskovskiy gosudarstvennyy pedagogicheskiy institut im. V.I. Lenina. Submitted March 4, 1965.

LEMM, Krystyna

Use of the resin "Araldit" in repairing of experimental mandibular fractures in the rabbit. Roczn. pom. akad. med. Swierczewski 11: 399-410 '65.

1. Z Kliniki Chirurgii Stomatologicznej Pomorskiej Akademii Medycznej (Kierownik: prof. dr. I. Semadeni-Koropacka).

LEMM, Krystyna

Contribution to the use of resins in the treatment of mandibular fractures. Czas. stomat. 18 no.8/9:1171-1172 Ag-S '65.

1. Z Kliniki Chirurgii Stomatologicznej Pomorskiej AM w Szczecinie (Kierownik: prof. dr. med. I. Semađeni-Konopacka).

LEMMERMAN, YE. K. (Engineer)

AID - P-3

Subject : USSR/Engineering
Card : 1/1
Author : Lemmerman, Ye. K., Engineer
Title : Economical type of light weight walls made of light weight concrete blocks
Periodical : Sbor. mat. o nov. tekh. v stroi. 2, 8 - 11, 1954
Abstract : The author describes his new method (adopted by one of the Trusts of the Building Ministry) of erecting light weight hollow walls consisting of two thin walls made of 15.35" wide concrete blocks connected at 20.47" or 36.4" intervals with the same concrete blocks placed sideways. In corner connections some reinforcing bars are used. The article is illustrated with 6 graphs.
Institutions: Not given
Submitted : No date

LEMMLEYN, G.A., professor.

My recollections of the Department of Physics at Kharkov University
and of my work there from 1902 to 1906. Uch.zap.KHGU 60:51-55 '55.

(MIRA 10:1)

(Kharkov University--History)
(Physical laboratories)

LEMMLEYN, G. G.

1964

CRYSTALLOGRAPHY
MINERALOGY

DECEASED
c. '63

LEMNE, M.; TEPAC, I. (Bucuresti)

The absolute age of the earth. Natura Geografie 16 no. 2:
30-37 Mr-Ap '64.

L 38946-66

ACC NR: AP6029607

SOURCE CODE: RU/0024/65/000/005/0035/0040

AUTHOR: Lemne, M. (Geologist; Bucharest); Tepac, I. (Geologist; Bucharest).

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ORG: none

TITLE: Radioactivity and terrestrial heat

SOURCE: Natura. Seria geografie-geologie, no. 5, 1965, 35-40

TOPIC TAGS: radioactivity effect, earth radiation, earth thermodynamics, solar radiation

ABSTRACT: The authors combine arguments from the technical literature of many countries to support their conclusion that radioactivity is a principal source of terrestrial heat. The argument is based on these points: heat from the sun is not felt at depths beyond 20 meters; heat from the interior of the earth (if its origin was as a part detached from the sun) should have been exhausted after about 40 million years, while current estimates of the earth's age are much higher than this; and there exist huge quantities of widely distributed radioactive substances in the interior of the earth. Orig. art. has: 3 tables. [Based on authors' Eng. abst.] [JPRS: 33,542]

SUB CODE: 08, 03 / SUBM DATE: none / SOV REF: 004 / OTH REF: 004

Card 1/1

0917

2705

BOBOESCU, N.; CRETA, G.; COJEREANU, P.; IEMNEANU, N.

Experimental studies on the characteristics of power in
the single seat valve with diffuser. Bul St si Tehn Tim
8 no.1:95-104 Ja-Je '63.

CRETA, G.; LEMNEANU, N.; FARGAS, D.

Calculation of steam transformations by electronic digital computers.
Studii tehn Timisoara 10 no.2:355-365 J1-D '63.

LEMNI, Teodor, ing.; COMEA, Sabin, ing.; SUPURAN, Mircea, ing.

Mechanized caravans for loading bulk and seasonal goods. Rev sailor
fer 13 no.1:14-18 Ja '65.

LEMNIJ, I.

Some data on the U.S.S.R. industry. Problema econ 18 no.3:121-
125 Mr '65.

BURSTEIN, I.; ~~LEMNIJ, I.~~

Economic development of the socialist countries in 1962 in figures. Probleme econ 16 no.6:78-89 Je '63.

LEMNIJ, I.

Changes in the structure of Rumanian industrial production. Probleme
econ 16 no.1:16-28 Ja '63.

BURSTEIN, I.; LEMNIJ, I.; SPIRIDON, A.

The economy of socialist countries in full development.
Probleme econ 15 no.7:74-88 J1 '62.

LEMNIJ, I.; PUIU, AL.

Aspects of the postwar international economic cooperation. Probleme
econ 17 no.3:88-101 Mr '64.

LEMPA, Henryk

Cytologic test in diagnosis of the loss of the amniotic fluid.
Polski tygod. lek. 16 no.22:824-825 29 My '61.

1. Z II Kliniki Poloznictwa i Chorob kobiecych Sl. A.M. w Bytomiu;
kierownik: prof: dr med. Bronislaw Stepowski.

(AMNIOTIC FLUID) (PREGNANCY compl)

~~LEMPART~~, Stanislaw, inz.; KACPRZAK, Kazimierz, inz.; ORLINSKI, Henryk, mgr;
ORNACKI, Jan, inz.; WARCHAL, Boguslaw, mgr inz.; WOJCIECHOWSKI, Jacek,
mgr inz.

Analysis of the utilization of supporting pillars with concrete
stowing. Rudy i metale 6 no.9:389-394 S '61.

YEVDOKIMOV, V.; BAKANOV, P.; LEMPERT, A.

Horizontal vacuum kettle for rendering fat in the "Progress"
Factory. Mias.ind.SSSR 27 no.1:23 '56. (MIRA 9:6)
(Oils and fats) (Vacuum apparatus)

LEMPERT, B.L.; LEYTES, F.L.

Role of the reduction of the lipolytic activity of the aortic wall in the pathogenesis of its lipid infiltration. Biul. eksp. biol. i med. 55 / i.e. 56/ no.10:25-29 1963 (MIRA 17:8)

1. Iz kafedry patologicheskoy fiziologii (zav. - prof. S.M.leytes) Tsentral'nogo instituta usovershenstvovaniya vrachey i Tsentral'nogo instituta kurortologii i fizioterapii (dir. G.N. Fospelova). Predstavlena deystvitel'nym chlenom AMN SSSR V.Kh.Vasilenko.

LEMPA, Henryk

Use of crystallization of the amniotic fluid for diagnostic purposes.
Ginek. pol. 33 no.5:643-652 '62.

1. Z II Kliniki Poloznictwa i Chorob Kobiacych Slaskiej AM.Kierownik:
prof. dr med. B. Stepowski.
(AMNIOTIC FLUID)

LEMPERT, A.E., inzh.

Modernization of belt dryers. Khim.mash. no.2:37-38 Mr '62.
(MIRA 15:3)

(Drying apparatus)

LEYTES, F. L., kand. med. nauk; LEMPERT, B. L.; V'YUROVA, Z. D.

Case of aortic aneurysm in Marfan's syndrome. Terap. 34 no.1:
106-109 '62. (MIRA 15:7)

1. Iz Moskovskoy rogodskoy bol'nitsy No. 58 (glavnyy vrach -
dotsent Ye. Ya. Khesin)

(ARACHNODACTYLY) (AORTIC ANEURYSMS)

SUKASOVA, M.I.; MATOVA, Ye.Ye.; LEMPERT, B.L.

Effect of delipins on the development of experimental atherosclerosis
in rabbits. Kardiologiya 4 no.6:42-48 N-D '64.

(MIRA 18:8)

1. Institut terapii (direktor -- prof. A.L.Myasnikov) AMN SSSR, Moskva.

LEYTES, F.L.; LEMPERT, B.L.

Localization of lipoprotein lipase in some tissues of white rats. Dokl. AN SSSR 157 no.3:672-673 J1 '64. (MIRA 17:7)

1. Tsentral'nyy institut usovershenstvovaniya vrachey i Tsentral'nyy institut kurortologii i fizioterapii. Predstavleno akademikom A.N. Bakulevym.

LEYTES, F.L., prof.; LEMPERT, B.L.

Histochemical method for the detection of lipoprotein lipase enzyme. Biul. eksp. biol. i med. 60 no.7:123-125 J1 '65.

(MIRA 18:8)

1. Kafedra patologicheskoy fiziologii (zav.- prof. S.M. Leytes) Tsentral'nogo instituta usovershenstvovaniya vrachey i Tsentral'nyy institut kurortologii i fizioterapii (direktor - kand. med. nauk G.N. Pospelova), Moskva.

LEMPERT, B.I.

Effect of stress and its combination with cholesterol load on the content of β -lipoproteins in the aortic wall in rats. Probl. endok. i gorm. 11 no.5:74-77 S-O '65. (MIRA 19:1)

1. Kafedra patologicheskoy fiziologii (zav. - prof. S.M. Iaytes)
TSentral'nogo instituta usovershenstvovaniya vrachev, Moskva.
Submitted October 24, 1964.

VANSETSKIY, A., inzhener; LEMPERT, E., inzhener.

Automatic apparatus for measuring amounts of water and salt in
dough making. Mias.ind.SSSR 26 no.6:5-8 '55. (MIRA 9:2)

1.Leningradskiy nyasekombinat.
(Dough) (Measuring instruments)

LEMPERT, E.; BUROVA, O.

Bringing of hides and skins in a worm apparatus. Mias.ind.SSSR
33 no.5:21-23 '62. (MIRA 15:12)

1. Leningradskiy myasokombinat.
(Hides and skins) (Brining)

LEMPERT, G. L.

LEMPERT, G. L. -- "On the Problem of Methods of Quantitative Characterization of the Direction of the Electrical Axis of the Heart." Academy of Medical Science USSR. Joint Council of the Group of Leningrad Institutes. Leningrad, 1955. (Dissertation for the Degree of Candidate in Medical Sciences.)

So; Knizhaya Letopis' No 3, 1956

LEMPERT, G.L.

Differentiation of the associated effect of two factors on the
direction of electrical cardiac axis. Terap. arkh. 27 no.8:87-91
'55 (MLRA 9:5)

1.Zav. elektrokardiograficheskim kabinetom poliklinicheskogo
otdeleniya 1-y Rzhskoy gorodskoy klinicheskoy bol'nitsy.
(ELECTROCARDIOGRAPHY,
differentiation of associated eff. of 2 factors on
direction of cardiac axis.)

LEMPERT, G.L.

"Electrocardiography." G.I.A. Dekhtiar'. Reviewed by G.L.Lempert.
Terap.arkh. 28 no.5:83-85 '56. (MLRA 9:10)
(ELECTROCARDIOGRAPHY) (DEKHTIAR', G.I.A.)

USSR / Human and Animal Physiology. Blood Circulation.

T-4

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3369

Author : Lempert, G. I.

Inst : First Riga City Hospital

Title : Pertaining to Methods of Measuring ECG Waves

Orig Pub : Tr. 1-y Rizhsk. gor. klinich. bol'nitsy. Riga, 1957,
51-58

Abstract : When measuring the height of the waves from the so-called isoelectric line, the thickness of this line, which varies from 0.5 - 3 mm, is not taken into consideration. Depending on whether the waves are measured from the upper or lower border or from the middle of the isoelectric line, a considerable difference in the size of the waves and of the angle "alpha" may be noted. It is recommended that the positive waves of the ECG be measured from the upper border and the negative waves

Card 1/2

USSR / Human and Animal Physiology. Blood Circulation.

T-4

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3369

from the lower border of the isoelectric line. Such a method of measuring the sizes of the ECG-waves will ensure a most correct determination of the direction of the electrical axis of the heart.

Card 2/2

USSR / Human and Animal Physiology. Blood Circulation.

T-4

Abs Jour : Ref Zhur - Biologiya, No 1, 1959, No. 3370

Author : Lempert, G. L.

Inst : First Riga City Hospital

Title : About a Method for Determination of the Angle "Alpha"
of the Electrocardiogram

Orig Pub : Tr. 1-y Rizhsk. gor. klinich. bol'nitsy. Riga, 1957,
59-62

Abstract : The size of the angle "Alpha" can be conveniently
determined from tables on which its values are shown
correlated to the values of the ECG waves in the leads
I and III. The accuracy of the findings, however, de-
creases as the absolute sizes of the ECG waves diminish.
A diagram of a perfected device is given, by which the
angle "Alpha" can be determined in the process of a
synchronous determination of the values of the ECG

Card 1/2

27

LEMPERT, G.L. (Riga)

"Principles and atlas electrocardiography" [in German] by R.Zucker-
mann. Reviewed by G.L.Lempert. Terap.arkh. 30 no.1:81-83 Ja '58.
(ELECTROCARDIOGRAPHY) (MIRA 11:3)

LEMPERT, Grigoriy Leonidovich; PIS'MENNY, R.Ya., red.; PARAKHINA,
N.L., tekhn. red.

[Fundamentals of electrocardiology] Osnovy elektrokardio-
logii. Moskva, Medgiz, 1963. 326 p. (MIRA 17:2)

*

Lempert, K.

HUNG • 31. New compounds with local anaesthetic activity -
D. Beke, K. Lempert and L. Gyermek. (*Magyar Kémiai Folyóirat* - Vol. 58, 1952, No. 10, pp. 310-312; Vol. 60, 1954, No. 5, pp. 147-151, 5 tabs.)

It is known mainly from the investigations carried out by Löfgren and collaborators that the aminosalicyclic anilides, toluidides, etc. (the xylocaïne group) possess valuable local anaesthetic properties. In order to establish the relations between the chemical structure and the local anaesthetic activity nuclear substituted halogen derivatives of these compounds were prepared. The diethylglyceryl halogeno anilides and toluidides prepared from the corresponding chloroacetyl derivatives show local anaesthetic activity, and several compounds even surpass Novocaine in this respect; their toxicity is low but strong local irritating properties prohibit their practical use. These irritating properties may be diminished and simultaneously the biological activity of the compound increased by the introduction of a second free aromatic amino group. However, the thus obtained derivatives are highly toxic. This toxicity can be diminished by the acylation (acetylation or succinylation) of the

2

1/2

HUNG

D. Bebe etc.

second amino group but their activity is reduced thereby. The N-(diethylglycyl)-2,6-dichloro-L-succinylamino amide prepared has a "zwitter" ionic structure and therefore it is water soluble. It proved to be a more potent local anaesthetic than Novocaine in spite of its free (more precisely, ionized) carboxyl group. Several quaternary derivatives of the compounds mentioned above were prepared and investigated in respect to their pharmacological value. The local anaesthetic activity of the alkyl quaternary compounds is low, the activity of the allylic quaternary compounds was found to be of the same order as that of the tertiary salts. Due to their low solubility in water the biological activity of the benzyllic quaternary compounds was not investigated. In respect to the effect of the nuclear substituents on the local anaesthetic potency of these compounds the conclusion can be drawn that not only the steric factors — assumed by Löfgren and collaborators to be solely responsible for the pharmacologic activity — but the electron affinity of the substituents is also of decisive importance.

P/2

. L E M P E R T , K .

Hungary/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61497

Author: Beke, D., Lempert, K., Gyermek, L.

Institution: None

Title: New Local Anesthetic Agents

Original

Periodical: Neue Lokalanaesthetisch wirksame Verbindungen, Acta chim. Acad. sci., hung., 1954, 5, No 1-2, 143-149; German; Russian and English resumés

Abstract: There have been prepared a number of N-diethylglycyanilides $\text{ArNHCOCH}_2\text{N}(\text{C}_2\text{H}_5)_2$ (GA) containing various halogen and alkyl substituents in the aromatic nucleus and the local anesthetic properties of the hydrochlorides and acid succinates (AS) of these compounds have been investigated. On treatment of $\text{ArNH}_2\text{ClCH}_2\text{COCl}$ there are obtained $\text{ArNHCOCH}_2\text{Cl}$ (CA) with a yield of 70-90% which give with $\text{HN}(\text{C}_2\text{H}_5)_2$ the GA with a yield of 60-70%. The following CA and GA have been prepared (listed are: Ar, MP ° C, of CA, and

Card 1/3

Hungary/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61497

Abstract: MP ° C of hydrochloride of GA): o-chlorophenyl, 74-75, 108-111; m-chlorophenyl, 100-101, 219-221; p-chlorophenyl, 168, 178-179; 2,4-dichlorophenyl, 117-118, 172-173; 2,5-dichlorophenyl, 115-116, 172-173; 2,6-dichlorophenyl, 172-173, 168-169, AS, MP 130-132°; 3,5-dichlorophenyl, 141-142, 206-207; 2,4,6-trichlorophenyl, 181, 218-220; p-bromophenyl, 176-177, 167-168; 2-brom-6-chlorophenyl, 167-170, 175-181; 2,5-dibromophenyl, 136-138, 188-190; 2,6-dibromophenyl, 170, 195, AS, 132-134; 2,4,6-tribromophenyl, 217-218, 211-213; 4-chlor-o-tolyl, 128-129, 120-121; 4,6-dichlor-o-tolyl, 177-178, 177.5, AS 102-103; 4-brom-o-tolyl, 132-134, 152-154; 4,6-dibrom-o-tolyl, 196-197, 135-137, AS 100-102; 2,6-dichlor-p-tolyl, 167-169, 193-195; 2-brom-p-tolyl, 118-119, 146-147; 2,6-dibrom-p-tolyl, 188-190, 188-190, AS 138-140; phenyl, 134-135, 108-109; o-tolyl, 112, 119-120; p-tolyl, 163-164, 147-148; o-ethylphenyl, 102-104, 138-140; α -naphthyl, 159-162, 162-163; 2-methylnaphthyl-1, 167-168, 210-211; about 1/2 of synthesized GA have local anesthetic properties approximating those of novocain. Substituents in ortho- and ortho'-positions are not indispensable for high anesthetic activity, thus GA (Ar = 3,5-dichlorophenyl) is as active as the

Card 2/3

Hungary/Organic Chemistry - Synthetic Organic Chemistry, E-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61497

Abstract: 2,6-isomer and exceeds that of novocain, while GA (Ar = 4-chlor-o-tolyl) is 1.4 times as active as novocain.

Card 3/3

LEMPERT, K

HUNG.

✓ New local anesthetics. II. D. Békó, K. Lempert, and L. Gyermek
(*Acta chim. Hung.*, 1954, 5, 151-158; cf. preceding abstract).
Pharmacological examination of the substituted diethylglycylamides
shows that, within this class of compounds, the introduction into
the mol. of a further substituent (halogen, alkyl, NO₂, NH₂, or
acylamide group) into the free *ortho* position (with respect to the
diethylglycylamide group) increases the anesthetic activity irres-
pective of the electron affinity of the new substituent. Steric
factors therefore appear important. If the same substituents are
introduced into the free *para* position of the 2 : 6-dihalogenodiethyl-
glycylamide, their effect on the biological activity of the product
depends on their electron affinity. The prep. is described of a series
of 2 : 3-dichloro- or -dibromo-4-acetamidoanilides with an N-
diethylglycyl group. The dihalogeno-4-nitroaniline is treated with
CH₂Cl-COCl, and the product treated with NHEt₂ to give the
dihalogeno-4-amino-N-diethylglycylamide which is reduced and
acylated to the dihalogeno-4-acetamido-N-diethylglycylamide.
Quaternary deriv. of the last-named are prepared. Formula and
m.p. of all compounds are given. H. WREN.

Lempert, K.

32. New compounds with local anaesthetic activity, IV.
K. Lempert, I. Gyermek. *Magyar Kémiai Folyóirat*, Vol. 61, 1955, No. 7, pp. 193-195

2

Analogs of 2-dimethyl-aminoethylindole — a compound of local anaesthetic activity — were prepared by introducing other heterocyclic systems into the molecule. (1) By reacting *o*-phenylenediamine with monochloroacetic acid and diethylamine 2-diethyl-amino-methylbenzimidazole was obtained which was converted to its crystalline dichlorohydrate (m. p. 209 to 211 °C) by the ethylacetate-hydrochloric acid-ether method. (2) The condensation of *N,N'*-diethyl-glycinonitrile with *o*-aminothiophenol yields directly 2-diethylamino-methylbenzothiazole. This compound was obtained in better yields by the interaction of *o,o'*-diamino-diphenyl disulphide with chloroacetyl-chloride and diethylamine through the intermediates 2,2'-di-(chloroacetamino)-diphenyl disulphide and 2,2'-di-(diethylglycylamino)-diphenyl disulphide by reductive cyclization. The monochlorohydrate of this compound yields hygroscopic white needles melting at 132-133 °C. (3) The bromination of quinaldine with bromosuccinimide yields 2-bromo-methyl quinoline which was reacted with diethylamine to obtain 2-diethylaminomethyl quinoline. Its dichlorohydrate, a powder, melted at 207 °C. According to the preliminary pharmacological examinations all three basically substituted heterocyclic compounds showed local anaesthetic activity at least equal to that of novocaine. Moreover the compound 2-diethylaminomethyl quinoline exhibited antihistaminic and antidiuretic activity.

Chem
Med

LEMPERT, Karoly; BREUER, Judit; LEMPERT KAROLYNE SRETER, Magda

Hydantoins, thiohydantoins, glycoxyamidines. Pt. 3. Magyar kem
folyoir 65 no.4:142-145 Ap '54.

1. Magyar Tudományos Akadémia Kísérleti Orvostudományi Kutató
Intézeté Korelettani Osztálya, Budapest és Eötvös Loránd
Tudományegyetem Szerves-Kémiai Intézet, Budapest.

HUNGARY / Organic Chemistry. Organic Synthesis.

G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1233.

Author : Lempert, K., Beke, D., Borovansky, A.

Inst : Not given.

Title : Research in the Field of Local Anesthetics. VI.
The Preparation of 4-Amino-3,5-Dichlorothiophenols
and Its Certain 5-Alkyl Derivatives.

Orig Pub: Magyar kem. folyoirat, 1956, 62, No 11-12,
373-377.

Abstract: Starting from 2,6-Cl₂C₆H₃NH₂ (I) or N-acetyl-1 (II),
the 2,6-Cl₂-4-HSC₆H₂NHR (III) were synthesized via
2,6-Cl₂-4-SO₂ClC₆H₂NHR (IV). By the action of
CH₂N₂ or R'I on II, the corresponding 2,6-Cl₂-4-
R'SC₆H₂BH R (V) are prepared. 14.1 grams of II
was heated with 32 milliliters of HSO₃Cl for two

Card 1/5

HUNGARY / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1233.

Abstract: hours at 125-130°C. and after being cooled, IV was obtained (R = H) (IV-a), in a 60-65% yield, m. p. 130-132°C. (from C₆H₆Cl); 10.42 grams of IV-a was fused with 34 grams of ClCH₂COOH and 4.6 milliliters of ClCH₂COCl and after it has been heated at 110-120°C. for one hour was poured into 400 milliliters of water. Thus IV obtained (R = COCH₂Cl) (IV-b) in a 91-96% yield, m. p. 194-194°C. (from benzene-chloroform); IV (R = COCH₃) (IV-c), yield 86%, does not melt up to 300°C., was prepared upon boiling for 15 minutes of 5.2 grams of IV-a with 20 milliliters of glacial acetic acid and 2.1 milliliters of acetic anhydride. A solution of 2.6 grams of IV-a and 13.4 grams of SnCl₂·2H₂O in 55 milliliters of glacial acetic

Card 2/5

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HUNGARY / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1233.

Abstract: acid (saturated with HCl gas), is agitated for 1.5 hours at 20°C. and for one hour at 65°C. and is filtered. From the filtrate after the addition of 25% HCl, III was obtained after ~ 48 hours (R = H), (III-a), yield 20%, m. p. 74-76°C., III-a was also obtained in a 81% yield by reducing IV-b or IV-c with zinc dust. To 3.25 grams of III in 60 milliliters of ether in the cold was added an ether solution of 2.54 grams of CH₂N₂, ~ 24 hours after being treated with HCl (acid) V was obtained (R = H, R' = CH₃), (V-a), yield 89%; V-a was also prepared by methylation with methyl iodide, in a 61% yield, m. p. 59-61°C. (from benzene). In the same way other V (R = H) were prepared. Given are R', yield in %, m. p. in °C.: C₂H₂, 78.2, -; C₃H₇, 65.1, 41-43; C₄H₉,

Card 3/5

HUNGARY / Organic Chemistry. Organic Synthesis. G-2

Abs Jour: Ref Zhur-Khimiya, No 1, 1959, 1233.

Abstract: 62/4, —. Upon melting 4.3 grams of V (R = H, R' = C₂H₅), with 8.2 grams of ClCH₂COOH and 2.2 milliliters of ClCH₂COCl followed by heating for one hour at 110-120°C., V was prepared (R = COCH₂Cl, R' = C₂H₅), yield 94.1%, m. p. 164-166°C.; the other V were prepared in the same way (R = COCH₂Cl) [given are R' and m. p. in °C. (from alcohol)]: CH₃, 180-180.5; n-C₃H₇, 168-168.5; n-C₄H₉, 148-149. All V (R = H) can serve as starting materials for synthesizing compounds with local anesthetic properties. From 24.3 grams of 3,5-Cl₂-4-NH₂C₆H₂SO₂.NH₂ (VI), 85 grams of ClCH₂COOH and 12 milliliters of ClCH₂COCl one obtains (110-120°C., 2 hours) 29.5 grams of 3,5-Cl₂-4-ClCH₂CONHC₆H₂SO₂.NH₂ (VII), m. p. 226-228°C. (from 30% aqueous al-

Card 4/5

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LEMPERT, KAROLY

STARK, Ervin, az orvostudományok kandidátusa; LEMPERT, Karoly; VAGI, Oszkarne

Isolation of benzoic acid from the urine of patients suffering from hyperfunction of the pituitary and adrenal cortex. Magy. Tudom. Akad. Biol. Orv. Oszt. Kozl. 8 no.4:415-416 1957.

1. Az MTA Kiserleti Orvostudományi Kutató Intézet Korelettani Osztálya és a Budapesti Orvostudományi Egyetem I. sz. Belklinikája.

(CUSHING SYNDROME, urine in
benzoic acid isolation (Hun))

(ADRENAL CORTEX, dis.
hyperfunct., isolation of benzoic acid from urine (Hun))

(BENZOATES, in urine
in adrenal cortex hyperfunct. & Cushing synd., isolation
of benzoic acid (Hun))

LEIBERT, K.

Studies on local anesthetics. V. 4-alkoxy derivatives of (N, N-diethylglycyl-) and (N-n-butylglycyl)-2,6-dichlorocamilide hydrochloride.

P.99 (ACTA CHIMICA) Vol. 18, no. 1, 1957, in German
Budapest, Hungary

SC: Monthly Index of East European Accessions (EEA+) LC. Vol. 7, No. 3
March 1958

LEMPERT, KARDY

HUNGARY/Organic Chemistry. Synthetic Organic Chemistry.

G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64490.

Author : Lempert Kardy, Lempert, Karolyne

Inst :

Title : Synthetic Materials With Hypotensive Activity. I.

Orig Pub: Magyar kem. folyoirat, 1957, 63, No 2-3, 84-87.

Abstract: With the intention of studying the relation of hypotensive activity to structure, a series of derivatives of 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinoline (I) were synthesized. N-(δ -acetoxybutyl)-(I) (Ia) can be derived from (I) and δ -bromobutylacetate in the presence of $(C_2H_5)_3N$ in an acetone solution, yield 69%, m.p. 61-62° (in benzene-ether, hydrochloride, m.p. 171-172° [in methyl-ethyl ketone (M)], succinate, m.p. 90-92° (in CCl₄-ether),

Card : 1/4

HUNGARY/Organic Chemistry. Synthetic Organic Chemistry.

G

Abs Jour: Ref. Zhur-Khimiya, No 19, 1958, 64490.

anisoyloxyethyl)-(I), can be produced m.p. 177-179^o, and N-(beta-veratroyloxyethyl, m.p. 182-184^o (both in chloroform-ether), and N-(δ -3',4',5'-trimethoxybenzoyloxybutyl)-(I), m.p. of hydrochloride 167-169^o. Upon the boiling of a solution of (I) with ethylene-chlorhydrin in the presence of (C₂H₅)₃N and sodium iodide in acetone, N-(δ -oxyethyl)-(I) is produced; yield of hydrochloride 52-58%, m.p. 192-193^o (in chloroform-ether). In order to make comparisons in pharmacological methods by the technique of Smorgonskov-Goldfarb (J. gen. chem. 1940, 10, 1113), the hydrochlorides of (δ -oxybutyl)- (δ -acetoxybutyl)- and (δ -3,4,5 trimethoxybenzoyloxy)-diethylamines, m.p. 88-90, 91-93 and 136-138, respectively, were synthesized. The majority of the above compounds

Card : 3/4

LEMPERT, K.

CATEGORY : Hungary 9-3
AUTH. JOUR. : RZKhim., No. 21 1959, No. 75070
AUTHOR : Lempert-Sreter, M. and Lempert, K.
INST. : Hungarian Academy of Sciences
TITLE : On the Base-Induced Cleavage of Functional Derivatives of p-Tosylglycine
ORIG. PUB. : Acta Chim Acad Sci Hung, 17, No 4, 471-474 (1958)
ABSTRACT : Heating of p-tosylglycine (I) and of its amide (II) to 220-230° with NH₃, di- and triethylamine leads to the cleavage of I and II and to the formation of p-thiocresol or of the corresponding sulfides and disulfides, amines, aldehydes, and CO₂. The above reaction takes place when the functionally modified carboxyl group contains readily ionizable [labile] hydrogen. The ethyl ester of I on heating with NH₃ at first gives II which subsequently cleaves as described above.

CARD: 1/2

146

LEMPERT, Karoly

Some problems of the relationship of chemical structure and pharmacological effects. Orv. hetil. 99 no.36:1229-1237 7 Sept 58.

Experimentel
1. A Magyar Tudományos Akademia Kiserleti Orvostudományi Kutató Intézete Kóreltani Osztályának (igazgató: Rusznyak István dr. Akadémikus) közleménye.

(DRUGS)

Pathophysiology

structure-activity relationship, theories & study methods
(Hun)

LEMPERT, K.

Chemistry of glycoamidines. p. 59

KOZLEMENYEI. Budapest, Hungary. Vol. 12, no. 1, 1959

Monthly list of East European Accessions (EEAI). Iu. Vol. 9, no. 1, Jan.,
1960.

Uncl.

LEMPERT, K. LEMPERT-SRETER, M.;

On the dissociation of N-(B.B.B.-trifluorethyl)-ptosylamides and of N-(p-tosl) - phenacylamines from ammonia. A preliminary report. In German.

ACTA CHIMICA. (Magyar Tudpmnyos Akademia) Budapest, Hungary.
Vol. 21, No. 1, 1959.

Monthly List of East European Accessions (EEAI) LC vol. 9, No. 2, Feb. 1960.
Uncl.

LEMPERT, K

Distr: 4E3d

1 1

Cleavage of N-(2,2,2-trifluoroethyl)- and N-phenacyl-p-toluenesulfonamide with ammonia. M. Lempert-Sreter and K. Lempert (L. Eötvös Univ., Budapest). *Acta Chim. Acad. Sci. Hung.* 21, 89-90(1959)(in German).
 Cleavage of the title compds. was carried out (several hrs. at 230-40°) in a sealed tube with aq. NH₃. In both cases, p-toluenesulfonamide, m. 135-6°, was obtained (in quant. yield from the first title compd. and in 57% yield from the second). Thus, cleavage occurred at the C-N bond.

5
1-Bw(du)
1-g.2.9(NB)

2/0
//
alt

Walter Ding

LEMPERT, Karoly; BREUER, Judit; LEMPERTNE SRETER, Magda; PATAKY, Istvan;
PFELFFER, Klara

Hydantoins, thiohydantoins, glycoyamidines. Pts. 1-2. Magy kem
folyoir 65 no.3:107-113 Mr '59.

1. Magyar Tudomanyos Akademia Kiserleti Orvostudomanyi Kutato
Intezete Korelettani Osztalya, Budapest, Eotvos Lorand Tudo-
manyegyetem Szerves-Kemiai Intezete, Budapest, Orvostudomanyi
Egyetem Gyogyszertani Intezete, Budapest.

COUNTRY : HUNGARY G
CATEGORY : Organic Chemistry. Synthetic Organic Chemistry
ABS. JOUR. : RZKhim., No. 23 1959, No. 62328
AUTHOR : Lempert, K.; Breuer, J.; Lempert-Streter, N.
INSU. :
TITLE : Hydantoins, Thiohydantoins, Glycoxyamidines.
Report III. Orientation in the Monobenzyla-
tion of 5,5-diphenylglycoxyamidines
ORIG. PUB. : Magyar kem. Folyoirat, 1959, 65, No 4, 143-
145
ABSTRACT : No abstract.
See RZKhim., 1959, No 16, No 57136

CARD: 1/1

LEMPERT, Karoly; BREUER, Judit

Hydantoin, Thiohydantoin, glycoyamidines. Pt. 4. Magyar folyoir 65 no. 7: 263-264 J1 '59.

1. Magyar Tudomanyos Akademia Kiserleti Orvostudomanyi Intezete Korelattani Osztalya.

LEMPERT, Karoly, a kémiai tudományok kandidátusa

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1. Magyar Tudományos Akadémia Kísérleti Orvostudományi Kutató Intézet
Körleletani Osztálya, Budapest.

Cytosine) (Quinazoline) (Pyrimidines)
(Thiazole) (Imidazole)

LEMPERTNE, Sreter, Magda; KNAUSZ, Dezso; LEMPERT, Karoly

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1. Eotvos Lorand Tudomanyegyetem Szerves Kemiai Intezete es Magyar Tudomanyos Akademia Kiserleti Orvostudomanyi Kutato Intezete, Korelettani Csztaly.

LEMPERT, Karoly

Chemistry of 2-thiouracils, isocytosines and their condensed derivatives analogons of quinzoline, thiazolopyrimidine, and imidazopyrimidine (series). Pt. II. (to be contd) Kem tud kozl MTA 18 no. 1:37-112 '62.

1. A kémiai tudományok kandidátusa: Magyar Tudományos Akademia Orvostudományi Kutató Intézete Köreletti Osztálya, Budapest.

LEMPERT, Karoly, a kemiai tudományok kandidátusa

Chemistry of 2-thiouracils, isocytosines and their condensed derivatives, analogons of quinazoline, thiazolopyrimidine, and imidazopyrimidine series). Pt.II.(To be contd.) Kem tud közl ~~MTA~~ no.1:37-112 '62.

1. Magyar Tudományos Akadémia Orvostudományi Kutató Intézete Kóreltani Osztálya, Budapest.

LEMPERT, Karoly, a kémiai tudományok kandidátusa

Chemistry of 2-thiouracils, isocytosines and their condensed derivatives (Analogues of quinazoline, thiazolopyrimidine, and imidazopyrimidine-series, etc.).III. Kem tud kozl MTA 18 no.2:243-300 '62.

1. Magyar Tudományos Akadémia Kísérleti Orvostudományi Kutató Intézete Korelettani Osztálya, Budapest.

LEMPERT, Karoly; BREUER, Judit

Alkylation, realkylation and dealkylation of 2-amino-4-quinazolinol by amines and ammonia. Magyar folyoir 68 no.10: 452-454 0 '62.

1. Magyar Tudományos Akademia Kiserleti Orvostudományi Intezete Korelettani Osztalya.

LEMPERT, K. (Budapest, XI., Gellert ter 4); LEMPERT-SRETER, M. (Budapest, XI., Gellert ter 4); BREUER, J. (Budapest, XI., Gellert ter 4)

Hydantoin, thiohydantoin, glycoyamidine. Pt. 13. Periodica polytechn chem 7 bo.1:7-19 '63.

1. Lehrstuhl für Organische Chemie, Technische Universität, Budapest (for K. Lempert).
2. Institut für Organische Chemie der Eotvos-Lorand Universität, Budapest (for Lempert-Sreter).
3. Institut für Experimentelle Medizinische Forschung der Ungarischen Akademie der Wissenschaften, Abteilung für Pathophysiologie, Budapest (for Breuer).

LEMPERT, K. (Budapest, XI., Gellert ter 4); BREUER, J. (Budapest, VIII., Koranyi Sandor u.2/a)

Hydantoin, thiohydantoin, glycoyamidina. Pt. 15. Periodica polytechn chem 7 no.4:299-310 '63.

1. Lehrstuhl fur Organische Chemie, Technische Universitat, Budapest (for Lempert). 2. Abteilung fur Pathophysiologie des Instituts fur Experimentelle Medizinische Forschung der Ungarischen Akademie der Wissenschaften, Budapest (for Breuer).

FODOR, Gabor, akademikus; BEKE, Denesne; BITE, Pal, kandidatus; DOBO, Pal;
FARKAS, Lorant, kandidatus; F. VARGA, Eva; LEMPERT, Karoly, kandidatus;
OTVOS, Laszlo, kandidatus; SZANTAY, Csaba, kandidatus; URESCH, Ferenc

An account of the Prague Symposium on Natural Organic Compounds.
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1. Magyar Tudomanyos Akademia Sztereokemiai Kutato Csoportja,
Budapest (for Fodor, Beke, Lempert, Otvos, Uresch). 2. Magyar
Tudomanyos Akademia Kemiai Tudomanyok Osztalya (for Bite, Dobo,
Farkas, F. Varga, Szantay). 3. "A Magyar Tudomanyos Akademia
Kemiai Tudomanyok Osztalyanak Kozlemenyei" szerkeszto bizottsagi
tagja (for Fodor).

LEMPERT, Karoly, kandidatus

Report on the discussion of the dissertation prepared by Elmer
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~~LEMPERT, Karoly~~; LEMPERTNE SRETER, Magda; BREUER, Judit; PATAKY, Istvan;
PFEIFER, A.Klara

Hydantoins, thiohydantoins, glycoyamidines. Pt.11. Magyar kem folyoir
69 no.4:143-149 Ap '63.

1. Magyar Tudomanyos Akademia Kiserleti Orvostudomanyi Kutato Intezete
Korelettani Osztalya, Budapest; Eotvos Lorand Tudomanyegyetem Szerves-
Kemiai Tanszeke es Budapesti Orvostudomanyi Egyetem Gyogyszertani
Intezete.

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LEMPERT, Karoly: BAEUER, Judit

Hydantoins, thiohydantoins, glycoeyamidines.Pt.15. Magyar folyoir 69
no.7:323-328 J1 '63.

1. Budapesti Muzsaki Egyetem Szerves-Kemiai Tanszeke es a Magyar Tudos-
manyos Akademia Kiserleti Orvostudomanyi Intezete Korelettani Osztalya.

LEMPERT, Karoly; DOLESCHALI, Gabor

Imidazoquinezolinédiones. Pt.2. Magyar folyoir 69 no.9:
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1. Budapesti Muszaki Egyetem Szerves-Kemiai Tanszeke.

LEMPERT, Karoly, dr. (Budapest, XI., Gellert ter 4); ZAUER, Karoly (Budapest, XI., Gellert ter 4); BREUER, Judith (Budapest, VIII., Koranyi Sandor u.2/a)

Hydantoins, thiohydantoins, glycoyamidines. Pt. 17. Periodica polytechn chem 8 no.1:21-28 '64.

1. Department of Organic Chemistry, Polytechnical University, Budapest (for Lempert and Zauer). 2. Department of Pathophysiology, Institute of Experimental Medical Research of the Hungarian Academy of Sciences, Budapest (for Breuer).

DOLESCHALL, Gabor, dr. (Budapest, XI., Gellert ter 4); LEMPERT, Karoly,
dr. (Budapest, XI., Gellert ter 4)

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1. Department of Organic Chemistry, Budapest Technical
University.

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AUTHOR: Loleschall, Gabor--Doloshall, G. (Doctor); Lempert, Karoly (Doctor)ORG: Department of Organic Chemistry, Technical University, BudapestTITLE: Imidazoquinazolinediones, III. N-alkyl derivatives and some related compounds

SOURCE: Academia scientiarum hungaricae, Acta chimica, v. 45, no. 4, 1965, 357-368

TOPIC TAGS: organic azo compound, organic synthetic compound, ester, organic amide, amine

ABSTRACT:

Starting from the ester or amide of (2-methylthio-3,4-dihydro-4-oxo-3-quinazolinyl)-acetic acid, various 2,5 (1H, 3H)-imidazo [2,1-b] quinazolinediones substituted in the 1 position have been prepared by ring closure effected by primary amines. Analogously, starting from the corresponding (1-quinazolinyl)-acetamide, 2,5 (1H, 3H)-imidazo [1,2-a] quinazolinediones substituted in position 3 have been synthesized. 1-Alkyl-2-alkylmercapto-4(1H)-quinazolinones, intermediate products used in these syntheses, showed a surprisingly high reactivity with nucleophilic reagents. The authors thank Dr. P. Sohar for the IR and Dr. L. Lang for the UV spectra, Mrs. I. Balogh-Batta and staff for the microanalysis, and Dr. H. E. Duell (Smith Kline and French Laboratories, Philadelphia) for the chemotherapeutic tests. [Orig. art. in Eng.] [JPRS: 33,906]

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