AGRANOVICH, V.M.; OVANDER, L.N.

Theory of induced absorption of light ...

7 no.9:2799-2802 S '65.

L 53659-65   EWT(1)/T/EEC(b)-2   P1-4   IJP(c)   GG

ACCESSION NR: AP5013400   UR/0053/65/086/001/0003/0039

AUTHOR: Ovander, L. N.

TITLE: Nonlinear optical effects in crystals

SOURCE: Uspekhi fizicheskikh nauk, v. 86, no. 1, 1965, 3-39

TOPIC TAGS: nonlinear effect, crystal, optical effect, optical resonance, crystal symmetry, Raman scattering, Raman effect

ABSTRACT: This review is confined to nonlinear third-order effects in the optical band, corresponding to scattering of light waves by phonons, and of the type arising when light from lasers is used to study the properties of condensed systems. The analysis is based on the approach used by the author (FTT v. 3, 2394, 1961 and v. 5, 872, 1963) for the interaction between normal oscillations of any nature, and in which the interaction between the radiation field and the crystal is not assumed to be weak. This makes possible an analysis of effects which cannot be regarded within the framework of perturbation theory. The article consists of a detailed exposition of the theory of nonlinear effects, followed by a discussion of a series of concrete effects. The subject headings are: I. General theory of

Card 1/2

L 53659-55

ACCESSION NR: AP5013400   0

...linear effects. 1. Expression for the Hamiltonian. 2. Separation of the sec-
ond and third-order terms in the initial Hamiltonian. 3. Separation of the oper-
ator of the nonlinear effects. II. Electronic nonlinear effects. 4. Formation of
summary harmonic. 5. Influence of symmetry and of the dimensions of the crystal
on nonlinear effects. 6. Resonance phenomena. 7. Some remarks concerning exist-
ing methods of calculation of nonlinear effects. III. Nonlinear effects due to
electron-vibration interaction (Raman scattering). 8. General theory of Raman
scattering. 9. Form of the Raman scattering tensor. Overtones. Composite tones.
Fermi resonance. Temperature dependence. 10. Raman scattering in piezoelectric
crystals. Orig. art. has: 7 figures, 50 formulas, and 3 tables.   [02]

ASSOCIATION: none

SUBMITTED: 00   ENCL: 00   SUB CODE: OP, SS

NO REF SOV: 037   OTHER: 092   ATD PRESS: 4013

Card 2/2

L 29727-66   EWT(1)/T   IJP(c)   GG

ACC NR: AP6018813   SOURCE CODE: UR/0056/66/050/005/1332/1342

AUTHOR: Agranovich, V. M.; Ovander, L. N.; Toshich, B. S.

ORG: none

TITLE: Theory of the nonlinear polarizability of crystals

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki, v. 50, no. 5, 1966, 1332-13??

TOPIC TAGS: ~~nonlinear optic polarizability~~, exciton, POLAR CRYSTAL, TENSOR, CRYSTAL OPTIC PROPERTY, OPTIC SPECTRUM

ABSTRACT: A new method is proposed for calculating the nonlinear crystal polarizability tensor ϵ_{ijl} ($k\omega$, $k'\omega'$, $k''\omega''$), which determines the third-order nonlinear optical processes in the exciton spectral range. The main difference between the new method and previous methods is that in determining ϵ_{ijl}, real electromagnetic waves in a medium are used for the states in the zeroth approximation. The properties of such waves (dispersion law, polarization) differ significantly from those of approximate models, such as Coulomb excitons and transverse photons. A relationship is established between ϵ_{ijl} and cubic anharmonic coefficients in a normal wave system. The expression for ϵ_{ijl} obtained by the authors becomes identical to that found by other researchers if the refractive indices of all the normal waves are assumed to be close to unity (or if the tensor ϵ_{ij} is assumed to be a unit tensor). The new method can also be used for calculating the nonlinear polarizability tensor ϵ_{ijlm}. Orig. art. has: 38 formulas.
                                                                           [CS]

SUB CODE: 20/ SUBM DATE: 26Nov65/ ORIG REF: 014/ OTH REF: 003/ ATD PRESS: 5013

Card   1/1   c c

L .44319-66   EWT(1)/T   IJP(c)   GG

ACC NR: AT6015889   SOURCE CODE: UR/3158/65/000/025/0002/0015

AUTHORS: Agranovich, V. M.; Ovander, L. N.; Toshich, B. S.

ORG: none

TITLE: On a theory of the nonlinear polarizability of crystals

SOURCE: Obninsk. Fisiko-energeticheskiy institut. Doklady, FEI-25, 1965. K teorii nelineynoy polyarisuyemosti kristallov, 2-15

TOPIC TAGS: tensor, crystal, electromagnetic radiation, Hamiltonian, Green function, Maxwell equation, Fourier series, exciton, phonon interaction, coulomb interaction, nonlinear effect, particle interaction, charged particle

ABSTRACT: The tensor of nonlinear polarizability of crystals ε_{ijl} for the exciton region of the spectrum is found by a method similar to one used earlier (V. M. Agranovich and Yu. V. Konobeyev. FTT, 5, 2524, 1963). The interaction between charged particles of the crystal and the natural radiation field existing in the crystal is not assumed to be weak. The tensor of nonlinear effects is proportional to the corresponding anharmonicity coefficients. The general formula for the tensor of nonlinear polarizability

$$\varepsilon_{ijl}(\vec{x},\omega;\vec{x}',\omega';\vec{x}'',\omega'') = \left(\frac{c^2}{4\pi}\right)^3 \frac{\Delta_{ip}(\vec{x}\omega)\Delta_{\eta j}(\vec{x}'\omega')\Delta_{nl}(\vec{x}''\omega'')}{\omega\omega'\omega''} T_{pm}$$

together with

$$T_{\ell m n}(\vec{x},\omega;\vec{x}',\omega';\vec{x}'',\omega'') = [Q_{m\ell n}(-\vec{x}',\vec{x}'';\omega',i\delta;-\omega'',i\delta) + }$$

Card 1/2

ACC NR: AP6020557   SOURCE CODE: UR/0181/66/008/008/2435/2439

AUTHOR: Verlan, E. M.; Ovander, L. N.

ORG: Kiev State University im. T. G. Shevchenko (Kiyevskiy gosudarstvennyy universitet)

TITLE: Resonance Raman scattering in crystals

SOURCE: Fizika tverdogo tela, v. 8, no. 8, 1966, 2435-2439

TOPIC TAGS: Raman scattering, exciton, absorption coefficient

ABSTRACT: According to a theory developed earlier by one of the authors (Ovander), the Stokes component of the Raman scattering in a crystal should be treated as the splitting of a light exciton into two parts. One is a light exciton in the region of crystal transparency; the other is almost purely a mechanical vibration, which eventually heats the crystal. A study is made of the resonance Raman scattering, taking into account the mechanical dispersion of vibration and damping. This limits the intensity of the light scattering in the resonance point. It is shown that auxiliary waves arise near exciton absorption and can play important roles in the case of thin plates. It follows from the theory that the absorption coefficient (for the ordinary wave) grows faster than the intensity of the Raman scattering as the incident light frequency approaches the absorption band frequency. Orig. art. has: 1 figure, 17 formulas.

SUB CODE: 20/   SUBM DATE: 28May65/   ORIG REF: 005
Card 1/1

L 5416-66   EWT(1)
ACCESSION NR: AP5025308

UR/0051/65/019/004/0638/0640
535.375.001.1

AUTHOR: Ovander, L. N.

TITLE: Nonanalytic functionality of Coulomb exciton energy and peculiarities of Raman resonance scattering

SOURCE: Optika i spektroskopiya, v. 19, no. 4, 1965, 638-640

TOPIC TAGS: Raman scattering, exciton, crystal optic property, energy band structure

ABSTRACT: The author attempts to explain the effect which nonanalyticity in the band structure of Coulomb excitons has on some of the characteristics of Raman scattering. The essence of the problem reduces to the fact that the Coulomb exciton energy appears in the formula for the intensity of Raman scattering given by the author in a previous work (L. N. Ovander, FTT, 6, 361, 1964). Non-piezoelectric crystals are considered, i. e. crystals with a center of symmetry. The effect of nonanalyticity with respect to the nondegenerate, double degenerate and triple degenerate levels is studied, using the notation given in the previous work. Recommendations

Card 1/2

L 2331-66   EWT(1)/EPF(c)/T   IJP(c)   WW/GG

ACCESSION NR: AP5022726   UR/0181/65/007/009/2799/2802

AUTHOR: Agranovich, V. M.; Ovander, L. N.

TITLE: Theory of induced light absorption in crystals

SOURCE: Fizika tverdogo tela, v. 7, no. 9, 1965, 2799-2802

TOPIC TAGS: induced absorption, absorption, nonlinear absorption, light interference, frequency doubling, two photon absorption

ABSTRACT: In a theoretical investigation of intensity-induced absorption, an analysis is made of the conditions under which interference effects for two-photon absorption are manifested. The case when the frequency of the two-photon harmonic falls in the exciton absorption band is treated on the basis of the theory of nonlinear effects in a subsystem excitons with retardation taken into account. It is shown that anharmonicity due to Coulomb interaction can take place when the frequency of the incident wave is almost twice as large as the exciton absorption frequency. Orig. art. has: 12 formulas. [CS]

Card 1/2

L 2331-66
ACCESSION NR: AP5022726

ASSOCIATION: none

SUBMITTED: 25Jan65   ENCL: 00   SUB CODE: SS,OP

NO REF SOV: 006   OTHER: 011   ATD PRESS: 4107

C

Card   2/2

S/0051/64/016/005/0735/0738

ACCESSION NR: AP4035472

AUTHOR: Ovander, L. N.

TITLE: Form of the Raman scattering tensor

SOURCE: Optika i spektroskopiya, v.16, no.5, 1964, 735-738

TOPIC TAGS: Raman effect, Raman scattering tensor, crystal symmetry, crystal point group

ABSTRACT: In an earlier paper by the author (Opt.i spektro.9,571,1960) there was investigated, by the method of group theory, the form of the Raman scattering tensor for the case when the frequency of the incident light is remote from the frequency of the absorption bands. In the present paper the author considers the form of the Raman scattering tensor in the case of irradiation in the absorption band for 32 point groups. The basic equation for the Raman scattering tensor is taken from the book of G.Placzek (Rayleigh Scattering and the Raman Effect; cited in Russian translation). With approach of the incident light frequency to the absorption band there become significant the terms that correspond to states whose energy approaches E_n". Knowing the symmetry of the system, one can decide which of the com-

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ACCESSION NR: AP4035472

ponents of the tensor p are non-zero, which vanish and which are equal. Thus, there
is obtained the form of the tensor for the resonance case. The results of calcula-
tions are presented in the form of tables for 13 point groups (the values for some
other groups can readily be derived from the tabulated values). It is noted that in
a number of cases the tensors are nonsymmetrical: the tensors are symmetrical only
in a number of particular cases. Orig.art.has: 1 formula and 13 tables.

ASSOCIATION: none

SUBMITTED: 01Jun63   DATE ACQ: 22May64   ENCL: 00

SUB CODE: OP, SS   NR REF SOV: 003   OTHER: 000

Card 2/2

ACCESSION NR: AP4013489   S/0181/64/006/002/0361/0367

AUTHOR: Ovander, L. N.

TITLE: Form of the tensor of combination scattering in crystals

SOURCE: Fizika tverdogo tela, v. 6, no. 2, 1964, 361-367

TOPIC TAGS: combination scattering, dipole moment, ordinary tensor, piezoelectric tensor, infrared spectrum, combination spectrum

ABSTRACT: This is a continuation of the author's previous work (Opt. i spektr., 9, 571, 1960) and also utilizes results from several other papers by the author. Vibrations in crystals are of two types. One type has dipole moment, is active in infrared and combination spectra, and is found in crystals with no inversion center, i.e., piezoelectric crystals. Piezoelectric vibrations have a tensor with two components: "ordinary" and "piezoelectric." The other group of vibrations has no dipole moment. These vibrations are inactive in the infrared spectrum. They are found in crystals with an inversion center as well as in crystals without it. Such vibrations are called ordinary, and they have only

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ACCESSION NR: AP4039685   S/0181/64/006/006/1893/1895

AUTHOR: Ovander, L. N.

TITLE: Elementary theory of Raman frequency emission

SOURCE: Fizika tverdogo tela, v. 6, no. 6, 1964, 1893-1895

TOPIC TAGS: Raman scattering, stimulated scattering, Raman laser, liquid laser, gas laser, solid laser

ABSTRACT: The elementary theory of stimulated Raman scattering is reviewed and the conditions for generation of Raman scattering and spectral narrowing are established. Experimental results, using data from the quoted references, indicate that spatial narrowing is about one milliradian (0.001) while the computed value, based on theory presented in this article, is about 0.0001. Formulas indicate that the longer the relaxation time, the narrower the spectral line, and that a continuous generator produces a very

Card 1/2

RUBASEVSCHI, A. [Rubashevskiy, A.], OVANDER, N.

"Dialectic development in the Michurin biology" by D.M. Trosin.
Reviewed by A. Rubasevschi, N. Ovander.

OVANDER, L.N.

Raman spectra of solutions in the absorption band region.
Opt. i spektr. 4 no.5:555-559 My '58.   (MIRA 11:6)

1.Kiyevskiy gosudarstvennyy universitet.
                    (Raman effect)

ol-3-4/14

AUTHOR: Ovander, L. N.

TITLE: Rayleigh Scattering of Light by Solutions in tne
            Absorption-band Region. (Releyevskoye rasseyaniye
            sveta rastvorami v oblasti polosy pogloshcheniya.)

PERIODICAL: Optika i Spektroskopiya, 1957, Vol.III, Nr.3, pp.221-226.
            (USSR).

ABSTRACT: This is a theoretical paper. An earlier paper by the
            same author (Ref.1) dealt with scattering for incident-
            light frequencies far from the absorption band.   This
            paper considers the case when the incident-light frequency
            lies in the absorptio.i band.   A solution model obtained
            earlier (Refs. 1, 3) was used in this work.   The
            quantum-mechanical state of the system was described by
            three quantum numbers representing the state of a
            molecule, state of the solvent, and radiation field
            respectively.   It is shown that tne Rayleigh scattering
            intensity varies with the frequency of the incident light
            and is proportional to the ordinate of absorption spectrum.
Card 1/2   The spectral form of scattered lines is identical with

AUTHOR: Ovander, L.N.   SOV 51-5-1-3

TITLE: Luminescence and Resonance Scattering (Lyuminestsentsiya i rezonansnoye rasseyaniye,

PERIODICAL: Optika i Spektroskopiya, 1958, Vol 5, Nr 1. pp 10-14 (USSR)

ABSTRACT: The paper is entirely theoretical. It deals with scattering of light observed when the frequency of the incident light lies in the absorption band region. This is called resonance scattering. The author attempts to find the relationship between the resonance scattering and luminescence which is also produced by incident light with its frequency lying in the absorption band. The case of Rayleigh scattering is considered here. The criterion used to separate luminescence from the resonance scattering is due to Vavilov (Ref 2, and it is based on the time dependence (duration) of the emitted light. It is shown that this

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ASSOCIATION: hiveski, g universi.tet .i. a'.. .uk. 'tet (k.mv..ate
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Card 2/2   i. ligh. - Te .ry   L.e : - . .ru.g .. .ri. r .e - .e..ry

S/051/60/008/04/008/032
E201/E691

AUTHOR: Ovander, L.N.

TITLE: The Anti-Stokes Components of the Raman Spectra of Compounds with Hydrogen Bonds

PERIODICAL: Optika i spektroskopiya, 1960, Vol 8, Nr 4, pp 477-481 (USSR)

ABSTRACT: A theoretical discussion of the Raman scattering in compounds with hydrogen bonds is given. A one-dimensional model, used earlier by Stepanov (Ref 1) and Vol'kenshteyn et al. (Ref 2), is used to describe the properties of a hydrogen bond; the model is a quantum mechanical system consisting of three nuclei. It is shown that the structure of the anti-Stokes component should be similar to that of the Stokes component. The paper is entirely theoretical. Acknowledgment is made to I.I. Kondilenko for suggesting the problem. There are 5 references, 3 of which are Soviet and 2 German.

SUBMITTED: July 14, 1959

Card 1/1

OVANDER, L.N.

Raman effect in crystals. Fiz. tver. tela 3 no.8:2394-2400
Ag '61.   (MIRA 14:8)

1. Kiyevskiy gosudarstvennyy universitet im. T.G. Shevchenko.
            (Raman effect)

S/181/62/004/001/ ' '
P102/B104

AUTHORS: Grechko, L. G., and Ovander, L. N.

TITLE: Peculiarities of Raman scattering in piezoelectric cryst...

PERIODICAL: Fizika tverdogo tela, v. 4, no. 1, 1962, 1   - 162

TEXT: A paper by H. Poulet (Ann. de Phys., $\underline{10}$, 908, 1955) is discuss...
in detail. On the basis of the theory of polarizability, Poulet has
studied anomalies in Raman scattering and described the dependence of
Raman scattering on the wave vectors when longitudinal and transverse
oscillations occur in the crystal. In the present paper, it is shown
that the effects considered by Poulet may be due to intermolecular
interactions. The authors do not apply the theory of polarizability,
whose applicability has not yet been verified for crystals, but conside
Raman scattering to be a polariton decay. They restrict themselves
to cubic crystals and triply degenerate oscillations. The contribution
of intermolecular interaction to Raman scattering is investigated, and
expressions are derived for the degree of depolarization and for the
dependence of the scattering intensity on the scattering angle for

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Peculiarities of Raman scattering...

S/181/62/004/001/025/052
B102/B104

longitudinal and transverse oscillations. The crystal is assumed to consist of symmetrical molecules with three levels each: ground state plus two triply degenerate states. Raman scattering is due to two components, H_A and H_B. H_A was investigated earlier (FTT, $\underline{3}$, 2394, 1961), and H_B, which describes dipole-dipole interactions between electrons and lattice vibrations

$$H_B = \sum_{ss_1ij} D_{ij}^{ss_1} x_i y_j, \qquad (1)$$

$$D_{ij}^{ss_1} = \frac{p}{R_{ss_1}^3}\left[\delta_{ij} - \frac{3(\mathbf{R}_{ss_1})(\mathbf{R}_{ss_1})}{R_{ss_1}^2}\right],$$

is considered here. x_i = electron coordinates, y_i = vibration coordinates, s and s_1 = molecule numbers, $\vec{R}_{ss_1}$ = intermolecular distance, p = product of electron charge and effective charge of the vibration coordinate.$\vec{i}$, and $\vec{j} = \vec{x}, \vec{y}, \vec{z}$ = Cartesian coordinates. H_B is then

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Peculiarities of Raman scattering...   S/181/62/004/001/025,052
B102/B1C4

With $a_{ml}^{(\vec{r})} = \sum_{ij} \Gamma_{ij}(\vec{s}\,(2m|x_i|21)(1r|y_i|0)$ expressions for the Raman
scattering tensor are derived:

$$a'' = a_s(sx) + a_y(sy) + a_z(sz) \quad \text{(longitudinal oscillations)}$$
$$a_i^{\perp} = a_s(\tau_1 x) + a_y(\tau_1 y) + a_z(\tau_1 z)$$
$$a_2^{\perp} = a_s(\tau_2 x) + a_y(\tau_2 y) + a_z(\tau_2 x) \quad \text{(transverse oscillations)} \qquad (11).$$

These relations are identical with those derived by Poulet. It is
how theoretical results can be compared with experimental data. T-
are 10 references: 4 Soviet and 6 non-Soviet. The reference to th-
English-language publication reads as follows: H. Whinston. J. Chem. :
19, 156, 1951.

ASSOCIATION: Kiyevskiy gosudarstvennyy universitet im. T. G. Shevchenko
               (Kiyev State University imeni T. G. Shevchenko)

SUBMITTED: July 17, 1961
Card 4/4

33370
S/'18'/62/'004/'001/'046 '052
B''2/B'38

$24.3500 (1137, 1138, 1144)$

AUTHOR: Ovander, L. N.

TITLE: Absorption spectrum of a crystal due to the decay of
             polaritons

PERIODICAL: Fizika tverdogo tela, v. 4, no. 1, 1962 294 295

TEXT: A special case of combination scattering is considered which can
be regarded as absorption. The process of decay of a polariton (light
exciton) is shown schematically in the figure. The branch II corresponds
to a polariton with an energy $2E_0$ and with a wave vector k_0. This
polariton disintegrates into two polaritons with energy E_0 and wave
vectors $\vec{k}_1$ and $\vec{k}_2$ represented by the right and left part of the branch
II, respectively. The law of conservation of momentum reads $\vec{k}_0 = \vec{k}_1 + \vec{k}_2$
The following three cases are considered: 1) The polariton has energy
E_0, and its spectral width ΔE is approximately equal to the spectral

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L 10000-63
ACCESSION NR: AP3000151/EWT(1)/EED-2-AFFTC/ASD/EED-3—LIP(C)

S/0141/63/006/002/0267/0274

AUTHOR: Ovander, L. E.

60
59

TITLE: Theory of the frequency doubling effect in ferrites,

SOURCE: Izvestiya vysshikh uchebnykh zavedeniy, radiofizika, v. 6, no. 2, 1963, 267-274

TOPIC TAGS: ferrites, frequency doubling by ferrites

ABSTRACT: Frequency doubling phenomenon in ferrites is considered in terms of interaction between the electromagnetic and spin waves that causes the excited states or "ferromagnons". Three component Hamiltonians are used to find the double-frequency ferromagnon flux on the basis of a known ferromagnon flux of the original frequency. To obtain maximum intensity of double-frequency radiation, the incident fluxes must be oriented with a small angle between their wave vectors. "In conclusion, the author is thankful to K. B. Tolpy*go, I. A. Deryugin, and A. M. Fedorchenko for discussing the results of his work."
ORIG. ART. HAS: 23 equations and 2 figures.

Card 1/2

OVANDER, L. N.

Rayleigh scattering in crystals. Fiz. tver. tela 5 no.1:21-25
Ja '63.   (MIRA 16:1)

   (Scattering(Physics))   (Excitons)

OVANDER, L.N.

Resonance Raman spectra in crystals. Fiz. tver. tela 4 no.6:
1471-1473 Je '62.   (MIRA 16:5)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.
                        (Raman effect)   (Crystals)

OVANDER, L.N.

Raman effect in piezoelectric tetragonal crystals. Fiz. tver. tela
4 no.6:1466-1470 Je '62.   (MIRA 16:5)

1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.
        (Raman effect) (Piezoelectric substance)

OVANDER, L.N.

    Theory of nonlinear o,tical ffects. Fiz. tver. tela 5 no.3:872-873
    Mr '63.

    1. Kiyevskiy gosudarstvennyy universitet imeni T.G.Shevchenko.
                   (Magneto-optical effect)

OVANTER, L. N.

USSR/Physics

Card 1/1

Pub. 43 - 23/62

Author   :   Ovander, L. N.

Title   :   Resonance combination diffusion

Periodical :   Izv. AN SSSR. Ser. fiz. 18/6, 683-684, Nov-Dec 1954

Abstract   :   The process of resonance combination diffusion was investigated on a
               model of an admixture in a crystal. The energy levels and the natural
               functions of the diffusion were determined in an adiabatic approximation.
               Results proved that the intensity of the diffusion line depends to a
               large extent upon the frequency of the radiation spectrum and varies
               proportionally to the ordinate of the absorption spectrum. It was
               established that resonance combination diffusion can be subjected to
               damping with admixtures as well as concentrational damping.

Institution : The T. G. Shevchenko State University, Kiev

Submitted :   ....

OVAN ER. . .".

Light scattering   ...ions beyond the absor t   band. t.
spekt . 2 nc. .? .   e '5?.   . ./ .
                     Light--Scattering)

S/051/61/010/003/010/010
E032/E514

AUTHOR: Ovander, L. N.

TITLE: Connection Between the Absorption Spectrum and the
            Dependence of the Raman Spectrum on the Frequency of
            the Incident Light

PERIODICAL: Optika i spektroskopiya, 1961, Vol.10, No.3, pp.420-421

TEXT: In an earlier paper the present author used a specific
model to establish that the intensity of the Raman spectrum, locked
upon as a function of the frequency of the incident light, is
proportional to the ordinate of the absorption spectrum.   In the
present paper the author analyses an example in which this is no
longer true, i.e. the result obtained in Ref.1 cannot be extended
to arbitrary systems.   The Raman intensity near an absorption band
is determined by the tensor (G. Placek, Ref.2):

$$a_{xy} = \sum_{s} \frac{M_{s,i}^{s'} M_{s,i'}^{s+1}}{\omega_{s}^{s'} - \omega + i\gamma} . \qquad (1)$$

This expression contains only those terms which are significant

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Connection Between the Absorption...   S/051/61/010/003/010/010
                                          E032/E514

near an absorption band. The factor dependent on ω is also
omitted, since it is assumed that within the absorption band the
relative change in the frequency is small.   In order to avoid
complications, polarization properties are ignored and it is assumed
that a_{xy} is a scalar quantity.   Consider now a complex molecule
having continuous absorption bands.   Bearing this in mind, it is
convenient to consider $\omega_n = \omega_1$ as a continuously varying quantity,
while $M_n^{n'} = M_c(\omega_1)$ and $M_{n'}^{n+1} = M_1(\omega_1)$ are assumed to be continuous
functions of ω_1.   If the motion of the electrons and nuclei is
discussed on the adiabatic approximation, then it is easy to show
that $M_1(\omega_1) = kM_0(\omega_1)$, where k is a constant.   The frequency
dependence of the Raman spectrum is then given by the square of the
quantity

$$a = k \int_{-\infty}^{\infty} \frac{M_0^2(\omega)\, d\omega}{\omega_1 - \omega + i\gamma} \qquad (2)$$

and the intensity of the absorption spectrum is given by

Card 2/4

Connection Between the Absorption...   S/051/61/010/003/010/010
                                        E032/E514

$$I \sim M_0^2(\omega) \tag{3}$$

where for simplicity M_0 is assumed to be real. Comparison of Eqs.(2) and (3) shows that I and a^2 are not proportional to each other. Consider the simple absorption spectrum shown in Fig.a. Assuming that γ is much smaller than the width of the absorption spectrum, one can obtain the limit of Eq.(2) when $\gamma \rightarrow 0$. Using the formula

$$\lim_{\gamma \to 0} \frac{1}{x + i\gamma} = P\frac{1}{x} - i\pi\delta(x)$$

where P denotes the principal value and δ represents the delta-function, one obtains the a^2 versus ω curve shown in Fig.6 This example shows that in general the proportionality between the absorption and the intensity of the Raman spectrum does not hold There are 1 figure and 2 Soviet references.

[Abstractor's Note: This is virtually a complete translation.]
SUBMITTED: October 10, 1960
Card 3/4

VENTSEL, I.N.

Ray effect scattering of ... ... solutions in the region of the
absorption band. Opt. i spektr. 3 no.3:221-226 S '57. (MIRA ... ..

... Kyevskiy gosudarstvennyy universitet.
(Light--Scattering)

Ovander L N

Rayleigh scattering of light by solutions in the region of the absorption band. L. N. Ovander (State Univ., Kiev). Optika i Spektroskopiya 3, 231-8 (1957).—Equations were derived showing that the intensity of Rayleigh light scattering in the region of the absorption band varies with the frequency of incident light proportionally to the ordinate of the absorption spectrum. The spectral shape of the scattering line coincides with the shape of the source. The scattering in the absorption region can be quenched thermally and by the effect of the admixt.   A. P. Ketlinsky

OVANDER, L.N.

Anti-Stokes component of Raman spectra for compounds containing a hydrogen bond. Opt. i spektr. 8 no.4:477-481 Ap '60.

(MIRA 13:11)

(Hydrogen bonding)   (Raman effect)

1. OVANDER, M. I.

2. USSR (600)

4. Lenin, Vladimir Il'ich, 1870-1924

7. Lenin's book, Materialism and empirocriticism, a model of the Part's point of
    of view in philosophy. Visnyk AN URSR 21 No. 7 1949

9. **Monthly List of Russian Accessions**, Library of Congress, ___June___ 1953. Unclassified.

1.

2.

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9. **Monthly List of Russian Accessions**, Library of Congress, _____ 1953, Unclassified.

FRANCH▮▮.; VITA, Ala; BESLEAGA, E.; APOSTOL, A.; BALTIEV, Ariadna; BATCU,A. BLINDU,P.; BLUM, Miria [deceased]; BRAUNER, E.; CUCIUREANU, Georgeta; DUMITRIU, St.; FELLER,H.; MICO, I.; MIHUL, Valantina; OVANESCO, A.; PAPP, E.; RADULESCO, Al.

Contributions concerning allergic complications of scarlatina within the scope of data obtained by current research. Arch. roum. path. exp. microbiol. 22 no.4:909-918 S-D'63

1. Travail de l'Institut Medico-Pharmaceutique, Jassy, et de l'Hopital des Maladies Contagieuses de Jassy.

MICU, I., dr.; OVANESCU, Al., dr.; CUCIUREANU, Georgeta, dr.; BEJENARIU, C.,
dr.

Pyocyanic and staphylococcal septicopyohemia with pleural focus.
Med. intern., Bucur 12 no.10:1531-1536 O '60.

1. Lucrare efectuata in Clinica de boli contagioase Iasi (director:
prof. Maria Franche).
                (SEPTICEMIA etiol.) (STAPHYLOCOCCAL INFECTIONS case reports)
                        (PLEURA dis.)

NICOLAU, St. S., acad.; ZAVATE, O.; CONSTANTINESCU, N.; MICU, I.; BIRZU, N.;
RUSU, Florica; OVANESCU, Al.

Viral infectious hepatitis (V.I.H.) transmitted parentally. Studii
cern inframicrobiol 12 no.4:421-435 '61.

1. Institutul de inframicrobiologie al Academiei R.P.R. si Institutul
de igiena, Iasi. 2. Membru al Comitetului de redactie si redactor
responsabil "Studii si cercetari de inframicrobiologie" (for Nicolau)

NICOLAU, S.St, academician; ZAVATE, O.; CONSTANTINESCU, N.; MICU, I.;
       BLAZU, N.; RUSU, Florica; OVANESCU, Al.

    Research on viral infectious hepatitis (V.I.H.) transmitted by
    parenteral route. Stud. cercet. inframicrobiol. 12 no.4:421-435
    '61.
          (HEPATITIS, INFECTIOUS transmission)
       (INJECTIONS complications)   (HOSPITALS)

BALDOVIN-AGAPI, Corâlia, dr.; FRANCHE, Maria, prof.; BELICIU, Irina, dr.;
    MICU, I., dr.; CVANESCU, A., dr.; ANDRONICVICI, G., dr.; BRACHER, E.,
    dr.; RADULESCU, A., dr.; DIMITRIU, St., dr.; DIMITRIU, A., dr.;
    RUGINA, N., dr.; BLINDU, P., dr.

Receptivity to scarlet fever assessed by Dick's reaction with
fractional doses of purified toxin. Microbiologia (Bucur) 6
no. 1:69-76 Ja-F '62.

1. Institutul "Dr. I. Cantacuzino" si Spitalul "Izolarea" din
    Iasi.

ZAVATE, Olga; DOGARU, Maria; CONSTANTINESCU, N., FRANCHE, Maria, ZICU, A.
        OVANESCU, Al.; BESLEAGA, E.

        Research on recurrences of exanthematous typhus. III.
        Comparative evolution of serological tests in typhus
        recurrences and primary infections. Stud. cercet.
        inframicrobiol. 15 no.3:245-253 '64.

Agon Ovanesian

Distr: 1,E2c

Use of Chloramine T in analytical chemistry. II De-
termination of iron, Aluminum, vanadium, and titanium.
Petru Spacu, Agon Ovanesian, and Dumitru Cirstoiescu
(Inst. Politeh., Bucuresti, Romania). Bul inst politehnic
Bucuresti 19, 183-; (1957). Summary in Russian and French).
—The metal to be detd. is pptd. with an acetate soln. of 2%
8-quinolinol. The pH of the soln. before pptn. must be as
follows: 3-11 for Fe, 4-9 for Al, 3-6 for V, and 5-8 for Ti.
The ppt. is washed with hot water, filtered, then dissolved
in 5N HCl, except for Al where a 1:1 soln. of 5N HCl and
EtOH is used. To the resultant soln. and excess of 0.1N
chloramine T is added dropwise and with stirring. To this
0.5 g. of KI is added and the I liberated by the excess of
chloramine T is titrated with a 0.1N $Na_2S_2O_3$. If the solns.
of Al and V have a concn. larger than 5 mg./cc. the results
will be high. A. Devin-

OVANESIAN, A.; VOICHESTU, I; SIATU, I.

    Important products resultin; from the action of chlorine on certain

silicates; preparation of silicon tetrachloride from diatomite. p. 195.

Academia Republicii Populare Romine.   STUDII SI CERCETARI DE CHIMIE.

Bucuresti.   Vol. 3, No. 3/4, July/Dec. 1955.

So. East European Accessions List   Vol. 5, No. 9   September, 1956

OVANESIAN, A.

Volumetric determination of cadmium. P. Spacu, A. Ovanesian, and D. Găvănescu. *Bul. inst. politich. Bucuresti* 18, 55-8(1956).—Cadmium is detd. by an indirect volumetric method by pptg. it as oxalate in a neutral soln., an excess based on the estd. Cd content of about 10% of 0.1M Na oxalate soln. being used. After filling the soln. to exactly 100 ml., aliquots are titrated with a KMnO₄ soln. The rapidity and ease of operation of the method are due to the elimination of the filtration and drying operations.

Francois Kertesz

Rumania/Chemical Technology.   Chemical Products and Their Application -- Mineral salts.
                                                                         Oxides. Acids
                                                                         Bases, I-ᶜ

Abst Journal: Referat Zhur - Khimiya, No 2, 1957, 5021

      Author: Spacu, P., Voichescu, P., Ovanesian, A.

 Institution: None

       Title: Products Obtained on Action of Chlorine on Some Silicates. Production
               of Silicon Tetrachloride from Diatomite

    Original
 Publication: Studii si cercetari chim., 1955, 3, No 3-4, 195-201

    Abstract: $SiCl_4$ was obtained by chlorination of diatomite (containing a small
               amount of Fe_2O_3) in the presence of coal as a reducing agent. The
               diatomite being porous has a large contact surface of active silica,
               which makes possible a ready reduction; the chlorination reaction
               takes place at a low temperature ($730-750^\circ$). Bisulfite liquor is
               used as binder for the raw material. Yield of $SiCl_4$ is 46-50%.

Card 1/1

OVANESSIAN, A

RUMANIA/Analytical Chemistry. Analysis of Inorganic Substances.   E-2

Abs Jour: Ref. Zhur.-Khimiya, 1958, No II, 35895.

Author : P. Spacu, A. Ovanesian, D. Gǎvǎnescu.
Inst   : Not given.
Title   : Volumetric Method of Determination of Cadmium.

Orig Pub: Bul. Inst. politchn., Bucuresti, 1956, 18, No 1-2, 55-58.

Abstract: A method is described, based on precipitation of Cd^{2+} in
         the form of $CdC_2O_4 \cdot 3H_2O$ in a neutral medium and on a
         subsequent permanganatometric determination of the excess
         $C_2O_4^-$. At a big excess of $Na_2C_2O_4$ ($> 10\%$) a complex com-
         pound $CdNa_2 (C_2O_4)_2$ soluble in water is formed. The pre-
         sence of important quantities of ammonium and alkali salts
         in the solution contributes also to the solution of the
         deposit $CdC_2O_4 \cdot 3H_2O \cdot 0.1$ n $Na_2^2 C_2 O_4$ is added to the
         analyzed solution containing 0.1-0.2 g Cd diluted by water

Card   : 1/2

OVANESIAN, K. A.

USSR/Plant Physiology - Respiration and Metabolism.   I-2

Abs Jour   : Ref Zhur - Biol., No 6, 1958, 24627

Author   : Oknina E.Z., Ovanesian K.A.

Inst   : Institute of Plant Physiology, Academy of Sciences USSR

Title   : Physiological and Biochemical Study of Cherry Seeds in
              Maturation and Passing into Quiescence.

Orig Pub   : Fiziol. rastyenii, 1957, No 1, 77-81

Abstract   : Seeds for the study were collected from 4-year old cherry
              offshoots of Polevka and Iiubskaia varieties June 18,
              July 6-7, July 25, August 3-6 at the experimental section
              of the Institute of Plant Physiology of the Academy of
              Sciences USSR. Reserve nutritive cubstances, starch, su-
              gar, fats, lipoids, protein and plasmodesm were determined
              in fresh material. Separation of the protoplasm was obser-
              ved under the microscope both on live and on fixated

Card 1/2

OVANESIAN. Ovanes 'ram,uchitel po khimiia

Self-working apparatues for obtaining gas from liquids and soli substanses Biolog 1 khim. no 6:53-54 '61. -

1. Vecheren tekhnikum po mekhanika Plovdiv.

OVALESCV, A G. (Leningrad)

End of a metal rod overgrown by bone tissue following osteosynthesis.
Ortop.travm. i prctez. 19 no.3:66 My-Je '57.
     (BONES--SURGERY)

OVAHKSOV, A.G. (Leningrad)

Combination file-respatory. Ortoo.travm. i protez. 18 no.4:53
Jl-Ag '57.   (MIRA 11:1)
          (SURGICAL INSTRUMENTS AND APPARATUS)

OVANESOV, A.G. (Leningrad, kan. Griboyedova, d.2-b, kv.77)

Ligation bobbin. Vest.khir. 79 no.7:132-133 Jl '57. (MIRA 10:10)

1. Iz N-skogo voyennogo gospitalya (vedushchiy khirurg - P.P. Ostrogorskiy)
        (SURGERY, OPERATIVE, apparatus and instruments,
            ligation band (Rus))

OVANESOV, A.G.

X-ray diagnosis of fractures of the posterior edge of the
tibia. A.G. Ovanesov. Ortop.travm. i protez 19 no.2:67
Mr-Ap '58   (MIRA 11:5)

1. Iz Leningradskogo okruzhnogo voyennogo gospitalya (nach.
N.S. Sokolov)
        (TIBIA--FRACTURE)

OVANESOV, A.G. (Leningrad, naberezhnaya kanala Griboyedova, d.2-b, kv.77)

Variations in the structure of the posterior surface of the distal epiphysis of the tibia and its clinical significance. Vest.khir. 83 no.11 N '59.   (MIRA 13:4)

1. Iz kafedry operativnoy khirurgii (nach. - prof. A.N. Maksimenkov) Voyenno-meditsinskoy ordena Lenina akademii im. S.M. Kirova.
        (TIBIA anat. & histol.)

OVANESOV, A.G.; OVANESOV, A.I.

A guide for bone suture. Ortop.,travm.i protez. 20 no.12:49 D '59. (MIRA 13:5)

1. Iz Leningradskogo okruzhnogo voyennogo gospitalya (nach. - N.S. Sokolov).
(ORTHOPEDICS equipment & supplies)

OVANESOV, G.A., dotsent kand.tekhn.nauk; DUBROVIN, G.A., inzh.

Increasing the load capacity of steel pouring bridge cranes
Stal' 22 no.1:94-95 Ja '62.

1. Zaporozhskiy mashinostroitel'nyy institut i zavod "Zaporozhstal'"
(Open-hearth furnaces --Equipment and supplies
(Cranes, derricks, etc

TKHOSTOV, B.A.; LUBININ, A.Z.; OVANESOV, G.P.; SAVEL'YEV, I.V.

Results of geological prospecting for oil and gas in the
R.S.F.S.R. for 1963. Geol. nefti i gaza 8 no.3:1-9 3 Mr '64.

(MIRA 17:6)

1. Gosplan RSFSR i Vserossiyskiy sovet narodnogo khozyaystva
RSFSR.

OVANESOV, G.P.; YARULLIN, K.S.

Alteration of oil properties in Paleozoic sediments of Bashkiria.
Sov.geol. 5 no.9:87-101 S '62.

1. Bashkirskiy filial AN SSSR.
            (Bashkiria--Petroleum geology)

OVANESOV, G.P.; KHAT'YANOV, F.I.

Oil and gas possibilities in the Ural Mountain portions of Bashkiria, Orenburg and Aktyulinsk Provinces in connection with the possible extension of Sakmara-Artinskiye reefs within the limits of this area. Sov.geol. 5 no.2:3-16 F '62.   (MIRA 15:2)

1. Upravleniye "Bashneft'", Trest "Bashneftegeofizika".
            (Ural Mountain region—Prospecting)

KUVYKIN, S.I.; OVANESOV, G.P.; ZOLOYEV, T.M.; SHAYEVSKIY, Yu.I.

Oil recovery from a nonuniform stratum. Geol. nefti i gaza
5 no.12:23-30 D '61.   (MIRA 14:11)

1. Bashkirskiy sovnarkhoz.
        (Bashkiria--Oil reservoir engineering)

OVANESOV, G.F.; YARULIN, K.S.

Oil field prospecting in Bashkiria. Vop.geol.vost.okr.Rus.
platf.i IUzh.Urala no.6:17-33 '60.   (MIRA 14:7)
             (Bashkiria--Petroleum geology)

OVANESOV, G.P.; YARULLIN, K.S.

Connection between oil pools and coal deposits in the lower
Carboniferous of northwestern Bashkiria. Vop.geol.vost.okr.
Rus.platf.i IUzh.Ura.a no.6:75-84 '60.   (MIRA 14:7)
          (Bashkiria—Petroleum geology)
          (Bashkiria—Coal geology)

OVANESOV, G.P.; VITUGIN, P.I.

Prospecting for oil in Fanenennian sediments of Bashkiria. Geol.
nefti i gaza 4 no.5:6-9 My '60.   (MIRA 13:9)

1. Ob*yedineniye Bashkirskoy neftyanoy promyshlennosti i Oktyabr'sk-
neft'.

                    (Bashkiria—Petroleum geology)

OVANESOV, G.P.

New data on the tectonics of western Bashkiria. Vop.geol.vost.okr.
Rus.platf.i IUzh.Urala no.7:34-47 '60.   (MIRA 14:10)
            (Bashkiria—Geology, Structural)

OVANESOV, G.P.; NADEZHKIN, A.D.

Methods for appraising the predicted oil and gas reserves. Geol.
nefti gaza 6 no.4:44-46 Ap '62.
                                        (MIRA 15:4)

1. Upravleniye Bashneft'.
        (Petroleum geology)   (Gas, Natural—Geology)

ROZANOV, Leonid Nikolayevich; OVANESOV, Gurgen Pavlovich; AKSENOV,
    Adol'f Alekseyevich; NADEZHDIN, Aleksandr Danilovich;
    ZARETSKAYA, A.I., ved. red.; DUBROVSKAYA, L., tekhn. red.

[Method fc rating producible and prospective reserves of
oil and gas in platform areas as exemplified by the studies
carried out in the Bashkir A.S.S.R.] Metodika otsenki per-
spektivnykh i prognoznykh zapasov nefti i gaza platformen-
nykh oblastei (na primere Bashkirskoi ASSR). Moskva, Gos-
toptekhizdat, 1963. 81 p.   (MIRA 16:11)
    (Bashkiria--Petroleum geology)
    (Bashkiria--Gas, Natural--Geology)

OVANESOV, G.P.; VITUGIN, P.I.; YEFREMOV, Ye.P.

Results of forced production of the layer D_{II} of the Konstantinovskoye field. Geol. nefti i gaza 6 no.6:12-16 Je '62.

(MIRA 15:6)

1. Bashkirskoye TSentral'noye neftyanoye upravleniye i Neftepromyslovoye upravleniye Oktyabr'skneft'.
(Bashkiria—Petroleum geology)

OVANESOV, Gurgen Pavlovich; BEKMAN, Yu.K., ved. red.;DIKENSHTEYN,
G.Ye., doktor geol.-min.nauk,red.; YAKOVLEVA,Z.I., tekhn.red.

[Formation of oil and gas pools in Bashkiria, their classifi-
cation and prospecting methods]Formirovanie zalezhei nefti i
gaza vBashkirii, ikh klassifikatsiia i metody poiskov. Pod
red. G.E.Dikenshteina. Moskva, Gostoptekhizdat, 196.. 204 p.
(MIRA 14:11)

(Bashkiria--Petroleum geology)
(Bashkiria--Gas, Natural--Geology)

OVANESOV, G. P., Doc GEOL-MIN SCI, "PROBLEMS OF FORMATION
OF PETROLEUM DEPOSITS AND GAS OF BAKSHIRIYA, THEIR CLASSI-
FICATION AND METHODS OF PROSPECTING." UFA, 1960. (ACAD SCI
USSR, INST OF GEOLOGY AND COMBUSTIBLE MINERALS, MINING-GEOL
INST, BASHKIR AFFILIATE, ACAD SCI USSR, ADMINISTRATION OF PET-
ROLEUM EXTRACTION INDUSTRY OF BASHSOVNARKHOZ "BASHNEFT'").
(KL, 3-61, 206).

85

OVANESOV, G. P.

Types of Bashkir oil pools. Geol. nefti i gaza 4 no.11:21-28 N '60.
(MIRA 13:11)

1. Upravleniye Bashneft'.
   (Bashkiria--Oil fields--Classification)

S, 209/60, 00. 15 12, 2
B027/B174

AUTHORS: Ovanesov, G P., Vitugin, P I.

TITLE: Prospecting for oil in Famennian deposits of Bashkiriya

PERIODICAL: Geologiya nefti i gaza, no 5, 196 , 6

TEXT: In February 1957, it was for the first time determined that the oil
occurrence in the upper Famennian deposits in Bashkiriya are of industrial
importance. A continuous yield of 30 tons/24 h from different drillings
indicates that the entire Tuymazy-Serafimovskoye area is prospective with
regard to Famennian oil. In various fields the occurrence of oil was
discovered in the carbonate deposits of the Devonian and Carboniferous
layers, so that it is absolutely necessary to intensify prospecting in the
Bashkir plateau. The oilfield Subkhankulovskoye, the best known deposits
with accumulations in the carbonate is tentatively being exploited. This
oilfield has a typical plateau structure in a southwest to northeast
direction; the fold has two domes.   9 drillings were made. 12 of them
yielded such amounts of oil that an industrial utilization is possible.
The Famennian oil is approximately three times less viscous than oil f-

Card 1/3

Prospecting for oil in Famennian   S/009/60/
                                                     B127/B176

the carbonaceous layer of the Serafimovskoye oilfield and contains less
sulfur. As a rule, the oil is deposited between the individual layers of
cracked limestone. It is difficult to determine the water-oil contact;
at the same intervals oil was obtained from some wells without water and
from others oilfield water without oil was obtained   It is possible that
the oilfield water penetrates from other zones or through fissures into
the lower layers; it is also possible that water bearing horizons are
present in the lower Famennian layers. From these findings the authors
conclude that oil occurrences in the carbonate deposits are of peculiar
type and difficultly to be exploited   At present, promising oil bearing
carbonate deposits are being determined according to the findings of the
drilling, such as core or oil in the washing fluid   The sinking of the
bore holes is also difficult as the washing fluid penetrates into the
fissures of the productive part of the cross section and obstructs them.
Research institutes and industrial organisations have until now devoted
too little attention to the carbonate rock formations and their oil
bearing characteristics. Reliable geophysical methods for the determina
tion of individual porous parts and for estimating the oil bearing
characteristics are necessary and also the carbonate layers must be more

Card 2/

Prospe_ting for ... in Fameinian....

carefully studied. Th.r. are 2 figures.

ASSOCIATION: Bashnef.. , Okiyatr skn.f.

S/.09/6../... 2/ 05/...../...
B.2./B.7.

Card 3/3

OVANESOV, G,P.; PASTUKHOV, A.G.; BILALOV, R.S.

Condensate gas deposits in the Ishimbay portion of the Ural Mountain
region. Geol. nefti i gasa 4 no.10:1-7 O '60.   (MIRA 13:9)

1. Ob"yedineniye Bashkirskoy neftyanoy promyshlennosti i Trest
Ishimbayskoy neftyanoy promyshlennosti.
          (Ishimbay region—Condensate oil wells)

OVANESOV, G.P.; MART'YEV, M.F.

Method of prospecting for structural features in the Bashkir U.S.S.R.
Geol.nefti ? no.10:9-16   O '58.   (MIRA 11:11)

1. Ob'yedineniye Bashkirakoy neftyanoy pronyshlennosti.
          (Bashkiria--Geology, Structural)

ROZANOV, L.N.; CVAHRSOV, G.P.

Oil-space and gas-bearing prospects of Paleozoic sediments in
Bashkiria. Geol. nefti 2 no.5:18-25 My '58.   (MIRA 11:5)

1. Bashkirskiy sovnarkhoz Ufimskogo neftyanogo nauchno-issledovatel'-
skogo instituta.
(Bashkiria--Petroleum geology)   (Bashkiria--Gas, Natural--Geology)

OVANESOV, G.P.

Using the "Ufimets" drilling rig in prospecting for Bashkirian
oil fields. Geol. nefti 1 no.6:41-47 Je '57.   (MIRA 10:8)
                    (Bashkiria--Oil well drilling)

OVANESOV, O.P.

Method of prospecting for large oil fields in Bashkiria. Geol. nefti
i gaza 4 no.2:5-9 F '60.   (MIRA 13:10)

1. Bashkirskiy sovnarkhos.
                (Bashkiria--Petroleum geology)

((ANESOV GP

Subject   : USSR/Mining   AID P - 1134

Card 1/1   Pub. 78 - 12/25

Authors   : Ovanesov, G. P. and Rosanov, L. N.

Title   : Method of investigation of the shapes of structural forma-
                tion in the Devonian deposits of Bashkir

Periodical   : Neft. khoz., v. 32, #11, 46-49, N 1954

Abstract   : General description of the geological formation of the
                Devonian deposits in Bashkir is presented particularly
                the location of structures indicating presence of anti-
                clines. Deep structural survey drilling is also recom-
                mended for preliminary evaluation of the oil-bearing
                potential. One map and 1 chart.

Institution : None

Submitted   : No date

OVANESOV, G.P.

Exploitation of reef pools. Neft.khoz.34 no.7:30-34 Jl '56. (MLRA 9:10)
                    (Petroleum geology)

OVANESOV, G.P.; ROZANOV, L.N.

    Method of exploring structures in Devonian deposits of Bashkiria.
    Neft.khoz. 32 no.11:46-49 N '54.   (MLRA 7:12)
       (Bashkiria--Geology, Stratigraphic)

OVJHBSOV, G.P.; KAZ'MIN, !.M.

New data on the geology of oil- and gas-bearing regions in
Bashkiria. Sov. geol. 1 no.1:114-127 Ja '58.   (MIRA 11:4)

1. Ob"yedineniye "Bashneft'," g. Ufa.
                (Bashkiria—Petroleum geology)
                (Bashkiria—Gas, Natural—Geology)

OVANESOV, G.P.

Method and efficiency of prospecting for commercial oil fields
and pools in Bashkiria. Trudy VNII no.33:33-54 '61.
                                                      (MIRA 16:7)

1. Bashkirskiy sovet narodnogo khozyaystva.
        (Bashkiria—Petroleum geology)

OVANESOV, G.P.

Methods for exploring and contouring oil pools by means of
multiwells. Geol.nefti 1 no.8:28-32 Ag '57.   (MIRA 10:12)

1.Bashneft'.
                    (Petroleum geology)

AKOPYAN, O.G.; OVANESOV, G.P.

Intensive exploitation of the Serafimovskaya group of the
Bashkirian fields. Neft' no.11:56-63 N '57. (MIRA 1:1)

1. Ob'yedineniye Bashneft'.
            (Bashkiria—Petroleum engineering)

OVANESOV, G.P.; KHALIMOV, E.M.; SAYFULLIN, M.S.

Present status of and methods for developing the Arlan oil
field. Geol. nefti i gaza 7 no.10:1-9 O '63.

(MIRA 17:10)

1. Sovet narodnogo khozyaystva RSFSR, Neftepromyslovoye
upravleniye Bashneft' i Neftepromyslovoye upravleniye
Arlanneft'.

BROD. I.O.; BEGISHEV, F.A.; GABRIELYAN, A.G.; OVANESOV, G.P.; SEYFUL'-
     MULYUKOV, R.B.; SHORNIKOV, B.Ya.; SHPIL'MAN, I.A.; KHANIN, I.L.

     Oil and gas potential of the Volga-Ural region, the lower
     Volga Valley, and the Caspian salt-dome region as parts of
     the northern Caspian oil- and gas-bearing basin. [Trudy]
     NILneftegaza no.10:5-16 '63.   (MIRA 18:3)

     1. Nauchno-issledovatel'skaya laboratoriya geologicheskikh kriteriyev
     otsenki perspektiv neftegazonosonosti; Upravleniya neftyanoy i gazovoy
     promyshlennosti Verkhne-Volzhskogo i Sredne-Volzhskogo sovetov
     narodnogo khozyaystva i i Orenburgskoye geologicheskoye upravleniye.

OV/NFΓOV, G.Г.; ΓΟ.ΟΓΕΓ, T.Μ.; .ΑΓΟV. Γ. .

         Γil prospecting in the Volga—Ural region for the last 100 years.
         Geol. nefti i geza 8 no.9:28–32 Γ '64.   (MIΓΑ ΓΓ.ΓΓ

         1. Sovet narodnogo khozyaystva RSFSR i Sredne—Volzhsk.y sovet
         narodnogo khozyaystva.

OVANESOV, G.P.; KHALIMOV, E.M.

Features of the present state of the development of the Devonian
oil pools in Bashkiria. Geol. nefti. i gaza 8 no.10:8-12 O '64.

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