RUSSIAN ACADEMY OF SCIENCES
DEPARTMENT OF EARTH SCIENCES, RAS
KARELIAN RESEARCH CENTRE, RAS
INSTITUTE OF GEOLOGY, KARELIAN RESEARCH CENTRE, RAS
LLC «KARELIAN INVESTMENT COMPANY «RBK»

PROGRAM

Conference with international participation

«SHUNGITE ROCKS OF KARELIA:
GEOLOGY, STRUCTURE, INNOVATIVE MATERIALS AND TECHNOLOGIES
«SHUNGITE 2020-2021»

29 June-1 July

Petrozavodsk

2021
June, 29
Conference Hall of Institute of Geology KRC RAS,
Room 422, Puskinskaya, 11, Petrozavodsk
and
on-line ZOOM

9.00-10.00 Registration

**Conveners: Kovalevski V.V., Deines Yu.E.**

10.00-10.10 Opening of the conference. Dr. Svetov S.A.


10.30-10.50 Chabanyuk D.A., Matveev V.A. (Petrozavodsk) Shungite Materials of the Zazhogino deposit, LLC NPK "Carbon-Shungit"

Section “Geological structure of shungite deposits”

10.50-11.10 Filippov M.M., Deines Yu.E. (Petrozavodsk) Prospects for the Discovery of a Shungite Deposit at the Nikonova Gora

Section “Litho- and geochemistry of shungite rocks; mineralogy of carbon and shungite rocks”

11.10-11.30 Kovalevski V.V. (Petrozavodsk) Shungite Carbon - Structural Features and Application to Technological Processes

11.30-11.50 Break

11.50-12.10 Van Zuilen M.A, Qu Y., Lepland A. (Trondheim) Structurally Heterogeneous Carbonaceous Matter And Mineral Templating Induced Graphitization In Karelian Shungite Rocks

12.10-12.30 Paiste K., Fike D.A., Kirsimäe K., Mänd K., Paiste P., Jones C., Lepland A., Prave A.R., Romashkin A.E. (St. Louis) Testing The Global Significance Of The Sulfur Isotope Record Of The Paleoproterozoic Zaonega Formation

12.30-12.50 Kreitsmann T., Lepland A., Bau M., Prave A., Paiste K., Mänd K., Romashkin A.E., Kirsimäe K. (Bremen) Rare Earth Elements And Carbon Isotope Record From The Carbonates Of The Zaonega Formation


13.10-14.00 Lunch Break

14.00-14.20 Rychanchik D.V., Romashkin A.E. (Petrozavodsk) Estimation of the concentration of proxy elements in the section of the Zaonega Formation, Mo and U isotopes and redox evolution


Study of Shungite Substance and Surface Water Composition of Shungite Deposits of Zaonezhye

Section “Physicochemical properties of carbonaceous matter and shungite rocks and their transformation under the influence of natural and man-made factors”

Comparative Raman Characteristics of Shungites and Metaanthracites of Contact-thermal Metamorphism

Shungite rocks are probable oil and gas source rocks?

Excursions to the Museum of Precambrian Geology

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Section “Scientific and technological aspects of the use of shungite rocks in large-scale industries (metallurgy, construction, agriculture, tires, rubber products, chemical complex, etc.)”

Study of EMR Absorption of Various Natures by Shungite-filled Elastomeric Composites

Development of a Technology for Producing Tire Rubber Mixtures with an Increased Dosage of Shungite

Study of the Possibilities of Using Shungite as a Carrier for the Ingredients of Rubber Compounds

New Research in the Field of Application of Shungite (Karelite) in Polymer Processing Industries

Shungite in Synergy with Microorganisms and Enzymes for Sustainable Agriculture with Zero Pesticide Residues

The Use of Shungite-bitumen Binder to Increase the Wear Resistance of Asphalt Concrete Pavements

Substantiation of the Possibility of Using Shungite as an Effective Radio-absorbing Material

Lunch Break

De Ales L., Vilcu L., Eremeev T. (Galazzano) Shungite in Synergy with Microorganisms and Enzymes for Sustainable Agriculture with Zero Pesticide Residues

Podolski Vl.P., Tyukov E.B., Chernousov D.I., Volkov V.V. (Voronezh) The Use of Shungite-bitumen Binder to Increase the Wear Resistance of Asphalt Concrete Pavements

Podolski Vl.P., Volkov V.V., Vnukov A.N. (Voronezh) Substantiation of the Possibility of Using Shungite as an Effective Radio-absorbing Material

Lunch Break

Golubev Ye.A., Antonets I.V., Shcheglov V.I. (Syktyvkar) Microwave reflective and absorbing properties of shungite microlayers
14.20-14.40  **Yadykina V.V., Vyrodova K.S. (Belgorod)** Scientific Background and Experience in the Use of Shungite in Road Construction Materials


15.00-15.20  **Break**

15.20-15.40  **Ikkonen E.N., Chazhengina S.Yu., Sidorova V.V. (Petrozavodsk)** Response of Onion Seedlings to Shungite Application


**Section “Innovative materials and technologies”**


16.20-16.40  **General discussion**

16.40-18.00  **Excursion to the Shungite Center**