



## PROGRAM

### **4<sup>th</sup> RUSSIAN RUBBER CONFERENCE (International)** **Rubber'2014: Traditions and Innovations**

*Location: Moscow, EXPOCENTRE FAIRGROUNDS*

*Organizers: NIIEMI LLC;*

*Lomonosow Moscow University of Fine Chemical Technology*

*General Sponsor: Orgkhim Biochemical Holding*

*Sponsor: SIBUR Holding OJSC*

*With Assistance: EXPOCENTRE FAIRGROUNDS*

*Media support: «Kauchuk i Rezina» magazine*

**April 23, 2014**

### **PLENARY SESSION**

*Congress Centre, Press Hall*

**The Chairman of the Plenary S.V. Reznichenko**

**09.15 – 10.00** Participants' Registration

**10.00 – 10.20** The Conference Opening. Welcoming speeches

**10.20 – 10.50** Analysis 2009-2013 and Development Perspectives of Russia Synthetic Rubber Industry

*V.I. Aksenov (NIOST LLC); A.I. Rakhmatullin (Sibur Innovation LLC); V.L. Zolotarev*

**10.50 – 11.20** Orgkhim Biochemical Holding: From Green Process Oils to Green Tires

*A.B Radbil; A.A. Schepalov; I.V. Zakharov, N.V. Khodov  
(Orgkhim Biochemical Holding)*

**11.20 – 11.50** Carbon Black Market Review

*I.P. Levenberg (MAKROchem®)*

**11.50 – 12.20** Synthetic Rubbers of Nizhnekamskneftekhim OJSC

*I.G. Akhmetov; A.G. Sakhabutdinov (Nizhnekamskneftekhim OJSC)*

**12.20 – 12.50** The Future of Tire Plants

*J. Peled (Pelmar Engineering Ltd, Israel)*

**12.50 – 14.00**

**Coffee - break**

**14.00 – 14.20** Tire Recycling System: Use of International Experience in the Organization of the Wastes of Production and Consumption Management

*A.N. Chernyshov (Association of Tires Producers)*

**14.20 – 14.40** Russian Tires Market Overview. Results 2013.

*M.M. Kuznetsov (GfK Retail and Technology RUSSIA)*

- 14.40 – 15.00 Designing a Rubber mixing Room**  
B. Milanese, Engineer (Italy)
- 15.00 – 15.30 PRESENTATION**  
**Products of NPP QUALITET LLC for Rubber Industry**  
A.S. Medzhibovskiy (NPP Qualitet LLC)
- 15.30 – 15.50 Coffee - break**
- 15.50 – 16.10 Nano-Mechanical Mapping of a Fractured «Shungite» Rubber**  
Dr. N. Severin, Dr. Jü.P. Rabe (Humboldt-Universität zu Berlin, Germany);  
Ju.A. Glebova; V.A. Shershnev (Lomonosov Moscow State University of Fine  
Chemical Technology)
- 16.10 – 16.30 On the Edge of the World Technology: Patent Research Opportunities**  
G.G. Busarev (Artpatent agency OJSC)
- 16.30 – 17.00 Scientific Publishing Indicators for Academics and R&D Organizations Using  
RSCI and Science Index**  
G.I. Zatsman (Scientific Electronic Library eLibrary.ru)

**April 24, 2014**

**SECTION MEETINGS**

**SECTION I. SYNTHETIC RUBBERS AND COMPONENTS OF ELASTOMERIC  
COMPOSITIONS**

*Congress Centre, Press Hall*

**The Chairman of the Section I.G. Akhmetov**

- 10.00 – 10.20 Modification of Titanium and Neodymium Catalysts for the Synthesis of  
1,4- cis-polyisoprene in a Turbulent Apparatus**  
V.P. Zakharov (Bashkir State University);  
I.Sh. Nasyrov; D.A. Zhavoronkov (Synthetiz-Kauchuk OJSC);  
V. Yu. Faizova (SNHZ OJSC); E.M. Zakharova (Institute of Organic Chemistry USC RAS)
- 10.20 – 10.40 Development of Butadiene-Styrene Synthetic Rubber Technology in Block Phase**  
A.M. Vagizov; I.G. Akhmetov; R.R. Galimov; I.G. Gazizov, A.G. Sahabudinov  
(Nizhnekamskneftekhim OJSC)
- 10.40 – 11.00 Investigation the Regularities of Synthesis of Butyl Rubber with the Use of zinc-  
based Catalyst Systems**  
E.A. Markina; O.V. Sofronova; S.M. Chelnokova; I.G. Akhmetov, A.G. Sahabudinov  
(Nizhnekamskneftekhim OJSC)
- 11.00 – 11.20 Improving the Preparation Stage Selfadhesion-reducing Agent for Synthetic  
Rubbers**  
I.Sh. Nasyrov; D.A. Zhavoronkov (Synthetiz-Kauchuk OJSC); V. Yu. Faizova (SNHZ OJSC);  
V.P. Zakharov; I.D. Zakirova; L.A. Murzina (Bashkir State University);  
E.M. Zakharova (Institute of Organic Chemistry of Ufa Scientific Centre RAS)
- 11.20 – 11.40 Experience of Application Disproportional Resin DisKas in the Production of e-  
SBR**  
V. Yu. Faizova; V.A. Sheludchenko; R.A. Kapanova (SNHZ OJSC)  
I.Sh. Nasyrov (Synthetiz-Kauchuk OJSC)
- 11.40 – 12.00 New Petroleum Resin on the Base of Isoprene. Synthesis, Structure and Practical  
Application**  
V.A. Rozentsvet (Institute of Ecology of the Volga River Basin RAS);  
N.P. Boreyko (FSUE «NIISK»)

12.00 – 12.40

**BREAK**

**The Chairman of the Section Eu.E. Potapov**

**12.40 – 13.00 On the Unification Possibility of Russian Carbon Black**

A.N. Novikov; G.I. Razdyakonova; V.A. Likhobov; O.A. Kokhanovskaya  
(Institute of Hydrocarbon Processing of Siberian Branch of RAS)

**13.00 – 13.20 Theoretical Aspects of Interaction of Polymers with Carbon Fullerenes**

T.I. Igumenova (Voronezh State University of Engineering Technologies)

**13.20 – 13.40 Development of the Technology of Obtaining of Substitute for Channel Carbon Black for Subsequent Organization of its Small Tonnage Production**

E.A. Maratkanova; G.I. Razdyakonova; V.A. Likhobov  
(Institute of Hydrocarbon Processing of Siberian Branch of RAS)

**13.40 – 14.00 Mechanical and Technological Properties Peculiarities of Elastomer Materials filled with Nanodispersed Mineral «Schungite»**

O.V. Boiko; Yu.V. Kornev; Yu.G. Yanovsky; S.V. Chirkunova  
(Institute of Applied Mechanics of RAS)

**14.00 – 14.20 Study of Possible Applications of «Shungite» (Karelit) in Formulations of Latex Rubber for the Manufacture of Gloves with High Resistant to Aggressive Environments**

E.S. Kravchenko; Eu.E. Potapov;  
(Lomonosov Moscow University of Fine Chemical Technology);  
A.P. Bobrov (Carbon Shungite LLC); G.K. Aseeva (NIIR OJSC);  
M.F. Plotnikova; A.E. Erohin (AP of RTP OJSC)

**14.20 – 14.40 Nanodispersed Mineral «Shungite» as a New Effective Filler for Elastomer Materials on the Basis of Special-purpose Rubbers**

S.V. Chirkunova; Yu.V. Kornev; Yu.G. Yanovsky; O.V. Boiko  
(Institute of Applied Mechanics of RAS)

14.40 – 15.00

**Coffee - break**

15.00 – 16.30

**«ROUND-TABLE» DISCUSSION**

**Congress Centre, Press Hall**

**New Ingredients on the Base of Natural Carbon- Containing Minerals  
for Elastomeric Compositions**

Moderator – Eu.E. Potapov

*Invite all Conference Participants*

16.30 – 17.00 Conference closing

**SECTION II. ELASTOMERIC MATERIALS AND ARTICLES**

**Congress Centre, SkyLight Hall**

**The Chairman of the Section S.I. Volfson**

**10.00 – 10.20 End-chain Modified Styrene-Isoprene-Butadiene Rubber**

S.I. Volfson (Kazan National Research Technological University);  
A.V. Budeeva; S.V. Turenko; P.S. Lempert (NIOST LLC)

**10.20 – 10.40 Development of Elastomeric Materials with Increased Cold Resistance Based on Propylene Oxide Rubber**

N.N. Petrova (Institute of Natural Sciences);  
V.V. Portnyagina (MK Ammosov North-Eastern Federal University, Yakutsk)

**10.40 – 11.00 Effect of Sulphidity of Silane Coupling Promotor on Tread Compound Properties**

N.E. Makarova; S.A. Shmeleva; A.A. Makhotin (Kama LLC Scientific & Technical Center);  
A.L. Zotov (Nizhnekamskshina OJSC); A.M. Mokhnatkin (MC Tatneft-Neftekhim LLC)

**11.00 – 11.30 PRESENTATION**

**Now and Future of Research and Development Work and Production of Medical Latex Products in the Research Complex NIIR OJSC**

V.S. Altzitsler; G.K. Aseeva; L.V. Gerbova; N.A. Romaniuk; S.V. Emelyanov  
(Research Institute of rubber and latex products OJSC)

**11.30 – 11.50 Rheological Behavior of Thermoplastic Vulcanizates**

E.V. Prut; T.I. Medintseva; D.V. Solomatin; O.P. Kuznetsova  
(Semenov Institute of Chemical Physics of RAS)

**11.50 – 12.00 Structural Characteristics Calculation of Nanocomposites Based on Dynamic Thermoplastic Elastomers**

S.I. Volfson; N.A. Okhotina; A.I. Nigmatullina.; O.A. Panfilova  
(Kazan National Research Technological University)

**12.10 – 13.00**

**BREAK**

**The Chairman of the Section O.V. Karmanova**

**13.00 – 13.20 Description of Stress-strain State of Rubber Defining Equations Based on Viscoelasticity**

Yu.A. Gamlitsky; M.V. Shvachich  
(STC «TRI» CLR, S&P Center of commercial VESKOM LLC);  
V.I. Mudruk (Bauman Moscow State Technical University)

**13.20 – 13.40 Basic Aspects of Creation of Medical Polymer Materials Steady to Bacterial Film Formation**

L.R. Lyusova; A.A. Ilyin  
(Lomonosov Moscow State University of Fine Chemical Technologies);  
L.S. Shibryaeva (Emanuel Institute of Biochemical Physics RAS);  
O.V. Makarov (Peoples' Friendship University of Russia)

**13.40 – 14.00 Influence of the Compositional Activators of Vulcanization on the Properties of Molded Rubbers**

O.V. Karmanova; L.V. Popova; T.V. Tarasevich  
(Voronezh State University of Engineering Technology);  
S.G. Tikhomirov (Sovteh LLC)

**14.10 – 14.20 Mechanical and Rheological Properties of Polymer Blends Containing Rubber Powders**

D.V. Solomatin; O.P. Kuznetsova; E.V. Prut; U.G. Zvereva  
(Semenov Institute of Chemical Physics, RAS)

**14.20 – 14.40 The Research of the Influence of the Modified Nanoclay on the Elastic Compounds**

M.N. Nagornaja; N.A. Tretjakova; S.J. Hodakova (FSUE «RPE «Progress»)  
A.F. Puchkov (Volzhskij politechnical institute (Branch of the Volgogradskij State Technical University)

**14.40 – 15.00**

**Coffee - break**

**15.00 – 16.30**

**«ROUND-TABLE» DISCUSSION**

**Congress Centre, Press Hall**

**New Ingredients on the Base of Natural Carbon- Containing Minerals  
for Elastomeric Compositions**

Moderator – Eu.E. Potapov

*Invite all Conference Participants*

**16.30 – 17.00 Conference closing**

*The program can be corrected*

## POSTER SESSION

### SECTION I. SYNTHESIC RUBBERS AND COMPONENTS OF ELASTOMERIC COMPOSITIONS

- 1 **Ultrasonic Treatment on the Titanium Catalyst in the Synthesis of Polydiene**  
V.P. Zakharov; I.D. Zakirova (Bashkir State University);  
E.M. Zakharova (Institute of Organic Chemistry Ufa Scientific Centre of RAS)
- 2 **Investigation the Influence of Brominated Butyl Rubber with Reduced Bromine Content and Unsaturation on Processing Properties of Raw Compounds**  
O.V. Sofronova; E.A. Markina; S.M. Chelnokova; I.G. Akhmetov; A.G. Sahabutdinov  
(Nizhnkamskneftekhimi OJSC)
- 3 **Research of Properties of the Butadiene-styrene Copolymerization Product by the Monte-Carlo Method**  
E.N. Miftakhov (Ishimbay branch of the Ufa state aviation technical University);  
T.A. Mikhailova (Sterlitamak branch of the Bashkir state University);  
I.Sh. Nasyrov (Synthetiz-Kauchuk OJSC);  
S.A. Mustafina (Sterlitamak branch of the Bashkir state University)
- 4 **Research of Properties of Elastomeric Compositions with High-disperse Carbon Additives**  
Z.S. Shashok; K.V. Vishnevsky; N.R. Prokopchuk; A.O. Duras; A.V. Leshkevich  
(Belarusian State Technological University)
- 5 **Study of Wettability of Shungite (Karelit) by Latex of NR and Effect of this Data on Some Technological Properties of Such Mixture**  
E.S. Kravchenko; M.A. Poldushov; Ye.E. Potapov; Yu.P. Miroshnikov  
(Lomonosov Moscow University of Fine Chemical Technology);  
A.P. Bobrov (Carbon Shungite LLC); G.K. Aseeva (NIIR OJSC);  
M.F. Plotnikova (AP of RTP OJSC)
- 6 **Influence of Polymer, Coal and Mineral Microfibers with Adhesion and Heat Shielding Properties of Elastomeric Compositions**  
V.F. Kablov; O.M. Novopoltseva; N.A. Keybal; K.Yu. Rudenko; A.A. Blinov  
(Volzhsky Polytechnical Institute, branch of Volgograd State Technical University)
- 7 **Polymer Compositions with Superfine Silicon Carbide**  
V.F. Kablov; V.S. Lifanov; V.G. Kochetkov; M.Ya. Loginova  
(Volzhsky Polytechnical Institute, branch of Volgograd State Technical University)
- 8 **Study of the Properties of Rubbers with Different Amine Antioxidants**  
G. A. Poldushova; K.L. Kandyrin; S.V. Reznichenko  
(Lomonosov Moscow State Academy of Fine Chemical Technology)
- 9 **Influence of Modifiers on Elastomer Blends Morphology**  
M.A. Poldushov; Y.P. Miroshnikov  
(Lomonosov Moscow State University of Fine Chemical Technology)
- 10 **Kinetics Vulcanization of Elastomer Compositions with Fluoropolymer Additives**  
V.D. Polonik; N.R. Prokopchuk; Z.S. Shashok  
(Belorussian State Technological University)
- 11 **Some Characteristic of Technological Properties of Elastomeric Compositions with the Composite Activator**  
S.N. Kayushnikov, (Belshina OJSC); K.V. Vishnevskii; N.R. Prokopchuk; Z.S. Shashok  
(Belarusian State Technological University)
- 12 **Study of the Efficiency and the Use of Antioxidant BC-1 Synthesized on the Basis of Alkylphenol Agidol-21 TT**  
V.Yu. Faizova; V.A. Sheludchenko; R.A. Kapanova (SNHZ OJSC);  
I.Sh. Nasyrov (Synthetiz-Kauchuk OJSC)

## SECTION II. ELASTOMERIC MATERIALS AND ARTICLES

- 1 **Influence of Oxidized Furnace Carbon Black on the Properties of Rubber**  
T.T. Rakhmatulin; A.A. Kanauzova; Yu.L. Morozov; L.G. Fomina; S.V. Reznichenko (NIIEMI LLC);  
G.I. Razdyakonova (Institute of Hydrocarbon Processing Siberian Branch of RAS)
- 2 **Reactive Hot Melt Sealants Based on Ethylenepropylenediene Rubber**  
L.I. Murtazina; A.R. Garifullin; I.A. Nikultsev; R.Yu. Galimzyanova; Yu.N. Khakimullin  
(Kazan National Research Technological University)
- 3 **High Fire Resistant Silicone Rubber Composition**  
V.M. Zaripova; R.N. Gadelshin; Yu.N. Khakimullin  
(Kazan National Research Technological University)
- 4 **Ground Vulcanizate in Elastomer Compositions**  
A.V. Kasperovich; V.V. Myadelets (Belarusian State Technological University)
- 5 **Application of Microwave Exposure for Manufacturing Products Made of Rubber Crumb**  
V.F. Kablov; V.P. Shabanova; V.A. Egorov  
(Volzhsky Polytechnical Institute, branch of Volgograd State Technical University);  
A.V. Perfiliev (Volzhsky Recycling and Tire Repair Plant CISC)
- 6 **Development Low-waste Technology Manufacture of Rubber Products**  
R.M. Dolinskaya; T.D. Sviderskaya (Belarussian State Technological University)
- 7 **The Research of the New Types Carbon Black in the Rubber Compound**  
E.A. Horova; S.J. Hodakova; N.A. Tretjkova (FSUE «RPE «Progress»);  
M.A. Karavaev (Omsktechuglerod LLC); A.A. Petin (NTZ Uglerodnuch Materialov» CISC)
- 8 **Nanoscale Titanium Dioxide in Rubber for Rubber Products of Nuclear Technology**  
V.A. Pankratova; I.M. Zemzereva; N.N. Bukanova (NIIEMI LLC);  
E.Y. Sudarikova (Ekos-1 CISC);  
G.M. Kuzmichyova (Lomonosov Moscow State University of Fine Chemical Technologies)
- 9 **Cold Resistance Spong Rubbers from SKMS-10 RKP**  
G.S. Arsenyeva; N.N. Bogdanova; N.N. Bukanova (NIIEMI LLC)
- 10 **The effect of vulcanization system composition on elastic deformation properties of tire rubbers**  
S.A. Perfileva (Belshina OJSC); Zh.S. Shashok;  
A.V. Kasperovich; K.V. Vishnevsky (Belarusian State Technological University)