**Titan Interstate Association**

**National Academy of Sciences of the Republic of Belarus**

**Physical and Technical Institute of NAS of the Republic of Belarus**

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**AGENDA of the**

**ХVI INTERNATIONAL CONFERENCE**

**‘Ti-2018 in CIS’**

**April 18–21, 2018**

**CROWNE PLAZA Hotel, Minsk, the Republic of Belarus**

Conference languages: Russian, English (simultaneous interpretation)

**April 18, 2018**

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| **15:00–19:00** | Registration of the Conference participants. **CROWNE PLAZA Hotel** |
| **19:00–22:00** | Welcome drinks reception on the occasion of the Conference opening. |

**April 19, 2018**

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| **08:00–09:30** | Registration of the Conference participants. **Presidium of the National Academy of Sciences of the Republic of Belarus**  |
| **08:45-19:30** | Excursion program for the Conference guests  |

**Plenary Meeting 1.**

**Presidium of the National Academy of Sciences of the Republic of Belarus, Plenary Hall**

**Chairman: Andrey Valentinovich Alexandrov, PhD**

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| **09:00** | Opening of the Conference Speeches to welcome the Conference participants**Sergey Antonovich Chizhik**, First Deputy Chairman of the Presidium of NAS of Belarus **Andrey Valentinovich Alexandrov**, General Director of Interstate Association Titan |
| **09:15** | **O.O. Leder, D.A. Kurochkin, M.O. Alabusheva**VSMPO-AVISMA CorporationState of the Global Titanium Market in 2017 and its Development Trends |
| **09:30** | **O.M. Ivasishin1, A.V.Alexandrov2**1 - Institute of Metal Physics of NAS of Ukraine2 – Interstate Association TitanPrimary Trends in Development of Titanium Powder Metallurgy and 3D Technologies |
| **09:50** | **A.F. Ilyushchenko, V.V. Savich**GNU (State Scientific Institution) Powder Metallurgy Institute‘Titanium Powder Metallurgy in Belarus: History, Current State and Prospects’ |
| **10:10** | **O.O. Leder, D.A. Kurochkin, M.O. Alabusheva**VSMPO-AVISMA Corporation Titanium Market of Russia and CIS |
| **10:25** | **A.S. Oryshchenko, V.P. Leonov, I.A. Schastlivaya**NRC "Kurchatov Institute" - CRISM "Prometey"Prospects for Usage of Titanium Alloys in Nuclear Power Industry |
| **10:40** | **L.Z. Bykhovsky, S.I. Anufrieva, O.S. Chebotaryova**FGBU (Federal State Budgetary Institution) ‘VIMS’Unconventional Sources of Raw Titanium |
| **11:00** | **Break** |

**Plenary Meeting 2.**

**Presidium of the National Academy of Sciences of the Republic of Belarus, Plenary Hall**

**Chairman: Sergey Vladimirovich Akhonin, Corresponding Member of NAS of Ukraine, D.Sc.Tech.**

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| **11:30** | **A.D. Dosta**Altimed CJSC, Minsk Dental Implants: Orthopedic Treatment Based on Dental Implants  |
| **11:45** | **M.Yu. Kollerov1, D.E. Gusev1, A.V. Burnaev1, V.N. Semyonov2**1 – Moscow Aviation Institute (National Research University)2 – Central Aerohydrodynamic Institute named after Professor N.E. Zhukovsky Analysis of Usability of Titanium Nickelide in Actuators of Various Applications |
| **12:00** | **I.S. Polkin1, S.V. Skvortsova2, G.A. Turichin3, M.B. Novikova1, F.A. Shamray3, M.A. German2, E.M. Golubeva1** 1 –All-Russia Institute of Light Alloys2 – FGBOU VO (Federal State Budgetary Educational Institution of Higher Education) Moscow Aviation Institute (National Research University)3 – St. Petersburg State Marine Technical UniversityOn Transformation of the Titanium Alloys Structure in Additive Construction |
| **12:15** | **S. Spitans**ALD Vacuum Technologies LLCNew Method for Large-Scale Electromagnetic Levitation Melting and Casting of Titanium Alloys |
| **12:30** | **M.O. Leder, I.Yu. Puzakov, N.Yu. Tarenkova, M.A. Kornilova**VSMPO-AVISMA CorporationOn Some Aspects of Smelting of Ortho-Alloys Ingots |
| **12:45** | **G.E. Titov, D.G. Titov**Transcon LLCLogistics Solutions for Metallurgy// TRANSCON LLC: 25 Years in Logistics Market |

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| **13:00–14:00** | **Lunch** |
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| **14:00** | **Presidium of the National Academy of Sciences of the Republic of Belarus,** **Conference Hall No. 216**Special Debate on Aviation Topics between NAS of Belarus and AVIC Corporation  |

**Plenary Meeting 3.**

**Presidium of the National Academy of Sciences of the Republic of Belarus, Plenary Hall**

**Chairman: Igor Leonidovich Pobol, D.Phys-Math.Sc.**

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| **14:00** | **K.L. Zanaveskin** L.Ya. Karpov Scientific Research Institute of Physical Chemistry (NIFHI)Chlorination of Domestic Raw Titanium in a Fluidized Bed Reactor  |
| **14:15** | **T.B. Yanko1, A.V. Ovchinnikov2**1 –Titanium Institute PJSC, Zaporozhye 2 – National Research Centre ’Titan Zaporozhye‘ Production and Usage of Titanium Alloy HDH Powders Obtained from Alloyed Titanium Sponge |
| **14:30** | **V.A. Matveychuk** E.O. Paton Electric Welding Institute Use of Additive Electron-Beam Technologies in Manufacture of Products Based on Titanium Alloys |
| **14:45** | **A.A. Bakinovsky**GNU (State Scientific Institution) Physical and Technical Institute of NAS of Belarus Production of Work Pieces by means of Layer-By-Layer Electron-Beam Deposition of Wire Made of Technical Grade Titanium |
| **15:00** | **A.N. Kalinyuk, V.I. Kostenko, V.V. Telin, M.P. Kruglenko**Strategy BM LLCMacrosegregation of Iron and Oxygen in Cast Tape Sections of Titanium of Grade ВТ1-0 and Grade 2 Produced by means of Electron-Beam Melting |
| **15:15** | **V.I. Polkin**NPO Titan LLC Development of Technology for Manufacturing Endoprostheses from Titanium Alloys |
| **15:30** | **I.A. Petrik, S.L. Chigileychik** MOTOR SICHAnalysis of Usability of Technology of Plasma-Jet Hard-Facing with Titanium Alloy Parts in Production of Helicopters and Gas Turbine Engines |
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| **15:45** | **Break** |

**Plenary Meeting 4.**

**Presidium of the National Academy of Sciences of the Republic of Belarus, Plenary Hall**

**Chairman: Prof. Svetlana Vladimirovna Skvortsova, D.Sc.Tech.**

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| **16:15** | **A.S. Kudryavtsev1, E.V. Chudakov1, V.P.Kulik1, N.V. Tretyakova1, M.O. Leder2, A.V. Berestov2**1 – NRC "Kurchatov Institute" - CRISM "Prometey"2 –VSMPO-AVISMA Corporation PJSCStructure and Properties of Hot-Rolled Plate Made of Titanium Alloy VST 5553 |
| **16:30** | **A.A. Popov, M.A. Zhilyakova, K.I. Lugovaya, N.G. Rossina**FGAOU VO (Federal State Autonomous Educational Institution of Higher Education) Ural Federal University named after the First President of Russia B.N.YeltsinSeparation of α2-Phase in Titanium Alloys |
| **16:45** | **I.I. Vegera1, A.I. Mikhlyuk1, V.B. Demidovich2, M.Yu. Khatsayuk2**1 – Physical and Technical Institute of NAS of Belarus 2 – St. Petersburg State Electrotechnical University (LETI)Induction Heat Treatment of Titanium Alloys |
| **17:00** | **S.V. Skvortsova1, A.M. Mamonov1, O.N. Gvozdyova1, S.A. Pozdeev2, D.A. Negodin2, A.V. Volodin3**1 – Moscow Aviation Institute (National Research University)2 –Chepetsky Mechanical Plant3 –Normal PJSCPseudo β-Titanium Alloy ВТ35: a Promising Material for Manufacturing of Fastening Elements |
| **17:15** | **A.A. Ilyin2, I.S. Polkin1, Yu.B. Egorova2, L.V. Davidenko3**1 –All-Russia Institute of Light Alloys2 – FGBOU VO Moscow Aviation Institute (National Research University)3 – FGBOU VO Moscow Polytechnic UniversityOn Strength and Structural Equivalents by B.A.Kolachyov |
| **17:30** | **A.V. Zhelnina, N.V. Shchetnikov, A.V. Trubochkin, M.O. Leder, I.Yu. Puzakov, M.S. Kalienko**VSMPO-AVISMA CorporationStudy of Influence of Interstitial Impurities on Polymorphic Transformation Temperature and Properties of High-Strength Titanium Alloys in their Heat-Strengthened State |
| **17:45** | **A.G. Illarionov, S.V. Grib, S.M. Illarionova, A.V. Huppeev**FGAOU VO Ural Federal University named after the First President of Russia B.N.YeltsinInfluence of Chemical and Phase Composition on Elasticity Modulus in Tempered Titanium Alloys |

**April 20, 2018**

**Plenary Meeting 5. CROWNE PLAZA Hotel, KING Conference Hall**

**Chairman: Vsevolod Veniaminovich Travin, PhD.**

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| **09:00** | **T.A. Lavrova, E.M. Nartova, M.O. Leder, A.V. Volkov**VSMPO-AVISMA CorporationInfluence of Deformation History on Macrostructure of Ti6Al4V Alloy after Beta Annealing |
| **09:15** | **V.V. Leonov, V.I. Mikhaylov, I.Yu. Sakharov, S.V. Kuznetsov**NRC "Kurchatov Institute" - CRISM "Prometey" Study of Welding Properties of High-Strength Titanium Alloys of Various Classes Used for Marine Facilities Structures |
| **09:30** | **V.V. Travin, S.G. Tyomkin, A.I. Zmozhny, G.A. Shevelyov**Kaluga Turbine WorksFastening Elements Made of Titanium Alloys. Designing and Operation Experience |
| **09:45** | **A.N. Drobov**GNU (State Scientific Institution) Physical and Technical Institute of NAS of Belarus Study of Influence of Saturating Medium Composition on Parameters of Hardened Layers after Ion-Plasma Nitration of Titanium  |
| **10:00** | **D.O. Khlobystov, D.A. Negodin, A.E. Moskalyov, I.A. Dubovitskaya, I.R. Kozlova**Chepetsky Mechanical PlantResults of Mastering the Production of Hot-Deformed Bars and Forgings Made of Titanium Alloys by Chepetsky Mechanical Plant for Russian Companies Engaged in Machinery-Producing, Shipbuilding, Aviation and Medical Industries |
| **10:15** | **P.A. Klevkov, O.P. Evmenov, V.Ya. Koshelev, M.V. Solonina**All-Russia Institute of Light AlloysCombined Technologies Used for Manufacturing of Bimetallic Bladed Integrated Disks from Heat-Resistant Titanium Alloys |
| **10:30** | **A.N. Pankratov, N.A. Lagunova, M.O. Leder, A.V. Volkov**VSMPO-AVISMA CorporationInfluence of Heat Treatment on Properties of ВТИ-4 Alloy |
| **10:45** | **S.N. Yurkevich**558 Aircraft Repair Plant, Belarus Surface Modification of Parts Made of Titanium Alloys |
| **11:00** | **Break** |

**Plenary Meeting 6. CROWNE PLAZA Hotel, KING Conference Hall**

**Chairman: Prof. Vyacheslav Anatolyevich Tomilo, D.Sc.Tech.**

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| **11:30** | **A.S. Oryshchenko, V.P. Leonov, L.P. Rtishcheva, K.G. Martynov**NRC "Kurchatov Institute" - CRISM "Prometey"Analysis of the Current State of Production of Tubes from Titanium Alloys for Shipbuilding and Nuclear Power Industry in the Russian Federation |
| **11:45** | **V.S. Kalinin1, A.V. Poludin1, L.P. Rtishcheva2, V.N. Kopylov2, K.G. Martynov2, A.N. Makovetsky3**1 –VSMPO-AVISMA Corporation2 – NRC "Kurchatov Institute" - CRISM "Prometey" 3 – Chelyabinsk Pipe-Rolling PlantDevelopment of Technology for Production of Cold-Deformed Tubes of Large Diameter 159 ÷ 273 mm from Titanium Alloys ПТ-1М and ПТ-7М according to specification TU 14-3-1119-82 |
| **12:00** | **D.A. Negodin1, D.O. Khlobystov1, A.E. Moskalyov1, L.P. Rtishcheva2, K.G. Martynov2, I.A. Dubovitskaya1**1 –Chepetsky Mechanical Plant2 – NRC "Kurchatov Institute" - CRISM "Prometey"Results of Development and Mastering of Production of Pipes from Titanium Alloys by Chepetsky Mechanical Plant |
| **12:15** | **A. Ovchinnikov1, A. Zavgorodniy2, A. Dzhuhan1**1-SRC "Titanium of Zaporozhye", Zaporozhye National Technical University2-LLC"MULTIFLEX"Experience in obtaining and using titanium powders |
| **12:30** | **Sukhov А.G.1, Malysh М.М.1, Shanchurov S.М.1, Leder М.О.2, Lednov S.V.2**1-RCLT2- VSMPO-AVISMA CorporationLaser cutting of titanium alloys |
| **12:45** | **V.V. Savin1, S.V. Serikov2, L.B. Pervukhin3**1 – Kant Baltic Federal University (BFU)2 –Sura LLC3 –Bitrub International LLCProduction and Usage of Titanium and Copper Based Bimetallic Bars and Pipes |
| **13:00–14:00** | **Lunch** |
| **14:00–16:00** | **Annual Meeting of Interstate Association Titan. QUEEN Conference Hall**  |
| **14:00–18:00** | **Excursion program for the Conference participants and guests.**  |
| **20:00-00:00** | **Banquet**  |

**Poster Presentations**

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| **1** | **A.G. Illarionov1, A.V. Zhloba 2, M.O. Leder2, S.I. Stepanov1, A.V. Berestov2, A.A. Popov1**1 – FGAOU VO Ural Federal University named after the First President of Russia B.N.Yeltsin 2 –VSMPO-AVISMA CorporationStructure, Mechanical and Special Properties of Sheets Made of VST2 Alloy in its Heat-Strengthened State |
| **2** | **S.L. Demakov, A.S. Yurovskikh, F.V. Vodolazsky, R.M. Shamsutdinov** FGAOU VO Ural Federal University named after the First President of Russia B.N.YeltsinIntermetallic Laminate Composites of Ti-Al-Nb System |
| **3** | **Yu.B. Egorova1, S.V. Skvortsova1, L.V. Davydenko2, O.N. Gvozdyova, E.V. Chibisova**1 – FGBOU VO Moscow Aviation Institute (National Research University)2 – FGBOU VO Moscow Polytechnic UniversityInfluence of Type and Structure Parameters on Mechanical Properties of Bars Made of ВТ6 Alloy  |