RMS Annual Session

Ontogeny of minerals applied to scientific and industrial uses
(to the 100 year anniversary of Prof. Dmitry Grigoriev)

6-8 October 2009

Scientific Programme
Dear colleagues!

The Presidium of the Russian Mineralogical Society and the Saint Petersburg State Mining Institute (Technical University) invite you to attend the Annual Session of the RMS dedicated to the 100 year anniversary of Prof. Dmitry Grigoriev.

**Registration:** 6th October, 9.00 to 15:00, Hall 1164 (by the Main Entrance).

Opening Ceremony – 6th October, 10:00.
Closing Ceremony – 8th October, 14:00.

**Duration of oral presentations:** 35 minutes (plenary session), 15 minutes (standard session), questions – 5 minutes. The names of principal speakers are underlined in the programme.

**Posters** must be placed in the Hall 1164 on 7th October during the dinner break. Poster session is open on 7th October from 17:00 to 18:00.
PROGRAMME

6th October, Tuesday

10.00-16.20. Conference Hall
Convenors: D.V. Rundqvist, Yu.B. Marin

Welcome talks: Rektor of SPMI Prof. V. S. Litvinenko, RMS President Prof. D. V. Rundqvist.

10.50. Results of the RMS contests 2009.

11.10. Rundqvist D.V. (Moscow)
Ontogenesis and phylogenesis in geology and the global laws of geological development.

12.00-12.20. Coffee Break

12.20. Yushkin N.P. (Syktyvkar)
Ontogeny of minerals and evolution of the mineral world.

13.00. Bulakh A. (Saint Petersburg)
Minerals in nature and "on paper".


14.00-15.00. Dinner

15.00. Popov V.A. (Miass)
Ontogeny of minerals and its importance for applied and basic research.

15.40. Petrov T.G., Krasnova N.I., Shuyskiy A.V. (Saint Petersburg)
Geologists should know the ontogeny of minerals.

16.20-16.40. Coffee Break

17.00. The visiting of the grave of the Prof. D. P. Grigoriev.
Session 1: History, current state and prospects of mineral ontogeny applied to problems of geochemistry, crystallography, mineralogy, lithology, petrology and economic geology.

10.00-12.00. Hall 1160

Convenors: M.A. Ivanov, E.M. Spiridonov

10.00. Rozhdestvina V.I. (Blagoveshchensk)
Ontogeny of precious metals.

10.25. Spiridonov E.M. (Moscow)
Metacrystals of Pd-Pt-Ag-Au-Te minerals in ores of Norilsk.

10.50. Mochalov A.G. (Saint Petersburg)
Genesis of platinum group minerals of the gabbro–pyroxenite–dunite plutonic complexes in the Koryak Highland.

11.15. Krinov D.I. (Moscow)
Peculiarities of mineral ontogeny in submarine hydrothermal systems.

11.40. Azarova Yu.V., Krinov D.I. (Moscow)
Ontogenic analysis of proportions of sulfides in rocks of Khibiny massif with regard to processes of sulfide formation.

12.00-12.20. Coffee Break

Zonar structure of fahlore group minerals as a criteria for distinction between plutonogenic, volcanogenic-plutonogenic and volcanogenic hydrothermal gold deposits.

12.45. Belogub E.V. (Miass)
Ontogeny of supergene sulfides from oxidation zones.

13.05. Kholodnov V.V. (Ekaterinburg)
Ontogeny of halogen-bearing minerals as an indicator of fluid regimes and mineralization of super subduction magmatism of the Urals.
Section of mineral ontogeny in the mineralogical museum of ISTU for educational process.

13.40. **Granovskaya N.V. (Rostov on Don)**
Belorechensk baryte deposit: A training ground for ontogenic researches.

### 14.00-15.00. Dinner

**Session 1: History, current state and prospects of mineral ontogeny applied to problems of geochemistry, crystallography, mineralogy, lithology, petrology and economic geology.**

**15.00-16.40. Hall 1160**

Convenors: **Yu.L. Voytekhovsky, A.I. Glazov**

15.00. **Smirnova N.L. (Moscow)**
Polygonal surface ontogeny.

15.20. **Voytekhovsky Yu.L. (Apatity)**
Population aspect of crystallomorphology.

15.40. **Titkov S.V. (Moscow)**
Problems of diamond ontogeny.

16.00. **Shafranovskiy G. I., Zinchenko V.N. (Saint Petersburg)**
Application of morphological data to ontogenesis of diamonds from Camuanzanza pipe, NE Angola.

To the ontogeny of oxalate kidney stones.

### 16.40-17.00. Coffee Break

17.00. **Posters** (the list is given in the end of the programme).
Hall 1164.
7th October, Wednesday

Session 3: Ontogeny of minerals as a tool for evaluation of mineral materials.
10.00-12.00. Hall 1166
Convenors: B.I. Pirogov, V.V. Shchiptsov

10.00. Pirogov B.I. (Moscow)
Ontogeny in technological mineralogy.

10.25. Shchiptsov V.V. (Petrozavodsk)
Special features of mineral genesis and technological properties of industrial minerals depending on scale of deposits.

Ontogenic approach to investigations of quartz raw material treatment and forecasting of quartz product quality.

11.05. Balitsky V.S., Balitskaya O.V. (Moscow)
Mechanisms of formation and morphogenetic types of fluid inclusions in crystals of synthetic minerals.

11.25. Sorokina E.S., Khomrach M.V., Balitskaya O.V. (Moscow)
Using features of inclusions to identify the types of ruby deposits.

11.45. Babaeva S.F. (Ufa)
Regularities of sulfide formation in pyrite deposits of the Southern Urals.

12.00-12.20. Coffee Break
Session: Experimental Mineralogy
12.20-14.00. Hall 1166
Convenors: A.M. Askhabov, A.E. Glikin

12.20. Balitsky V.S., Balitskaya O.V. (Moscow)
Professor Dmitry Pavlovich Grigoriev and the role of ontogenic investigations in creation of highly effective technologies of growing of synthetic quartz and its colored varieties.

12.40. Balitskaya O.V., Balitsky V.S. (Moscow)
Genetic gemology of crystalline and amorphous varieties of silica.

To the ontogeny of isomorphic-mixed crystals.

The features of formation of beryl structure compounds in dry media.

Features of morphology of fayalite, formed on various substrates in hydrothermal conditions.

14.00-15.00. Dinner
Session 2: Modern analytical methods used for studies of mineral formation processes.
15.00-16.40. Hall 1166
Convenors: A.V. Kozlov, V.G. Krivovich

15.00. Lokhov K.I., Sergeev S.A. (Saint Petersburg)
Determination of accessory zircon genesis by isotopic hafnium-neodymium systematics.

15.20. Morozov M., Savichev A.A. (Saint Petersburg)
Raman mapping: A tool for mineral identification on micro/submicroscale.

15.40. Skublov S.G., Simakin S.G. (Saint Petersburg)
First experience of element mapping of zircon crystal using time-of-flight mass-spectrometer TOF-SIMS5.

16.00. Rassulov V.A.. (Moscow)
Luminescence of zircons and apatites from main types of rocks of the Baltic shield.


16.40-17.00. Coffee Break

17.00. Posters (the list is given in the end of the programme).
Hall 1164.
8th October, Tuesday

10.00-14.00. Conference Hall
Convenors: N.P. Yushkin, V.I. Kuzmin

10.00. Kuzmin V.I. (Moscow)
Mineral ontogeny of the redeposited weathering crust of the Tomtor carbonatite massif: Confirmation of deposit genesis.

10.20. Tchaikovskiy I.I. (Perm)
Processes of modern mineral formation associated with evaporite complexes of Perm region.

10.40. Kovalev S.G., Michurin S.V., Timofeeva E.A. (Ufa)
U-Th-REE-mineralization of the western slope of the Southern Urals (distribution, mineral forms, genesis).

11.00. Brusnitsyn A.I. (Saint Petersburg)
Metamanganolites of Ural: mineralogy and genesis.

11.20. Borisov S.V., Magarill S.A., Pervukhina N.V. (Novosibirsk)
Crystal structural prerequisites of the formation of natural mercury mineral assemblages.

11.40. Tatarinov A.V., Yalovik L.I. (Ulan-Ude)
Bacterial organomineral microaggregates in sediments of mineral springs and alkaline lakes in riftogenic structures of Transbaikalia.

12.00-12.20. Coffee Break
Convenors: D.V. Rundqvist, N.P. Yushkin

12.20. Yevzikova N.Z. (Saint Petersburg)
The «Ontogeny of minerals» as a breakthrough into the higher mineral-ogy.

12.45. Gavrilenko V.V., Nesterov A.R., Yanson S.Yu. (Saint Petersburg)
Typomorphism of minerals as one of bases of architectural heritage pres-ervation of Saint Petersburg.

13.05. Koneev R.I. (Tashkent)
Gold-ore deposits of Uzbekistan: mineralogical-geochemical style and regularities of formation.

Altaite formation conditions at the Cavnic Pb-Zn Deposit, Baia Mare region, Romania.

13.45. Farewell talks and the Closing Ceremony.

14.00-15.00. Dinner

15.00. Minutes of the RMS Scientific Council.
Conference Hall.
Posters.
7th October, Wednesday
17.00-18.00. Hall 1164
Convenors: M.V. Morozov, D.A. Petrov


Golovanova O.A. (Saint Petersburg). Adsorption of glycine and glutamic acid on hydroxylapatite of different stoichiometry.


Gulbin Yu.L. (Saint Petersburg). Garnet-biotite geothermometer and temperature estimates for zoning garnet formation from metapelites.


Erokhin Yu.V., Khiller V.V. (Ekaterinburg). Monazite from glimmerites of the Shabrovsky ore field.
Zykin N.N. (Moscow). The nature of ore-forming solutions after water oxygen and hydrogen isotope composition from fluid inclusions of ore deposits minerals.

Ivanov B.G. (Saint Petersburg). Features of formation of yttrium aluminium garnet crystals.


Kizyranova E.V. (Saint Petersburg). Oscillations of morphology and kinetic properties of crystals in connection with the clustering processes.


Naumko I.M. (Lviv). Significance of fluid inclusions for studies of ontogeny of minerals from rock-ore complexes of Ukraine.


Petrov D.A. (Saint Petersburg). Quantitative analysis of the “secondary alaskite” structure in Salmi massif (Karelia).

Popenko G.S. (Tashkent). Growth and morphology of gold in supergene conditions.


Rylov V., Meshchaninov F. (Rostov on Don). Ontogeny of pyrrhotite by ore quality estimation of the Kizil-Dere deposit (Privodorazdelnaya zone, Greater Caucasus).

Sakellaris G.A., Meyer F.M., Kolb J., Voudouris P.Ch. (Aachen). Peculiarities of chemical composition of minerals in banded ores of the Mauk massive sulfide deposit (Southern Urals).

Safina N.P., Kotlyarov V.A. (Miass). Peculiarities of chemical composition of minerals in banded ores of the Mauk massive sulfide deposit (Southern Urals).


The Organizing Committee

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