



2020

**ИННОВАЦИОННЫЕ ПРОЦЕССЫ
КОМПЛЕКСНОЙ ПЕРЕРАБОТКИ ПРИРОДНОГО
И ТЕХНОГЕННОГО МИНЕРАЛЬНОГО СЫРЬЯ**
(Плаксинские чтения – 2020)



**ПРОГРАММА
МЕЖДУНАРОДНОЙ КОНФЕРЕНЦИИ**

**INNOVATIVE PROCESSES OF COMPLEX
TREATMENT OF NATURAL AND MAN-MADE
MINERAL RAW MATERIALS**
(Plaksinsky Readings – 2020)

**PROGRAM
OF INTERNATIONAL CONFERENCE**

АПАТИТЫ

CONFERENCE AGENDA



September 22– Tuesday	
ASSEMBLY HALL, Mining Institute KSC RAS (Apatity) ASSEMBLY HALL, Institute of Comprehensive Exploitation of Mineral Resources, IPKON RAS (Moscow)	
10⁰⁰–10³⁰	Conference opening
10³⁰–16⁴⁰	Plenary reports
13⁰⁰–14⁰⁰	<i>Lunch</i>
Workshops	
September 23– Wednesday	
ASSEMBLY HALL, Mining Institute KSC RAS (Apatity) CONFERENCE HALL, IPKON RAS (Moscow)	
9⁰⁰–11⁰⁰	Modern mineral processing technologies
ASSEMBLY HALL, Mining Institute KSC RAS (Apatity) ASSEMBLY HALL, IPKON RAS (Moscow)	
11¹⁵–17³⁰	Flotation, gravity, magnetic and electromagnetic separation
ASSEMBLY HALL, Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials (Apatity) CONFERENCE HALL, IPKON RAS (Moscow)	
9⁰⁰–17⁰⁰	Processing of secondary mineral resources. Environmental and economic aspects
13⁰⁰–14⁰⁰	<i>Lunch</i>
September 24– Thursday	
ASSEMBLY HALL, Mining Institute KSC RAS (Apatity) ASSEMBLY HALL, IPKON RAS (Moscow)	
9⁰⁰–15⁰⁰	Comprehensive mineral processing, hydrometallurgical processes
ASSEMBLY HALL, Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials (Apatity) CONFERENCE HALL, IPKON RAS (Moscow)	
9⁰⁰–11⁰⁰	Technological mineralogy. Disintegration and ore preparation
13⁰⁰–14⁰⁰	<i>Lunch</i>
ASSEMBLY HALL, Mining Institute KSC RAS (Apatity) ASSEMBLY HALL, Institute of Comprehensive Exploitation of Mineral Resources (Moscow)	
15⁰⁰–16⁰⁰	Final meeting of Plaksin Readings 2020 Conference. Discussion. Summary
September 25 – Friday	
CONFERENCE HALL, Mining Institute KSC RAS (Apatity)	
9⁰⁰–11⁰⁰	Supporting environmental economic and social impacts of mining activity

September 22– Tuesday

ASSEMBLY HALL, Mining Institute KSC RAS (Apatity)
ASSEMBLY HALL, Institute of Comprehensive Exploitation of Mineral Resources,
IPKON RAS (Moscow)

10⁰⁰-10³⁰	<i>Conference opening. Greetings</i>
10³⁰-11⁰⁰	Chanturia V.A. Innovative technologies for complex and deep processing of mineral raw materials with complex material composition
11⁰⁰-11³⁰	Weisberg L.A. Digital technologies and big data in mineral processing (Saint-Petersburg - online)
11³⁰-11⁵⁰	<i>Coffee break</i>
11⁵⁰-12²⁰	Dmitrak Yu.V. Development of innovative methods and equipment for determining the dynamic parameters of milling loading for fine rock grinding (Apatity)
12²⁰-12⁵⁰	Ozhogina E.G., Kotova O.B. Technological mineralogy: predictive assessment of the quality of unconventional mineral raw materials, prospects for use (Moscow, IPKON)
12⁵⁰-14⁰⁰	<i>Lunch</i>
14⁰⁰-14²⁰	Nikolaev A.I., Krivovichev S.V. The role of the Kola chemical-technological cluster in the transition from a resource-based economy to an innovative one (Apatity)
14²⁰-14⁴⁰	Bogovich A.N. Increasing the competitiveness of the Olenegorsky GOK JSC through the introduction of innovative technologies (Apatity)
14⁴⁰-15⁰⁰	Kalugin A.I. The current state of technologies to process apatite-nepheline ore from the Khibiny deposits (Apatity)
15⁰⁰-15²⁰	Kurkov A.V., Anufrieva S.I., Rogozhin A.A. Molecular Recognition Technology - an advanced direction for selective metal extraction (Moscow, IPKON)
15²⁰-15⁴⁰	Matveeva T.N. Current state and prospects for expanding the range of flotation reagents for the extraction of precious metals from refractory mineral raw materials (Apatity)
15⁴⁰-16⁰⁰	<i>Coffee break</i>
16⁰⁰-16²⁰	Aleksandrova T.N., Liberwirt H. Selective disintegration and separation of mineral raw materials: theory, methods, practical implementation (Apatity)
16²⁰-16⁴⁰	Orekhova N.N., Shadrinova I.V., Zelinskaya E.V., Volkova N.A. Resources of the Urals and Siberia's mining-induced mineral raw materials: main research results, prospects for their development (Moscow, IPKON)

MODERN MINERAL PROCESSING TECHNOLOGIES

September 23– Wednesday

ASSEMBLY HALL, Mining Institute KSC RAS (Apatity)
CONFERENCE HALL, IPKON RAS (Moscow)

Moderators:

Chanturiya E.L. Dr.Eng., prof.

Tereshchenko S.V. Dr.Eng., prof.

**International Conference “Plaksin Readings-2020”
September 21-26, 2020, Apatity, Russia**

9⁰⁰-9¹⁵	Rasskazov I.Yu., Rasskazova A.V., Konareva T.G., Lavrik A.V., Sorokin A.A. Research of the processes of staged heap leaching of valuable components from off-balance and low-grade ores of the Malmyzhsky porphyry copper deposit (Khabarovsk)
9¹⁵-9³⁰	Petrov I.M. Technological and economic aspects of processing of rare earth raw ores (Moscow)
9³⁰-9⁴⁵	Opalev A.S. Ways to improve the quality of iron ore concentrates at ferruginous quartzite processing enterprises (Apatity)
9⁴⁵-10⁰⁰	Tereshchenko S.V., Shibaeva D.N., Shumilov P.A., Vlasov B.A., Bulatov V.V. Analysis of the influence of the geometric parameters of the radiometric separator transportation device on the flotation productivity (Apatity)
10⁰⁰-10¹⁵	Shigaeva V.N., Buzunova T.A., Nazarenko L.N. Study of the beneficiation of feldspar from the Kedrovoe deposit (Yekaterinburg)
10¹⁵-10³⁰	Gazaleeva G.I. Problems in processing of non-metallic raw materials containing fine slimes (Yekaterinburg)
10³⁰-10⁴⁵	Turetskaya N.Yu., Prokopyev S.A., Prokopyev E.S., Emelyanova K.K., Kadesnikov I.V., Kopylov S.A. Screw separation in iron ore processing technology (Irkutsk)
10⁴⁵-11⁰⁰	Pestryak I.V., Morozov V.V., Zhargalsaykhan E. Substantiation of the scheme of cyclic water rotation during flotation-biohydrometallurgical processing of middlings (Moscow)
11⁰⁰-11¹⁵	Coffee break

FLOTATION, GRAVITY, MAGNETIC AND ELECTROMAGNETIC SEPARATION
September 23– Wednesday

ASSEMBLY HALL, Mining Institute KSC RAS (Apatity)
ASSEMBLY HALL, Institute of Comprehensive Exploitation of Mineral Resources, IPKON RAS (Moscow)

Matveeva T.N., Dr.Eng, prof.
Opalev A.S., PhD in Eng
Kurkov A.V., Dr.Eng.

11¹⁵-11³⁰	Yuriev A.I., Lesnikova L.S., Umysheva A.A., Miller A.A. Assessment of the flotation activity of the components of the host copper-nickel rocks (case study of the Talnakh dressing plant) (Norilsk)
11³⁰-11⁴⁵	Kondratyev S.A. Influence of the degree of oxyethylation of physically sorbed collectors on the recovery of the useful component and the quality of the flotation concentrate (Novosibirsk)
11⁴⁵-12⁰⁰	Gavrilova T.G., Kondratyev S.A. Development of the mechanism of sulfide flotation activation by heavy metal ions (Novosibirsk)
12⁰⁰-12¹⁵	Tsitsilina D.M. Flotation of apatite ore with nickel oleate (Novosibirsk)
12¹⁵-12³⁰	Zavyalov S.S., Morozov Yu.P. Study of the regularity of the separation of sulfide ore from the Shatyrkul deposit by dry gravity beneficiation methods (Yekaterinburg)
12³⁰-12⁴⁵	Penkov P.M., Khamidulin I.Kh. Study of accumulative turbulization centrifugal separation (Yekaterinburg)

**Innovative processes of complex treatment
of natural and man-made mineral raw materials
(Plaksin Readings – 2020)**

12 ⁴⁵ -13 ⁰⁰	Shevchenko A.S., Morozov Yu.P., Shautenov M.R., Khamidulin I.Kh. Combined technology for processing tungsten-containing tailings (Yekaterinburg)
13 ⁰⁰ -14 ⁰⁰	Lunch
14 ⁰⁰ -14 ¹⁵	Viduetsky M.G., Garifulin I.F., Maltsev V.A., Purgin A.P., Panshin A.M., Izbrecht P.A., Golovko F.P., Nesmelov V.Yu., Yochev I.SCH. Column flotation machines: evolution (Yekaterinburg)
14 ¹⁵ -14 ³⁰	Elnikova S.P. Determination of the probability of particle destruction during crushing "in a layer" (Yekaterinburg)
14 ³⁰ -14 ⁴⁵	Ostapenko S.P., Mesyats S.P. Investigation of the hydration of the minerals surface by the computer modeling (Apatity)
14 ⁴⁵ -15 ⁰⁰	Golets M., Smolko Schwarzmeier N., Nordberg H. Application of synthetic anionic collectors to improve the performance of apatite direct flotation (Sweden)
15 ⁰⁰ -15 ¹⁵	Lebedok A.V., Markworth L. Effective technology of pneumatic flotation. The potential of technical modernization of the flotation process for apatite-containing ores (Apatity)
15 ¹⁵ -15 ³⁰	Romashev A.O., Kuznetsov V.V. Development of a methodological approach to determining the flotation beneficiation parameters (Apatity)
15 ³⁰ -15 ⁴⁵	Semyanova D.V. Study of the relationship between the structure of the collector's hydrocarbon fragment and its tensiometric characteristics with the collecting ability) (Apatity)
15 ⁴⁵ -16 ⁰⁰	Getman V.V., Karkeshkina A.Yu. Application of polyvinylcaprolactam in the flotation beneficiation of sulfide ores (Moscow, IPKON)
16 ⁰⁰ -16 ¹⁵	Coffee break
16 ⁰⁰ -16 ¹⁵	Timofeev A.S. Method for determining the concentration of ferrosilicon in suspension for the process of heavy-medium separation (Moscow, IPKON)
16 ¹⁵ -16 ²⁵	Artemiev A.V., Mitrofanova G.V. Evaluation of the suspension effect in flocculation processes (Apatity)
16 ²⁵ -16 ³⁵	Bazarova E.A., Chernousenko E.V., Mitrofanova G.V. Nitrogen-containing mono-derivatives of dicarboxylic acids as collectors for flotation of non-ferrous metal ores (Apatity)
16 ³⁵ -16 ⁴⁵	Kameneva Y.S., Chernousenko E.V. Investigation of the collecting ability of complexing reagents with a nitrile group during flotation of copper-nickel ores (Apatity)
16 ⁴⁵ -17 ⁰⁰	Lukichev S.V., Opalev A.S., Nikitin R.M., Biryukov V.V. Simulation modeling in studies to improve the efficiency of technological flowsheets for mineral beneficiation (Apatity)
17 ⁰⁰ -17 ¹⁵	Ignatkina V.A., Korzh V.R., Aksenova D.D. Effect of combinations of an oxyhydriyl collector and a nonionic heteropolar compound on the selectivity of calcium minerals flotation (Moscow, IPKON)
17 ⁰⁰ -17 ³⁰	Opalev A.S., Khokhulya M.S., Karpov I.V., Fomin A.V. Scientific and technical approach to improving the technology for producing iron ore concentrate at Olkon JSC (Apatity)

PROCESSING OF SECONDARY MINERAL RESOURCES. ENVIRONMENTAL AND ECONOMIC ASPECTS

September 23– Wednesday

ASSEMBLY HALL, Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials (Apatity)
CONFERENCE HALL, IPKON RAS (Moscow)

Moderators:

Shadrunkova I.V., Dr.Eng, prof.

Makarov D.B., Dr.Eng., prof.

9⁰⁰-9¹⁵	Petrova A.I. Environmental problems of processing rare earth raw ores
9¹⁵-9³⁰	Lukanin A.A., Sosnovskiy S.A., Sachkov V.I., Obkhodskaya E.V. Processing of mining-induced titanium-containing solutions in a high-temperature spray reactor (Tomsk)
9³⁰-9⁴⁵	Vasilkova A.O., Byvaltsev A.V., Khmelnitskaya O.D., Voiloshnikov G.I. Development of a technology for processing mining-induced raw materials using ultra-low concentrations of sodium cyanide (Irkutsk)
9⁴⁵-10⁰⁰	Ryspanov N.B., Pirmatov E.A., Mukusheva A.S., Ryspanov N.N., Fedyanin Yu.V. Study of percolation leaching of useful components from the tailings of a flotation plant
10⁰⁰-10¹⁵	Medyanik N.L., Ponomarev A.P., Smirnova A.V. Study of effective recoverable forms of zinc and copper metal cations from hydrotechnogenic mineral raw materials (Magnitogorsk)
10¹⁵-10³⁰	Mullina E.R., Medyanik N.L., Mishurina O.A., Varnavsky D.A., Lyapkin S.D. Resource potential of hydraulic engineering facilities of mining and processing enterprises of the South Urals (Magnitogorsk)
10³⁰-10⁴⁵	Mishurina O.A., Medyanik N.L., Mullina E.R., Turlina A.A., Rastorguev A.E. Prospects and practice of using ion flotation for the selective processing of hydrotechnogenic formations (Magnitogorsk)
10⁴⁵-11⁰⁰	Lavrinenko A.A., Kunilova I.V., Golberg G.Yu., Lusinyan O.G., Kravchenko V.N. Problems of complex processing of ash and slag waste from coal combustion (Moscow, IPKON)
11⁰⁰-11¹⁵	Coffee break
11¹⁵-11³⁰	Galchenko Yu.P., Kalabin G.V. Theoretical substantiation of the possibility of building convergent mining technologies in the development of the Arctic subsoil (Moscow, IPKON)
11³⁰-11⁴⁵	Minenko V.G., Makarov D.V., Samusev A.L. Justification and development of a new class of sorbents based on electrochemically modified saponites (Apatity)
11⁴⁵-12⁰⁰	Kalinkin A.M., Gurevich B.I., Kalinkina E.V., Semushin V.V. Geopolymer materials using a mechanically activated composition based on ash from a thermal power plant with the addition of natural calcite (Apatity)
12⁰⁰-12¹⁵	Amosov P.V., Baklanov A.A. Methodological approach for assessing the level of the atmosphere's dust pollution based on numerical modeling (Apatity)
12¹⁵-12³⁰	Makarov D.V., Svetlov A.V., Goryachev A.A., Konina O.T., Masloboev V.A. Dusting of apatite-nepheline ore dressing tailings and meteorological parameters of the warm period in the 21 st century (Apatity)
12³⁰-12⁴⁵	Mazukhina S.I., Sandimirov S.S., Masloboev V.A., Makarov D.V. Thermodynamic modeling of hypergenesis of copper-nickel mining and processing wastes under different temperatures and moisture regimes

**Innovative processes of complex treatment
of natural and man-made mineral raw materials
(Plaksin Readings – 2020)**

	(Apatity)
12 ⁴⁵ -13 ⁰⁰	Barmin I. S., Morozov V. V. Improvement of the processing technology for fine-grained tailings of the Kovdorsky GOK
13 ⁰⁰ -13 ¹⁵	Bronitskaya E.S., Kydzhy M.V., Sycheva N.A., Anufrieva S.I., Grishaev G.S. Preliminary assessment of the possible using deep beneficiation methods for the processing of mining-induced iron-containing raw materials
13 ¹⁵ -14 ⁰⁰	Lunch
14 ⁰⁰ -14 ¹⁵	Maksimova V.V., Krasavtseva E.A., Masloboev V.A. Study of interaction of fine fraction of loparite ore dressing tailings with water-soluble peat compounds (Apatity)
14 ¹⁵ -14 ³⁰	Svetlov A. V., Krasavtseva E. A. Bottom sediments of ponds of the waste water treatment system of a copper-nickel mine as a promising complex raw material (Apatity)
14 ³⁰ -14 ⁴⁵	Slukovsky Z.I., Dauvalter V.A. Chemical composition and mineral particles in bottom sediments of Lake Nyudyavr, Murmansk region
14 ⁴⁵ -15 ⁰⁰	Slukovsky Z.I. Heavy metals and forms of their occurrence in sapropel of lakes in the southern Karelia (Apatity)
15 ⁰⁰ -15 ¹⁵	Gerasimova L.G., Nikolaev A.I., Maslova M.V. Shchukina E.S. Prospects for the production and use of functional materials from the Khibiny apatite-nepheline concentration waste (Apatity)
15 ¹⁵ -15 ³⁰	Kasikov A.G., Areshina N.S. Processing of gas cleaning products and waste from the Kolskaya MMC JSC (Apatity)
15 ³⁰ -15 ⁴⁵	Coffee break
15 ⁴⁵ -16 ⁰⁰	Chekanova Yu.V., Nikolaev A.I., Oryshchenko A.S., Artemenkov A.G. Evaluation of the suitability of mineral and mining-induced raw materials of the Kola Peninsula for welding production (Apatity)
16 ⁰⁰ -16 ¹⁵	Kasikov A.G., Shchelokova E.A., Zheleznova M.V., Sokolov A.Yu. On the problem of utilization of afterburning products of carbonyl nickel production (Apatity)
16 ¹⁵ -16 ³⁰	Manakova N.K., Suvorova O.V. Mining-induced waste from enterprises of the Murmansk region as a raw material for thermal insulation foams (Apatity)
16 ³⁰ -16 ⁴⁵	Slukovskaya M.V., Mosendz I.A., Petrova A.G., Markovskaya E.F., Kremenetskaya I.P., Ivanova L.A., Tereshchenko S.V., Shibaeva D.N. Evaluation of the effectiveness of pyroxenite-vermiculite-sungulite granular product for soil remediation (Apatity)
16 ⁴⁵ -17 ⁰⁰	Ksenofontov B.S., Yakushkin V.P. Possibilities of using combined flotation machines for processing mining-induced raw materials (Moscow)

**COMPREHENSIVE MINERAL PROCESSING, HYDROMETALLURGICAL
PROCESSES**

September 24– Thursday

ASSEMBLY HALL, Mining Institute KSC RAS (Apatity)

ASSEMBLY HALL, IPKON RAS (Moscow)

Moderators:

International Conference “Plaksin Readings-2020”
September 21-26, 2020, Apatity, Russia

Lavrinenko A.A., Dr.Eng., prof.
Kasikov A.G., PhD in Chemistry

9⁰⁰-9¹⁵	Chanturia V.A., Samusev A.L., Minenko V.G., Ryazantseva M.V., Koporulina E.V. Selective precipitation of zirconium and rare-earth elements from acidic productive solutions of eudialyte concentrate leaching (Apatity)
9¹⁵-9³⁰	Kopylova A.E., Prokhorov K.V., Bogomyakov R.V. Intensification of gold recovery during electrochemical treatment of flotation pulp from copper-porphyry and gold-quartz ores (Khabarovsk)
9³⁰-9⁴⁵	Bagramyan V.V., Sargsyan A.A. Complex processing of perlite by microwave method (Yerevan)
9⁴⁵-10⁰⁰	Tasibekov Kh.S., Bekishev Zh.Zh., Zlobina E.V., Ismailova A.G., Kishibaev K.K., Tokpaev R.R., Atchabarova A.A., Nauryzbaev M.K. Obtaining activated carbons on the basis of wheat grain processing wastes and their use for rhenium sorption (Kazakhstan)
10⁰⁰-10¹⁵	Ismailova A.G., Tasibekov Kh.S., Rashit D.R. Sorption extraction of tungsten (VI) by modified carbon sorbents (Kazakhstan)
10¹⁵-10³⁰	Nauryzbaev M.K., Khavaza T.N., Ibraimov Z.T., Atchabarova A.A., Beknazarov K.I., Tasibekov Kh.S., Tokpaev R.R. Development of an integrated technology for processing the Kazakh phosphogypsum (Kazakhstan)
10³⁰-10⁴⁵	Avchukir, Kh., Burkitbayeva B.D., Tassibekov Kh.S., Nauryzbaev M.K. Electrodeposition of indium using protonated betainium bis-(trifluoromethylsulfonyl)imide ionic liquid (Kazakhstan)
10⁴⁵-11⁰⁰	Zlobina E.V., Troeglazova A.V., Kalina I.A. Sorption extraction and concentration of rhenium with coal sorbents (Kazakhstan)
11⁰⁰-11¹⁵	Coffee break
11¹⁵-11³⁰	Bulaev A.G., Melamud V.S., Artykova A.V., Elkina Yu.A., Nechaeva A.V., Boduen A.Ya. Leaching of non-conditioned copper-zinc concentrates with high arsenic content (Apatity)
11³⁰-11⁴⁵	Svetlov A.V., Goryachev A. A. Sulfuric acid granulation of copper-nickel ore dressing tailings under negative temperatures (Apatity)
11⁴⁵-12⁰⁰	Chanturia V.A., Chanturia E.L., Koporulina E.V., Ryazantseva M.V., Samusev A.L., Minenko V.G. Influence of combined energy effects on the structural-chemical and morphological properties of mineral components and efficiency of acid leaching of eudialyte concentrate (Apatity)
12⁰⁰-12¹⁵	Chanturia V.A., Minenko V.G., Samusev A.L., Koporulina E.V. Alkaline decomposition of eudialyte concentrate under conditions of physicochemical and energy influences (Apatity)
12¹⁵-12³⁰	Luchko M.S., Fedotov P.K. Determination of technological parameters affecting the intensification of the concentration of gold-containing ores by the method of jigging in a centrifugal field (Apatity)
12³⁰-12⁴⁵	Tcharo H. Modeling of hydrodynamic parameters of a pile in heap leaching
12⁴⁵-13⁰⁰	Yanishhevskaya E.S., Melamud V.S., Bulaev A.G. Biohydrometallurgical technology for copper-nickel ore and concentrate processing
13⁰⁰-14⁰⁰	Lunch
14⁰⁰-14¹⁵	Goryachev A.A., Makarov D.V. Processing of sulfide copper-nickel raw materials by low-temperature roasting with ammonium sulfate
14¹⁵-14³⁰	Aleksandrov P.V., Imideev V.A., Medvedev A.S., Berbenev A.O., Kochurov K.I. Processing of molybdenite concentrates by a combined method based on roasting with sodium carbonate (Moscow)

14³⁰-14⁴⁵	Malinnikova O.N., Belousov F.S., Pashichev B.N., Dokuchaeva A.I. Studies of the sorption properties of fossil coals
14⁴⁵-15⁰⁰	Sokolov A.Yu., Kasikov A.G., Bagrova E.G. Extraction purification of sulfuric acid solutions from iron with di-2-ethylhexylphosphoric acid (Apatity)

TECHNOLOGICAL MINERALOGY. DISINTEGRATION AND ORE PREPARATION

September 24– Thursday

ASSEMBLY HALL, Institute of Chemistry and Technology of Rare Elements and Mineral Raw Materials (Apatity)

CONFERENCE HALL, IPKON RAS (Moscow)

Moderators:

Ozhogina E.G., Dr.in Geology and Mineralogy, prof.

Kompanchenko A.A., PhD in Geology and Mineralogy

9⁰⁰-9¹⁵	Lavrik A.V., Lavrik N.A., Rasskazova A.V., Litvinova N.M., Konareva T.G. Mineral and technological features of gold from the Delken deposit (Khabarovsk Territory) (Khabarovsk)
9¹⁵-9³⁰	Sosnovskiy S.A., Lukanin A.A., Sachkov V.I., Obkhodskaya E.V. Electropulse disintegration of gold-bearing and rare-metal ores (Tomsk)
9³⁰-9⁴⁵	Chikisheva T.A., Prokopyev S.A., Prokopyev E.S., Kondratyeva M.A., Karpova A.G., Tukser V.I. Mineral and technological features of the sands of the Barun-Naryn mining-induced deposit (Irkutsk)
9⁴⁵-10⁰⁰	Antonov A.A. Application of a thermodynamic approach to finding the conditions for the formation of synthetic analogues of rare mineral species - phosphates - copper arsenates (Apatity)
10⁰⁰-10¹⁵	Nikolaeva N.V., Aleksandrova T.N., Popov O., Klichovik M. Substantiation of an integrated approach to assessing the strength of rocks and ores (Apatity)
10¹⁵-10³⁰	Talovina I.V., Duryagina A.M., Heide G., Bravo A. Morphometric parameters of rocks and ores as the basis for selective ore preparation of raw materials (Apatity)
10³⁰-10⁴⁵	Bocharov V.A., Ignatkina V.A., Abryutin D.V., Kayumov A.A., Korzh V.R. On the influence of the interaction mechanism of microgalvanic couples in the process of contact during the destruction of mineral complexes on the results of flotation separation (Moscow)
10⁴⁵-11⁰⁰	Pashichev B.N., Dokuchaeva A.I., Ulyanova E.V. Discovering the features of the microstructure of fossil coals using the entropy-complexity method (Apatity)
11⁰⁰-11¹⁵	Dokuchaeva A.I., Pashichev B.N., Dolgova M.O. Features of coals prone to spontaneous combustion (Apatity)

September 24– Thursday

ASSEMBLY HALL, Mining Institute KSC RAS (Apatity)
ASSEMBLY HALL, Institute of Comprehensive Exploitation of Mineral Resources,
IPKON RAS (Moscow)

15⁰⁰-16⁰⁰ Final meeting of the Plaksin Readings 2020 Conference. Discussion
and Summary

**SUPPORTING ENVIRONMENTAL ECONOMIC AND SOCIAL IMPACTS OF MINING
ACTIVITY (SEESIMA PROJECT)**

September 25 – Friday

CONFERENCE HALL, Mining Institute KSC RAS (Apatity)

Moderator:

Masloboev V.A., Dr.Eng., prof.

9⁰⁰-9²⁰	<i>Chipakwe V., Karlkvist T., Rosenkranz J., Chehreh Chelgani S.</i> On rationalisation of energy consumption and product properties in dry grinding process: role of grinding aids (<i>Minerals and Metallurgical Engineering, Dept. of Civil, Environmental and Natural Resources Engineering, Luleå University of Technology, Luleå, Sweden</i>)
9²⁰-9⁴⁰	<i>Goryachev A.A.</i> Low-temperature roasting of copper-nickel ore with ammonium sulphate (<i>Institute of North Industrial Ecology Problems KSC RAS, Apatity</i>)
9⁴⁰-10⁰⁰	<i>Virpiranta H., Taskila S., Sotaniemi V., Leiviskä T., Rämö J., Tanskanen J.</i> Continuous biological treatment of cold sulfate-containing mining waters (<i>Chemical Process Engineering, University of Oulu, Oulu, Finland</i>)
10⁰⁰-10²⁰	<i>Leiviskä T.</i> Vanadium recovery from Nordic mine wastes (<i>Chemical Process Engineering University of Oulu, Oulu, Finland</i>)
10²⁰-10⁴⁰	<i>Khokhulya M.S., Fomin A.V., Alekseeva S.A., Seleznev A.O. Sokolov V.D.</i> Pilot tests of separation technology for columbite ore from Zashikhinskoe deposit (<i>Mining Institute of KSC RAS, Apatity</i>)
10⁴⁰-11⁰⁰	<i>Ross Wakelin.</i> An EU cross-border collaborative project on mining industry in the north (<i>coordinator of the SEESIMA project, SINTEF Narvik, Norway</i>)