



III МЕЖДУНАРОДНАЯ
НАУЧНАЯ КОНФЕРЕНЦИЯ

III INTERNATIONAL
SCIENTIFIC CONFERENCE

**СТАНДАРТНЫЕ ОБРАЗЦЫ
В ИЗМЕРЕНИЯХ И ТЕХНОЛОГИЯХ**
**REFERENCE MATERIALS
IN MEASUREMENT AND TECHNOLOGY**

**Программа
конференции**
Conference
Programme

11-14 сентября
september

2018

Екатеринбург, Россия
Ekaterinburg, Russia

III Международная
научная конференция

III International
scientific conference

СТАНДАРТНЫЕ ОБРАЗЦЫ В ИЗМЕРЕНИЯХ И ТЕХНОЛОГИЯХ

Программа конференции

REFERENCE MATERIALS IN MEASUREMENT AND TECHNOLOGY

Conference programme

11 - 14 сентября
 September

2018

Екатеринбург, Россия
Ekaterinburg, Russia

CONFERENCE ORGANIZERS:

Federal Agency on Technical
Regulating and Metrology Rosstandart (Russia)

Scientific Methodical Centre
The State Service for Reference
Materials of Composition and Properties
of Substances and Materials -
“Ural Research Institute
for Metrology” UNIIM (Russia)

PROGRAMME COMMITTEE:

Chairperson of the Programme Committee:

Sergey S. Golubev Rosstandart (Russia)

Co-chair of the Programme Committee:

Sergey V. Medvedevskikh UNIIM (Russia)

Scientific Secretary of the Conference:

Olga N. Kremleva UNIIM (Russia)

Members of the Programme Committee:

Angelique Botha	NMISA (RSA)
Wolfram Bremser	BAM (Germany)
Vasilisa B. Baranovskaya	IGIC RAS (Russia)
Andrey S. Baturyn	VNIOFI (Russia)
Vladimir I. Dobrovolskiy	VNIIFTRI (Russia)
Sergey I. Donchenko	VNIIFTRI (Russia)
Anatoliy I. Krylov	VNIIM (Russia)
Elena V. Kulyabina	VNIIMS (Russia)
Ilya Kuselman	Independent consultant on metrology (Israel)
Alexander Yu. Kuzin	VNIIMS (Russia)
Natalia P. Muravskaya	VNIOFI (Russia)
Narine G. Oganyan	VNIIFTRI (Russia)
Mikhail V. Okrepilov	VNIIM (Russia)
Anton N. Pronin	VNIIM (Russia)
Egor P. Sobina	UNIIM (Russia)
Vladimir G. Tsoy	VNIHSZR (Russia)
Irina E. Vasil'eva	IGC SB RAS named after academic A. P. Vinogradov

Secretariat:

Natalia S. Taraeva
Natalia S. Baratova
Anna V. Kveglis

UNIIM (Russia)
UNIIM (Russia)
UNIIM (Russia)

Conference venue:

Chamber Theatre of the Museum of Ural Writers
18, Proletarskaya St., Ekaterinburg, Russia
Tel: +7 343 350-60-68, +7 343 355-72-42
Fax: +7 343 355-72-42
E-mail: conference@gssso.ru

Conference languages:

Russian
English

GENERAL INFORMATION ABOUT THE CONFERENCE EVENTS

Tuesday, 11 September 2018		
9:00 - 10:00	Registration of the conference participants	Conference venue: <i>Chamber Theatre, 18, Proletarskaya St.</i>
10:00 - 10:30	Opening of the conference	Conference venue
10:30 - 11:30	Plenary Session	Conference venue
11:10 - 11:40	Coffee Break	Conference venue
11:40 - 13:00	Plenary Session	Conference venue
13:00 – 14:30	Lunch break	Restaurant “Mamulya” <i>41, Lenina St.</i>
14:30 - 16:00	Session 1 <i>International session</i>	Conference venue
16:00 – 16:30	Coffee Break	Conference venue
16:30 – 17:00	Session 1 (<i>continued</i>) <i>International session</i>	Conference venue
17:00 – 18:00	Session 2 <i>General issues in the field of reference materials</i>	Conference venue
19:00 – 21:00	Excursion (only for those who will attend a course on 14 September 2018)	Gathering at UNIIM (1 st floor) 4, Krasnoarmeyskaya St., Ekaterinburg

Wednesday, 12 September 2018		
9:00 - 9:45	Session 2 (<i>continued</i>) <i>General issues in the field of reference materials</i>	Conference venue
9:45 – 10:30	Session 3 <i>Geology, metallurgy</i>	Conference venue
10:30 - 11:00	Coffee Break	Conference venue
11:00 - 11:45	Session 3 (<i>continued</i>) <i>Geology, metallurgy</i>	Conference venue
11:45 – 13:00	Session 4 <i>Medicine, pharmaceuticals</i>	Conference venue
13:00 - 14:30	Lunch break	Restaurant “Mamulya” <i>41, Lenina St.</i>
14:30 - 16:00	Session 5 <i>RMs of physical properties</i>	Conference venue
16:00 - 16:30	Coffee Break	Conference venue
16:30 - 17:15	Session 5 (<i>continued</i>) <i>RMs of physical properties</i>	Conference venue
17:15 - 18:00	Poster Session	Conference venue

Wednesday, 12 September 2018		
19:00 - 22:00	Conference dinner	Theatre “Cosmos” <i>2, Dzerzhinsky St.</i>

Thursday, 13 September 2018		
9:00 - 10:30	Session 6 <i>Quality of life</i>	Conference venue
10:30 - 11:00	Coffee Break	Conference venue
11:00 - 12:45	Special Session 7 <i>Metrological traceability</i>	Conference venue
12:30 - 14:15	Lunch break	Restaurant “Mamulya” <i>41, Lenina St.</i>
14:15 - 16:00	Session 8 <i>Mathematical and statistical support for the characterization of reference materials</i>	Conference venue
15:30 - 16:00	Coffee Break	Conference venue
16:00 - 17:45	Session 9 <i>Application of reference materials</i>	Conference venue
17:45 – 18:00	Closure of the conference	Conference venue

Friday, 14 September 2018		
8:30 -17:00	Out-of-town excursion programme	Gathering at UNIIM (1 st floor) 4, Krasnoarmeyskaya St., Ekaterinburg

PLENARY SESSION

Tuesday, 11 September 2018

Chairperson: Sergey V. Medvedevskikh, UNIIM (Russia)

Time	Speaker	Organization	Lecture title
10:00 - 10:30	Conference organizers, program committee		Opening of the conference, welcome address to the participants
10:30 - 10:50	Sergey V. Medvedevskikh	UNIIM	Reference materials of the Russian Federation: Strategy of ensuring the uniformity of measurements until 2025 <i>Medvedevskikh S. V., Kremleva O. N. (51)</i>
10:50 – 11:10	Mikhail V. Okrepilov	D.I. Mendeleev Institute for Metrology (VNIIM)	On calibration and measurement capabilities of COOMET national metrological institutes in the field of physical and chemical measurements <i>Konopelko L. A., Kustikov Y. A., Okrepilov M. V., Pronin A. N. (29)</i>
11:10 – 11:40	Coffee Break		
11:40 - 12:00	Natalia P. Muravskaya	VNIIOFI	International cooperation in the field of reference materials for laboratory medicine <i>Baturin A. S., Muravskaya N. P. (3)</i>
12:00 - 12:20	Olga N. Kremleva	UNIIM	State Register of approved type reference materials of the Russian Federation <i>Agisheva S. A., Kremleva O. N., Suslova V. V. (1)</i>
12:20 -12:40	Vladimir N. Malakhov	ASNP “TsVKK”	The state of affairs and problematic issues in conducting ILC at medical laboratories <i>Malakhov V. N.</i>
12:40 – 13:00	Narine G. Oganyan	VNIIFTRI	Activity of VNIIFTRI in the field of physical-chemical measurements <i>Dobrovolskiy V. I., Oganyan N. G., Prokunin S.V. (13)</i>
13:00 – 14:30	Lunch break		

SESSION 1: International session

Tuesday, 11 September 2018

Chairperson: Wolfram Bremser, BAM, Germany

Time	Speaker	Country, organization	Lecture title
14:30 – 14:45	Wolfram Bremser	Germany BAM	Forthcoming Endeavours of ISO/REMCO <i>Bremser W. (8)</i>
14:45 – 15:00	Angelique Botha	RSA, NMISA	Harmonised guidance for the producers and users of reference materials – the current status and future prospects <i>Botha A. (7)</i>
15:00 – 15:15	Kenneth W. Pratt	USA, NIST	Evaluating long-term capability in primary pH metrology using techniques of the CCQM key comparisons in pH <i>Pratt K. W. (60)</i>
15:15 – 15:30	Samuel Wunderli	Switzerland, Atomolmetrion GmbH	Combined measurement uncertainty for pH-values using certified reference materials in potentiometric measurements with glass electrodes <i>Wunderli S. (73)</i>
15:30 – 15:45	Adriaan M.H. van der Veen	Holland, VSL	Bayesian methods in the certification of reference materials <i>van der Veen A.M.H. (72)</i>
15:45 – 16:00	Johannes van de Kreeke	Germany BAM	COMAR, where do you go? <i>van de Kreeke J., Pradel R. (34)</i>
16:00 – 16:30	Coffee Break		
16:30 – 16:45	Ilya Kuselman	Israel, Independent Consultant on Metrology	Conformity assessment of multicomponent materials - who and why takes risks? <i>Kuselman I., Pennechi F. R., da Silva R. J. N. B., Hibbert D. B. (38)</i>

SESSION 1: International session

Tuesday, 11 September 2018

Chairperson: Wolfram Bremser, BAM, Germany

Time	Speaker	Country, organization	Lecture title
16:45 – 17:00	Wolfram Bremser	Germany BAM	Validation of methods for the determination of qualitative properties <i>Bremser W., Menzel W. (9)</i>

SESSION 2: General issues in the field of reference materials

Tuesday, 11 September 2018

Chairperson: Olga N. Kremleva, UNIIM, Russia

Time	Speaker	Organization	Lecture title
17:00 – 17:15	Valentina A. Pripisnova	“CRM”	Falsification of certified reference materials. How to identify and how to fight? <i>Pripisnova V. A., Atanov A. N. (61)</i>
17:15 – 17:30	Anton V. Belov	Rostov CSM	Interlaboratory comparison tests – the main tool of competence assessment <i>Belov A.V. (4)</i>
17:30 – 17:45	Narine G. Oganyan	VNIIFTRI	VNIIFTRI's participation in international comparisons in the field of physical-chemical measurements <i>Dobrovolskiy V.I., Oganyan N.G., Prokunin S.V., Stakheev A.A. (14)</i>
17:45 – 18:00	Aleksey Yu. Kit	VIMS	Analysis of the industry base of certified reference materials of mineral raw materials <i>Lebedeva M. I., Kit A.Yu. (41)</i>

SESSION 2: General issues in the field of reference materials (continued)

Wednesday, 12 September 2018

Chairperson: Olga N. Kremleva, UNIIM, Russia

Time	Speaker	Organization	Lecture title
09:00 – 09:15	Dmitriy V. Falkin	Accreditation Centre “Standart”	Procedures for the management of reagents and reference materials at the laboratory in accordance with ISO/IEC 17025:2017 <i>Falkin D.V. (18)</i>
09:15 – 09:30	Alexandra S. Demchenko	STC “MinStandarts”	Experience in implementing a quality system of the ores and rocks reference material producer in Minstandarts <i>Moshkova M. V., Demchenko A. S. (53)</i>
09:30 - 09:45	Olga V. Fatina	VNIIM	Problem of comparability of characteristics of certified reference materials – gas mixtures of the same kind, produced by different enterprises <i>Konopelko L.A., Kolobova A.V., Fatina O.V. (28)</i>

SESSION 3: Geology, metallurgy

Chairperson: Irina E. Vasil'eva, IGC SB RAS, Russia

Wednesday, 12 September 2018

Time	Speaker	Organization	Lecture title
09:45 – 10:00	Irina E. Vasil'eva	IGC SB RAS	Multiparametric reference materials required for analysis of geological samples on precious metals <i>Vasil'eva I. E., Shabanova E. V., Dreglea A. I. (24)</i>
10:00 – 10:15	Valeriy V. Stepanovskikh	ICRM	Development, production, testing and use of certified reference materials for metallurgical production <i>Stepanovskikh V. V. (69)</i>
10:15 – 10:30	Maria I. Lebedeva.	VIMS	Reference material producer - VIMS: key aspects of ensuring the quality of certified reference materials of solid mineral resources <i>Lebedeva M. I. (40)</i>
10:30 – 11:00	Coffee Break		
11:00 - 11:15	Margarita A. Dombrowskaya	Ural Federal University	Production and certification of reference materials of boron mass fraction in silumin <i>Lisienko D. G., Dombrowskaya M. A., Kubrina E. D. (42)</i>
11:15 - 11:30	Anton S. Zasukhin	UNIIM	Development of a certified reference material of hydrogen mass fraction in titanium hydride <i>Zasukhin A. S., Sobina E. P., Migal P. V. (76)</i>
11:30 - 11:45	Stepan V. Lisovskii	State University MIPT	Technique of controlling the content of Ce and Gd in YGAG:Ce powders by means of inductively coupled plasma mass spectrometry <i>Lisovskii S. V. (43)</i>

SESSION 4: Medicine, pharmaceuticals

Wednesday, 12 September 2018

Chairperson: Elena V. Kulyabina, VNIIMS, Russia

Time	Speaker	Organization	Lecture title
11:45 – 12:00	Rauza A. Volkova	SCEEMP of the Ministry of Health of Russia	Problems of reference materials of biological medicinal products <i>Olefir Y. V., Volkova R. A., Fadeikina O. V., Sakanyan E. I., Merkulov V. A., Movsesyants A. A., Bondarev V. P. (56)</i>
12:00 – 12:15	Natalia Yu. Griazskikh	VNIIOFI	Development of reference materials in the laboratory medicine. Reference materials of electrolytes in the blood serum <i>Griazskikh N. Yu., Yermakova Y. I., Zyablikova I. N., Ivanov A. V. (22)</i>
12:15 – 12:30	Maria P. Krasheninina	UNIIM	Application of raman spectroscopy with the purpose of drugs quality control in injection form <i>Krasheninina M.P., Medvedevskikh M.Yu., Il'ina E.V., Galeev R.R.(32)</i>
12:30 – 12:45	Olga G. Kornilova	“SCEEMP” of the Ministry of Health of Russia	Reference materials to assess specific safety of preparations of immunoglobulins, and human albumin: development, validation and application <i>Kornilova O. G., Krivvykh M. A., Volkova R. A., Borisevich I. B. (30)</i>
12:45 – 13:00	Elena V. Kulyabina	VNIIMS	Reference materials of catalytic activity as a means of providing the metrological traceability of measurement results. KATAL <i>Kulyabina E. V., Melkova O. N., Guskova E. A. (37)</i>
13:00 – 14:30	Lunch break		

SESSION 5: RMs of physical properties
 Chairperson: Egor P. Sibina, UNIIM, Russia

Wednesday, 12 September 2018

Time	Speaker	Organization	Lecture title
14:30 - 14:45	Ekaterina A. Volegova	UNIIM	Development of certified reference materials set of magnetic properties of hard magnetic materials based on NdFeB alloy <i>Volegova E. A., Maslova T. I., Malygin M. A., Vas`kovskiy V. O., Volegov A. S. (25)</i>
14:45 – 15:00	Ivan A. Emelyanenko	VNIIFTRI	Absorbed dose rate and absorbed dose transfer reference materials with dose measurement possibilities ranging from 50 to 1000 Gy <i>Emelyanenko I. A., Tenishev V. P. (15)</i>
15:00 – 15:15	Alexander S. Vasilyev	UNIIM	Multiparametric certified reference materials used for metrological support of coating parameters <i>Kazantsev V. V., Vasilyev A. S. (26)</i>
15:15 – 15:30	Anastasiya A. Neklyudova	VNIIM	New certified reference materials of liquid viscosity <i>Neklyudova A. A., Demyanov A. A. (54)</i>
15:30 – 15:45	Iлона N. Matveeva	UNIIM	Validation of the test procedure for stretching in line with GOST 10446 with the use of a reference material of wire for quality control <i>Matveeva I. N., Tolmachev V. V.(46)</i>
15:45 – 16:00	Andrey M. Nepomiluev	UNIIM	Perspectives of developing reference materials of thermodynamic properties for metrological support in the field of thermal analysis and calorimetry in the Russian Federation <i>Nepomiluev A.M., Kazantsev V.V., Shipitsyn A.P. (55)</i>
16:00 – 16:30	Coffee Break		

SESSION 5: RMs of physical properties

Chairperson: Egor P. Sibina, UNIIM, Russia

Wednesday, 12 September 2018

16:30 – 16:45	Egor P. Sobina	UNIIM	Development of reference materials for porosity based on aluminium oxide for the method of mercury porosimetry <i>Sobina E.P. (67)</i>
16:45 – 17:00	Elena G. Parfenova	UNIIM	Metrological assurance of infrared analyzers of grain <i>Parfenova E. G., Molodykh S. N. (58)</i>
17:00 – 17:15	Ilona N. Matveeva	UNIIM	Development of a certified reference material of the physical properties of soil clay (loam) <i>Matveeva I. N., Tolmachev V. V. (46)</i>
17:15 – 18:00	Poster Session		
19:00	Conference dinner		

SESSION 6: Quality of life

Thursday, 13 September 2018

Chairperson: Maria Yu. Medvedevskikh, UNIIM, Russia

Time	Speaker	Organization	Lecture title
09:00 – 09:15	Alexandra G. Budko	VNIIM	Metrological assurance for dioxin measurements. Development of a new certified reference material of dioxin mass fraction in animal fat <i>Budko A. G., Mikheeva A. Yu., Krylov A. I. (10)</i>
09:15 – 09:30	Maria P. Krasheninina	UNIIM	On the development of a certified reference material of gluten <i>Krasheninina M. P., Sergeeva A. S., Medvedevskikh M. Yu., Miluyshkin A. L., Shatalov I. S. (33)</i>
09:30 – 09:45	Elena V. Shabanova	IGC SB RAS	A new multielement reference material for composition of pine needles <i>Shabanova E. V., Vasil'eva I. E., Zak A. A., Mustafina O. K. (63)</i>
09:45 – 10:00	Anna M. Bogacheva	UNIIM	Development of interlaboratory comparison samples and reference materials for the quality assurance of air composition measurements <i>Bogacheva A. M. (5)</i>
10:00 – 10:15	Svetlana N. Eldetsova	Sibtekhlogiya	Reference materials on the natural basis in the fuel and energy complex of the Russian Federation <i>Eldetsova S. N., Kolesnikov A. F.</i>
10:15 – 10:30	Maria Yu. Medvedevskikh	UNIIM	On the development of reference materials of food quality indicators <i>Medvedevskikh M. Yu., Krasheninina M. P., Sergeeva A. S., Nikonova N. A. (50)</i>
10:30 – 11:00	Coffee Break		

SESSION 7: Metrological traceability

Thursday, 13 September 2018

Chairperson: Alena V. Sobina, UNIIM, Russia

Time	Speaker	Organization	Lecture title
11:00 – 11:15	Alexander Yu. Shimolin	UNIIM	Development of a certified reference material of 0.1 M potassium dichromate solution gso 10992-2017 <i>Shimolin A. Yu., Sobina A. V. (64)</i>
11:15 – 11:30	Ianina I. Ermakova	VNIIOFI	Development of reference materials in the field of physical and chemical analysis. Reference materials for composition of aluminum, iron, magnesium, nickel and titan aqueous ion solutions <i>Ermakova I. I., Ivanov A. V., Zyablikova I.N., Shobina A. N. (16)</i>
11:30 – 11:45	Marina F. Kuznetsova	UNIIM	Development of certified reference materials for mass fraction of elements in solid matrix for metrological assurance of x-ray fluorescence and atomic emission analysis <i>Kuznetsova M. F., Sobina A.V. (39)</i>
11:45 – 12:00	Olga N. Kremleva	UNIIM	Isotope dilution mass spectrometry in the development of reference materials <i>Kremleva O. N., Tabatchikova T. N. (35)</i>
12:00 – 12:15	Tatiana P. Stolboushkina	VNIIFTRI	Development and certification of ICP standard solution of lead <i>Stolboushkina T. P., Stakheev A. A. (68)</i>
12:15 – 12:30	Alena V. Sobina	UNIIM	Proficiency testing with the established traceability to the national primary standard GET 176-2017 <i>Sobina A. V. (66)</i>
12:30 – 14:15	Lunch Break		

SESSION 8: Mathematical and statistical support for the characterization of reference materials

Thursday, 13 September 2018

Chairperson: Vyacheslav V. Kazantsev, UNIIM, Russia

Time	Speaker	Organization	Lecture title
14:15 - 14:30	Maria Yu. Medvedevskikh	UNIIM	Creation of a system for automatic monitoring and accounting of pollutant discharges into water objects <i>Medvedevskikh S. V., Kazantsev V. V., Medvedevskikh M. Yu., Sergeeva A. S. (48)</i>
14:30 - 14:45	Pavel V. Migal	UNIIM	Evaluation of uncertainty of the certified value of multicomponent reference material <i>Migal P. V., Medvedevskikh S. V., Firsanov V. A. (52)</i>
14:45 – 15:00	Olga V. Fadeikina	“SCEEMP” of the Ministry of Health of Russia	Methodological approaches to statistical evaluation of test results obtained during certification of reference materials used for biologicals quality evaluation <i>Fadeikina O. V., Volkova R. A. (17)</i>
15:00 - 15:15	Petr M. Aronov	UNIIM	Estimation of consensus value of interlaboratory measurement results with minimum increase of associated uncertainty <i>Aronov P. M., Kremleva O. N. (2)</i>
15:15 – 15:30	Maria P. Krasheninina	UNIIM	Estimation of material preparation quality of certified reference materials of solid wet substances <i>Medvedevskikh S. V., Krasheninina M. P., Medvedevskikh M. Yu. (49)</i>
15:30 – 16:00	Coffee Break		

SESSION 9: Application issues of reference materials

Thursday, 13 September 2018

Chairperson: Yuriy S. Bessonov, UNIIM, Russia

Time	Speaker	Organization	Lecture title
16:00 – 16:15	Valentina V. Borisova	RTU MIREA	Use of bismuth-containing glassy reference materials for the determination of transition elements by the luminescence method <i>Borisova V. V., Kutvitsky V. A., Mironova E. V. (6)</i>
16:15 – 16:30	Anastasia A. Zabelina	UNIIM	Evaluating the effectiveness of corrective actions at the laboratory of non-destructive control <i>Zabelina A. A., Tolmachev V. V. (75)</i>
16:30 – 16:45	Alexey Yu. Kropanev	UNIIM	Techniques for ambient air monitoring. Certification and organization of the intralaboratory quality control of measurements conducted using reference materials <i>Kropanev A. Yu. (36)</i>
16:45 – 17:00	Olga B. Ponomareva	UNIIM	External control of the quality of food composition measurements using interlaboratory comparison materials <i>Ponomareva O. B., Kotov M. V. (59)</i>
17:00 – 17:15	Ilya N. Svistunov	Rostest-moscow	The practical use of reference materials for verifying measuring instruments <i>Svistunov I. N., Gorbunov R. A., Levin A. E. (70)</i>
17:15 – 17:30	Sergey V. Serdjukov	UNIIM	The use of a reference material to solve problems in assessing the quality of electrical steel in accordance with the requirements of Russian and foreign standards <i>Serdjukov S. V., Maslova T. I. (62)</i>

SESSION 9: Application issues of reference materials

Chairperson: Yuriy S. Bessonov, UNIIM, Russia

Thursday, 13 September 2018

17:30 – 17:45	Yuliya S. Chentsova	UNIIM	The use of a reference material of asphalt-concrete mixture in the evaluation of personnel skills at a road construction laboratory <i>Chentsova Yu. S., Tolmachev V. V. (11)</i>
---------------	---------------------	-------	--

THE PROGRAMME OF POSTER SESSION

Wednesday, 12 September 2018

Chairperson: Olga N. Kremleva, UNIIM, Russia

Time	Speaker	Organization	Lecture title
14:30 - 18:00	Ludmila I. Goryaeva	UNIIM	Organization of interlaboratory comparisons for determining the indicators of the composition and properties of drinking, natural and purified waste water using reference materials <i>Goryaeva L. I., Fatkulina E. K. (20)</i>
	Eugenia P. Shchukina	UNIIM	Development of a certified reference material for determining total alkalinity of natural water <i>Goryaeva L. I., Shchukina E. P., Fatkulina E. K. (21)</i>
	Anastasia Yu. Gulyaeva	VGNKI	Reference materials used in the veterinary field <i>Gulyaeva A. Yu., Kis I. V., Kolyachkina S. V., Komarov A. A. (23)</i>
	Alexey A. Demyanov	VNIIM	Reference materials of the composition and properties for determination of quality parameters of petroleum and petroleum products <i>Demyanov A. A., Neklyudova A. A.</i>
	Anna. V. Zelenkova	IRGIREDMET	Experience of an accredited laboratory in interlaboratory comparisons <i>Zelenkova A. V., Prokopyeva S. V., Stupakova E. V. (77)</i>
	Veniamin M. Zyskin	UNIIM	On improving the accuracy of producing certified reference materials of iron (III) and copper (II) ion solutions <i>Zyskin V. M., Sobina A. V. (78)</i>

Time	Speaker	Organization	Lecture title
	Karina A. Mishina	VNIIM	On the development of certified reference materials for melting point of high-purity organic substances <i>Kazartcev Ya. V., Korchagina E. N., Mishina K. A., Shehovtsov D. A. (27)</i>
14:30 - 18:00	Veronika A. Koryukova	UNIIM	Metrological support of gas adsorption analysis <i>Koryukova V.A., Sobina E.P. (31)</i>
	Anatoliy I. Krylov.	VNIIM	Possibility of developing a reference procedure or primary reference procedure to ensure traceability of measurements for mercury in gas media <i>Maksakova I. B., Smirnov V. V., Krylov A. I. (44)</i>
	Olga V. Starovoytova	Federal State Unitary Enterprise Mayak Production Association	Developing a certified reference material based on plutonium dioxide for total plutonium content <i>Marchuk A. Yu., Starovoytova O. V., Maximova I. M., Stepanova O. V. Tadevosyan Yu. A., Semyonov M. A., Chukhlantseva, E. V., Plekhanov V. V. (45)</i>
	Elena V. Osintseva	Limited Liability Company Ugra-PGS	The risk-based approach in the production of reference materials <i>Osintseva E.V. (57)</i>
	Svetlana N. Shushunova	West-Siberian Testing Center	Work on the production of certified reference materials, performed by Western-Siberian Testing Center in 2017-2018 <i>Shushunova S. N. (65)</i>
	Lyudmila N. Yamchshikova	Affiliate of RSE “NE CPMRM RK” “VNIItsvetmet”	The activity of a specialized organization of the state service for reference materials of VNIItsvetmet institute <i>Yamchshikova L. N., Matyuschenko Ye. V. (74)</i>