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All-Russian Seminar on the Study of the Structure of Liquids and Solutions (In Memory of O.Ya. Samoilov)

Margarita N. Rodnikova

N.S. Kurnakov Institute of General and Inorganic Chemistry of RAS, <http://igic.ras.ru/>
Moscow 119991, Russian Federation

E-mail: rodnikova@igic.ras.ru

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Abstract: This publication is dedicated to the memory of Oleg Yakovlevich Samoilov, who passed away in June 1980. Having entered the Institute of General and Inorganic Chemistry of the USSR Academy of Sciences after the university bench in 1942, Oleg Yakovlevich worked his way up from a junior researcher to the head of a laboratory, having defended his candidate and at the age of 37 his doctoral dissertation and soon received the academic title of professor. His area of interest was the nature of the liquid state, and in this area he opened the way to new views on the structure of liquids and the nature of the thermal motion of their particles, reflected in the monograph "The structure of aqueous solutions of electrolytes and hydration of ions", immediately translated abroad to major foreign languages, and at the seminar organized by him at the Institute for the Study of the Structure of Liquids and Solutions, which he directed from 1962 to the last days of his life, and which continues to exist to this day. The entire content of the seminar is reflected in this publication.

Keywords: structure of aqueous solutions of electrolytes, ion hydration, negative hydration

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IN MEMORY of O.Ya.SAMOILOV

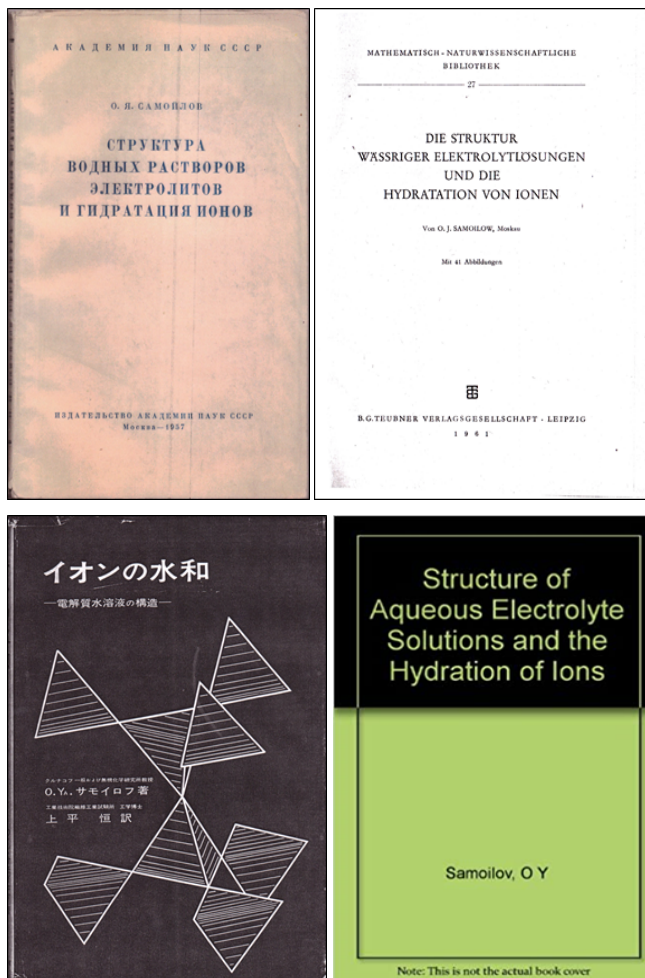


The book by O. Ya. Samoilov "The structure of aqueous solutions of electrolytes and hydration of ions" was published in 1957. It was a new look at solutions, a view from the perspective of the physics of the liquid state. Samoilov was 36 years old.

It was a new scientific approach. But he was not out of nowhere. In 1945, the fundamental work of Yakov Il'ich Frenkel "The kinetic theory of liquids" was published, and experimental works on negative viscosity and an increase in the mobility of water molecules in solutions of large singly charged ions in comparison with pure water appeared incomprehensible from the point of view of thermodynamics and interaction energies in solutions. Samoilov's merit is that he proposed a new molecular-kinetic approach to the phenomenon of ion hydration in solutions, considering hydration as the effect of an ion on the mobility of the nearest water molecules.

This approach emphasizes the important statement that the mobility of particles in a liquid is determined not by the total energy of its interaction with the environment, but by the change in this energy at small distances from this particle, i.e. the role of short-range forces in the mobility of particles in liquids and solutions is emphasized. From this approach, a colossal number of scientific directions, works, applications and development of the fundamental science of solutions have grown. With this approach, Samoilov discovered and explained the phenomenon of negative hydration - an increase in the mobility of water molecules near sufficiently large singly charged ions in comparison with pure water. On his monument, at the Novodevichy cemetery, it is written "Oleg Yakovlevich Samoilov - the author of the discovery of the phenomenon of negative hydration".

In 1957, Samoilov was invited to London at the Discussion Faraday Society. He did not go (then, as you know, it was difficult to leave), but sent his report. He was opposed by



Henry Frank, whose main position was that the increase in mobility in solution occurs in the second hydration sphere of the ion, located between the first hydration sphere clearly oriented to the ion and bulk water. Samoilova supported, first of all, Hertz with work on nuclear magnetic relaxation in aqueous solutions of alkali metal halides and later, in our laboratory, joint work with Rishad Mazitov on NMR relaxation on nuclei of central ions. But to resolve this question - who is right Samoilov or Henry Frank - could only be the method of molecular dynamics. And this was done by Alphonse Geiger in 1981, having published in *Berichte der Bunsengesellschaft für physikalische Chemie* 1981.V.85.P.52 model calculations on the mobility of water molecules in the first and second hydration spheres of a model xenon particle with different charges, showing at what the ratio of the charge to

the radius of the particle, Samoilov is right, and at what rate Frank is right. But that was in 1981. A. Samoilov died in 1980 at the age of 59 without reading this. But the name of Samoilov remained in the world SCIENCE.

In 1980 he managed to respond to the proposal of a group of theoreticians headed by Rezo Dogonadze (Institute of Electrochemistry of the USSR Academy of Sciences) to write a review on hydration - "Margarita Nikolaevna and I will write," but, unfortunately, he died. This review was written by: M.N. Buslaeva (Rodnikova), O.Ya. Samoilov - "Microdynamics of Solvation". It was published in The Chemical Physics of Solvation in 1985. Samoilov's model approach was developed and confirmed by molecular dynamics, nuclear magnetic relaxation, and cold neutron scattering. Also shown is the negative solvation of large singly charged ions in other solvents with a spatial network of H-bonds, for example, in monoethanolamine - the dissertation of A.B. Razumova, in aqueous solutions of ethylenediamine, the dissertation of T.M. Valkovskaya. A new approach to the issues of solvation in solutions, based on the main characteristic of a liquid - its mobility and the relationship of mobility with the structure of the liquid, proposed by Samoilov, gave many new ideas, directions and works.

Scientific people, one way or another connected with the issues of the liquid state, reached out to Samoilov. IZ Fischer from Minsk; G.A. Krestov from Ivanovo; Yu.P. Syrnikov, V.A. Shcherbakov, Yu.V. Gurikov, V.I. Chizhik from Leningrad; I.B. Rabinovich and V.G. Tsvetkov from Gorky; K.A. Valiev and R.K. Mazitov from Kazan; P.S. Yastremsky from Volgograd; P.L. Privalov from Tbilisi; and of course from Moscow: Yu.M. Kessler, G.A. Martynov, R.R. Dogonadze, A.A. Kornyshev, G.N. Zatsepina, S.E. Shnol and many others, mainly young physicists, chemists, biologists and geologists, people of science. Samoilov's

book was snapped up. A seminar was needed where scientific problems could be discussed. The seminar grew out of a colloquium not even of a laboratory, but of a group of O. Ya. Samoilov. Chairman - O.Ya. Samoilov, secretary - M.N. Rodnikova. Samoilov is 41 years old, Rodnikova is 30 years old.

Only in 1965. Oleg Yakovlevich received a laboratory. The deputy director V.P. Markov and the head of the laboratory V.I. Tikhomirov showed great efforts here. And the seminar worked, uniting people involved in the Science of liquids and solutions, and O.Ya. Samoilov led the seminar. About 90 meetings were held under his leadership. But in 1980 O. Ya. Samoilov died. There remained the students of M.N. Rodnikov, V.I. Yashkichev, A.K. Lyaschenko and G.G. Malenkov, who came to O.Ya. Samoilov with his model of the structure of water and hydrophobic effects in biology, and of course many other young scientists who discussed their scientific problems with O. Ya. Samoilov.

The laboratory was then very supported by Academician Ivan Vladimirovich Tananaev. He offered M.N. Rodnikov both the head of the laboratory and the chairman of the seminar (we attach a letter from Academician I.V. Tananaev to the Department of Chemistry and Chemical Technology of the USSR Academy of Sciences). Years have passed, the heads of the laboratory have changed, but the chairman of the seminar is still the doctor of chemical sciences, prof. M.N. Rodnikov. All the years since 1992 the seminar has been supported by the Russian Foundation for Basic Research (RFBR). The work of the seminar can be judged by the titles of the reports and the names of their authors, which are presented in this book, which can be considered as a gift **FUNDAMENTAL SCIENCE ABOUT LIQUIDS AND SOLUTIONS.**

All-Russian Seminar on the Study of the Structure of Liquid Solutions



Наши докладчики



Г.А.Крестов



А.Г.Гривцов



Г.Н.Зацепина



А.М.Кузнецов



И.З.Фишер



Ю.М.Кесслер



К.А.Валиев



П.М.Зоркий и Г.Г.Маленков



Г.Н.Саркисов



Ю.П.Сырников



Ю.И.Наберухин



И.Л.Фабелинский



С.Э. и Э.Э. Шноль



А.К.Лященко



В.Л.Воейков



Желиговская

Маленков, Бульёнков



Ю.Я.Фиалков

и другие, чьих фотографий у нас нет...

1962 year

Seminar No. 1

09.02.1962

1. Samoilov O. Ya.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"TO ELECTROSTATICS OF AQUEOUS SOLUTIONS OF ELECTROLYTES"

Seminar No. 2

02.21.1962

2. Dmitriev V.M.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"STUDY OF CATION HYDRATION OF SOME RARE EARTH ELEMENTS IN AQUEOUS SOLUTIONS BY ISOTOPE EXCHANGE"

Seminar No. 3

02.28.1962

3. Vinogradov E.E., Yashkichev V.I.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"HYDRATION AND SALTING OUT (ABOUT THE EFFECT OF SALTING UP IN THE EXTRACTION OF BORIC ACID FROM AQUEOUS SOLUTIONS)"

Seminar No. 4

03.29.1962

4. Fisher I.Z.

Belarusian State University

"MOTION OF HYDRATED IONS IN SOLUTIONS"

Seminar No. 5

04.26.1962

5. Akhadov Ya.Yu.

D.Mendeleev Moscow Institute of Chemical Technology

"RESEARCH OF THE DIELECTRIC PROPERTIES OF PURE LIQUIDS AND SOLUTIONS IN THE CENTIMETER RANGE OF ELECTROMAGNETIC WAVES"

Seminar No. 6

05.29.1962

6.¹Lekht E.S., ²Samoilov O.Ya.

¹*A.N. Frumkin Institute of Electrochemistry*

²*N.S. Kurnakov IGIC of USSR Academy of Sciences*

"ON THE INTERACTION OF IONS IN AQUEOUS SOLUTIONS WITH THE NEAREST WATER MOLECULES"

Seminar No. 7

06.12.1962

7. Vinogradov E.E.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"ON THE TEMPERATURE DEPENDENCE OF DISTRIBUTION COEFFICIENTS FOR THE EXTRACTION OF BORONIC ACID FROM AQUEOUS SOLUTIONS"

Seminar No. 8 23.10.1962

8. Golovatenko R.T., Samoilov O.Ya.
N.S. Kurnakov IGIC of USSR Academy of Sciences
 "INFLUENCE OF THE COVALENCE OF THE SALT OUT CATION WITH WATER MOLECULES ON THE EFFICIENCY OF SALT OUT"

1963 year**Seminar No. 9 02.19.1963**

9. Crosses G.A.
Ivanovo Institute of Chemical Technology
 "THERMODYNAMIC CHARACTERISTICS OF CHANGES IN THE PROPERTIES OF SOLVENTS DURING ION HYDRATION"

Seminar No. 10 04.02.1963

10. Valiev K.A.
Kazan State Pedagogical Institute
 "ON STUDY OF MOBILITY OF PARTICLES OF A LIQUID BY METHODS OF MAGNETIC RESONANCE"

Seminar No. 11 01.10.1963

11. Gurikov Yu.V.
V.G. Khlopin Radium Institute of the USSR Academy of Sciences, Leningrad
 "ON ORIENTATIONAL ORDERING OF MOLECULES IN WATER"

Seminar No. 12 October 29, 1963

12. Povarov Yu.M., Kessler Yu.M.
A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences
 "CHANGE OF THE STRUCTURE OF THE SOLVENT IN THE COULON ION FIELD AND THERMODYNAMICS OF SOLUTIONS OF STRONG ELECTROLYTES"

Seminar No. 13 12.17.1963

13. Perelygin I.S.
Kazan State University
 "APPLICATION OF INFRARED SPECTROSCOPY FOR STUDYING ION SOLVATION IN SOLUTIONS"

1964 year**Seminar No. 14 03.10.1964**

14. Mazitov R.K.
Kazan State University
 "RESEARCH OF THE KINETICS OF HYDRATION IN AQUEOUS SOLUTIONS OF IONS Mn^{2+} , Cr^{3+} , VO^{2+} , MoO^{3+} "

15. Rabinovich I.B.

N.I. Lobachevsky Gorky University
 "ISOTOPE EFFECTS IN PHYSICO-CHEMICAL PROPERTIES OF LIQUIDS WITH HYDROGEN BONDING"

Seminar No. 15 05.12.1964

16. Shcherbakov V.A.
V.G. Khlopin Radium Institute of the USSR Academy of Sciences, Leningrad
 "SOME ISSUES OF COMPLEX FORMATION IN AQUEOUS SOLUTIONS OF ELECTROLYTES"

17. Petrov A.V., Karjakin A.V., Yukhnovich G.V.
V.I. Vernadsky Institute of Geochemistry and Analytical Chemistry of the USSR Academy of Sciences
 "STUDY OF WATER SOLUTIONS IN ORGANIC SOLVENTS BY IR SPECTROSCOPY"

Seminar No. 16 05.19.1964

18. Martynov G.A.
Institute of Physical Chemistry of the USSR Academy of Sciences
 "STATISTICAL THEORY OF AQUEOUS SOLUTIONS OF ELECTROLYTES"

Seminar No. 17 05.26.1964

19. Gulivets N.I.
Dnepropetrovsk Metallurgical Institute
 "X-RAY STUDIES OF MOLECULAR FLUIDS"

20. Ryss A.V.
Dnepropetrovsky Metallurgical Institute
 "X-RAY STUDY OF TETRAFLUOROBORIC ACID AND SOME ITS SALTS"

Seminar No. 18 10.11.1964

21. Lanshina L.V., Shakhparonov M.I., Merzhanov I.A.
Lomonosov Moscow State University
 "RELAY LIGHT SCATTERING IN ACETIC ACID SOLUTIONS (ACETIC ACID-WATER)"

22. Frontasiev V.P., Schreiber L.S.
Chernyshevsky Saratov State University
 "REFROMETRIC STUDY OF THE INFLUENCE OF TEMPERATURE ON CHANGES IN THE STRUCTURES OF SIMPLE AND HEAVY WATER"

Seminar No. 19 27.11.1964

23. Mishchenko K.P.

Leningrad Technological Institute of the Pulp and Paper Industry

"THERMODYNAMIC STUDIES OF AQUEOUS AND NONAQUEOUS SOLUTIONS OF ELECTROLYTES IN A WIDE RANGE OF CONCENTRATIONS AND TEMPERATURES"

1965 year

Seminar No. 20 **01.05.1965**

24. Zundel G.

Germany

"STUDY OF INTERACTION AND STRUCTURE OF HYDRATES BY IR SPECTROSCOPY"

Seminar No. 21 **01.12.1965**

25. Zundel G.

Germany

"RESEARCH BY THE METHOD OF IR-SPECTROSCOPY OF THE NATURE OF PROTON IN ACID SOLUTIONS"

Seminar No. 22 **01.26.1965**

26. Pereygin I.S., Safiullina N.R.

Kazan State University

"SPECTROSCOPIC STUDY OF THE INTERACTION OF IONS WITH WATER MOLECULES IN MULTICOMPONENT IONIC SOLUTIONS"

27. Lazarev V.I.

All-Union Oil and Gas Research Institute, Moscow

"INFLUENCE OF THE NATURE OF THE CATION ON THE REACTIVITY OF AN-ION"

Seminar No. 23 **04.13.1965**

28. Mank V.V., Matyash I.V., Pitsyuga V.G.,

Toryanik A.I., Ionov V.I., Anders A.G.

Institute of Low Temperature Physics and Technology, Academy of Sciences of the Ukrainian SSR, Kharkov Donetsk State University

"INFLUENCE OF INERT GAS ADDITIVES ON THE STRUCTURE OF SIMPLE LIQUIDS"

29. Malenkov G.G.

Institute of Physical Chemistry of the USSR Academy of Sciences

"GEOMETRIC ASPECT OF STABILIZATION OF WATER STRUCTURE BY NON-ELECTROLYTE MOLECULES"

1966 year

Seminar No. 24 **01.22.1966**

30. Gurikov Yu.V., Legin E.K.

V.G. Khlopin Radium Institute of the USSR Academy of Sciences, Leningrad

"THERMODYNAMIC THEORY OF WATER SOLUTIONS"

Seminar No. 25 **02.19.1966**

31. Skyshevsky A.F., Dorosh A.K.

T.G. Shevchenko Kiev State University

"STRUCTURE OF SOME AQUEOUS SOLUTIONS OF ELECTROLYTES ACCORDING TO X-RAY DATA"

Seminar No. 26 **03.19.1966**

32. Lilich L.S.

Leningrad State University

"THERMODYNAMIC PROPERTIES OF SOLUTIONS AND THEIR STRUCTURE"

33. Syrnikov Yu.P.

S.M. Kirov Leningrad Forestry Academy

"ON THE INTERACTION OF IONS WITH THE NEAREST WATER MOLECULES"

Seminar No. 27 **04.16.1966**

34. Drakin S.I., Karapetyants M.Kh.,

Kurmaliyeva R.Kh.

D.Mendeleev Moscow Institute of Chemical Technology

"MODEL STUDIES FOR DETERMINING THE COORDINATION NUMBERS OF IONS IN SOLUTION"

35. Drakin S.I., Karapetyants M.Kh.,

Lantukhova L.V.

D.Mendeleev Moscow Institute of Chemical Technology

"APPARENT CAPACITY OF ELECTROLYTE IN WATER AND METHANOL, THEIR RELATIONSHIP WITH THE STRUCTURE OF THE SOLUTION"

Seminar No. 28 **05.28.1966**

36. Namiot A.Yu.

All-Union Oil and Gas Research Institute, Moscow

"ABOUT THE REASONS OF ANOMALOUS CHANGES IN ENTROPY DURING THE DISSOLUTION OF NON-POLAR GASES IN WATER"

37. Litvinenko I.V., Bibik A.P., Ratchenko I.V.

Dnepropetrovsk Metallurgical Institute

"ON THE TEMPERATURE DEPENDENCE OF THE INFLUENCE OF IONS ON THERMAL CONDUCTIVITY OF WATER"

Seminar No. 29 **11.12.1966**

38. Kessler Yu.M.

A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences

"STRUCTURAL AND NON-CULOMAN EFFECTS IN THERMODYNAMICS IN SOLUTIONS OF STRONG ELECTROLYTES"

1967 year

Seminar No. 30 **02.14.1967**

39. Sokolov N.D., Pshenichnov E.A.

Institute of Chemical Physics of the USSR Academy of Sciences

"INFLUENCE OF A SOLVENT ON THE MECHANISM OF PROTOLYTIC REACTIONS"

Seminar No. 31 **03.14.1967**

40. Ivoilov G.K., Mazitov R.K.

Kazan State University

"INFLUENCE OF DIAMAGNETIC CATIONS ON THE TIME OF NUCLEAR RELAXATION OF PROTONS IN AQUEOUS SOLUTIONS OF VANADIL"

Seminar No. 32 **04.03.1967**

41. Bezrukov O.F.

Research Institute of Physics, Leningrad State University

"SELF-DIFFUSION IN AQUEOUS SOLUTIONS OF AMINO ACIDS, PEPTIDES AND PROTEINS"

1968 year

Seminar No. 33 **01.16.1968**

42. Alexandrov V.V., Lebed V.I.

Kharkiv State University

"COMPARISON OF THE TEMPERATURE DEPENDENCE OF THERMODYNAMIC CHARACTERISTICS OF ION SOLVATION IN WATER AND NONAQUEOUS MEDIA"

Seminar No. 34 **02.27.1968**

43. Makhaylov V.A., Grigorieva E.F.

Institute of Inorganic Chemistry, Siberian Branch of the USSR Academy of Sciences

"SOLUBILITY OF SULEMA IN WATER-ALCOHOLIC MIXTURES AND THEIR STRUCTURE"

Seminar No. 35

04.25.1968

44. Ravdel A.A.

Lensoviet Leningrad Institute of Technology

"ON THE SOLVATION OF IONS IN SOLUTIONS"

45. Toryanik A.I., Kisel'nik V.V.

Donetsk State University

"ON THE ENERGY OF SELF-DIFFUSION ACTIVATION IN AQUEOUS SOLUTIONS OF ELECTROLYTES"

Seminar No. 36

12.24.1968

46. Nemilov S.V.

State Optical Institute, Leningrad

"THE NATURE OF VISCOUS FLOW OF INORGANIC GLASSES ON THE BASIS OF ANALYSIS OF ENERGY PARAMETERS OF ACTIVATION"

1969 year

Seminar No. 37

03.04.1969

47. Syrnikov Yu.P.

SM. Kirov Leningrad Forestry Academy

"ABOUT THE SELF-DIFFUSION OF WATER"

Seminar No. 38

04.02.1969

48. Fisher I.Z.

I.I. Mechnikov Odessa State University

"RELATIONSHIP OF WATER STRUCTURE WITH ITS POLARIZATION PROPERTIES"

Seminar No. 39

05.13.1969

49. Yakimov M.A.

Leningrad State University

"DESTRUCTION OF THE WATER STRUCTURE AND COMPLEX FORMATION BETWEEN COMPONENTS - ELECTROLYTES IN TRIPLE WATER SYSTEMS"

Seminar No. 40

09.30.1969

50. Chekalin N.V., Shakhparonov M.I.

Lomonosov Moscow State University

"ON THE STRUCTURE OF WATER AND AQUEOUS SOLUTIONS OF METHYL AND PROPYL ALCOHOLS AND ACETONE ACCORDING TO DIELECTRIC RELAXATION DATA"

Seminar No. 41 **October-November 1969**

51. Yukhnovich G.V., Shelyukhaev B.P.

*V.I. Vernadsky Institute of Geochemistry and Analytical
Chemistry of the USSR Academy of Sciences*

"POSSIBILITIES OF MODERN PHYSICAL
METHODS IN APPLICATION TO
STUDYING THE STRUCTURE OF WATER"

1970 year

Seminar No. 42 **03.18.1970**

52. Egorov V.M.

Institute of Crystallography of the USSR Academy of Sciences

"THERMODYNAMIC STUDY OF
AQUEOUS SOLUTIONS OF LITHIUM,
SODIUM, POTASSIUM, CESIUM AND
AMMONIUM CHLORIDES AT HIGH
TEMPERATURES AND PRESSURES"

53. Ikornikova N.Yu., Vasilchikova I.V.,
Antoshin A.V.

Institute of Crystallography of the USSR Academy of Sciences

"DISSOLUTION OF CRYSTALS IN
AQUEOUS SOLUTIONS OF LITHIUM,
SODIUM, POTASSIUM, CESIUM AND
AMMONIUM CHLORIDES AT HIGH
TEMPERATURES AND PRESSURES"

Seminar No. 43 **04.09.1970**

54. Zatsepina G.N.

Lomonosov Moscow State University

"PHYSICAL ANALYSIS OF WATER
PROPERTIES AS A CONSEQUENCE OF
ELECTRONIC STRUCTURE OF H₂O
MOLECULES. MECHANISM OF MOTION
OF HYDRAXYL AND HYDROXONY IONS
IN ICE AND WATER"

Seminar No. 44 **28.04.1970**

55. Klassen V.I.

Institute of Mining of the USSR Academy of Sciences

"SOME EXPERIMENTAL DATA ON THE
CHANGE IN THE PROPERTIES OF WATER
AFTER MAGNETIC TREATMENT"

Seminar No. 45 **09.15.1970**

56. Zagorets P.A., Orlov V.V., Ermakov V.I.

D. Mendeleev Moscow Institute of Chemical Technology

"STUDY OF ELECTROLYTE SOLUTIONS
BY EPR AND OPTICAL SPECTROSCOPY"

Seminar No. 46 **03.11.1970**

57. Rabinovich V.A.

*All-Union Scientific Research Institute of Metrological
Service, Moscow*

"REAL THERMODYNAMIC ACTIVITY
OF INDIVIDUAL IONS: THEORY AND
EXPERIMENT"

1971 year

Seminar No. 47 01/26/1971

58. Yergin Yu.V., Kostrova L.I.

Bashkir State University

"RESEARCH OF SOLVATION OF IONS
OF HALOGENIDES OF ALKALINE
METALS IN SOLUTIONS BY THE
MAGNETOCHEMICAL METHOD"

Seminar No. 48 **02.23.1971**

59. Matyash I.V.

*Institute of Low Temperature Physics and Technology,
Academy of Sciences of the Ukrainian SSR, Kharkov*

"INTERMOLECULAR INTERACTIONS IN
WATER AND AQUEOUS SOLUTIONS OF
ELECTROLYTES"

Seminar No. 49 **06.16.1971**

60. Yashkichev V.I.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"MODEL OF COLLECTIVE MOTION OF
WATER MOLECULES IN WATER"

Seminar No. 50 **10.12.1971**

61. Penkina N.V.

Lensoviet Leningrad Institute of Technology

"ON THE VISCOSITY OF AQUEOUS
SOLUTIONS OF ELECTROLYTES"

1972 year

Seminar No. 51 **01.18.1972**

62. Toryanik A.I., Kisel'nik V.V., Toryanik V.M.

Donetsk State University

"INFLUENCE OF TEMPERATURE AND
PRESSURE ON NUCLEAR-MAGNETIC
RELAXATION AND SELF-DIFFUSION IN
PURE WATER"

Seminar No. 52 **04.11.1972**

63. Khripun M.K., Voronovich A.N., Lilich L.S.

Leningrad State University

"THERMODYNAMICS OF SOLUTIONS"

Seminar No. 53 **04.25.1972**

64. Fishkis M.Ya., Soboleva T.E.

All-Union Research Institute of Power Sources, Moscow

"X-RAY STUDY OF KI AND LiI SOLUTIONS"

65. Terekhova D.S.

Dnepropetrovsk Metallurgical Institute

"STUDY OF NEAR HYDRATION IN AQUEOUS SOLUTIONS OF CERTAIN HALOGENIDES"

Seminar No. 54 **05.16.1972**

66. Kolokoltsov V. B.

V.G. Khlopin Radium Institute of the USSR Academy of Sciences, Leningrad

"INFLUENCE OF MULTI-CHARGED IONS ON NUCLEAR-MAGNETIC RELAXATION OF AQUEOUS SOLUTIONS OF ELECTROLYTES"

67. Malenkov G.G., Sarkisov G.N.

Institute of Physical Chemistry of the USSR Academy of Sciences

"STUDY OF THERMODYNAMIC PROPERTIES OF WATER BY THE METHOD OF MONTE-CARLO"

Seminar No. 55 **11.28.1972**

68. Gurikov Yu.V.

Agrophysical Research Institute VASKhNIL, Leningrad

"EFFECTIVE INTERACTION OF IONS IN A DIELECTRIC MEDIUM"

Seminar No. 56 **12.19.1972**

69. Krumgalz B.S., Kudryavtseva I.V., Mishchenko K.P.

Leningrad Technological Institute of the Pulp and Paper Industry

"ON SPECIFIC HYDRATION OF COMPLEX IONS IN SOLUTIONS OF TETRAALKYLAMMONIUM SALTS"

1973 year

Seminar No. 57 **09.26.1973**

70. Lapshin V.A., Annan A.A.

I.I. Mechnikov Odessa State University

"ON INTERCONNECTION OF THERMODYNAMIC CHARACTERISTICS OF BINARY SYSTEMS 1-1 ELECTROLYTES"

Seminar No. 58 **31.10.1973**

71. Doganadze R.R., Kornyshev A.A.

A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences

"TAKING INTO ACCOUNT THE STRUCTURE OF A POLAR SOLVENT IN THE THEORY OF IONIC SOLVATION"

1974 year

Seminar No. 59 **12.03.1974**

72. Vishnevskaya G.P., Gumerov F.M., Kozyrev B.M., Karimova A.F.

Kazan Institute of Physics and Technology

"STUDY OF AQUEOUS SOLUTIONS Mn^{2+} and Fe^{3+} BY RADIOSPECTROSCOPY METHODS"

Seminar No. 60 **23.04.1974**

73. Vargaftik M.N., Katsman L.A., Syrkin Ya.K.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"KINETICS OF RAPID REACTIONS OF PROTONING OF INORGANIC O^- and N^- BASES IN WATER"

Seminar No. 61 **29.10.1974**

74. Mishustin A.I., Kessler Yu.M.

A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences

"RELAXATION OF NUCLEI OF Li^+ IONS IN NONAQUEOUS SOLUTIONS OF LITHIUM SALTS"

Seminar No. 62 **11.26.1974**

75. Pinsker G.E.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"GEOMETRIC MODEL OF LIQUID"

1975 year

Seminar No. 63 **02.04.1975**

76. Malyuk N.G., Toryanik A.I.

Donetsk State University

"SELF-DIFFUSION OF MOLECULES IN WATER AND ELECTROLYTE SOLUTIONS AT HIGH PRESSURES"

Seminar No. 64 **11.03.1975**

77. Gaiduk V.I., Kudryashova V.A., Khurgin Yu.I.

Institute of Radioengineering and Electronics of the USSR Academy of Sciences

"STUDY OF HYDRATION IN AQUEOUS SOLUTIONS OF ELECTROLYTES BY THE METHOD OF MILLIMETER SPECTROSCOPY"

Seminar No. 65 **05.04.1975**

78. Lyashchenko A.K.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"RELATIONSHIP OF TEMPERATURE DEPENDENCE OF ELECTROLYTE SOLUBILITY WITH MOLECULAR INTERACTIONS IN AQUEOUS SOLUTION"

| | | |
|--|-------------------|--|
| 1976 year | | "ABOUT MACHINE MODELING OF LIQUID WATER" |
| Seminar No. 66 | 02.10.1976 | Seminar No. 75 02.06.1978 |
| 79. Ivanov V.I. | | 87. Dorosh A.K. |
| <i>Institute of Molecular Biology of the USSR Academy of Sciences</i> | | <i>T.G. Shevchenko Kiev State University</i> |
| "DNA AS A TOOL FOR STUDYING ION HYDRATION" | | "STRUCTURE OF SOME SOLVENTS AND ELECTROLYTE SOLUTIONS BY X-RAY DATA" |
| Seminar No. 68 | 05.18.1976 | Seminar No. 76 02.07.1978 |
| 80. Bondarenko G.V., Humpbacked Yu.E. | | 88. Korsunsky V.I., Naberukhin Yu.I. |
| <i>Institute of Experimental Mineralogy of the USSR Academy of Sciences</i> | | <i>Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk</i> |
| "VIBRATIONAL-ROTATIONAL SPECTRA OF WATER AT HIGH TEMPERATURES AND PRESSURES" | | "MICROHETEROGENIC STRUCTURE OF WATER SOLUTIONS OF NON-ELECTROLYTES. STUDY BY THE METHOD OF DIFFRACTION OF X-RAY RAYS " |
| Seminar No. 69 | 05.19.1976 | Seminar No. 77 28.03.1978 |
| 81. Naberukhin Yu.I. | | 89. Iron B.V. |
| <i>Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk</i> | | <i>Institute of Physical Chemistry of the USSR Academy of Sciences</i> |
| "BASIC MODELS OF WATER STRUCTURE CONSTRUCTION" | | "CHANGE OF PHYSICO-CHEMICAL PROPERTIES OF WATER NEAR SOLID SURFACES" |
| Seminar No. 70 | 06.15.1976 | Seminar No. 78 24.10.1978 |
| 82. Anisimov M.A. | | 90. Shakhparonov M.I. |
| <i>Moscow Institute of Petrochemical and Gas Industry</i> | | <i>Lomonosov Moscow State University</i> |
| "CRITICAL EVENTS" | | "ON MECHANISMS OF RAPID REACTIONS OCCURRING DURING THERMAL MOTION IN LIQUID SYSTEMS CONSISTING OF ALCOHOLS, ROH" |
| Seminar No. 71 | 09.02.1976 | Seminar No. 79 14.11.1978 |
| 83. Luck W. | | 91. Namiot A.Yu. |
| <i>Germany</i> | | <i>All-Union Oil and Gas Research Institute, Moscow</i> |
| "SPECTRAL STUDY OF WATER AND WATER SOLUTIONS" | | "MUTUAL SOLUBILITY OF WATER AND NON-POLAR SUBSTANCES AT TEMPERATURES UP TO 300-400°C" |
| Seminar No. 72 | 10.26.1976 | Seminar No. 80 12.12.1978 |
| 84. Andreeva T.A. | | 92. Dogonadze R.R., Marsagashvili T.A. |
| <i>Rostov on Don</i> | | <i>A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences</i> |
| "SOLUBILITY OF ELECTROLYTES IN WATER AND THE PROCESS OF CLUSTER FORMATION" | | "QUANTUM THEORY OF SOLVATION OF POLYATOMIC MOLECULES IN POLAR SOLVENTS" |
| 1977 year | | 1979 year |
| Seminar No. 73 | 12.20.1977 | Seminar No. 81 23.01.1979 |
| 85. Dyadin Yu.A. | | 93. Dolgonosov B.M. |
| <i>Institute of Inorganic Chemistry, Siberian Branch of the USSR Academy of Sciences, Novosibirsk</i> | | <i>Lomonosov Moscow State University</i> |
| "ABOUT CLATRATE HYDRATES" | | |
| 1978 year | | |
| Seminar No. 74 | 01.17.1978 | |
| 86. Malenkov G.G. | | |
| <i>Institute of Physical Chemistry of the USSR Academy of Sciences</i> | | |

"COLLECTIVE PROCESSES IN LIQUIDS
AT PHASE TRANSFORMATIONS"

Seminar No. 82 **06.02.1979**

94. Shakhparonov M.I.

Lomonosov Moscow State University

"PROBLEMS OF VISCOSITY THEORY"

Seminar No. 83 **20.03.1979**

95. Kartsev V.N., Zabelin V.A.

N.G. Chernyshevsky Saratov State University

"ON CONNECTION OF ISOTHERMAL
COMPRESSIBILITY OF LIQUIDS WITH
ENERGY OF INTERMOLECULAR
INTERACTIONS"

96. Kazin I.V., Dashevsky V.G., Kaganyuk V.S.
*Institute of Organoelement Compounds of the USSR
Academy of Sciences*

"ON THE SOLVATION OF IONS IN WATER"

Seminar No. 84 **10.04.1979**

97. Gaiduk V.I., Kalmykov Yu.P.

*Institute of Radioengineering and Electronics of the
USSR Academy of Sciences*

"APPLICATION OF THE MODEL
OF LIMITED ROTATORS" MOR "TO
THE DESCRIPTION OF DIELECTRIC
DISPERSION OF POLAR FLUIDS"

Seminar No. 85 **17.05.1979**

98. Chizhik V.I.

Leningrad State University

"STUDY OF THE MICROSTRUCTURE
OF ELECTROLYTE SOLUTIONS BY THE
METHOD OF NUCLEAR-MAGNETIC
RELAXATION"

Seminar No. 86 **29.06.1979**

99. Chernova R.K.

N.G. Chernyshevsky Saratov State University

"FEATURES OF COMPLEX FORMATION
OF ORGANIC REAGENTS WITH METAL
IONS IN STRUCTURED SURFACE
ACTIVE SUBSTANCES IN AQUEOUS
SOLUTIONS"

100. Ryazanov M.A.

Syktvkar State University

"THE STRUCTURE OF WATER AND
PROBLEMS OF STUDYING ASSOCIATIONS
AND COMPLEX FORMATION OF IONS IN
AQUEOUS SOLUTIONS"

1980 year

Seminar No. 87 **29.01.1980**

101. Naberukhin Yu.I.

*Institute of Chemical Kinetics and Combustion, Siberian
Branch of the USSR Academy of Sciences, Novosibirsk*

"NEW ARGUMENTS FOR A CONTINUAL
MODEL OF WATER STRUCTURE"

Seminar No. 88 **11.03.1980**

102. Gurikov Yu.V.

Agrophysical Research Institute VASKhNIL, Leningrad

"ON THE STRUCTURE OF WATER
SOLUTIONS"

Seminar No. 89 **23.09.1980**

103. Malenkov G.G., Dyakonova L.P.

*Institute of Physical Chemistry of the USSR Academy
of Sciences*

"STUDY OF Na⁺ and K⁺ HYDRATION BY
THE METHOD OF MONTE CARLO"

Seminar No. 90 **23.12.1980**

104. Kornyshev A.A.

*A.N. Frumkin Institute of Electrochemistry of the
USSR Academy of Sciences*

INTERIOR INTERACTIONS IN POLAR
MEDIA

1981 year

Seminar No. 91 **03.02.1981**

105. Naberukhin Yu.I.

*Institute of Chemical Kinetics and Combustion, Siberian
Branch of the USSR Academy of Sciences, Novosibirsk*

"THE ROLE OF HYDROGEN BONDS,
HYDROPHOBIC AND VAN-DER-
WAALS INTERACTIONS IN AQUEOUS
SOLUTIONS OF NON-ELECTROLYTES"

Seminar No. 92 **03.03.1981**

106. Malomuzh N.P., Troyanovsky V.S.

I.I. Mechnikov Odessa State University

"COLLECTIVE CONTRIBUTIONS TO
THE VISCOSITY OF SOLUTIONS"

Seminar No. 93 **09.06.1981**

107. Lyashchenko A.K., Lileev A.S.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"STRUCTURE OF AQUEOUS SOLUTIONS
OF ELECTROLYTES"

Seminar No. 94 **20.06.1981**

108. Martynov G.A.

Institute of Physical Chemistry of the USSR Academy of Sciences

"ON THE CURRENT STATE OF THE THEORY OF LIQUIDS"

Seminar No. 95 **24.11.1981**

109. Mazitov R.K.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"ELECTRIC QUADRUPOLE RELAXATION OF ION NUCLEI IN SOLUTIONS"

Seminar No. 96 **15.12.1981**

110. Yakub E.S.

I.I. Mechnikov Odessa State University

"CURRENT STATE OF STATISTICAL THERMODYNAMICS OF REACTIVE LIQUIDS"

1982 year

Seminar No. 97 **26.01.1982**

111. Naberukhin Yu.I.

Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk

"I AND V STRUCTURES OF SIMPLE LIQUIDS AND WATER"

Seminar No. 98 **03.16.1982**

112. Fabelinsky I.L.

Lebedev Physical Institute, USSR Academy of Sciences

"SPECTRA OF MOLECULAR SCATTERING OF LIGHT"

Seminar No. 99 **04.27.1982**

113. Humpback Yu.E., Demyanets Yu.V.

Institute of Experimental Mineralogy, USSR Academy of Sciences, Chernogolovka

"FUNCTION OF RADIAL DISTRIBUTION OF MOLECULAR DENSITY IN WATER AT PRESSURE 1000 BARR AND TEMPERATURE FROM 25-500°C"

Seminar No. 100 **22-23.11.1982**

THE HUNDRED SESSION OF THE ALL-UNION SEMINAR ON STUDYING THE STRUCTURE OF LIQUIDS AND SOLUTIONS

114. Rodnikova M.N.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"REQUIREMENTS FOR SPEAKERS: PROFESSIONALISM, MODERN LEVEL OF THE REPORTED PROBLEM, PROFITABILITY OF PRESENTATION; REQUIREMENTS FOR ORGANIZERS: FRIENDLY TOWARDS DISCUSSION"

115. Syrnikov Yu.P.

SM. Kirov Leningrad Forestry Academy

"MODERN CONCEPT OF THERMAL MOTION IN A LIQUID AND THE CONCEPT OF POSITIVE AND NEGATIVE HYDRATION"

Speeches: V.I. Yashkichev

N.S. Kurnakov IGIC of USSR Academy of Sciences

Mishustin A.I.

Moscow Institute of Chemical Engineering



116. Naberukhin Yu.I.

Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk
 "PROBLEMS OF BUILDING A QUANTITATIVE MODEL OF WATER STRUCTURE"

Speeches: Malenkov G.G. *Institute of Physical Chemistry of the USSR Academy of Sciences*;
 Lyashchenko A.K. *N.S. Kurnakov IGIC of USSR Academy of Sciences*; Yuhnevich G.V. *N.S. Kurnakov IGIC of USSR Academy of Sciences*

117. Gurikov Yu.V.

Agrophysical Research Institute VASKhNIL, Leningrad

"ABOUT SALT EFFECTS IN NON-ELECTROLYTE SOLUTIONS"

Speeches: Kessler Yu.M. *A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences*; Naberukhin Yu.I. *Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk*

118. Crosses G.A.

Ivanovo Institute of Chemical Technology

"THERMODYNAMICS AND STRUCTURE OF SOLUTIONS"

Speeches: V.V. Alexandrov *Kharkov State University*; Abrosimov V.K., Afanasyev V.N. *Ivanovo Institute of Chemical Technology*

Seminar No. 101 **28.12.1982**

119. Mishustin A.I.

Moscow Institute of Chemical Engineering

"MECHANISM OF CATION SOLVATION IN PURE AND MIXED SOLVENTS"

1983 year

Seminar No. 102 **05.17.1983**

120. Namiot A.Yu., Oleinik P.M.

All-Union Oil and Gas Research Institute, Moscow

"APPLICABILITY OF HENRY'S LAW TO SOLUTIONS OF NON-POLAR GASES IN WATER"

Seminar No. 103 **06.22.1983**

121. Kvlivdze V.I.

Lomonosov Moscow State University

"APPLICATION OF THE NMR METHOD TO STUDYING PHASE TRANSITIONS IN HETEROGENEOUS SYSTEMS"

1984 year

Seminar No. 104 **24.01.1984**

122. Avdiev E.G., Bogolyubov G.M.

Research Institute of Physics, Leningrad State University

"FORMATION OF CHARGED CLUSTERS IN WATER (H^+ , H_2O) $_n$ "

Seminar No. 105 **28.02.1984**

123. Ivanov E.N.

Moscow Institute of Electronics and Mathematics

"SOME ISSUES OF THE MODERN THEORY OF ROTARY MOTION"

124. Valiev K.A.

General Physics Institute of the USSR Academy of Sciences

"PICTURE OF THERMAL MOTION OF PARTICLES IN A LIQUID DEPENDING ON THE SCALE OF TIME"

Seminar No. 106 **27.03.1984**

125. Librovich N.B.

Institute of Chemical Physics of the USSR Academy of Sciences

"SOLVATION OF H^+ AND OH^- IN SOLUTIONS. HISTORY OF RESEARCH AND CURRENT STATE OF THE PROBLEM"

Seminar No. 107 **09.10.1984**

126. Daragan V.A.

Institute of Chemical Physics of the USSR Academy of Sciences

"STUDY OF ROTATIONAL MOTION OF MOLECULES BY THE METHOD OF MAGNETIC RELAXATION"

Seminar No. 108 **13.11.1984**

127. Toryanik A.I.

Donetsk State University

"SELF-DIFFUSION IN WATER IN A WIDE RANGE OF TEMPERATURES AND PRESSURES"

Seminar No. 109 **18.12.1984**

128. Malomuzh N.P., Pelishenko S.B., Fisher I.Z.

I.I. Mechnikov Odessa State University

"NON-HYDRODYNAMIC THERMAL FLUCTUATIONS IN LIQUIDS"

1985 year

Seminar No. 110 **19.02.1985**

129. Aytyan S.Kh.

A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences

"MOLECULAR DYNAMICS AS A METHOD FOR STUDYING THE STRUCTURE AND MOBILITY OF PARTICLES IN A LIQUID"

Seminar No. 111 **09.04.1985**

130. Zatsepina G.N.

Lomonosov Moscow State University

"MOLECULAR BASIS OF PECULIARITIES OF TEMPERATURE DEPENDENCES OF PHYSICAL PROPERTIES OF WATER"

Seminar No. 112 **05.29.1985**

131. Ryazanov M.A.

Syktvkar State University

Seminar No. 113 **08.10.1985**

132. Geiger A.

Germany

"STRUCTURE OF THE HYDROGEN BOND NETWORK IN WATER"

Seminar No. 114 **09.10.1985**

133. Geiger A.

Germany

"STUDY OF NEGATIVE AND HYDROPHOBIC HYDRATION BY THE METHOD OF MD"

Seminar No. 115 **10.12.1985**

134. Grivtsov A.G.

Institute of Physical Chemistry of the USSR Academy of Sciences

"MD METHODS FOR STUDYING PHYSICAL KINETICS IN LIQUIDS"

1986 year

Seminar No. 116 **03.11.1986**

135. Novikov A.G.

Institute of Atomic Energy, Obninsk

"STUDY OF THE PROCESS OF SELF-DIFFUSION IN WATER BY THE METHOD OF QUASIELASTIC SCATTERING OF COLD NEUTRONS"

Seminar No. 117 **03.18.1986**

140. Dorosh A.K., Ivanitskiy P.G., Krotenko V.T., Kostyuchenko A.Yu., Bulavin L.A.

T. Shevchenko Kiev State University

"STUDY OF THE DYNAMICS OF WATER MOLECULES IN AQUEOUS SOLUTIONS 1, 1 - ELECTROLYTES"

Seminar No. 118 **05.27.1986**

141. Feldman Yu.D.

Institute of Biology, Kazan Branch of the USSR Academy of Sciences

"TEMPORARY DIELECTRIC SPECTROSCOPY AND MOLECULAR MOTION IN LIQUIDS"

Seminar No. 119 **06.03.1986**

142. Lyubimov Yu.A., Nabokov O.Ya.

Lomonosov Moscow State University

"STUDY OF THE DIELECTRIC PROPERTIES OF WATER"

Seminar No. 120 **11.25.1986**

143. Kornyshev A.A.

A.N. Frumkin Institute of Electrochemistry of the USSR Academy of Sciences

"ELECTROSTATICS OF MEDIA WITH SPATIAL DISPERSION"

Seminar No. 121 **12.23.1986**

144. Martynov G.A., Sarkisov G.N.

Institute of Physical Chemistry of the USSR Academy of Sciences

"PHASE TRANSITIONS OF THE FIRST KIND"

1987 year

Seminar No. 122 **02-03.02.1987**

HYDROPHOBIC HYDRATION AND HYDROPHOBIC INTERACTION

145. Kesler Yu.I.

Institute of Chemistry of Non-aqueous Solutions of the USSR Academy of Sciences, Ivanovo

"SALVOPHOBIC EFFECTS. FACTS AND DOUBTS"

146. Zatsepina G.N.

Lomonosov Moscow State University

"HYDROPHOBIC HYDRATION AND WATER STRUCTURE"

147. Naberukhin Yu.I.

Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk

"SPECTROSCOPIC STUDY OF HYDROPHOBIC HYDRATION"

148. Rodnikova M.N.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"EVALUATION OF THE MOBILITY OF THE SOLVENT IN THE NEARBY OF LARGE SINGLE-CHARGE IONS"

150. Malenkov G.G.

Institute of Physical Chemistry of the USSR Academy of Sciences

"STUDY OF HYDROPHOBIC HYDRATION AND HYDROPHOBIC INTERACTION BY METHODS OF MACHINE MODELING"

151. Lyashchenko A.K.

N.S. Kurnakov IGIC of USSR Academy of Sciences

"STRUCTURAL ORGANIZATION OF WATER IN SOLUTIONS WITH HYDROPHILIC AND HYDROPHOBIC HYDRATION"

152. Anisimov M.A.

Gubkin Moscow Institute of Petrochemical and Gas Industry

"STRUCTURAL PHASE TRANSITIONS IN NONELECTROLYTE SOLUTIONS"

153. Zaslavsky B.Yu.

Institute of Organoelement Compounds of USSR Academy of Sciences

"FORMATION OF TWO-PHASE SYSTEMS IN AQUEOUS SOLUTIONS OF POLYMERS"

153. D.P.

Institute of Biological Physics, USSR Academy of Sciences, Pushchino

"STATE OF WATER NEAR THE ATOMIC GROUPS OF BIOLOGICAL MOLECULES"

154. Abaturov L.V.

Institute of Molecular Biology, USSR Academy of Sciences

"HYDROPHOBIC AND POLAR INTERACTIONS IN ORGANIZATION AND STABILIZATION OF NATIVE GLOBULAR PROTEINS"

155. Bukin V.A.

Institute of Biological Physics, USSR Academy of Sciences, Pushchino

"DNA HYDRATION"

156. Shakhnovich E.A.

Protein Institute of the USSR Academy of Sciences, Pushchino

157. Naberukhin Yu.I.

Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk

"HYDROPHOBIC INTERACTIONS. FACTS AND GENERALIZATIONS"

Seminar No. 123

27.10.1987

158. Sperkach V.S.

T. Shevchenko Kiev State University

"ACOUSTIC SPECTROSCOPY OF LIQUID SYSTEMS"

Seminar No. 124

24. 11.1987

159. Soloviev V.A.

Leningrad State University

"ON THE MOLECULAR MECHANISM OF VOLUME AND SHEAR VISCOSITY IN ASSOCIATED FLUIDS"

Seminar No. 125

08.12.1987

160. Gurikov Yu.V.

Agrophysical Research Institute VASKHNIL, Leningrad

"METHOD OF EFFECTIVE INTERACTION IN THE THEORY OF SOLUTIONS"

1988 year

Seminar No. 126

16.02.1988

161. Melikhov I.V.

Lomonosov Moscow State University

"PHENOMENA IN SUPERSATURATED SOLUTIONS"

Seminar No. 127

01.03.1988

162. Privalov P.L.

Protein Institute of the USSR Academy of Sciences, Pushchino

"PROTEIN STABILITY AND HYDROPHOBIC INTERACTIONS"

Seminar No. 128

19.04.1988

163. Churaev N.V.

Institute of Physical Chemistry of the USSR Academy of Sciences

"PROPERTIES OF AQUEOUS CONCENTRATED SOLUTIONS OF ELECTROLYTES IN THIN LAYERS"

Seminar No. 129

18.05.1988

164. Gill J.B.

United Kingdom

"THE USE OF VIBRATIONAL SPECTROSCOPY FOR DETERMINING PARTICLES IN SOLUTION: IONIC VAPORS AND COMPLEXES IN LIQUID AMMONIA"

Seminar No. 130

24.05.1988

165. Naberukhin Yu.I., Medvedev N.N.,

Voloshin V.P.

| | | | | |
|---|--|---|--|--|
| prof. J.Barthel (Regensburg, Germany) | Наши гости | | | |
| prof.C.A Angell (USA) |  |  |  |  |
| prof. A.Geiger (Germany) | | | | |
| prof. Lucjan Sobczyk (Polska) |  |  |  |  |
| prof. J.B.Gill (UK) | | | | |
| prof. G. Somsen (Netherlands) |  |  |  |  |
| prof. Y.Marcus (Israel) | | | | |
| prof. L.H. Huyskens (Belgium) |  |  |  |  |
| prof. W.Luck (Germany) | | | | |
| prof. H.G. Hertz (Germany) |  |  |  |  |
| prof. Z.Kęcki (Polska) | | | | |
| prof. Yu.Feldman (Israel) |  |  |  |  |
| prof. Joanna Sadlej (Polska) | | | | |
| prof. Arie Ben-Naim (Israel) |  |  |  |  |
| prof. A. Kornyshev (Imperial College London) | | | | |
| Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk | | | | |
| "STRUCTURE OF SIMPLE LIQUIDS. GEOMETRIC ANALYSIS OF COMPUTER MODELS " | | | | |
| Seminar No. 131 | 10.10.1988 | Seminar No. 134 | 28.02.1989 | |
| 166. Barthel J. | | 170. Novikov A.G. | | |
| Germany | | Institute of Atomic Energy, Obninsk | | |
| "TRANSPORTATION PROPERTIES OF ELECTROLYTE SOLUTIONS FROM INFINITE DILUTION TO SATURATION" | | "GENERALIZED FREQUENCY SPECTRUM AND MICRODYNAMIC CHARACTERISTICS OF THE PROTON OF WATER MOLECULES" | | |
| Seminar No. 132 | 01.11.1988 | Seminar No. 135 | 04.04.1989 | |
| 167. Gaiduk V.I., Novskova T.A. | | 171. Gorbunov B.Z. | | |
| Institute of Radioengineering and Electronics of the USSR Academy of Sciences | | Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk | | |
| "ORIENTATION POLARIZATION AND ITS MANIFESTATION IN THE DIELECTRIC SPECTRA OF WATER AND WATER SYSTEMS" | | "HETEROGENEOUS NUCLEATION OF ICE CRYSTALS AT SMALL DEVIATIONS FROM EQUILIBRIUM. EXPERIMENT AND SIMULATION" | | |
| 1989 year | | | | |
| Seminar No. 133 | 17.01.1989 | Seminar No. 136 | 15.06.1989 | |
| 168. Gordeev G.P., Lebedev V.T. | | 172. Somsen G. | | |
| | | Nederland | | |
| | | "HYDROPHOBIC EFFECTS" | | |

Seminar No. 137**22.06.1989**

173. Huyskens L.H.

Belgium

"PREDICTION OF THE SOLUBILITY OF CRYSTALS AND POLYMERS IN VARIOUS SOLVENTS"

Seminar No. 138**29-30.06.1989**

174. Angell C.A.

United States of America

"CHEMICAL PHYSICS AND METAPHYSICS OF SUPERCOOLED LIQUIDS AND GLASSES (ESPECIALLY IN THE CASE OF WATER)"

175. Angell C.A.

United States of America

"MOLECULAR-DYNAMIC STUDY OF LIQUID SILICATES"

Seminar No. 139**05.12.1989**

176. Bandura A.V., Vinogradova G.B.,

Novoselov N.P.

Leningrad Technological Institute of the Refrigeration Industry

"ON THE POSSIBILITY OF APPLICATION OF THE MONTE-CARLO METHOD IN MODELING THE MIXED SOLVENT-ION SYSTEM"

177. Bushuev Yu.G.

Ivanovo Institute of Chemical Technology

"SOME METHODOLOGICAL ISSUES OF STUDYING THE STRUCTURE OF LIQUIDS. THEORY AND EXPERIMENT"

1990 year**Seminar No. 140****06.02.1990**

178. Malenkov G.G.

Institute of Physical Chemistry of the USSR Academy of Sciences

"WATER IN THE CAR: QUESTIONS AND ANSWERS"

Seminar No. 141**10.04.1990**

179. Naberukhin Yu.I., Voloshin V.P.

Institute of Chemical Kinetics and Combustion, Siberian Branch of the USSR Academy of Sciences, Novosibirsk

"ANALYSIS OF EMPTY INTERATOMIC SPACE AS A METHOD FOR DESCRIBING COMPUTER MODELS OF LIQUIDS"

Seminar No. 142**20.12.1990**

180. Martynov G.A., Vinogradova O.I.

Institute of Physical Chemistry of the USSR Academy of Sciences

"GENERALIZED VIRIAL EQUATION AND UNIVERSAL EQUATION OF STATE"

Seminar No. 143**18.12.1990**

181. Bulienkov N.A.

Institute of Physical Chemistry of the USSR Academy of Sciences

"REGULAR TETRAHEDRIC STRUCTURES: QUASICRYSTALS, CRYSTALLOIDS, FRACTALS (BINDED WATER, AEROGELS, AMORPHOUS SILICON, ARSENIC, SILICON)"

1991 year**Seminar No. 144****14.03.1991****IN MEMORY A.G. GRIVTSOVA****"METHODS OF NUMERICAL EXPERIMENT"**182. Shnol E.E., *Institute of Applied Mathematics RAS, Pushchino*

Balabaev N.K., *Institute of Mathematical Problems of Biology RAS, Pushchino*

Vorontsov-Velyaminov Saint Petersburg State University

Zakharov A.P., *Institute of Physical Chemistry, USSR Academy of Sciences*

Corr. Memb. Khokhlov A.R., *Lomonosov Moscow State University*

Ilyashevich A.M., *Saint Petersburg State University*

Grosberg A., *United States of America*

Frank-Kamenetsky M.D., *Institute of Molecular Genetics RAS*

Khazin M.L., *Institute of Physical Chemistry RAS*

Seminar No. 145**28.05.1991**183.¹Medvedev N.N., ²Geiger A., ¹Naberukhin Yu.I.

¹*Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk*

²*Germany*

"DESCRIPTION OF THE WATER STRUCTURE WITH THE HELP OF THE RAVEN'S POLYTOPES"

Seminar No. 146**15.10.1991**

184. Ostanevich Yu.M.

Joint Institute for Nuclear Research, Dubna

"METHOD OF SMALL-ANGLE NEUTRON SCATTERING. SMALL-ANGLE SCATTERING OF TMM SOLUTIONS"

1992 year

Seminar No. 147

185. Marcus Y.

Israel

"SELECTIVE ION SOLVATION"

1993 year

Seminar No. 148

186. Kartsev V.N., Tsepulin V.V.

N.G. Chernyshevsky Saratov State University

"SOLUTION OF THE PROBLEM OF INTERMOLECULAR INTERACTION IN TWO-COMPONENT SOLUTIONS BY THE METHOD OF PHASE TRANSITIONS"

Seminar No. 149

187. Bulienkov N.A.

Institute of Physical Chemistry of RAS

"POSSIBILITIES OF DETERMINAL EVOLUTION OF LIVING NATURE BASED ON FRACTAL STRUCTURE OF BOUNDED WATER"

Seminar No. 150

188. Gaiduk V.I., Novskova T.A.

Institute of Radioengineering and Electronics RAS

"MOLECULAR MODEL OF ORIENTATION RELAXATION IN LIQUID WATER"

189.¹Lyashchenko A.K., ²Novskova T.A., ¹Lileev A.S., ¹Zasetskiy A.Yu., ²Gayduk V.I.

¹*N.S. Kurnakov IGIC of Russian Academy of Sciences*

²*Institute of Radioengineering and Electronics of the Russian Academy of Sciences*

"ROTARY MOTIONS OF WATER IN HYDRATE SHELLS"

Seminar No. 151

190. Amounts B.D.

Lomonosov Moscow State University

"GRID MODEL OF THE SURFACE LAYER OF LIQUIDS"

Seminar No. 152

191. D.P.

Institute of Biological Physics RAS, Pushchino

"MOLECULAR ACOUSTICS IN THE RESEARCH OF AQUEOUS SOLUTIONS OF BIOLOGICALLY IMPORTANT COMPOUNDS"

1994 year

Seminar No. 153

192. Khurgin Yu.I.

N.D. Zelinsky Institute of Organic Chemistry RAS

21.04.1992

"ABSORPTION MILLIMETER SPECTROSCOPY OF WATER SYSTEMS"

Seminar No. 154

11-12.04.1994

IN MEMORY A.G. GRIVTSOVA

193. Geiger A.

Germany

"MOLECULAR MOBILITY AND STRUCTURE OF THE HYDROGEN BOND NETWORK IN WATER AND AQUEOUS SOLUTIONS"

194. Balabaev N.K.

Institute of Mathematical Problems of Biology RAS, Pushchino

"MODELING MD POLYMERS"

195. Brodskaya E.N.

Saint Petersburg State University

"STUDY OF SPONTANEOUS SURFACE POLARIZATION OF MD METHODS FOR DIFFERENT WATER MODELS"

196. Mazo M.A.

N.N. Semyonov Institute of Chemical Physics of RAS

"MD MODELING GLASSING AND SHEAR DEFORMATION OF A TWO-DIMENSIONAL LENNARD-JONES SYSTEM"

197. Vasilevskaya V.V., Khalatur P.G., Khokhlov A.R.

A.N. Nesmeyanov Institute of Organoelement Compounds of RAS

Tver State University

"MATHEMATICAL MODELING OF THE FORMATION OF MICRODOMAIN STRUCTURES IN THERMAL MIXTURES NEAR THE GLASS TEMPERATURE OF ONE OF THE COMPONENTS"

Seminar No. 155

14.06.1994

198. Kusalik P.

Canada

"COMPUTER SIMULATION OF MOLECULAR LIQUIDS. STRUCTURE, DYNAMICS AND DIELECTRIC PROPERTIES"

199. Svishchev I.

Canada

LOW TEMPERATURE WATER AND AMORPHOUS ICE. LATEST NEWS"

Seminar No. 156

29.11.1994

200. Lobyshev V.I.

Lomonosov Moscow State University

"OWN LUMINESCENCE OF WATER"

1995 year

Seminar No. 157 17.01.1995

201. Kalinichev A.G.

Institute of Experimental Mineralogy of RAS, Chernogolovka

"PHYSICO-CHEMICAL PROPERTIES OF WATER ACCORDING TO THE DATA OF COMPUTER EXPERIMENTS"

Seminar No. 158 23.05.1995

202. Sokolov N.D.

N.N. Semyonov Institute of Chemical Physics of RAS

"BASIC ASPECTS OF THE THEORY OF HYDROGEN BONDING"

Seminar No. 159 06.06.1995

203. Goldstein I.P., Fedotov A.N.

Karpov Research Institute of Physical Chemistry

"ROLE OF THE MEDIUM IN DONOR-ACCEPTOR INTERACTION OF MOLECULES"

Seminar No. 160 21.11.1995**IN MEMORY I.Z. FISHER**

204. Malomuzh N.P.

Mechnikov Odessa National University, Ukraine

"ABOUT THE LIFE AND WORK OF PROFESSOR I.Z.FISHER"

205. Fabelinsky I.L.

Lebedev Physical Institute of RAS

"ABOUT MOLECULAR VISCOSITY"

205. Martynov G.A., Wompe A.G.

Institute of Physical Chemistry RAS

"PHASE TRANSITIONS OF THE FIRST KIND"

1996 year

Seminar No. 161 30.01.1996207.¹Talis A.L., ²Tytik D.L.¹*All-Russian Research Institute for the Synthesis of Mineral Raw Materials, Aleksandrov*²*Institute of Physical Chemistry of RAS*

"POLYMODULAR STRUCTURE OF AMORPHOUS ICE AND POSSIBLE MECHANISM OF ITS STABILIZATION"

Seminar No. 162 26.03.1996

208. Naberukhin Yu.I.

Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk

"SPECTROSCOPY OF HYDROGEN BONDING"

209. Yukhnevich G.V.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"COOPERATIVE HYDROGEN COMMUNICATION"

Seminar No. 163 27.03.1996

210. Malenkov G.G.

Institute of Physical Chemistry of RAS

"CRITERIA OF HYDROGEN CONNECTION"

Seminar No. 164 11.06.1996

211. Kornyshev A.A.

Germany

"NON-LOCAL DIELECTRIC FUNCTION OF WATER. DEPENDENCE ON THE FREQUENCY OF THE "WAVE VECTOR"

1997 year

Seminar No. 165 11.02.1997

212. Dembovsky S.A.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"ANTISYMMETRY OF A LIQUID"

Seminar No. 166 07.04.1997**IN MEMORY A.G. GRIVTSOVA**

213. Lemak A.S., Balabaev N.K.

Institute of Mathematical Problems of Biology RAS, Pushchino

"EFFECT OF THE WALL ON THE BEHAVIOR OF THE POLYMER CHAIN IN SHEAR FLOW"

214. Khalatur P.G.

Tver State University

"MAXIMUM DESCRETED (LATTICE) MOLECULAR DYNAMICS FOR NUMERICAL MODELING OF POLYMERS"

Seminar No. 167 20.05.1997

215. Sarkisov G.N.

Institute of Theoretical and Experimental Biophysics RAS, Pushchino

"SOME PROBLEMS OF THE APPROXIMATE THEORY OF LIQUIDS"

Seminar No. 168 27.05.1997

216. Naberukhin Yu.I., Luchnikov V.A.

Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk

"ANALYSIS OF LOCALIZED VIBRATIONS AS A METHOD FOR STUDYING STRUCTURAL INSTABILITY IN COMPUTER MODELS OF AMORPHOUS SUBSTANCE"

Seminar No. 169

217. Martynov G.A.

Institute of Physical Chemistry of RAS

"STATISTICAL MECHANICS AND THERMODYNAMICS"

Seminar No. 170

218. Fialkov Yu.Ya.

Kiev Polytechnic Institute

"CALCULATION OF TRUE THERMODYNAMICS OF CHEMICAL EQUILIBRIUM IN SOLUTIONS"

1998 year

Seminar No. 171

219.¹Kornyshev A.A., ²Leykin S.

¹Germany, ²United States of America

"LAWS OF SYMMETRY FOR INTERACTION OF SPIRAL MACROMOLECULES"

Seminar No. 172

220. Martynov G.A.

Institute of Physical Chemistry of RAS

"THE PROBLEM OF PHASE TRANSITIONS OF THE FIRST KIND IN STATISTICAL MECHANICS"

Seminar No. 173

221. Naberukhin Yu.I.

Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk

"STRUCTURAL INHOMOGENEITY AND PHASE TRANSITION OF THE LOSS OF CONTINUITY IN THE COMPUTER MODEL OF ARGON AND WATER"

Seminar No. 174

222. Kirsh Yu.E.

Karpov Research Institute of Physical Chemistry

"POLY-N-VINYLCAPROLACTAM-HYDRATE COMPLEX AS A MODEL DETECTOR OF STRUCTURAL TRANSFORMATIONS AND INTERACTIONS IN AQUEOUS SOLUTIONS"

Seminar No. 175

223. Heisenger K.

Germany

"STRUCTURE AND DYNAMICS OF AQUEOUS SOLUTIONS OF ELECTROLYTES NEAR A METAL SURFACE"

10.06.1997

10.10.1997

13.01.1998

10.02.1998

31.03.1998

23.06.1998

08.07.1998

Seminar No. 176

27-28.10.1998

IN CONJUNCTION WITH THE SEMINAR ON THEORETICAL BIOPHYSICS

(chairman R.N.Sarkisov, M.N. Rodnikova)

224. Krishtalik L.I.

A.N. Frumkin Institute of Electrochemistry of the Russian Academy of Sciences

CHARGE TRANSFER PROCESSES IN PROTEIN MEDIA

225. Balabaev N.K.

Institute of Mathematical Problems of Biology RAS, Pushchino

"MODELING THE DYNAMICS OF MOLECULES IN A FLOW"

226. Malenkov G.G., Poltev V.I., Teplukhin A.V., Tytik D.L.

Institute of Physical Chemistry RAS

"HYDRATION OF POLYNUCLEOTIDE FRAGMENTS ACCORDING TO A NUMERICAL EXPERIMENT"

227. Sarkisov G.N.

Institute of Theoretical and Experimental Biophysics RAS, Pushchino

"PHASE TRANSITIONS IN SIMPLE MODELS"

228. Mornev O.A.

Institute for Theoretical and Experimental Biophysics RAS

"THERMODYNAMIC MACHINE IN NON-EQUILIBRIUM MODE: INVERSIBILITY, OPTIMALITY, LOSSES"

229. Bulienkov N.A.

Institute of Physical Chemistry of RAS

"SYSTEM FORMING PARAMETRIC STRUCTURES OF BOUNDED WATER AND THEIR ROLE IN BIOLOGICAL STRUCTURES AND IN SELF-ORGANIZING NANOTECHNOLOGIES"

1999 year

Seminar No. 177

04.06.1999

230. Erukhimovich I.Ya., Ermoshkin A.V., Tamm M.V.

A.N. Nesmeyanov Institute of Organoelement Compounds RAS

"THE APPROACH OF IMLIVSHITZ IN THE STATISTICAL THEORY OF ASSOCIATING FLUIDS"

- Seminar No. 178** 06.08.1999
231. Naberukhin Yu.I.
Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk
"HETEROGENEOUS STRUCTURE OF WATER"
- Seminar No. 179** 01.10.1999
232. Naberukhin Yu.I.
Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk
"ABOUT THE SYMPOSIUM ON METASTABLE WATER"
- Seminar No. 180** 11.11.1999
233. Bureiko S.F.
V.A. Fock Research Institute of Physics SPbSU
"ON BIFURCATE HYDROGEN CONNECTION"
- Seminar No. 181** 03.12.1999
234. Burlakova E.B.
N.M. Emanuel Institute of Biochemical Physics of RAS
"LOW DOSES: ACTION AT DIFFERENT LEVELS OF THE ORGANIZATION"
- 2000 year
- Seminar No. 182** 28.03.2000
235. Sarkisov G.N.
Institute of Theoretical and Experimental Biophysics RAS, Pushchino
"MOLECULAR DISTRIBUTION FUNCTIONS IN THE NEIGHBORHOOD OF PHASE TRANSITIONS OF THE FIRST KIND"
- Seminar No. 183** 19.04.2000
236. Tchaikovsky Yu.V.
S.I. Vavilov Institute of the History of Natural Science and Technology of RAS
"ABOUT COGNITIVE MODELS"
237. Malenkov G.G.
Institute of Physical Chemistry of RAS
"HISTORY OF STUDYING THE STRUCTURE OF WATER"
- Seminar No. 184** 20.06.2000
238. Yamaguchi T.
Japan
"STRUCTURE OF AQUEOUS SOLUTIONS OF ELECTROLYTES FROM SUPERCOOLED TO SUPERCRITICAL STATE"
- Seminar No. 185** 29.06.2000
239. Kotov V.Yu.
Lomonosov Moscow State University
"EXTERNAL CHARGE TRANSFER BETWEEN ANIONS"
- Seminar No. 186** 26.09.2000
240. Barthel J.
Germany
"NEW ASPECTS OF PHYSICAL CHEMISTRY OF ELECTROLYTE SOLUTIONS"
- Seminar No. 187** 31.10.2000
241.¹Kornyshev A.A., ²Leykin S.
¹Germany, ²United States of America
"DNA STRUCTURE AND COLLECTIVE MECHANISM OF HOMOLOGICAL SEQUENCE RECOGNITION AT DISTANCE"
- 2001 year
- Seminar No. 188** 04.03.2001
242. Malenkov G.G.
Institute of Physical Chemistry of RAS
"ABOUT METASTABLE PHASES OF WATER"
- Seminar No. 189** 24.04.2001
243. Voikov V.L.
Lomonosov Moscow State University
"COOPERATIVE PROPERTIES OF BLOOD"
- Seminar No. 190** 13.06.2001
244. Naberukhin Yu.I.
Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk
"TOPOLOGY OF HYDROGEN CONNECTION NETWORKS IN COMPUTER WATER MODELS"
245. Malenkov G.G.
Institute of Physical Chemistry of RAS
ABOUT THE SCIENTIFIC MEETING "NEW TYPES OF PHASE TRANSFORMATIONS"
- Seminar No. 191** 11.09.2001
246. Feldman Yu.D.
Israel
"DIELECTRIC RELAXATION IN DISORDERED SYSTEMS"
- Seminar No. 192** 19-20.11.2001
IN MEMORY OF O. Ya. SAMOILOVA
247. Rodnikova M.N.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"CREATIVE O. Ya. SAMOILOV WAY"

248. Geiger A.

Germany

"MECHANISM OF MOBILITY OF WATER MOLECULES ON THE HYDROGEN BONDING NETWORK"

Discussions by topics:

1. The mechanism of negative hydration
2. Proton disorder in liquid water
3. The mechanism of mobility of protons in aqueous solutions of acids
4. Amorphous ice
5. Models of the structure of liquid water

2002 year

Seminar No. 193 **29.10.2002**

249. Sarkisov G.N.

Institute of Theoretical and Experimental Biophysics of RAS, Pushchino

"MOLECULAR DISTRIBUTION FUNCTIONS OF STABLE, METASTABLE AND AMORPHOUS CLASSICAL MODELS"

Seminar No. 194 **19.11.2002**

250. Malenkov G.G.

Institute of Physical Chemistry of RAS

"ABOUT SELF-DIFFUSION OF WATER MOLECULES"

Seminar No. 195 **17.12.2002**

251. Zorkiy P.M.

Lomonosov Moscow State University

"THE PROCESS OF AGGLOMERATION OF LIQUID AND SOLID AROMATIC HYDROCARBONS. EXPLANATION OF MELTING TEMPERATURES"

2003 year

Seminar No. 196 **28.01.2003**

252. Bulienkov N.A.

Institute of Physical Chemistry of RAS

"SYSTEMS AND GOLDEN SECTION"

Seminar No. 197 **11.02.2003**

253. Rusanov A.I.

Saint Petersburg State University

"THEORY OF THE EQUATION OF STATE BASED ON EXCLUDED VOLUME"

Seminar No. 198 **18.03.2003**

254. Yaroslavtsev A.B.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"ION TRANSPORT IN SYSTEMS WITH HYDROGEN LINKS"

Seminar No. 199 **15.04.2003**

255. Bushuev Yu.G.

Ivanovo Institute of Chemical Technology

"COMPUTER MODELING OF WATER FROM CRYSTAL TO SUPERCRITICAL FLUID"

256. Volkov A.A., Tikhonov V.I.

A.M. Prokhorov Institute of General Physics of RAS

"ABOUT ORTHO AND STEAM WATER"

Seminar No. 200 **17.06.2003**

257. Feldman Yu.

Israel

"DIELECTRIC SPECTROSCOPY OF COMPLEX SYSTEMS: PROBLEMS AND SOLUTIONS"

Seminar No. 201 **30.09.2003**

258. Lomba E.

Spain

"RESPONSE METHOD AND THE ORNSTEIN-ZERNICKE INTEGRAL EQUATION IN THE THEORY OF THE LIQUID STATE"

Seminar No. 202 **28.10.2003**

259. Sobczyk L.

Poland

"HYDROGEN COMMUNICATION. ITS ROLE IN THE ORIGIN AND EVOLUTION OF LIFE"

Seminar No. 203 **25.11.2003**

260. Martynov G.A.

Institute of Physical Chemistry of RAS

"CRITICAL PHENOMENA, LAWS OF SIMILARITY AND EQUATIONS OF STATE OF SIMPLE LIQUIDS"

2004 year

Seminar No. 204 **10.02.2004**

261. Tiger R.P.

N.N. Semyonov Institute of Chemical Physics of RAS

"KINETICS OF MOLECULAR REACTIONS IN SOLUTIONS OF ALIPHATIC ALCOHOLS AS SELF-ORGANIZED SYSTEMS"

Seminar No. 205 **24.02.2004**

262. Ostrovsky V.E.

Karpov Research Institute of Physical Chemistry

"HYDRATE MODEL OF THE DNA-WATER SYSTEM"

Seminar No. 206 30.03.2004

263. Ivanov V.I.

V.A. Engelhardt Institute of Molecular Biology of RAS

"RIBOSOMA: A WAY TO DETERMINE WHAT MOTIONS IN IT ARE RESPONSIBLE FOR PROTEIN SYNTHESIS"

Seminar No. 207 01.06.2004

264. Churaev N.V.

Institute of Physical Chemistry of RAS

"STRUCTURAL FORCES IN THIN LAYERS OF LIQUIDS"

Seminar No. 208 09.07.2004

265. Kuznetsov A.M.

A.N. Frumkin Institute of Electrochemistry of RAS

"QUANTUM-MECHANICAL MODELS OF PROTON TRANSFER IN LIQUID SOLUTIONS"

Seminar No. 209 19.10.2004

266. Trakhtenberg L.I.

Karpov Research Institute of Physics Chemistry

"ROLE OF INTERMOLECULAR OSCILLATIONS AND REORGANIZATION OF REAGENTS DURING TUNNEL TRANSFER OF H⁺ ATOMS. EFFECT OF PRESSURE AND TEMPERATURE"

2005 year

Seminar No. 210 22.02.2005

267. Gaiduk V.I.

Institute of Radioengineering and Electronics of RAS

"ON THE ROLE OF PROTON TRANSFER IN THE FORMATION OF LONG INFRARED SPECTRA OF WATER AND ICE"

268. Lyaschenko A.K.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"STRUCTURAL DYNAMICS AND DIELECTRIC SPECTRUM OF WATER IN THE WHOLE REGION OF ORIENTATION POLARIZATION"

Seminar No. 211 15.03.05

269. Voelkov V.L.

Lomonosov Moscow State University

"BIOENERGY WATER"

Seminar No. 212 11.10.2005

270. Malenkov G.G.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"ICE POLYMORPHISM"

Seminar No. 213 15.11.2005

271. Smirnova N.A.

Saint Petersburg State University

"MACROSCOPIC PROPERTIES AND FORMS OF SELF-ORGANIZATION OF MIXED SURFACTANT SOLUTIONS"

Seminar No. 214 29.11.2005

IN MEMORY G.N. SARKISOVA

272. Maevsky E.I.

Institute of Theoretical and Experimental Biophysics RAS, Pushchino

"INTRODUCTION"

273. Martynov G.A., Vorobiev V., Apfelbaum E.
Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"SOME NEW RESULTS OF THE THEORY OF LIQUIDS"

274. Tovbin Yu.K.

Karpov Research Institute of Physical Chemistry

"DISCRETE DISTRIBUTION FUNCTIONS IN THE STATISTICAL THEORY OF MOLECULAR SYSTEMS"

Seminar No. 215 13.12.2005

275. Bazilevsky MV, Grigoriev FV, Sulimov VB, Leontiev IV.

Lomonosov Moscow State University

"EFFECT OF EXCEPTED VOLUME FOR LARGE AND SMALL SOLVATES IN WATER (THEORY OF HYDROPHOBIC INTERACTIONS)"

2006 year

Seminar No. 216 07.02.2006

276. Belashchenko D.K.

Moscow Institute of Steel and Alloys

"COMPUTER SIMULATION OF IRON IN THE CORE OF THE EARTH"

Seminar No. 217 21.03.2006

277. Tovbin Yu.K.

Karpov Research Institute of Physical Chemistry

"PHASE DIAGRAMS IN LIMITED VOLUMES"

Seminar No. 218

278. Kiselev M.G.

Institute of Solution Chemistry of RAS

"STRUCTURE OF HYDROGEN-BOUND CLUSTERS NEAR THE CRITICAL POINT BY THE METHOD OF COMPUTER SIMULATION"

Seminar No. 219

279. Feldman Yu.

Israel

"SPATIAL AND TEMPORAL SCALINGS IN PERKOLATED HYDROGEN BOND NETWORKS"

Seminar No. 220

280. Belashchenko D.K.

Moscow Institute of Steel and Alloys

"CLUSTER MECHANISM OF HOMOGENOUS CRYSTALLIZATION (COMPUTER RESEARCH)"

281. Martynov G.A.

Frumkin Institute of Physical Chemistry and Electrochemistry RAS

"SOME REMARKS ABOUT THE METASTABLE STATE OF SUBSTANCE"

Seminar No. 221

282. Zhelegovskaya E.A., Bulienkov N.A.

Frumkin Institute of Physical Chemistry and Electrochemistry RAS

"SURFACE WATER LAYER: ITS STRUCTURE, PROPERTIES AND ROLE AS A MATRIX IN THE SELF-ORGANIZATION OF COLLOIDAL SYSTEMS AND NANOMATERIALS BASED ON THEM"

Seminar No. 222

283. Bulienkov N.A.

Frumkin Institute of Physical Chemistry and Electrochemistry RAS

"HIERARCHICAL FRACTAL SYSTEM-FORMING STRUCTURES OF BINDED WATER AND SELF-ORGANIZATION ON THEM HETEROGENEOUS BIO- AND NANO-SYSTEMS"

2007 year

Seminar No. 223

284. Durov V.A.

18.04.2006

Lomonosov Moscow State University

"STRUCTURE, DYNAMICS AND PROPERTIES OF LIQUIDS: SUPER-MOLECULAR ORGANIZATION, LONG CORRELATION OF MOLECULES, MACROSCOPIC MANIFESTATIONS"

Seminar No. 224

285. Gaiduk V.A.

Institute of Radioengineering and Electronics of RAS

"MOLECULAR NATURE AND RESULTS OF ANALYTICAL CALCULATION OF LONG INFRARED SPECTRA OF ICE Ih"

Seminar No. 225

286. Voeikov V.L.

Lomonosov Moscow State University

"ROLE OF BOUNDARY WATER IN BIOLOGY"

Seminar No. 226

287. Martynov G.A.

Frumkin Institute of Physical Chemistry and Electrochemistry RAS

"THEORY OF CRITICAL PHENOMENA IN LIQUIDS"

288. Humpbacked Yu.I.

Institute of Experimental Mineralogy RAS, Chernogolovka

"TRANSITION OF LIQUID WATER IN A SUPERCRITICAL STATE"

289. Oparin R.D., Kiselev M.G.

Institute of Solution Chemistry of RAS

"FEATURES OF THE LOCAL STRUCTURE OF SUPERCRITICAL CARBON DIOXIDE WHEN TRANSITING THROUGH CRITICAL DENSITY"

290. Polezhaev V.I.

Institute for Problems in Mechanics RAS

"EQUILIBRIUM AND CONVECTION IN NEAR-CRITICAL CONDITIONS"

2008 year

Seminar No. 227

291. Anisimov M.A.

United States of America

"THERMODYNAMICS OF NANOSCALE"

Seminar No. 228

292. Anisimov M.A.

United States of America

03.04.2007

29.05.2007

04.12.2007

08.04.2008

09.04.2008

20.02.2007

"FLUCTUATION IN SOFT MATTER
(CRITICAL PHENOMENA)"

Seminar No. 229 **20.05.2008**

IN MEMORY N.A. CHUMAEVSKY

293. Novotortsev V.M.

N.S. Kurnakov IGIC of Russian Academy of Sciences

CREATIVE WAY PROF. N.A. CHUMAEVSKY

294. Naberukhin Yu.I., Voloshin V.P.

*Institute of Chemical Kinetics and Combustion SB
RAS, Novosibirsk*

"DISTRIBUTION OF LIFE TIMES AND
NON-LIFE OF HYDROGEN BONDS IN
COMPUTER MODELS OF WATER"

295. Skorikov V.M.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"OPTICAL PROPERTIES OF SINGLE
CRYSTALS WITH A STRUCTURE OF
SILLINITEANDEULETHINE-SCIENTIFIC
AND CREATIVE CONTRIBUTION TO
THEIR RESEARCH N.A. CHUMAEVSKY"

Seminar No. 230 **10.06.2008**

296. Voloshin V.P.

*Institute of Chemical Kinetics and Combustion SB
RAS, Novosibirsk*

"TOPOLOGICAL STABILITY OF THE
HYDROGEN BOND NETWORK IN
WATER WITH INCREASING DENSITY"

Seminar No. 231 **14.10.2008**

297. Belashchenko D.K.

Moscow Institute of Steel and Alloys

"APPLICATION OF THE SUBMERSIBLE
ATOM MODEL TO LIQUID METALS.
LIQUID SODIUM"

Seminar No. 232 **18.11.2008**

298. Savvatinsky A.I., Korobenko V.N.

Joint Institute for High Temperatures of RAS

"TRANSITION OF LIQUID CARBON
FROM SEMICONDUCTOR PROPERTIES
TO METAL-LIKE"

299. Voeikov V.L.

Lomonosov Moscow State University

ABOUT III INTERNATIONAL
CONFERENCE "WATER IN PHYSICS,
CHEMISTRY AND BIOLOGY"

2009 year

Seminar No. 233

27.01.2009

300. Lyashchenko A.K., Novskova V.A.

N.S. Kurnakov IGIC of Russian Academy of Sciences

Institute of Radioengineering and Electronics of RAS

"DIELECTRIC SPECTROSCOPY OF
WATER IN THE WHOLE AREA OF
ORIENTATION POLARIZATION"

Seminar No. 234

07.04.2009

IN MEMORY A.M. KUZNETSOVA

301. Corr. Memb. RAS Chizmadzhev Yu.A.,
Medvedev I.G.

*Frumkin Institute of Physical Chemistry and
Electrochemistry of RAS*

"SASHA KUZNETSOV MAN AND SCIENTIST"

302.¹Mazmutdinov R.R., ²Tsirlina G.A.

¹*Kazan State Technological University*

²*Lomonosov Moscow State University*

"VARIETY OF SOLVENT EFFECTS IN THE
KINETICS OF ELECTRODE PROCESSES"

Seminar No. 235

12.05.2009

303.¹Malenkov G.G., ²Naberukhin Yu.I.,
²Voloshin V.P.

¹*Frumkin Institute of Physical Chemistry and
Electrochemistry RAS*

²*Institute of Chemical Kinetics and Combustion SB
RAS, Novosibirsk*

"COLLECTIVE EFFECTS IN THE
DYNAMICS OF MOLECULES IN WATER.
COMPUTER MODELLING"

Seminar No. 236

02.07.2009

304. Tovbin Yu.K.

Karpov Research Institute of Physical Chemistry

"MOLECULAR MODELS AND
CONCENTRATION DEPENDENCES
OF VISCOSITY COEFFICIENTS IN THE
VOLUME PHASE AND INSIDE NARROW
PORES"

Seminar No. 237

06.10.2009

305. Ryzhkina I.S., Konovalov A.I.

*A.E. Arbuзов Institute of Organic and Physical
Chemistry, Kazan*

"AQUEOUS SOLUTIONS WITH LOW
AND SUPERLOW CONCENTRATIONS OF
DISSOLVED SUBSTANCES: FORMATION

OF SUPRAMOLECULAR NANOSIZED ASSOCIATES"

Seminar No. 238 **13.10.2009**

306. Lyashchenko A.K.

N.S. Kurnakov IGIC of Russian Academy of Sciences

XXXI INTERNATIONAL CONFERENCE
ON SOLUTION CHEMISTRY

307. Malenkov G.G.

*Frumkin Institute of Physical Chemistry and
Electrochemistry of RAS*

XVIII INTERN. CONF. "HORIZONS OF
HYDROGEN COMMUNICATION"

Seminar No. 239 **10.11.2009**

308.¹Bunkin N.F., ¹Suyazov N.V., ¹Shkirin A.V.,

¹Indukaev K.V., ²Ignatiev K.V.

¹Prokhorov Institute of General Physics of RAS

²LLC "Laboratories AMFORA"

"STABLE NANOBUBBLES OF DISSOLVED
GAS IN AQUEOUS SOLUTIONS OF
ELECTROLYTES"

Seminar No. 240 **15.12.2009**

309. Belovolova L.V., Glushkov M.V.

Prokhorov Institute of General Physics of RAS

"INFLUENCE OF AIR GASES AND
REACTIVE FORMS OF OXYGEN ON THE
PROPERTIES OF DILUTED AQUEOUS
SOLUTIONS"

2010 year

Seminar No. 241 **09.03.2010**

310. Tovbin Yu.K.

Karpov Research Institute of Physical Chemistry

"MOLECULAR THEORY OF SPHERICAL
DROPS IN THE STEAM PHASE"

Seminar No. 242 **18.05.2010**

311. Chaikov L.L.

Lebedev Physical Institute of RAS

"DYNAMIC LIGHT SCATTERING AS
A TOOL FOR MEASURING PARTICLE
SIZE AND DYNAMICS OF RELAXATION
PROCESSES"

312. Laptinskaya T.

Lomonosov Moscow State University

"LIGHT SCATTERING AS A METHOD
FOR STUDYING CHEMICAL SYSTEMS"

Seminar No. 243 **25.05.2010**

313. Feldman Y., Puzenko A.

Israel

SYMMETRIC BROADENING OF THE
SPECTRA OF COMPLEX DIELECTRIC
PERMEABILITY AND "STRANGE KINETICS"

Seminar No. 244 **28.10.2010**

314. Aseev V.

Finland

"SCATTERING OF LIGHT BY POLYMER
SOLUTIONS"

Seminar No. 245 **30.11.2010**

315. Chekalin S.

Institute of Spectroscopy of RAS

"FEMTOSECOND LASER SPECTROSCOPY"

Seminar No. 246 **21.12.2010**

316. Lyaschenko A.K., Lileev A.S., Novskova T.A.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"DIELECTRIC SPECTROSCOPY
OF AQUEOUS SOLUTIONS OF
ELECTROLYTES AND DYNAMICS OF
WATER IN HYDRATE SHELLS OF IONS"

2011 year

Seminar No. 247 **29.03.2011**

317. Polukhin V.A.

*Institute of Metallurgy, Ural Branch of the Russian
Academy of Sciences, Yekaterinburg*

"MELTING MECHANISMS DEPENDING
ON THE CHARACTER OF INTER-
ATOMIC CONNECTION AND NANO
LIMITS ACCORDING TO THE DATA OF
MD MODELING"

Seminar No. 248 **21.06.2011**

318. Stepanov S.V., Byakov V.M., Zvezhinsky D.S.

*Alikhanov Institute for Theoretical and Experimental
Physics*

"POSITRONIC ANNIHILATION
SPECTROSCOPY OF LIQUID MOLECULAR
MEDIA"

Seminar No. 249 **18.10.2011**

319. Belashchenko A.K.

Moscow Institute of Steel and Alloys

"ESTIMATION OF THE EARTH'S
CORE PROPERTIES BASED ON THE
SUBMERGED ATOM MODEL"

Seminar No. 250 **29-30.11.2011**

250 SESSION OF THE ALL-RUSSIAN SEMINAR ON STUDYING THE STRUCTURE OF LIQUIDS AND SOLUTIONS

320. Acad. of RAS Rusanov A.I., Nekrasov A.G.

Saint Petersburg State University

"DISCOVERY OF NANOSTRUCTURAL OPTICAL ACTIVITY OF SURFACTANT SOLUTIONS"

321. Tovbin Yu.K.

Karpov Research Institute of Physical Chemistry

"LOWER BOUNDARY OF THE SIZE OF APPLICABILITY OF THERMODYNAMICS"

322. Martynov G.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"CRITICAL PHENOMENA AND EQUATION OF STATE OF LIQUIDS AND GASES"

323. Malenkov G.G.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"COLLECTIVE EFFECTS IN THE MOTION OF MOLECULES IN LIQUIDS"

324. Novakovskaya Yu.V.

Lomonosov Moscow State University

"HYDROGEN CONNECTIONS - STATIC AND DYNAMIC MOTIVE"

325. Bul'yonkov N.A., Zheligovskaya E.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"PHYSICO-CHEMICAL AND BIOLOGICAL PROCESSES IN THE SURFACE WATER"

326. Trakhtenberg L.I.

N.N. Semyonov Institute of Chemical Physics of RAS

"INFLUENCE OF TEMPERATURE AND PRESSURE ON H-ATOM TUNNELING IN BIOLOGICAL SYSTEMS"

327. Voelkov V.L.

Lomonosov Moscow State University

"STABLE NON-EQUILIBRIUM STATE OF BICARBONATE WATER SYSTEMS"

2012 year

Seminar No. 251

27.03.2012

328. Revina A.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"STATE OF WATER IN RETURN MICELLES"

Seminar No. 252

25.05.2012

329. Geiger A.

Germany

"WHAT WE HAVE LEARNED FROM COMPUTER SIMULATION OF A COOLED, STRETCHED AND CONNECTED IN A CLOSED VOLUME OF WATER"

Seminar No. 253

29.05.2012

330. Naberukhin Yu.I., Anikeenko A.V., Voloshin V.P.
Institute of Chemical Kinetics and Combustion SB RAS, Novosibirsk

"LARGE-SCALE AND LONG-TERM CORRELATIONS IN WATER (NANOTURBULENCE !?)"

Seminar No. 254

08.10.2012

331. Feldman Yu.

Israel

"DIELECTRIC PROPERTIES OF BIOLOGICAL SYSTEMS"

Seminar No. 255

27.11.2012

332. Chechetkina E.A.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"SELF-ORGANIZATION OF CHEMICAL BONDS IN GLASS-FORMING SUBSTANCES"

2013 year

Seminar No. 256

22.01.2013

333. Novakovskaya Yu.V.

Lomonosov Moscow State University

"HYDROGEN CONNECTIONS - A CONNECTED SYSTEM OF CONNECTIONS BETWEEN ELECTRIC NEGATIVE ATOMS"

Seminar No. 257

31.01.2013

334. Sadlej J.

Poland

"WATER - ARE WE CLOSER TO GET TO KNOW THE SECRET OF LIQUID WATER?"

Seminar No. 258

23.04.2013

335. Zubavichus Ya.V.

Institute of Synchrotron and Neutron Research, National Research Center "Kurchatov Institute"



«ОТКРЫТИЕ НАНОСТРУКТУРНОЙ ОПТИЧЕСКОЙ АКТИВНОСТИ РАСТВОРОВ ПАВ»
А. И. Русанов



«ВОДОРОДНЫЕ СВЯЗИ – СТАТИЧЕСКИЙ И ДИНАМИЧЕСКИЙ МОТИВ»
Ю. В. Новаковская



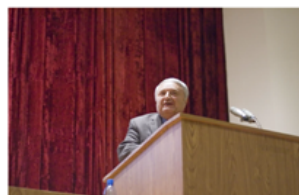
«НИЖНЯЯ ГРАНИЦА РАЗМЕРОВ ПРИМЕНИМОСТИ ТЕРМОДИНАМИКИ»
Ю. К. Товбин



«КОЛЛЕКТИВНЫЕ ЭФФЕКТЫ В ДВИЖЕНИИ МОЛЕКУЛ В ЖИДКОСТЯХ»
Г. Г. Маленков



«КРИТИЧЕСКИЕ ЯВЛЕНИЯ И УРАВНЕНИЕ СОСТОЯНИЯ ЖИДКОСТЕЙ И ГАЗОВ»
Г. А. Мартынов



«ВЛИЯНИЕ ТЕМПЕРАТУРЫ И ДАВЛЕНИЯ НА ТУННЕЛИРОВАНИЕ Н-АТОМА В БИОЛОГИЧЕСКИХ СИСТЕМАХ»
Л. И. Трахтенберг



«УСТОЙЧИВО НЕРАВНОВЕСНОЕ СОСТОЯНИЕ БИКАРБОНАТНЫХ ВОДНЫХ СИСТЕМ»
В. Л. Воейков



Е. А. Желиговская



Н. А. Бульненков

"STUDY OF LIQUID WATER AND WATER ICE BY SOFT RANGE X-RAY SPECTROSCOPY"

Seminar No. 259

04.06.2013

336. Tovbin Yu.K.

Karpov Research Institute of Physical Chemistry

"MOLECULAR THEORY OF THE SOLID - VAPOR/LIQUID PHASE TRANSITION"

Seminar No. 260

24.09.2013

337. Tchaikovsky Yu.V.

S.I. Vavilov Institute of the History of Natural Science and Technology of RAS

"BARRIER TO KNOWLEDGE"

Seminar No. 261

09.10.2013

338. Feldman Yu.

Israel

"VARIETY OF WATER STATES IN HETEROGENEOUS MATERIALS"

Seminar No. 262

11.11.2013

339. Kornyshev A.A.

Imperial College London

"IONIC LIQUIDS AT CHARGED SECTION BOUNDARIES AND IN NANOPORES - BASES OF THEORY AND APPLICATIONS"

2014 year

Seminar No. 263

11.02.2014

340. Stepanov S.V., Byakov V.M., Zvezhinsky D.S., Stepanov P.S.

A.I. Alikhanov Institute for Theoretical and Experimental Physics

"WHAT DO POSITRONS SAY ABOUT THE MELTING PROCESS IN MOLECULAR MEDIA?"

Seminar No. 264 **25.03.2014**

341. Kononov L.O.

N.D. Zelinsky Institute of Organic Chemistry RAS

"SUPER DIMENSIONAL" APPROACH - A NEW TOOL FOR STUDYING CHEMICAL REACTIONS IN SOLUTIONS "

Seminar No. 265 **08.04.2014**

342. Viktorov A.I.

Saint Petersburg State University

"SPATIAL NETS IN SOLUTIONS OF AGGREGATING CHAIN MOLECULES AND THEIR MOLECULAR-THERMODYNAMIC MODELING"

Seminar No. 266 **20.05.2014**

343. Zheligovskaya E.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"ROLE OF BONDED WATER STRUCTURES IN THE SELF-ORGANIZATION OF ORGANIC SYSTEMS ON THE SURFACE AND IN THE VOLUME OF WATER SOLUTION"

Seminar No. 267 **26.08.2014**

344. Feldman Yuri, Puzenko A., Ben Ishai P., Gutina A.

Israel

"DIELECTRIC RESPONSE OF INTERPHASE WATER - FROM ORDERED STRUCTURES TO A SINGLE HYDRATE SHELL"

Seminar No. 268 **21.10.2014**

345. Artyukhov I.V., Artyukhov V.I.

Max Planck Institute for Biology of Ageing

"MOLECULAR DYNAMIC SIMULATION OF PHASE TRANSITIONS IN THE WATER + XENON SYSTEM"

Seminar No. 269 **09.12.2014**

346. Kiselev M.G.

G.A. Krestov Institute of Chemistry of Solutions RAS, Ivanovo

"UNIVERSAL CORRELATIONS BETWEEN CHARACTERISTICS OF HYDROGEN

BONDS IN LIQUIDS AND SUPERCRITICAL FLUIDS"

2015 year

Seminar No. 270 **20.01.2015**

347. Martynov G.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"FLUCTUATION THEORY OF CRITICAL PHENOMENA IN LIQUIDS"

Seminar No. 271 **19.05.2015**

348. Belashchenko D.K.

Moscow Institute of Steel and Alloys

"ON GEOMETRY AND THERMODYNAMICS OF NANOCLUSTERS"

Seminar No. 272 **02.06.2015**

349. Voloshin V.P.

V.V. Voevodsky Institute of Chemical Kinetics and Combustion of SB RAS, Novosibirsk

"APPLICATION OF THE VORONOE-DELONE METHOD FOR CALCULATING THE VOLUMES OF ATOMIC STRUCTURES AND INTER-ATOMIC VOIDS, INCLUDING ON THE BOUNDARY OF DISSOLVED MOLECULES AND SOLVENT"

Seminar No. 273 **29.09.2015**

350. Boulyonkov N.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"GENERALIZED CRYSTALLOGRAPHY, AXIOMATICS OF SYSTEMIC MOLECULAR BIOLOGY AND THE ORIGIN OF LIFE ON EARTH"

Seminar No. 274 **20.10.2015**

351. Voeikov V.L.

Lomonosov Moscow State University

ABOUT X ANNUAL CONFERENCE ON PHYSICS, CHEMISTRY AND BIOLOGY OF WATER. VARNA, BULGARIA

352. Bul'yonkov N.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

AXIOMATICS OF SYSTEMIC MOLECULAR BIOLOGY

Seminar No. 275 **01.12.2015**

353. Sergeev N.M.

Lomonosov Moscow State University

PROTON EXCHANGE IN WATER (BASED ON NMR SPECTROSCOPY DATA)

2016 year

Seminar No. 276 **19.01.2016**

354. Boynovich L.B.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

SURFACE FORCES INDUCED BY STRUCTURING OF LIQUIDS IN NANOSIZED FILMS

Seminar No. 277 **22.03.2016**

355. Malenkov G.G.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

OWN STRUCTURES OF CONDENSED PHASES

Seminar No. 278 **29.03.2016**

356. Voloshin V.P., Naberukhin Yu.I.

V.V. Voevodsky Institute of Chemical Kinetics and Combustion of SB RAS, Novosibirsk

"RIGHT" AND "WRONG" HYDROGEN BINDINGS IN WATER

Seminar No. 279 **19.04.2016**

357. Fomin Y.D., Tsiok E.N., Ryzhov V.N.

L.F. Vereshchagin Institute for High Pressure Physics of RAS

"PHASE DIAGRAMS AND ANOMALOUS BEHAVIOR OF SYSTEMS WITH POTENTIALS WITH NEGATIVE CURVATURE"

Seminar No. 280 **26.04.2016**

358.^{1,2}Popov I., ¹Feldman Yu.

¹Israel

²Kazan Federal University, Tatarstan, Russia

"MECHANISM OF DIELECTRIC RELAXATION IN WATER AND IN ICE"

Seminar No. 281 **06.10.2016**

359. Kuzmin V.I.

MIREA-Russian Technological University

"PROTON EXCHANGE IN WATER (BASED ON NMR SPECTROSCOPY DATA)"

Seminar No. 282 **27.10.2016**

360.¹Stovbun S.V., ²Tverdislov V.S.

¹N.N. Semyonov Institute of Chemical Physics of RAS

²Lomonosov Moscow State University

"FROM NONLIVING TO LIVE MOLECULAR BIOLOGY AS A PERIODIC SYSTEM OF SYMBOLIC CHIRAL STRUCTURES"

Seminar No. 283 **15.11.2016**

361. Asadchikov V.E.

A.V.Shubnikov Institute of Crystallography. Federal Research Center "Crystallography and Photonics" RAS

"X-RAY METHODS FOR RESEARCHING THE INTERNAL STRUCTURE OF NOT FULLY ORDERED SYSTEMS"

Seminar No. 284 **01.12.2016**

362. Feldman Y., Popov I.

Israel

"DIELECTRIC RESPONSE OF WATER TO INTERACTION WITH DISSOLVED SUBSTANCE"

Seminar No. 285 **20.12.2016**

363. Martynov G.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"FLUCTUATION THEORY OF LIQUIDS"

2017 year

Seminar No. 286 **31.01.2017**

364. Tikhonov A.M.

P.L. Kapitza Institute for Physical Problems of RAS

"MOLECULAR STRUCTURES AND TWO-DIMENSIONAL PHASE TRANSITIONS AT THE OIL - WATER BOUNDARY ACCORDING TO SYNCHROTRON RADIATION SCATTERING DATA"

Seminar No. 287 **28.02.2017**

365. Malenkov G.G.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"STRUCTURES OF ELEMENTS OF GROUP IV AND SOLID PHASES OF WATER"

Seminar No. 288 **21.03.2017**

366. Bunkin N.F.

A.M. Prokhorov Institute of General Physics of RAS

"NANODROP HETEROGENEITY OF AQUEOUS SOLUTIONS OF A POLAR ORGANIC ON THE EXAMPLE OF A TETRAHYDROFURAN - WATER MIXTURE"

Seminar No. 289 **23.05.2017**

367. Guskov A.P.

Institute of Solid State Physics of RAS, Chernogolovka
 "SPINODAL DECOMPOSITION OF SOLUTIONS DURING FORMATION OF EUTECTIC STRUCTURE"

Seminar No. 290 **30.05.2017**

368. Voloshin V.P.

V.V. Voevodsky Institute of Chemical Kinetics and Combustion of SB RAS, Novosibirsk

"THE STRUCTURE OF THE LIPID BILAYER AND THE WATER SURROUNDING IT RELATIVE TO THE BOUNDARY BETWEEN THEM"

Seminar No. 291 **11.06.2017**

369. Naberukhin Yu.I.

V.V. Voevodsky Institute of Chemical Kinetics and Combustion of SB RAS, Novosibirsk

"COLLECTIVE VORTEX-LIKE MOTION IN A LIQUID. MOLECULAR DYNAMICS OF ARGON AND WATER "

Seminar No. 292 **26.09.2017**

370. Shnol S.E.

Institute for Theoretical and Experimental Biophysics of RAS, Pushchino

"INONESTABLE SCAN OF MEASUREMENT RESULTS" OF PROCESSES OF ANY NATURE AS A CHARACTERISTIC OF CHANGES IN THE SPACE-TIME METRIC"

Seminar No. 293 **24.10.2017**

371. Kalinichev A.

HSE University, Moscow; France

"STRUCTURE AND PROPERTIES OF WATER AND SOLUTIONS ON SURFACE AND IN NANOPORES OF CLAY, CEMENT AND OTHER INORGANIC MATERIALS"

2018 year

Seminar No. 294 **20.02.2018**

372. Malenkov G.G.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"STRUCTURAL AND DYNAMIC INHOMOGENEITY OF LIQUIDS"

Seminar No. 295 **27.03.2018**

373. Martynov G.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"FLUCTUATION THEORY OF LIQUIDS"

Seminar No. 296 **29.05.2018**

TO THE 100th ANNIVERSARY OF I.Z. FISHER

374. Malomuzh N.P.

I.I. Mechnikov Odessa State University, Ukraine

"REPORT DEDICATED TO THE 100TH ANNIVERSARY OF THE BIRTH OF THE FAMOUS SOVIET PHYSICIST PROFESSOR JOSEPH ZALMANOVICH FISHER, ONE OF THE CREATORS OF THE STATISTICAL THEORY OF LIQUIDS"

375. Rodnikova M.N.

N.S. Kurnakov IGIC of Russian Academy of Sciences

"MEMORIES"

Seminar No. 297 **05.06.2018**

376. Novakovskaya Yu.V.

Lomonosov Moscow State University

"MOLECULAR CLUSTERS WITH CONJUGATED HYDROGEN BONDS: STATIONARY AND DYNAMIC PROPERTIES"

Seminar No. 298 **19.06.2018**

377. Naberukhin Yu.I.

V.V. Voevodsky Institute of Chemical Kinetics and Combustion of SB RAS, Novosibirsk

"STUDY OF LARGE-SCALE COLLECTIVE MOTIONS IN LIQUID ARGON AND WATER BY THE METHOD OF MOLECULAR DYNAMICS"

Seminar No. 299 **28.06.2018**

378. Voloshin V.P.

V.V. Voevodsky Institute of Chemical Kinetics and Combustion of SB RAS, Novosibirsk

"DESCRIPTION OF THE ROTATION OF MOLECULES IN COMPUTER MODELS USING THE ALGEBRA OF QUATERNIONS"

Seminar No. 300 **05.07.2018**

379. Kornyshev A.

Imperial College London

"ELECTROCHEMICAL PHOTONICS"

Seminar No. 301 **09.10.2018**

380. Arie Ben-Naim

Israel

"HYDROPHOBIC-HYDROPHILIC FORCES IN PROTEIN FOLDING"

Seminar No. 302 11.12.2018

381. Stepanov S.V., Byakov V.M., Ilyukhina O.V., Bokov A.V., Karpov M.V.

National Research Center "Kurchatov Institute", A.I. Alikhanov Institute for Theoretical and Experimental Physics

"POSITRONIUM IN MELT WATER"

2019 year

Seminar No. 303 26.02.2019

382. Revina A.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"WATER IN RETURN MICELLES"

Seminar No. 304 23.04.2019

383. Skorb Ye.V.

Saint Petersburg National Research University of Information Technologies, Mechanics and Optics

"PHOTO-INITIATED PROCESSES

AT THE BOUNDARY OF A SEMICONDUCTOR AND pH OF REGULATED POLYMER NANOLAYERS"

Seminar No. 305 04.06.2019

384. Fomin Y.D., Tsiok E.N., Ryzhov V.N., Brazhkin V.V., ¹Trachenko K

L.F. Vereshchagin Institute for High Pressure Physics of RAS

¹*University of London*

"COLLECTIVE EXCITATIONS IN LIQUIDS AND SUPERCRITICAL FLUIDS"

Seminar No. 306 17.09.2019

385. Martynov G.A.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS

"STATISTICAL MECHANICS AND THE LAW OF LIKE BACHINSKY"

Seminar No. 307 08.10.2019

386. Kondratyuk N.D.

Moscow Institute of Physics and Technology, Dolgoprudny

"PREDICTION OF THE TRANSPORTATION PROPERTIES OF

HYDROCARBONS BY THE METHODS OF MOLECULAR DYNAMICS"

Seminar No. 308 12.11.2019

387. Kalinichev A.G.

France; National Research University "Higher School of Economics", Moscow

"SUPERCRITICAL FLUIDS IN NANOPORES AND ON THE SURFACE OF MINERALS AND CEMENT PHASES UNDER THE CONDITIONS OF GEOLOGICAL DEPOSIT OF CO₂"

Seminar No. 309 10.12.2019

388. Budkov Yu.A.

HSE University, Moscow; G.A. Krestov Institute of Chemistry of Solutions of RAS

"STATISTICAL THEORY OF SOLUTIONS OF MOLECULES WITH A COMPLEX ELECTRIC STRUCTURE: APPENDIX TO SOLUTIONS OF POLAR MOLECULES"

2020 year

Seminar No. 310 11.02.2020

389. Malomuzh N.P., Shakun K.S.

I.I. Mechnikov Odessa National University, Ukraine

"MD-MODELING OF COLLECTIVE TRANSFER OF MOLECULES IN ATOMIC LIQUIDS OF ARGON TYPE AND IN WATER"

Seminar No. 311 03.03.2020

390. Kononov L.O.

N.D. Zelinsky Institute of Organic Chemistry of RAS

"SUPREME ANALYSIS" OF SOLUTIONS USING POLARIMETRY, LIGHT SCATTERING AND OTHER METHODS: APPLICATION FOR STUDYING CHEMICAL REACTIONS IN SOLUTIONS"

2021 year

Seminar № 312 18.05.2021

To the 100th anniversary of O. Ya. Samoilov

391. Rodnikova M.N.

N.S.Kurnakov IGIC of RAS, Moscow

"OLEG YAKOVLEVICH SAMOILOV - THE AUTHOR OF THE DISCOVERY OF THE PHENOMENON OF NEGATIVE HYDRATION"

392. Malenkov G.G.

Frumkin Institute of Physical Chemistry and Electrochemistry of RAS, Moscow

"WHAT PROPERTIES OF NON-ELECTROLYTE SOLUTIONS DOES A DNA MOLECULE FEEL?"

393. Fomin Yu.D.

Vereshchagin Institute of High Pressure Physics of RAS, Troitsk

"COLLECTIVE EXCITATION OF SIMPLE LIQUIDS AND WATER"

394. Yashkichev V.I.

Moscow Pedagogical State University, Moscow

"HYDRATION-DEHYDRATION OF CELL CYTOSKELETON PROTEINS AND THE PROBLEM OF AGING".



N.S. Kurnakov IGIC of RAS, Assembly Hall

Seminar No. 312

18.05.2021

To the 100th anniversary of O.Ya. Samoilov

В Отделение физико-химии и
технологии неорганических матери-
алов АН СССР

Институт общей и неорганической химии АН СССР просит официально утвердить работающий при отделе редких элементов ИОНХ АН СССР Всесоюзный семинар по изучению структуры жидких растворов. Семинар был создан по инициативе проф. О.Я. Самойлова в 1961 году. В течение всех этих лет его ученым секретарем, а после смерти О.Я. Самойлова председателем является ст. науч. сотр. канд. хим. наук М.Н. Родникова. Семинар пользуется популярностью среди ученых, занимающихся вопросами структуры и динамики частиц в жидкостях и растворах. На его заседаниях ставятся доклады обзорного характера по теории, методам исследования и экспериментальным результатам в области жидкостей и растворов. М.Н. Родникова является членом секции растворов Комиссии по термодинамике при АН СССР и секции "Электролиты" при Комиссии по электрохимии при АН СССР. Ходатайства данных комиссий прилагаем.

Зав. отделом редких элементов ИОНХ АН СССР

академик

М.Н. Родникова

А.В. Танаанав

ноябрь 1986 г.

М.Н. Родникова
22.12.86 *Родн*

ПРЕЗИДИУМ АКАДЕМИИ НАУК СССР
БЮРО ОТДЕЛЕНИЯ ФИЗИКОХИМИИ И ТЕХНОЛОГИИ
НЕОРГАНИЧЕСКИХ МАТЕРИАЛОВ

ПОСТАНОВЛЕНИЕ

Протокол № 8 от 11 ноября 1986 г.
№ _____

г. Москва

О постоянно действующем Всесоюзном семинаре по изучению структуры жидких растворов
Докладчик – доктор хим. наук
Н.Т. Кузнецов

Бюро Отделения ПОСТАНОВЛЯЕТ:

Утвердить постоянно-действующий Всесоюзный семинар по изучению структуры жидких растворов, работающий при отделе редких элементов Института общей и неорганической химии им. Н.С. Курнакова АН СССР. Утвердить председателем указанного семинара кандидата хим. наук М.Н. Родникову.

Л.А. Академик-секретарь
Отделения
академик
Ученый секретарь
Отделения
доктор хим. наук

Н.М. Жаворонков

Н.Т. Кузнецов