

BRIEF PROGRAM OF THE VII INTERNATIONAL CONGRESS & EXHIBITION

"Non-ferrous metals and minerals-2015"

Venue: International business and exhibition center "Siberia", 19 Aviatorov st., Krasnoyarsk, Russia

Тема	б/м	Место
September, 15		
8.30-10.00	с) ЕЖИ-10М	т-кот Hall
9.50-10.30	Congress and exhibition opening, photography	Sl y Hall
10.00-17.00	босЗТТМ (Lunch: 12.30 - 14.00)	Exhibition Hall №2
10.30-12.00	PLENARY SESSION	Concert hall Grand hall "Siberia"
13.00-14.30	Brainstorming "Engineering in the non-ferrous metallurgy"	Big hall (2nd floor)
11.00-17.00	«Youth Playground of Professional Metallurgists»	Conference- hall in the Exhibition Hall №2
10.00-14.00	Job fair	Exhibition Hall №2
11.30-17.50	РзлОМТ (Lunch: 13.50 - 14.50)	Conference hall (3rd floor)
13.00-16.40	Alumina and bauxite production (Lunch: 13.00 - 13.50)	Small hall (2nd floor)
13.00-17.20	Silicon production (Lunch: 13.00 - 13.50)	Conference hall №2- Grand Hall Siberia
14.40-17.35	Mineral and raw materials sources and processing technologies of non-ferrous and precious metals (Lunch: 13.00 - 14.00)	Conference hall №3- Grand Hall Siberia
14.00-17.20	Precious metals production (Lunch: 13.00 - 14.00)	Middle hall ABK
18.00-21.00	Biront's memory readings: Metal science and heat treatment of metals	Restaurant "Siberia"
18.00-21.00	Welcome drinks & snacks	

(Lunch: 13.00 - 14.00)

ENGLISH

Grand Hall, Siberia

September, 16

9.00-17.00	босЗТТМ (Lunch: 12.30 - 14.00)	Exhibition Hall №2
9.00-17.00	Job fair	Exhibition Hall №2
14.00-15.00	Poster session	Exhibition Hall №2
15.00-17.15	Prof. Peter Polyakov's Symposium "Dream Cell"	Conference hall (3rd floor)
9.00-15.00	РзлОМТ (Lunch: 12.15 - 13.15)	Conference- hall (3rd floor)
9.00-17.20	Aluminium reduction technology (-11: 12.00 - 13.30)	Big hall (2nd floor)
9.00-16.40	Carbon and carbon materials (-11: 12.00 - 13.00)	Small hall (2nd floor)
9.00-16.40	Silicon production (-11: 12.00 - 13.00)	Conference hall №2- Grand Hall Siberia
9.00-16.40	Mineral and raw materials sources and processing technologies of non-ferrous and precious metals (-11: 12.00 - 13.00)	Conference hall №3- Grand Hall Siberia
9.00-17.00	Non-ferrous and rare metals production (-11: 12.15 - 13.15)	Middle hall ABK
9.00-17.25	Casting of non-ferrous metals and alloys. Recycling. (-11: 12.30 - 13.20)	
10.00-15.00	«Youth Playground of Professional Metallurgists»	Conference- hall in the Exhibition Hall №2
17.30-20.00	Excursion «Evening Krasnoyarsk»	Departure from the central entrance of business center "Siberia"

September, 17

9.00-16.00	босЗТТМ (Lunch: 12.30 - 13.30)	Exhibition Hall №2
9.00-12.00	бОК-ОМТ Krasnoyarsk Aluminium Smelter / Krasnoyarsk Non-Ferrous Metals Plant / Krasnoyarsk Metallurgical Plant / Geology Museum of Central Siberia	Departure from the central entrance of business center "Siberia"
9.00-10.30	Round-Table Discussion "Reliability equipment exploitation assurance"	Big hall (2nd floor)

11.00-12.30	Round-Table Discussion "Aluminium cell life time - 2200 days"	Big hall (2nd floor)
13.00-15.00	Round-Table Discussion "Morality, mentality and management of work"	Big hall (2nd floor)
9.00 - 17.00	Workshop „Automated Mineralogy - analytical tools for geometallurgical applications in mining, mineral processing and science" (the first day)	Conference hall №2- Grand Hall Siberia
12.30-17.30	Aluminium reduction technology (Lunch: 12-12.30)	Conference- hall (3rd floor)
15.10-17.30	Management (Lunch: 12.00-13.00)	Small hall (2nd floor)
12.40-17.30	Non-ferrous and rare metals production. Rare-earth metals mining, metallurgy and usage (Lunch: 12.00-12.40)	Conference hall №3- Grand Hall Siberia
12.45-17.35	Pressure metal treatment. (Lunch: 12.00-12.45)	Middle hall ABK
18.00-20.00	Congress and Exhibition Closing Ceremony	Conference -hall

September, 18

9.00 - 16.00	Workshop „Automated Mineralogy - analytical tools for geometallurgical applications in mining, mineral processing and science" (the second day)	Conference hall №2- Grand Hall Siberia
9.00 - 14.00	Trip to the National Park "Krasnoyarsk Stolby"	Departure from the central entrance of business center "Siberia"

ENGLISH

= Vc; PSW

September, 14, Monday
Venue: Siberian federal university
Krasnoyarskiy rabochiy ave., 95

_Q Q | MDoctor of Chemistry, Professor P.V. Polyakov, Siberian Federal University

Topic «Aluminum reduction technology» aud. 425			
10.00-13.00	Life time, design and construction of aluminium cells	Professor Harald Oye	Norwegian University of Science and Technology, J L3M
13.00-14.00	^: Q_S		
14.00-15.30	Influence of anode performance on smelter cost	Dr. Markus Meier	R&D Carbon, h5,cl TeQ J
15.45-17.00	Analysis of scientific and technical achievements in the aluminium industry (TMS 2015 materials)	Professor Peter Polyakov	Siberian Federal University, Russia

_Q Q | Mcandidate of technical sciences, T.R. Gilmarshtina, Siberian federal university

Topic «Casting of metals and alloys» aud. 427			
11.30-13.00	Modeling of structures and segregations during solidification	Dr. Charles-André nK JY	MINES ParisTech CEMEF UMR CNRS 7635, France
13.00-14.00	^: Q_S		
14.00-15.30	Engineering the heterogeneous nucleation in aluminium and magnesium alloys melt – high performance automotive light metal castings	Dr. N. Hari Babu J KLe Jk	Brunel Centre for Advanced Solidification Technology (BCAST), Brunel University London, @
15.45-17.00	Hydrogen platform of periodic system of elements	Professor Vladimir r Q KLe	Siberian State Industrial University, Novokuznetsk, k YZAK

_Q Q | MDr. Sci. in Geology and Mineralogy, professor V.A. Makarov, Siberian federal university

Topic «Mineral and raw materials sources of non-ferrous and precious metals» Hall of the Scientific Board			
14.30-15.30	Metallurgy of large igneous provinces (metallurgy of intraplate magmatism associated with mantle 2Q eze	Professor Aleksandr Borisenko	V.S. Sobolev Institute of Geology and Mineralogy SB RAS, Novosibirsk, Russia
15.45-17.00	SEDEX type deposits as a main source of Pb, Zn and Ag in the world. Brief global overview. Prospects for Russia and Krasnoyarsk region	Dr. Sci. in Geology and Mineralogy Konstantin Lobanov	Moscow, Russia

PLENARY SESSION

September, 15, Tuesday
Concert hall "Grand hall Siberia"

_Q Q | MDoctor of Chemistry, Professor P.V. Polyakov, Siberian federal university
Member of the Russian Academy of Sciences G.L. Pashkov, Institute of Chemistry and Chemical Technology SB RAS

Time	Title	Company	Speaker
10.30-11.00	Krasnoyarsk Krai is a center of Russian non-ferrous metallurgy	Krasnoyarsk Krai Government	V.A. Tolokonsky, Governor of Krasnoyarsk Krai
11.00-11.30	Direction for development of UC RUSAL	UC RUSAL	V.A. Soloviev, General director
11.30-12.00	Problems of professionals training for non-ferrous metallurgy industry	Ural Federal University named after the first President of Russia B.N. Yeltsin, Russia	Professor S.S. Nabichenko

ROUND TABLES DISCUSSION

September, 15, Tuesday
Big hall, 2nd floor

13.00-14.30	Brainstorming «Engineering in the non-ferrous metallurgy»
-------------	---

September, 16, Wednesday
14.00-15.00

WORKSHOP "AUTOMATED MINERALOGY - ANALYTICAL TOOLS FOR GEOMETALLURGICAL APPLICATIONS IN MINING, MINERAL PROCESSING AND SCIENCE"

Conference-hall №2 Grand Hall Siberia

September 17, 9.00 - 17.00

- E History of automated mineralogy
- E Electron beam based methods
- E MLA/EDSMSCAN (principles and examples)
- E Proton beam based methods
- E Other process analytical methods
- E Quality assurance and -management (QA/QM)
- E *Example 1 – Petrography and accessory minerals*
- E *Example 2 – Platinum Group Minerals*

Example 4 - Bioleaching

11.00-

- Example 5 – Tailings as important resources
- Gold and mercury in natural and man-made mineral sites
- Germanium in lignite
- Prospects of mineral raw materials extraction for Germanium production in Krasnoyarsk
- Workshop assessment by the participants

The workshop will be useful both for young scientists working in the mining, processing and metallurgical industries and for young scientists who are involved in such research at universities and research institutes.

To provide the 2nd part of the workshop (starting with the examples) every participant should use its own laptop (preferred by the organizers).

SECTION «ALUMINA AND BAUXITE PRODUCTION»

September, 15, Tuesday
Conference hall, 3rd floor

—Candidate of Technical Sciences **A.V. Panov**, UC RUSAL
Dr. Eng. Sc. **Il. Shepelev**, Research Company "ECO-ENGINEERING"

Time	Title	Company	Authors
11.30	Review of alumina technology papers at TMS, AOW, ICSOBA	RUSAL Engineering & Technology Centre	r. > . I K U F
11.45	Introduction of alumina containing slags in the sintering process – trials and prospects	RUSAL Engineering & Technology Centre	A.S. Semyuta, I.V. Davydov, A.V. Alexandrov
12.05	Modified Bayer process	Baikov Institute of Metallurgy and Material Science RAS, Moscow, Russia	Yu.A. Lainer, B.G. Baimaev, M.V. Nefedeva, A.I. Kiselev, S. Iliev, V.V. Alistarkh
12.05	Hydrochloric acid method of complex recycling of low-grade aluminum containing raw material for production of coagulant, alumina and building materials	Baikov Institute of Metallurgy and Material Science RAS, Moscow, Russia	D.V. Valeev, Yu.A. Lainer, B.G. Baimaev, V.I. Pak, A.S. Tuzhilin, D.Yu. Rozhkov

12.50-
13.50

Time	Title	Company	Authors
13.50	Experience of JSC "RUSAL Achinsk" upon involvement of North Urals bauxites	RUSAL Achinsk, K YZZK	A.Yu. Sakhrachev, A.V. Chashchin, E.I. Zhukov, I.I. Shepelev, A.V. Alexandrov
14.10	Increased rates of production of alumina by nepheline ore preparation and limestone	Siberian Federal University, Russia	A.V. Konev, K.A. Shulgina, L.N. Kuzina, S.F. Bogdanovskaya, J.V. Mironova
14.30	Designing of schemes for bucking of plastic and prone to sticking ores, nonmetallic materials, man-made feedstock	Gormasheport, K YZZK	A.I. Stepanenko
15.10	The way of leaching of alumina containing sinter	Aluminium of I KIKOT ZK	A.R. Sabitov, V.V. Kaulin, S.A. Tverdokhlebov
15.30	The research on solid phase separation of tube digest draining on hydraulic cyclone	Aluminium of I KIKOT ZK	A.R. Sabitov, S.A. Tverdokhlebov, V.V. Kaulin, M.N. Pechenkin
15.50	Method of Computational Flow Dynamics and its applications in alumina refineries	RUSAL Engineering & Technology Centre	V.O. Golubev
16.10	New efficient heat exchangers for cooling of slurry or aluminate liquor during precipitation	RUSAL Engineering & Technology Centre	I.V. Davydov, I.V. Domanskij, M.N. Malofeev
16.30-16.40	Zciba:		
16.40	Full analysis of Sierra Leone bauxite and possibilities of bauxite residue filtration	SC ALUM SA, K Uti j K W	Gh. Dobra, A. Kiselev, L. Filipescu, V. Alistarkh, N. Anghelovici, S. Iliev

17.00	Reduction of parasitic water intake and selection of optimum concentrations for Alumina Production at RUSAL Mykolajiv Ltd., Ukraine	RUSAL Mykolajiv Ltd., Mykolajiv, Ukraine	V.A. Prigarin, N.V. Shtrina
17.20	Chemical and engineering characteristics of complex mineral binder preparing on base of alumina industrial waste	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	A.M. Zhyzhaev, T.I. Shepeliev, N.N. Bochkov, N.V. Golovnykh
17.35-17.50	Study of composition and morphology of dusts from cleaning collectors of electrostatic gas treatment systems of sintering furnace of Achinsk Alumina Plant in order its utilization	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	A.M. Zhyzhaev, T.I. Shepeliev, N.N. Bochkov, A.Yu. Saknachev
18.00-21.00	Welcome drinks & snacks		

SECTION «ALUMINIUM REDUCTION TECHNOLOGY»

September, 16, Wednesday
Conference hall, 3rd floor

—99) Doctor of Chemistry, Professor P.V. Polyakov, Siberian Federal University
Candidate of Technical Sciences V.Yu. Buzunov, UC RUSAL

Session «General questions»

Time	Title	Company	Authors
9.00	Development of electrolysis technology and electrolytic cells constructions	UC RUSAL, Moscow, KYZZK	V.A. Kryukovskiy, G.A. Strazutdinov, M.Ya. Mintsis, P.V. Polyakov
9.20-9.40	Changes in operating practice and vertical integration boosts ALRO	ALRO S.A., Romania	M. Cilianu, Gh. Dobra, F. Stere, C. Stanescu, I. Mihaescu
9.40-10.15	Zcha:		

Session «Ecology of aluminium smelting»

10.15	Overview of ecological achievements in the aluminium industry (TMS-2015 materials)	Siberian Federal University, Russia	S.G. Shatrai, V.V. Kondratiev, A.V. Belyanin
10.35	Slimes utilization of aluminum production plants	Siberian Federal University, Russia	A.M. Pogodaev, Yu.I. Storozhev, A.V. Belyanin, A.V. Proshkin
10.55	Treatment of gas emissions in potrooms (prebake anodes)	Fives Solios S.A., France	P. Mausset
11.15	Aluminum electrolysis cell end products and their use in production	RUSAL Engineering & Technology Centre, Bratsk, Russia	A.N. Baranov, L.V. Gavrilenko, A.V. Morenko, A.A. Gavrilenko, Ye.V. Timkina, P.A. Yakushevich
11.35	Retrofitting of «Dry» scrubber for prebaked anode cells JSC «RUSAL NOVOKUZNETSK»	JSC «SibVAMI» Irkutsk, Russia	V.G. Grigoriev, S.V. Tepkin, A.P. Pyankin, D.V. Vysotsky, A.V. Yermakov, A.S. Zherdev, M.E. Kazantsev, S.Yu. Pavlov
11.55	Recycling and utilization of fluorine carbon-bearing aluminum wastes	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	V.V. Somov, Ju.V. Bogdanov, V.V. Anikin, S.Ju. Pavlov, A.G. Suss, A.A. Damaskin, A.V. Morenko, A.N. Baranov
12.15-12.30	Q.S		

Session «Cathode»

13.15	The possibility to use brown coal semi-cokes as lining material in electrolyte pots for primary aluminium production	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	A.V. Proshkin, V.V. Pargin, G.E. Nagibin, A.G. Sbitnev
-------	--	--	--

13.35	Development and experimental research of the material for the stable side ledge and bottom ledge $\Phi\Gamma\text{K}\Delta$	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	G.V. Arkhipov, P.V. Polyakov, E.R. Shaidulin, Yu.O. Avdeev
13.55	Control of current distribution in cathode unit of electrolysis cell	Siberian Federal University, Russia	V.P. Ten, A.I. Gromyko, I.E. Nefedov, V.K. Fitzerger, D.G. Lazarev
14.15-15.00	Poster session / Exhibition booths presentation: E HAZEMAG & EPR GmbH company presentation, E Applying of instruments in metallurgy and metal science, produced by the company "Scientific Instruments"		
9.00-17.00	Job fair		
16.00-15.00	«Youth Playground of Professional Metallurgists»		

POSTER SESSION

Exhibition Hall №2
September, 16, Wednesday
14.00-15.00

Aluminum production waste products as a promising raw material	Irkutsk National Research Technical University, Russia	A.A. Pavkina, N.V. Nemchinova
Calculation of the combustion parameters of the anode gases aluminum cell	Siberian Federal University, Russia	S.G. Shahrat, A.P. Skuratov, A.V. Belyanin, V.V. Kondratiev, A.A. Pinaev
Anode carbon cover in aluminum electrolysis cell. Review of practices of foreign aluminum $\Gamma\Delta\text{K}\Delta$	Siberian Federal University, Russia	S.G. Shakhrai, P.V. Polyakov, Yu.G. Mikhalev, E.R. Shaidulin, A.M. Ivanova

30

The potassium-containing electrolyte monitoring using of X-ray diffraction	Siberian Federal University, Russia	A.S. Samoilov, Yu.N. Zaitsev, P.S. Dubinin, O.E. Plesina, S.G. Ruzhnikov, I.S. Yakimov, S.D. Kirik
--	-------------------------------------	--

SYMPOSIUM "DREAM CELL"

September, 16, Wednesday
Conference hall, 3rd floor

Time	Title	Company	Authors
15.00	Electrolytic cell as a dissipative system	Siberian Federal University, Russia	P.V. Polyakov
15.15	Diffusion layer during solid metals dissolution and reduction. Optical $\Delta\text{Z}\Phi\Gamma\Delta\text{K}\Delta\text{Z}$	Siberian Federal University, Russia	L.A. Isaeva Yu.G. Mikhalev P.V. Polyakov
15.30	Diffusion layers and self organization on the interfaces during liquid metals electrolysis	Siberian Federal University, Russia	Yu.G. Mikhalev, L.A. Isaeva, P.V. Polyakov
15.45	Bubbles layers and mass transfer during the electrolysis	Siberian Federal University, Russia	A.S. Yasinitsky, P.V. Polyakov
16.00	Peltier heat and thermal boundary layers	Siberian Federal University, Russia	P.V. Polyakov
16.15	Statistical methods of aluminium smelter control	Siberian Federal University, Russia	N.A. Mikhalev
16.30	История разработки метода контроля температуры в электролизе алюминия (1968-2015 гг.)	UC RUSAL	> r. I. Mikhalev
16.45	1'000'000 amperes dream cell	KAN-MAK Ltd., Russia	Karl von Kaenel, Jacques Antille, Louis Bugnion, Laure von Kaenel
17.00-17.15	Development of innovative principle of electrochemical decomposition of alumina dissolved in fluoride ΔZ	Siberian Federal University, Russia	P.V. Polyakov, A.B. Kiyuchanov, A.S. Yasinitsky, Yu.N. Popov

30

16.10	Energy efficient environmentally sound raw material transport system at aluminum production plants in Irkutsk oblast	JSC «SibVAMI» Irkutsk, Russia	V.G. Grigor'ev, S.V. Tepkin, A.A. Kuzakov, <u>A.P. Pyrkhin</u>
16.30	High speed metallurgy of aluminum for coal fuel cell	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	O.G. Partenov, <u>A.D. Kustov</u>
16.50	Obtaining of corrosion-resistant ceramic or cement materials as inert anodes by oxidative designing of UZ	Baikov Institute of Metallurgy and Material Science RAS, Moscow, Russia	K.A. Sointsev, <u>Yu.A. Lainer</u> , E.N. Samoilov, A.S. Cherniavsky, Yu.F. Kargin
17.10-17.30	Mineral raw materials treatment using chloric method with acid	Baikov Institute of Metallurgy and Material Science RAS, Moscow, Russia	T.N. Vetchinkina, Yu.A. Lainer, A.S. Tuzhlin, D.Yu. Rozhkov, B.G. Balmaev
18.00	Congress and Exhibition Closing Ceremony		

SECTION «SILICON PRODUCTION»

September, 15, Tuesday
Small hall, 2nd floor

Chairman: Dr. Eng. Sc. K.S. Ekin, UC RUSAL

Time	Title	Company	Authors
13.00	Silicon technology with the effect of formation of secondary silicon	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	K.S. Ekin
13.20	The influence of temperature of reaction zones of silicon furnace bath on the extraction degree of irreducible elements	ZAO «Kremniy», Shelekhov, Russia	A.A. Molyavko, T.T. Fereferova, D.K. Ekin, K.S. Ekin

13.40	Mathematical description and process monitoring in blend area as foundation of sound management of production of technical silicon	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	A.V. Sivtsov, K.S. Ekin, <u>A.E. Cherevko</u>
14.00-14.20	Carborundum containing carbonaceous reducing agent – efficient component in the blends for production of silicon and ferrosilicon alloys	Institute of Metallurgy UB RAS, Yekaterinburg, Russia	V.P. Vorobiev
14.20-14.40	Zciba:		
14.40	Commercial tests of carbide containing materials in recovery smelting of silicon in ore thermal electric furnaces	ZAO «Kremniy», Shelekhov, Russia	K.S. Ekin, D.K. Ekin, S.V. Koshkin, M.V. Pegarov, A.A. Molyavko, T.T. Fereferova
15.00	Phase chemical equilibrium in (Fe-Si-C) – slag – gas	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	N.F. Yakushevich, O.A. Polyakh, K.S. Ekin
15.20	A study of furnace slag chemical composition produced in silicon production	Irkutsk National Research Technical University, Irkutsk, K.YZAK	N.V. Nemchinova, T.A. Buzikova
15.40	Optimization of silicon casting by liquation solidification	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	K.S. Ekin, <u>A.E. Cherevko</u> , D.K. Ekin, S.V. Koshkin, M.V. Pegarov, D.V. Dresyansky
16.00	Conception of the pouring cleaned silicon process development at the "SUAL-Kremniy-Ural", LLC	SUAL-Kremniy-Ural, Kamensk-Uralsky, K.YZAK	V.V. Chinnov, V.V. Benderskiy, <u>A.L. Koblik</u>
16.20-16.40	Design improvement of casting mold for production of refined	SUAL-Kremniy-Ural, Kamensk-Uralsky, K.YZAK	V.V. Benderskiy,
18.00-21.00	Welcome drinks & snacks		

SECTION «SILICON PRODUCTION»

September, 16, Wednesday
Small hall, 2nd floor
_Q Q | MDr. Eng. Sc. K.S. Elkin, UC RUSAL

9.00	Development and certification of reference silicon specimens of metallurgical grade in laboratories of ZAO Kremniy and enterprises of RUSAL Aluminum Division	ZAO «Kremniy», Shelekhov, Russia	V.K. Kryuchkov, T.T. Fereferova
9.20	Startup of ore-smelting furnace with improved bath profile after major overhaul	ZAO «Kremniy», Shelekhov, Russia	K.S. Elkin, A.G. Barantsev, D.P. Vavenko D.K. Elkin, M.V. Peganov, D.V. Dresvyansky, A.A. Molyavko
9.40	Silicon production for solar power	Speitsstroyinvest Ltd., SibVAMI, Irkutsk, K YZZK	B.I. Zelberg, K.S. Elkin, V.G. Grigoriev, A.G. Barantsev
10.00	UMG silicon is one of direction recovering metallurgical silicon in silicon for using in solar energy	RUSAL Global Management B.V., Moscow, Russia	A.N. Suponenko
10.20-10.40	Zcda;		
10.40	Silicon electrodeposition on glassy carbon in the $KF-KCl-K_2h_3$ melt	Institute of High Temperature Electrochemistry, UB RAS, Yekaterinburg, K YZZK	S.I. Zhuk, A.V. Isakov, A.P. Apisarov, O.V. Chemezov, L.M. Minchenko, Yu.P. Zaykov
11.00	NexION 350 ICP-MS analysis of high purity materials and semiconductors	Representative Office of SCHELEIC AG (Switzerland), Moscow, Russia	P.V. Timofeev
11.40	Problems and regularities of production of electrode paste based on anthracite	>@t \$, Russia	I.M. Kashlev, K.S. Elkin, V.M. Strakhov

12.00	Ultrasonic method for testing of the internal structure of carbon	p] pkn' l k' o ü Novosibirsk electrode plant, Russia	G.S. Bliskin, wV. Butakova, A.A. Spektoruk, A.L. Kvanin, A.V. Matveev
12.00-13.00	A. Q S		
13.00	Implementation of up-to-date dry scrubbing of gases from ore-smelting furnaces at ZAO Kremniy	SibVAMI, Irkutsk, K YZZK	V.G. Grigoryev, S.V. Tepkin, V.D. Vysotsky, A.P. Plankin, A.V. Ermakov, K.S. Elkin, A.M. Muratov
13.20	Experience of creation of the energy saving paint for housing and communal services	h7eZZZONhvest Ltd., Irkutsk, Russia	V.V. Kondratiev, A.B. Zelberg, V.N. Nikolaev
13.40	Processing and use of finely divided silicon production waste in	Irkutsk National Research Technical University, Irkutsk, K YZZK	A.I. Karlina, N.N. Ivanchik, V.V. Kondratiev, V.N. Petrovskaya, A.A. Nemarov
14.00-15.00	Poster session / Booths presentation at the Exhibition: E HAZEMAG & EPR GmbH company presentation, E Applying of instruments in metallurgy and metal science, produced by the company "Scientific Instruments"		
15.00	Production of composite materials based on dust wastes of silicon	h7eZZZONhvest Ltd., Irkutsk, Russia	A.I. Karlina, A.B. Zelberg, Yu.S. Egorov, V.V. Kondratiev
15.20	New materials for production of reliable impermeable membrane of industrial waste mud storage	JSC «SibVAMI», Irkutsk, Russia	B.I. Zelberg, V.G. Grigoriev, K.S. Elkin
15.40	Integrated processing carbothermic reduction of red mud	h7eZZZONhvest Ltd., Irkutsk, Russia	V.V. Kondratiev, B.I. Zelberg, A.G. Barantsev, L.V. Ragozin

ENGLISH

SECTION «PRECIOUS METALS PRODUCTION»

September, 15, Tuesday
Conference hall №3 Grand Hall Siberia

— Q () Professor, Doctor of Chemistry N.V. Belousova, Siberian federal university
R. V. Ashitov, JSC "Krastrsvetmet"

16.00	Commercial trials of reprocessing of silicon carbide plates of aluminum cells in production of siliceous ferrous alloys	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	I.M. Kashiev, K.S. Elkin
16.20-16.40	Arrangement of ferrosilicon production on the premises of JSC «Uzmetkombinat»	JSC «SibVAMI», Irkutsk, Russia	V.G. Grigorenv, S.V. Tepkin, A.P. Pyankin, A.V. Ermakov, K.S. Elkin
9.00-17.00	Job fair		
16.00-15.00	«Youth Playground of Professional Metallurgists»		

14.30-19.30
wa wa GP. 58
POSTER SESSION
(no experience)

Exhibition hall №2
September, 16, Wednesday
14.00-15.00

Carbon nanotubes in production of metallic ZrO ₂	Irkutsk National Research Technical University, Irkutsk, K YZAK	K.S. Elkin, N.A. Ivanov, A.I. Karina, N.N. Ivanov
Theory and practice of flotation nanosized silicon containing structures	Irkutsk National Research Technical University, Irkutsk, K YZAK	V.V. Kondratiev, A.I. Karina, A.A. Nemarov, N.N. Ivanov
Improving the properties of cast iron with silica and carbon nanostructures	Irkutsk National Research Technical University, Irkutsk, K YZAK	V.V. Kondratiev, N.A. Ivanov, Yu.S. Egorov, N.N. Ivanchik
Study of properties of finely dispersed waste from silicon production by scanning electron microscopy	Irkutsk National Research Technical University, Irkutsk, K YZAK	N.N. Ivanchik, V.V. Kondratiev, N.A. Ivanov, A.I. Karina

Time	Title	Authors	Company
14.40	Abilities of optical emission spectrometers with inductively coupled plasma Prodigy ICP and DC/AC-Arc spectrometers Prodigy DCArc in elemental analysis of precious metals and it's alloys	LABTEST RGC Moscow, Russia	A.V. Akimova, A.E. Kamenshtchikov
15.00	Extraction of selenium from selenium-containing concentrates produced by OJSC "Krastrsvetmet" with the receipt of residues enriched with precious metals	Center of Earth Sciences, Metallurgy and Ore Beneficiation, Republic of Kazakhstan	S.A. Trebukhov, A.A. Trebukhov, F.Kh. Tulentay, A.V. Nitcenko
15.20	Development of refinery mother solutions polishing (complete recovery) technology at JSC "KRASTRSVETMET"	JSC «Krastrsvetmet», Krasnoyarsk, Russia	N.B. Khmielev, O.V. Zherebtsova
15.40	Reprocessing optimization of reutilization middlings of refining with barium peroxide	JSC «Krastrsvetmet», Krasnoyarsk, Russia	E.A. Pavlov, E.V. Matisev, N.B. Khmielev, A.A. Gushchinsky
16.00-16.05	BREAK		
16.35	Effect of salt background on precipitation of iridium under autoclave conditions	Siberian Federal University, Russia	N.V. Belousova, O.V. Belousov, A.M. Zhizhaev, L.I. Dorokhova, F.A. Kyasov
16.55	Reprocessing of platinum-rhenium and platinum catalysts based on K ₂ VO ₄	JSC «Krastrsvetmet», Krasnoyarsk, Russia	D.A. Solokhov, E.S. Marchenko, V.I. Markov, A.A. Rategov
17.15-17.35	The electrochemical properties of nanosize powders of noble metals	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	R.V. Borisov, O.V. Belousov
18.00-21.00	Welcome drinks & snacks		

SECTION «NON-FERROUS AND RARE METALS PRODUCTION»

September, 17, Thursday
Conference hall №3 Grand hall Siberia

Chairmen: member of Russian Academy of Sciences G.L. Pashkov, Institute of Chemistry and Chemical Technology SB RAS
Professor S.S. Nabolechenko, Ural federal university

15.00	Synthesis and research of copper sulfides nanoparticles	Siberian Federal University, Russia	K.S. Murasheva, S.V. Saykova
15.20	An anion exchange precipitation of indium oxide (III) by using the anion exchange resin AB-17-8 in the OH-form	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	N.P. Yevseyevskaya, G.L. Pashkov, S.V. Saikova, M.V. Pantelieva, G.N. Bondarenko, I.V. Nemtsev
15.40	Optical properties of large-sized germanium crystals	Tver State University, K.YZZK	I.A. Kaplinov, A.I. Kolesnikov, E.I. Sokolova
16.00	New opportunities of inductively coupled plasma optical spectrometry and mass spectrometry for analysis of nonferrous, precious, rare metals	Representative Office of SCHLITTEC AG (Switzerland), Moscow, Russia	P.V. Timofeev
16.20	Prospects of max-fuel fabrication in Russia	Siberian Federal University, Russia	I.Yu. Kosarev, O.A. Vlasov
16.40-17.00	Synthesis of a-Co(OH) ₂ intercalated with organic anions and its solvothermal decomposition	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	E.V. Linok, G.L. Pashkov, S.V. Saikova, M.V. Pantelieva, A.M. Zhizhaev, G.N. Bondarenko, I.V. Korolkova
17.30-18.30	Excursion «Evening Krasnoyarsk» Departure from the business center "Siberia" at 17.30		

POSTER SESSION

Exhibition hall №2
September, 16, Wednesday
14.00-15.00

Prospects of roasting with sodium chloride application for sulfide concentrates of non-ferrous and rare metals processing (Cu, Ni and Mo)	State research technological University «MISiS»	P.V. Achenkov, A.S. Medvedev, V.A. Imidzev
Processing of electric steel-making dust	Ikutsk National Research Technical University, Ikutsk, K.YZZK	E.V. Naumov, A.A. Tyurin

Time	Title	Company	Authors
9.00-12.00	ВЫСТАВКА RUSSAL Krasnoyarsk Aluminium Smelter / Krasnoyarsk Non-Ferrous Metals Plant / Krasnoyarsk Metallurgical Plant / Geology Museum of Central Siberia		
12.00-12.30	A. Q.S		
12.40	Reduction of the volume of waste by the use of technology for block underground leaching of mining rock in situ	JSC "VNIPromtekh nologit", Russia	K.S. Kazakov
13.00	Formation and changes of pre-nucleation liquid intermediates in reactions between chloride complexes of Pt(IV) and Pd(II) and sodium sulfide in aqueous solutions	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	M.N. Likhatski, A.A. Karacharov, Yu.L. Mikhailin
13.20	Promising electrochemical reactors for the solution of actual problems of industry and national economy	LLC "Defin Aqua", Moscow, Russia	T.A. Kharlamova, A.F. Alaterdov, O.V. Yurasova
13.40	Titanium high-speed metallurgy for titanite processing	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	A.D. Kusov, R.A. Zakirov, T.A. Kenova, O.G. Parfenov, L.A. Solovoyov
14.00-14.10	Zc ba:		
14.10	Abilities of optical emission spectrometers with inductively coupled plasma Prodigy series and DC/AC-Arc spectrometers Prodigy DC/Arc in determination of major and trace element in non-ferrous metals and its alloys	LABTEST RCC, Moscow, Russia	A.V. Akimova, A.E. Kamenshchikov, G.V. VLF

14.30	Designing of schemes for bucking of plastic and prone to sticking ores, nonmetallic materials, man-made feedstock	Gormasheexport, k YZK	A.I. Stepanenko
14.50	The composite adsorbent to immobilize cations of heavy metals and radionuclides from industrial waste non-ferrous metallurgy	National research South Ural state university, Chelyabinsk, k YZK	G.G. Mikhailov, T.M. Lonzinger, A.G. Morozova, V.A. Skotnikov
15.10-15.30	Zcba;		

Session «Rare-earth metals mining, metallurgy and usage»

September, 17, Thursday
Conference hall №3 Grand hall Siberia

Dr. V.I. Kuzmin, Institute of Chemistry and Chemical technology SB RAS
AA. Romanov, Siberian Federal University

Time	Title	Company	Authors
15.30	Production of silicate concentrates, containing rare-earth metals	Special design-engineering office «Nauka» at Krasnoyarsk Scientific Center SB RAS, Krasnoyarsk, Russia	V.F. Pavlov, O.V. Shabanova, I.V. Pavlov, M.V. Pavlov
15.50	Determination of capabilities of rare and rare earth metals extraction from technological solutions with complex salt composition	JSC «VNIPromtekh» [UFA], Russia	E.Yu. Meshkov, V.V. Golovko, A.A. Soloviev, K.K. Kadyrov
16.10	Cerium extraction process from rare-earth metal concentrated by electrochemical and extraction	JSC «Giredmet», Moscow, Russia	O.V. Yurasova, T.A. Kharlamova, A.A. Gasanov, A.F. Alafardov
16.30	Extraction of lanthanide nitrates (III) with mixtures of binary extracting agents: amine carboxylates and dialkyl phosphates	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	S.N. Kalyakin, V.I. Kuzmin, M.A. Mulaigaleeva
16.50	Heat capacity and thermodynamic properties of the lanthanide orthovanadates LnVO ₄	Siberian Federal University, Russia	L.G. Chumilina, L.T. Denisova

17.10-17.30	Production of technical scandium oxide from red mud of alumina	State research technological University «MISIS»	A.S. Medvedev, P.T. Khaikulina, S.S. Kirov, A.G. Syss, A.B. Planov, S.H. Gorbachev
18.00	Congress & Exhibition Closing ceremony		

SECTION «CARBON AND CARBON MATERIALS»

September, 16; Wednesday
Big Hall, 2nd floor

Dr. Markus Meier, R&D Carbon, Switzerland
Yu.A. Frantsev, RUSAL ETC, Russia
Dr. N.V. Chesnokov, Institute of Chemistry and Chemical Technology SB RAS
Fathollah Sadeghi, Mahna-Farayand Co. Ltd, Iran

Session «Anode Raw Materials»

Time	Title	Company	Authors
9.00	Peculiarities of high-sulphur coke industrial calcination	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	V.Ju. Buzunov, A.M. Konstantinov, V.M. Polovnikov, S.A. Khramenko, V.R. Shmal, I.V. Cherskikh
9.30	Retort coke calcination oven complex project at JSC «RUSAL SAYANOGORSK»	JSC «SibVAM» Irkutsk, Russia, RUSAL Engineering & Technology Centre, k YZK	V.G. Grigoriev, S.V. Tepkin, M.A. Glushkevich, I.I. Lapaev, A.V. Mikhailov
10.00	Production and characteristics of compound coal tar pitch	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	V.N. Marakushina, V.K. Frizorger, D.G. Lazarev, M.I. Krak, V.I. Andreikov

10.30	Investigation of alternative production of binder pitch for anode paste	RUSAL Engineering & Technology Centre, Krasnoyarsk, Russia	E.N. Marakushina, V.K. Frizonger, V.V. Pingin, D.G. Lazarev, M.I. Krak, P.N. Kuznetsov, F.A. Buryukin
11.00	Thermal dissolution for obtaining of alternative pitch binder	Institute of Chemistry and Chemical Technology SB RAS, Krasnoyarsk, Russia	P.N. Kuznetsov, E.N. Marakushina, A.V. Kazdanova, S.M. Kolesnikova, L.I. Kuznetsova, F.A. Buryukin, S.S. Kositsyna
11.30	Bench mark prebaked anode production with Russian raw materials	R&D Carbon Sierre, Switzerland	Raymond Perruchoud, Julien Wyss, Markus Meier
12.00-13.00	Q.S		

Session «Anode and Electrode Production»

13.30	Anode Baking Technology development (for aluminium Smelters)	RioTintoAlcan, France	Francois Charnier
14.00	Lazar continuous carbon baking – the future is now	Lazar Anode Technologies, Switzerland	Don Neill, Nicholas Walla, Steven J. Dubec, Kim A. Collins, Rick Lazarou
14.30-15.00	Poster section / Booths presentation at the Exhibition: E HAZEMAG & EPR GmbH, E Applying of instruments produced by the company "Scientific instruments" in metallurgy and materials sciences		
15.00	Study of wear mechanism of BOÜ RABF products during operation in bricklaying of anode baking furnaces of OAO RUSAL Sayanogorsk	Borovich Refractory Plant, Russia	A.V. Proshkin, V.V. Skurikhin, O.S. Kuznetsova, A.N. Ignatieva, A.A. Kovalenko

15.30	Improvement of BB durability and thermo physics properties	ENERGOPROM – Novosibirsk Electrode Plant, Russia	T.V. Butakova, M.V. Lepp, G.S. Bleskin, A.A. Spektoruk, S.A. Olvovsky
16.00	MIREA – the online real-time solution for verifying the electrical quality of your anodes	ECL, France	G. Léonard, S. Guérard, C. Lavoie, D. Laroche, D. Rose
16.30	Ultrasonic non-destructive testing for carbon/graphite electrode quality control	LLC "ENERGOPROM R & D Center", Russia	G.S. Bleskin, T.V. Butakova, A.A. Spektoruk, A.L. Kvanin, A.V. Matveev
17.00-17.20	HAZEMAG – Engineering and design of breaker machinery	HAZEMAG & EPR GmbH, Germany	Artur Hubert

POSTER SECTION

Exhibition hall №2
September, 16, Wednesday
14.00-15.00

Investigation into the production technology of pitch binder	Siberian Federal University, Krasnoyarsk, KYZZK	N.N. Dovzhenko, F.A. Buryukin, P.N. Kuznetsov, E.N. Marakushina
--	---	---

Evening events:

Picnic, in honor of Professor Peter Polyakov's 80-year anniversary (by invitation)
 Excursion "Evening Krasnoyarsk"
DEPARTURE from Hotel "Siberia" at 17.30

Session «Equipment, machinery attachment and engineering of metallurgical plant's foundry floors»

16.15	Latest development in Aluminium Degassing Technology	STAS Inc.	Florent Gougerot
16.35	Refurbishment of melting-casting area of Krasnoyarsk metallurgical plant	JSC «SibVAMI», Irkutsk, Russia	V.G. Grigoriev, S.V. Tepikin, A.V. Klimov, A.P. Pivankin, V.G. Kokoulin
16.55	Analytical calculation of differential and integral electromagnet characteristics of MHD stirrer	«RPC Magneto hydrodynamics» Ltd, Krasnoyarsk, Russia	V.N. Timofeev, M.Yu. Khatsayuk, O.A. Eremin
17.10-17.25	Competence in technology of foundry production	OK STROIBIS, Moscow, Russia	A.S. Katushonok

POSTER SESSION

**Exhibition hall №2
September 16, Wednesday
14.00-15.00**

Research process of formation the liquid phase in cylindrical blank from titanium alloy 6AL-4V in the electromagnet field	Siberian Federal University, Russia	V.B. Demidovich, M.Yu. Khatsayuk, A.A. Maksimov, V.N. Timofeev, I.I. Rastvorova
Influence of technological factors on the formation of defects in a flat ingot macrostructure series aluminium alloys 1XXX, 8XXX and their microstructure analysis	Siberian Federal University, Russia	V.F. Frolov, A.I. Bezrukikh, T.A. Oreikina, D.V. Gusev, S.V. Kostin, S.V. Belyaev, I.Yu. Gubanov
Research of changes surface strength from sand-clay mixtures with the machano activated graphite additive	Siberian Federal University, Russia	P.O. Yuriev, S.V. Belyaev, E.M. Lesiv A.I. Bezrukikh

The research of properties of suspensions based on carbon – contained materials for foundry production	Siberian Federal University, Russia	S.A. Hudonogov, T.A. Bogdanova, T.R. Gimanshina, V.N. Baranov, S.I. Lytkina, S.V. Mishnev, A.A. Kosovich, E.G. Partyko, E.Yu. Podshibyakina, P.O. Yuryev
--	-------------------------------------	---

*evening events:
... (see the exp. 81)*

SECTION «METAL PRESSURE TREATMENT»

POSTER SESSION

**Exhibition hall №2
September 16, Wednesday
14.00-15.00**

**prof., Dr. Eng. Sc. S.B. Sidelnikov, Siberian Federal University
prof., Dr. Eng. Sc. Yu. A. Gorbunov, «SIALMET» LLC**

Title	Company	Authors
Study processability processing and properties of metal series aluminium alloys 1XXX	Siberian Federal University, Russia	I.V. Kostin, N.N. Dovzhenko, S.V. Belyaev, V.F. Frolov, S.B. Sidelnikov
Analytical dependences calculation of the energy and force conditions of continuous pressing by CONFORM method	Siberian Federal University, Russia	D.V. Bogdanov, S.V. Belyaev, Yu.V. Gorkhov, I.Yu. Gubanov, A.Yu. Krokhin, P.A. Hramtsov
Research structure and properties of lengthy deformed semi-finished products from alloy Al-Zr obtained with various methods of combined processing	Siberian Federal University, Russia	S.B. Sidelnikov, N.N. Dovzhenko, V.M. Bespalov, K.A. Nikitina

15.35	Effect of cross rolling on the microstructure of copper	RSE "Rudny Industrial Institute", Kazakhstan	A.S. Arbuz, A.B. Nayzabekov, H. Dyya, T. Bayor, S.N. Lezhnev, A.S. Buzhinsky
15.55	Development and production of profiles 6XXX series alloys for the manufacture of interior components for high-speed transport	Siberian Federal University, Russia	R.S. Stryamkin, Yu.A. Gorbunov, M.F. Frolov, N.V. Okladnikova
16.15	Computer simulation and automated calculation of manufacturing parameters for new alloys of gold and silver	Siberian Federal University, Russia	S.B. Sidelnikov, J.N. Dovzhenko, Yu.D. Dikovskaya, O.S. Lebedeva, K.A. Bindareva
16.35	Research of mechanical properties of electrotechnical rod from 8176 and 8030 alloys obtained with using combined methods of metal forming	Siberian Federal University, Russia	A.L. Trifonov, S.B. Sidelnikov, A.P. Samchuk
16.55	Bi-metallic steel copper compound mechanism formation study	Siberian Federal University, Russia	N.N. Dovzhenko, E.V. Feskov, I.L. Konstantinov, S.B. Sidelnikov, I.N. Dovzhenko
17.15-17.35	Modeling cold pilger rolling of pipes from alloy D16 for the mill CRP 55-1	Siberian Federal University, Russia	R.E. Sokolov, Yu.F. Kurmachev, D.S. Voroshilov, A.A. Vysotina
18.00	Congress & Exhibition Closing Ceremony		

SECTION «MANAGEMENT»

September, 17, Thursday
Small Hall, 2nd floor

—Candidate of Economic Sciences, T. N. B. , Siberian Federal University

Time	Title	Company	Authors
9.00-12.00	Krasnoyarsk Aluminum Smelter / Krasnoyarsk Non-Ferrous Metals Plant / Krasnoyarsk Metallurgical Plant / Geology Museum of Central Siberia		
12.00-13.00	A. Q. S		
15.10	SWOT – analysis of Russia participation in the international capital, products and labor markets	Institute of Macroeconomic Researches, Oleg	N.V. Okhlopova
15.30	The contour-integrated management of productions of the industrial enterprise	Siberian State Aerospace University, Krasnoyarsk, Russia	A.V. Selivanov, I.I. Vashlaev
15.50	Increasing of "Casting and mechanical plant SCAD" effectiveness through consolidation with Spanish	Casting and Mechanical Plant «SKAD» Ltd., Dvynogorsk	Yu. Yu. Kleimenova
16.10	Investment highly profitable work on the deposits of non-ferrous metals and gold with the development of innovative ore dressing	Siberian Federal University, Russia	A.V. Konev, K.A. Shulgina, I.N. Kuzina, S.F. Bogdanovskaya, J.V. Mironova
16.30	Management of entrepreneurial activity on the basis of balanced business value and financial stability and forecasting of performances of enterprises of non-ferrous industry	Siberian Federal University, Russia	O.M. Zaitkov, E.S. Belyaeva
16.50	Problem of international CDIO standards introduction in metallurgy engineering	Siberian Federal University, Russia	S.I. Osipova, E.A. Rudnitskiy
17.10-17.30	Justification approaches to the calculation of the number of maintenance personnel gold mining	Polyus Gold, Ltd, Kyzak	S.A. Efimov, M.S. Kuzmin
18.00	Congress & Exhibition Closing Ceremony		