

**ФГАОУ ВО «Севастопольский государственный
университет»**

**ФГАОУ ВО «Национальный исследовательский
технологический университет «МИСиС»**

ООО «ИНЛИНК»

**МЕЖДУНАРОДНАЯ НАУЧНО-ТЕХНИЧЕСКАЯ
КОНФЕРЕНЦИЯ**

INTERNATIONAL CONFERENCE

**«INTELLIGENT MANUFACTURING AND MATERIALS
2021»**

ЯЛТА

01 – 05 марта 2021 г.

March 01-05, 2021

Yalta, Russia

НАУЧНАЯ ПРОГРАММА

SCIENTIFIC PROGRAM

КОМИТЕТЫ (COMMITTEE)

ПРЕДСЕДАТЕЛЬ ОРГКОМИТЕТА (CHAIR)

Prof. Sergey Bratan (Sevastopol State University, Sevastopol, Russia)

СОПРЕДСЕДАТЕЛЬ ОРГКОМИТЕТА (CO-CHAIR)

Prof. Alexander Glezer (National University of Science and Technology «MISIS», Moscow, Russia)

МЕЖДУНАРОДНЫЙ ПРОГРАММНЫЙ КОМИТЕТ (INTERNATIONAL PROGRAM COMMITTEE)

Prof. Zakaria Boumerzoug (University of Biskra, Algeria)

Prof. Kapil Gupta (University of Johannesburg, South Africa)

Prof. U. Abdulgazis (Crimean. Eng. and Ped. Un., Russia)

Prof. T. Duyun (Belgorod St. Technol. Un., Russia)

Prof. V. Smolentsev (Voronezh State Tech. Un., Russia)

Assoc. Prof. A. Giutuni (Tunis Tech. University, Tunisia)

Assoc. Prof. G-J. Jasper (Plymouth University, United Kingdom)

Prof. R. Kasper (OVG University Magdeburg, Germany)

Prof. Z. Sharifov (Azerbaijan Technical. University, Azerbaijan)

Prof. A. Kozlov (Lipetsk State Tech. Un., Russia)

Prof. A. Suslov (Moscow State Industrial University, Russia)

Prof. V. Gusev (Donetsk National Tech. Un., Ukraine)

Prof. A. Korotkov (Kuzbas State Tech. Un., Russia)

Prof. V. Nosenko (Volgograd State Tech. Un., Russia)

Prof. A. Feofanov (STANKIN, Russia)

ОРГАНИЗАЦИОННЫЙ КОМИТЕТ (ORGANIZING COMMITTEE)

Assoc. Prof. A. Kolesov (Sevastopol State Un., Russia)

Assoc. Prof. A. Tarakhovskiy (Sevastopol State Un., Russia)

Assoc. Prof. D. Sidorov (Sevastopol State Un., Russia)

Mrs. Marina Roshchupkina (INLINK Ltd, Russia)

СЕКРЕТАРЬ (SECRETARY)

Assoc. Prof. S. Roshchupkin (Sevastopol State Un., Russia)

К СВЕДЕНИЮ УЧАСТНИКОВ

ПРИБЫТИЕ участников конференции 01 марта 2021 г.

МЕСТО ПРОВЕДЕНИЯ - Отель Ялта Интурист, ул. Дражинского 50, Ялта, Крым, Россия

РЕГИСТРАЦИЯ участников 01 марта (с 14.00 до 18.00), главный холл.

Порядок работы конференции

01 марта, понедельник

14.00-18.00 – Прибытие, регистрация, размещение участников конференции

02 марта, вторник (конференц-зал «Висла», 16 этаж)

10.00-11.00 – Открытие конференции

11.00-18.00 – Секционные заседания (с перерывами на обед и кофе-брейки)

03 марта, среда

09.00-13.00 – Заслушивание докладов в режиме видеоконференции

13.00-14.00 – *Перерыв на обед*

С 14.00 Экскурсия (бесплатная)

04 марта, четверг

10.00 - Культурная программа. Экскурсии по достопримечательностям Крыма (за дополнительную плату). С перечнем экскурсий можно ознакомиться при регистрации.

05 марта, пятница

9.00-10.00 – Заключительное пленарное заседание.

Заккрытие конференции.

Рабочие языки – русский, английский

Регламент

Продолжительность устных докладов – 10-12 минут, включая ответы на вопросы.

Формат презентации: Power Point, pdf, doc.

Загрузка докладов на компьютер ассистента руководителя секции осуществляется только перед началом работы секции. При необходимости руководитель секции может вносить изменения в порядок выступлений.

Стендовые доклады – в формате А1 (вертикальное или горизонтальное расположение).

Session 1: Additive Technologies (Аддитивные технологии)

1.1 Experimental Investigation of Nozzle Clogging Using Vibration Signal-Based Condition Monitoring for Fused Deposition Modeling

D. Jhodkar, A. Nayak and K. Gupta

1.2 Mortar for 3D Printing Based on Gypsum Binders

E. Potapova, G. Tatiana, S. Kirill and H. Fischer

1.3 Determining the Optimal Mode of the Inconel 718 Alloy Deposition at a Direct Laser Deposition Plant

M. Oleynik, A.I. Khaimovich and A.V. Balaykin

1.4 Modeling and Optimization of Additive Systems Based on Intelligent Technologies

I. Lvovich, Y. Lvovich, A. Preobrazhenskiy, O. Choporov and E. Ruzicky

1.5 Additive Technologies in Manufacturing and its Industry

D. Kurasov

1.6 Investigation of the Peculiarities of Deformation and Fracture of Metals Obtained on the Basis of 3D Printing with Registration of an Acoustic Emission Signal

M. Anosov, Y.G. Kabaldin, D. Shatagin, D. Ryabov and P. Kolchin

1.7 Cold Resistance and Mechanical Properties of 07Cr25Ni13 (ER309LSI) Stainless Steel Obtained by 3D Printing by Electric Arc Surfacing on a CNC Machine

D. Shatagin, M. Anosov, P. Kolchin, D. Ryabov and A. Kiselev

1.8 Influence of Surfacing Modes on the Formation of Pores in the Deposited Metal Produced by Wire Arc Additive Method (WAAM) Using Al-Mg Alloy

A. Kurakin, I. Strukov, I. Skoblikov, V. Karpov and E. Efimov

1.9 Kinematic Error Modeling of Delta 3D Printer

A. Kochetkov, T.N. Ivanova, L. Seliverstova and O. Zakharov

1.10 Towards the Possibility of Additive Manufacturing of XNA-Based Devices Using Molecular Engineering Principles

O.V. Gradov, I. Maklakova, M.A. Gradova, A.I. Sergeev and Y.K. Naganovskiy

1.11 Measurement Assurance of Additive Manufacturing on the Example of Laser Surface Polishing Products by Remelting

A. Kransutskaya, V. Funtikov, A. Syritskii and A. Komshin

1.12 Stress Simulation of the Structure of a Stretch Die Made by Fused Deposition Modeling

A. Koshkina, K. Evgeny, M. Alexander and A. Alexander

1.13 Optimization of Temperature Regimes of the Hotend for Devices of Additive Manufacturing

A. Sinev, R. Panasenko, V. Petrenko, A. V. Berestov and Yu. Bozhko

1.14 Sample Printing Device for Additive Manufacturing of Electronic Housings

A. Sinev, R. Panasenko, V. Petrenko, G. Baryshev and A. V. Berestov

Session 2: Materials Science (Материаловедение)

2.1 Creation of Basalt Plastics with Different Types of Hybrid Matrices

E. Kosenko, N. Baurova and V. Zorin

2.2 Research on the Synthesis of Propants Applied for Oil Production by the Method of Hydraulic Facing

E.A. Yatsenko, B.M. Goltsman, A.A. Chumakov, N.A. Vil'bitskaya and W.S. Li

2.3 New Technologies for Producing Multifunctional Reinforced Carbon Plastics

V. Neluyb, G. Malysheva and I. Komarov

2.4 Application of an Ultra-Compact Eddy-Current Transducer for Investigation of Defects in Welded Joints of High-Strength Steel

V.N. Malikov, A. Ishkov and L. Nikonov

2.5 Research of High-Speed HFC-Boriding Kinetics

V.N. Malikov, A. Shegolev and A. Ishkov

2.6 Experimental Studies of Conductive Paths of Printed Circuit Boards by Using Subminiature Eddy Current Transducers

V.N. Malikov, M. ANANYEV, A. Ishkov and L. Nikonov

2.7 Accelerated Weathering Testing of Polypropylene Tank Materials

A.M. Suleymanov, E.B. Tuisina, L.N. Shafigullin, R. Rinberg and A.T. Gabdrakhmanov

2.8 Membrane Surface Morphology before and after the Reversible Hydrogen Doping of Diffusion Filters

O. Akimova, I. Tereshina, T.P. Kaminskaya and I. Karateev

2.9 The Peculiarities of Mass Transfer in the Surface Layer of Materials under Extreme Heating

A. Brover, G. Brover, O. Moysova and V. Yankovskaya

2.10 Modeling and Simulation of Non-Contact Base Excited AFM

M.R. Bahrami

2.11 Influence of the Form Factor on the Results of the Fracture Process Modeling under Uniaxial Tension

A. Taube, R. Novikov and E.I. Storozheva

2.12 Comparative High-Field Magnetization Study of $(\text{Sm,Er})_2\text{Fe}_{17}$ and $\text{Er}_2\text{Fe}_{17}$ Compounds and their Nitrides

L.A. Ivanov, M. Paukov, I. Tereshina, S. Veselova, O. Akimova, V. Verbetsky and D.I. Gorbunov

2.13 Diagrams of isothermal decomposition of overcooled Austenite in maraging Steel at uniaxial tensile Loading

T. Makhneva, A.A. Sukhikh, V.B. Dementiev and S.S. Makarov

2.14 Dependence of Surface Profile on Diamond Impregnation Characteristics

N. Khripunov

2.15 The Patterns of Phase Composition and Properties of High-Calcium Low-Density Ceramics Formation Based on Argillous Raw Materials of Various Chemical and Mineralogical Composition

N. Yatsenko, A. Yatsenko, N.A. Vil'bitskaya, O. Sazonova and R. Savanchuk

2.16 Experimental Investigation on Developing Electroless Nickel Phosphorous Coating of a Novel Aluminium Nanocomposite

G. Jeyaraj, R. Elansezhian and K. Veerapan

2.17 Neural Network Modeling of the Fatigue Strength of Metal Materials at Low Temperatures

Y.G. Kabaldin, A.A. Khlybov, M. Anosov, D. Ryabov and A. Kiselev

2.18 Obtaining of Coatings from Ni-Al by Electro Spark Deposition and Surface Smoothing by Ultrasonic Plastic Deformation

S.N. Khimukhin, K.P. Eremina and S.V. Nikolenko

2.19 Research on Chrome Plating Quality of the Internal Surfaces in the Hydraulic Drives with Hydrostatic Guideways

D.V. Ardashev, N. YUSUBOV, L.V. Shipulin and A. Degtyareva-Kashutina

2.20 Novel Materials for Myco-Decontamination of Cyanide-Containing Wastewaters through Microbial Biotechnology

I. Pavlov and Y. Litovka

2.21 The Laboratory Installation for the Research of Thermal Conductivity Materials in Powdery State under High Pressure

D. Elovenko, P. Pimshtein and K. Kuznetsov

2.22 The Influence of Elastic Nonlinearity on Wave Processes in Media with Dislocations

V. Erofeev, A. Malkhanov and A. Shekoyan

2.23 Analysis the Causes of Quality Defects in a Car Rack

J. SITKO, K. Midor and T.N. Ivanova

2.24 Production of Colored Phosphate Coatings on Steel

V. Konovalova and V. Rummyantseva

2.25 Influence of Additive's Concentration on the Temperature Conditions for the Formation of the Solid Solutions of the System $MgAl_2O_4-Ga_2O_3$

A. Ulianova and M. Senina

2.26 Research of Low-Alloy Steel Powder Produced by Plasma Spray

A.T. Gabdrakhmanov, A.T. Galiakbarov, I.H. Israfilov, L.N. Shafigullin and A. Tsoi

2.27 Investigation of Entropy Change and Kinetics Martensitic Transformations in TiNi Alloy Using Differential Scanning Calorimetry and Relationship with Microstructure

A. Churakova, E. Kayumova and D. Gunderov

2.28 Functional Gradient Heat-Resistant Materials Manufactured by Spark Plasma Sintering

S. Oglezneva, M. Kachenjuk, A. Smetkin and V. Savich

2.29 Influence of the technology of obtaining the material of the cathode of the Cu – Fe system at the depth of penetration of ions into the titanium target

V.V. Ovchinnikov, E.V. Luk'yanenko, I.A. Kurbatova, S.V. Yakutina and N.V. Uchevatkina

2.30 Influence of the Structural State of Titanium Alloy on the Depth of Penetration of Ions during Implantation

V.V. Ovchinnikov, S.V. Yakutina, I.A. Kurbatova, E.V. Luk'yanenko and N.V. Uchevatkina

2.31 Changing the Sizes of Details Made of Aluminum Alloys during Microarc Oxidation Process

O. Tchufistov, E. Tchufistov and A. Zolkin

2.32 Structural Features and Distribution of Silicon in Ferrosilicon-Magnesium Modifiers

D. Boldyrev, S. Platov, M.V. Kharchenko and N. Urtsev

2.33 Study of the Influence of the Shape of Internal Cavities on the Nature of Wave Strain Hardening

A. Kirichek, S. Barinov and D. Umnov

2.34 Influence of the Initial Grain Size on the Structural-Phase State of the VT20 Titanium Alloy Surface after Implantation

V.V. Ovchinnikov, I.A. Kurbatova, E.V. Luk'yanenko, N.V. Uchevatkina and S.V. Yakutina

2.35 Composition and Properties of High-Entropy CrZrTiNiCu Coating

E. Eremin, V. Yurov and S. Guchenko

2.36 The Formation of Delta-Ferrite Phase during the Thermal Deformation Treatment of Corrosion-Resistance Steel 14Cr17Ni2

G. Gavrilov, V. Galkin, P. Yavtushenko, E. Marinin and A. Fomichev

2.37 Research of Dispersion Characteristics of the Surface of SiO₂ Thin Films Obtained by Etching to Create Vertical PTS-ADC Diffraction Grates

V. Florentsev, G. Baryshev, V. Shilov and A.P. Biryukov

2.38 The Study of the Formation Process of Microstructure and Properties during Laser Alloying of the Surface of the Structural Steels

G. Gavrilov, E. Marinin, P. Yavtushenko, N. Uglov and K. Razheva

2.39 Investigation of the Effect of Hardening Heat Treatment Modes on the Properties of Products Made of Silicon-Nickel Bronze

E. Marinin, D. Sergeev and A. Pogudina

2.40 Improvement of Thermal Conductivity for Carbon Fabric Composites Base on the Fabric Structure

P. Thant Kyaw, P.P. Maung and G. Malysheva

2.41 Wear Resistance of Experimental Hard Alloys Grades with Co-Mo-Ti Binders upon Conditions of Friction without Lubricant on Stainless Steel

E. Fominov, M. EGOROV, D. MOISEEV, E. Dieudonne and C. SHUCHEV

2.42 About Determining the Microhardness of Composite Coatings

Z. Sergey Yurevich, Z. Anatoly Ivanovich, N. Penkov, K. George Vladimirovich and T. Paul Vladimirovich

2.43 Influence of Heat Treatment on Structure and Durometric Properties of Coatings Obtained by Surfacing with ПНЛ-04Х27Н7М3Л2Т Cast Rods

A. Nazarko and R. Plomodialo

2.44 Structure and Properties of a Local Diffusion Discrete Coating Applied to High Speed Steel

E.A. Chekalova and A.V. Zhuravlev

2.45 Investigation of the Properties of Heat-Protective Coatings to Improve the Performance of Products

V. Smolentsev, N. Nenahov and N. Potashnikova

2.46 Investigation of Mechanical Properties of Silk and Epoxy Composite Materials

N.A. Akeel, V. Kumar and O. Zaroog

2.47 The Study of the Effect of Thermal Deformation Treatment Modes on the Microstructure and Properties of the Heat-Resistant Nickel Alloy VZH159

G. Gavrilov, V. Galkin, A. Ryabcev, A. Generalov and E. Bazhenov

2.48 Experimental and Analytical Determination of the Coefficient of Dynamic Loading in the Contact Interaction of Bodies

D. Borodin, D. Misirov, S. Semergey, Y. Borzilov and V. Yeroenko

2.49 Development of a Method for Obtaining a Wear-Resistant Coating for a Cutting Tool

A. Litvinov, V.U. Buzko, E.Y. Balaev and A.I. Goryachko

2.50 Study of the Effect of Tungsten Carbide Nanopowder Agglomerate Additives on the Strength Properties of Carbon Fiber-Reinforced Plastic

V.M. Gavrish, T. Chayka, A. Oleynik and O. Gavrish

2.51 Features of Obtaining Multicomponent Magnetron Targets for the Formation of Non-Porous Transformation-Hardenable Coatings of a Given Composition

R. Plomodialo, D. Dmitrenko and Z. Blednova

2.52 Studies of Magnetically Active Silicone Elastomers on a Vibrostend

A. Minaev, J. Korovkin, H. Valiev, G.V. Stepanov and D.Y. Borin

2.53 The Structure and Properties of Dispersed Aluminium Composite Compounds Made by Welding Friction with Mixing

A.N. Feofanov, V.V. Ovchinnikov and A.M. Gubin

2.54 Influence of Mechanical Activation and Mechanical Alloying on the Structure, Phase State of the Fe-Ni-Co-Al-Nb Powder Composition and on High-Entropy Coatings Based on it

Z.M. Blednova, E.Y. Balaev and A.P. Jurkova

2.55 The Life Extension for Parts and Units of Mining Machines Using Anti-Adhesive Materials

L.I. Andreeva

2.56 Analysis of Phase Composition and Properties of Composite Nickel-Phosphoric Coatings Using Wear-Resistant and Antifriction Modifying Agents

I. Shcherbakov

Session 3: Materials Processing Technologies (Технологии обработки материалов)

3.1 Theory of Formation of Edge's Surface Roughness Finished by Radial Polymer-Abrasive Brushes

D. Podashev

3.2 Experimental Studies of Deformation and Temperature Processes Mandrelling in the deform-3d System

M. Selemenev, A. Cherepenko, E. Zvyagina, A. Tkachenko and E. Selemeneva

3.3 Features of Mechanical Treatment of Zirconia Crystals when Manufacturing Dies

V. Alisin, M. Borik, A. Kulebyakin, E. Lomonova and D. Gutsev

3.4 Experimental and Computational Method for Determining Temperature Stresses in the Welding of Structures Made of Carbon and High-Alloy Structural Steels

L. Mironova, R. Nigay and N. Evgeny

3.5 Isothermal Crimping of Thick-Walled Shells

A. Pasyнков, S. Nedoshivin and N.S. Pasynkova

3.6 Crimping Power Modes with Thinning of the Deformable Element of the Steel Pipe

S.N. Larin, V. Platonov and O. Tkach

3.7 Drawing of Square Blanks in a Cylindrical Die with Controlled Movement of the Edges

S.N. Larin and N. Samsonov

3.8 Optimization of Cutting Conditions with an End Mill According to the Criterion of the Smallest Amplitude of Vibration

D. Topolov and I. Boldyrev

3.9 Numerical Simulation of the Laser Infusion Process of a Ni-Cr-B-Si Cover Strengthened with Zirconium Oxide Particles

V. Alisin, M. Roshchin and J. Gladyszewski

3.10 Investigation of Influence of Magneto-Hydrodynamic Processes on Structure Formation and Alloying of Steels by Electroslag Remelting

E. Kuzmichev, P.V. Igumnov, V.K. Khe and A.E. Skiruta

3.11 Milling of Electron Beam Melting Ti-6Al-4V by HSS Instrument with Combined Surface Treatment

S. Fedorov, S. Fedorov, T. Oo and E. Mustafaev

3.12 Science-Based Technologies in the Manufacture Liquid Rocket Engines Filter Element Channels

A. Ryazantsev, A. Shirokozukhova and O. Shipilova

3.13 Grinding of High-Strength Materials

T.N. Ivanova, W. Biały, J. Sitko, K. Midor and A. Muzyemnek

3.14 Development of the Device and the Complex-Profile Tool for Obtaining Channels in the Turbopump Units Bodies

A. Ryazantsev, S. Yukhnevich and I. Lomakin

3.15 Solving the Inverse Problem of Recovering the 3D Surface of a Detail According to its 2D Projections in the Modelling of Electroplating Processes

I. Solovjeva, D. Solovjev and Y. Litovka

3.16 Determination of Rolling Mill Roller Load during Procurement Transportation

M. Androsenko, I. Savelyeva, I. Krayniy, I. Demidov and I. Deeva

3.17 Algorithm of Strength Calculation of Drive Elements of a Roller Conveyor

M. Androsenko, N. Tyuteryakov, E. Kulikova, L. Deryabina and I. Krayniy

3.18 Residual Stresses Determination near FSW Joints by Combining the Hole Drilling Method and Reflection Hologram Interferometry

A.V. Chernov, I. Odintsev and V.S. Pisarev

3.19 Technology for Producing Fine Tungsten Carbide Powders

A. Zverovshchikov and K. Kolmakov

3.20 Evaluation of the Possibilities of Processing High-Alloy Corrosion-Resistant Steels during Grinding Operations

A. Romanenko, D. Shatko, A. Nepogozhev and P.A. Strelnikov

3.21 Cyber-Physical Hybrid Processing System Digital Twin

D. Shatagin, A. Galkin, A. Osmehin and N. Klochkova

3.22 Study of the Silicon Carbide Wear Area after Micro-Scratching of Titanium, Zirconium, Niobium and Molybdenum at a speed of 35 m/s

V.A. Nosenko, A.V. Fetisov, S.V. Nosenko, V.G. Karpov and V.Y. Puzyrkova

3.23 Properties of Vibro-Abrasive Treatment by Combination the Kinds and Granulometric Characteristics of the Medium

Y. Kolganova, A. Azarova, B. Soldatov, N. Koval and G. Sanamyan

3.24 Modification of the Surface of a Reconditioned Cutting Tool via Laser Ablation

E. Yagyaev and S. Akimov

3.25 Controlled Process of Crystallization in Weld Pool

V. Melyukov and E. Marinin

3.26 Mathematical Modeling of Process Optimization in Profiling Grinding Wheels via Laser

E. Yagyaev and I.B. Sefedin

3.27 Research of the Influence of the Physical and Mechanical Properties of the Workpiece Material on the Temperature Field of the Turning Process

A. Unyanin and P. Finageev

3.28 Improvement of Method and Mechanism for Conical and Paraboloid Springs Hardening

N. Zemlyanushnov and N. Zemlyanushnova

3.29 Modeling of the Contact Interaction of the Tool Indenter with the Part Surface when Processing by Surface Plastic Deformation Methods

V. Fyodorov, M. Nagorkin, M. Kheifetz and E. Polsky

3.30 Investigation of Residual Stresses during Processing of GTE Blades with Microbeads

Y. Kurguzov, N. Nosov and D. Lyushnya

3.31 Evaluation of the Manufacturability of "shaft"-type Parts with the Use of Complex Methods

A. Sychugov, Y. Frantsuzova and V. Salnikov

3.32 Modeling the Deformation of Non-Rigid Shafts during Turning on CNC Machines

N. Matseyan and N. Nosov

3.33 Thermal Unit with Controlled Distribution of Flow Speeds of Processed Raw Materials in Zones of Electrified Modules

A. Nigegorodov, A. Gavrilin, B. Moyzes, K. Kuvshinov and S. Sakipova

3.34 Analytical Modeling of Cutting Forces and Technological Parameters Interrelation when Grinding Shafts` Ends by a Grinding Wheel End on Circular Grinding Machines

S. Yudin, P. Pereverzev and B.A. Reshetnikov

3.35 Forecasting of the Possibility of Fragile Destruction Top of Cutting Blade of a Thread Forming Tool

M. Selemenev, A. Tarapanov, L.Y. Frolenkova, A. Novikov and E. Prasolov

3.36 Specific of the Recrystallization Driving Force Calculation on the early Stages of Thermomechanical Treatment of Aluminum Alloys

E. Aryshenskiy, J. Hirsch, E.D. Beglov, S. Konovalov and V.R. Kargin

3.37 Use of Digital Twins for Mathematical Modeling of Ultrasonic Cutting of Titanium Blanks

M. Ilyushkin, K. Savelev, O. Krupennikov and E.S. Kiselev

3.38 Experience of High-Density Polyethylene as a Binding Substance in Grinding Wheels

A. Korotkov, S. Vöth, V.A. Korotkov and F. Vasilii

3.39 Model of Layer-By-Layer Cooling Trajectory in Rolled Products by TMCP

S. Platov, K. Maslennikov, N. Urtsev, R. R. Dema and E. Yu. Zvyagina

3.40 Improving the Efficiency of Metal Production Waste Processing in Electromagnetic Field

V. A. Lebedev, Yu. M. Vernigorov, A. A. Schirin, L. V. Chunakhova and E. P. Melnikova

3.41 Automatic Control System for Bodies of Revolution Processing

O. I. Drachev, B. M. Gorshkov and N. S. Samokhina

Session 4: Building Materials (Строительные материалы)

4.1 Properties of Additives Based on Synthetic Aluminosilicates for Lime Dry Building Mixtures

V. Loganina, A.D. Ryzhov and B.S.D. Al Saedi

4.2 Estimation of the Probability of Cracking of Facade Coatings

V.I. Loganina, R. Fediuk, D. Taranov and Y.H.M. Amran

4.3 Steelmaking slag – a complex material for the production of small-size materials using hyper-press technology

I. Romanenko and A. Fadin

4.4 Optimization of Compositions and Hardening Conditions of Vibropress Concretes Based on Steel-Making Slag

I. Romanenko and A. Fadin

4.5 Synthesis of a Composite Alloy Based on Ore Concentrate and Oxide Compounds

E. Kim, E.H. Ri, M.A. Ermakov, H. Ri and A. Zhivetyev

4.6 Development of Compositions of New Enamel Coatings with Various Operational and Decorative Properties to Protect Steel Architectural and Construction Panels

A. Ryabova, A.Y. Fanda, E.A. Yatsenko and M.G. Lee

4.7 Investigation of the Fluxing Additives Effect on the Foaming of Different Silicate Raw Materials

B.M. Goltsman, E.A. Yatsenko, L.A. Yatsenko, N. Goltsman and D. Kuzmenkov

4.8 Obtaining Calcium Sulfoaluminate Using Aluminate Waste

I. Burlov, D. Zorin and Y.R. Krivoborodov

4.9 Application of Fuel Ash as a Microfiller in Cement Dispersion Systems

V. Petropavlovskaya, T. Novichenkova, K. Petropavlovskii, O.V. Aleksandrova and H. Fischer

4.10 The Structure and Properties of Asphalt Concrete on the Basis of Waste Foundry Sand

K. Pugin

4.11 Reducing the Emission Activity of Vanadium from Building Materials

K. Pugin

4.12 Structured Thermal Insulation and Evaluation Methods of its Operating Durability

A. Pilipenko, I.V. Bessonov, E.Y. Bobrova, M. Kaddo and O. Rasulov

4.13 Modified Gypsum Mineral Compositions as a Basis for the Production of Dry Building Mixes for Self-Leveling Floors

V. Petropavlovskaya, M. Zavadko and T. Nigmatulla

4.14 Influence of Tungsten Nanopowders on the Kinetics of Cement Stone Strength Gain

V.M. Gavrish, T. Chayka, A. Oleynik and N. Derbasova

4.15 The Damping Effect in the Propagation of the Cracks in Fine-Grained Carbonate Concrete

V. Belov, P. Kuliaev and T. Barkaya

4.16 Development of Polystyrene Foam Plates and Sprayed Concrete for Three-Layer Products and Structures

Z. Okhunov, F. Aminov, O. Rasulov, A. Aminov and S. Mishra

4.17 Regulation of Rheological Properties of Three-Phase Dispersed Systems Used for the Production of Building Materials

V. Belov and P. Kuliaev

4.18 Structural Changes in Concrete under the Influence of Reactor Spectrum Neutrons

M. A. Frolova, S. D. Strekalov, S. S. Bezotosny and P. A. Ponomarenko