NEW ACQUISITIONS TO THE FERSMAN MINERALOGICAL MUSEUM RAS: THE REVIEW FOR 2009–2010

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In 2009 – 2010 to the main collection of the Fersman Mineralogical museum RAS were acquired 840 specimens of minerals, meteorites, tectites, stone artpieces etc. The systematic collection was replenished with 339 mineral species including 90 new mineral species for the Museum, 42 of which are represented by the type specimens (holotypes, co-types and their fragments). 5 of them were discovered with help of the Museum researchers. Two species were discovered in the specimens from the Museum collection. Geography of acquisitions includes 62 countries and also extraterrestrial objects. More than 77% of all the acquisitions were donated by 105 private persons and 2 organizations. Museum collecting resulted in slightly over 12% of acquisitions; 6,5% arrived from an exchange and 3% was purchased. Less than 2% is represented by another types of acquisitions. In this paper, the new acquisitions are described by mineral species, geography, acquisition type and donors. The list of the new acquisitions is given.
2 tables, 19 photographs, 6 references.
Keywords: new arrivals, Mineralogical museum, collection, minerals, meteorites, donors.

In 2009 – 2010 period 840 items were added to the main collections of the Fersman Mineralogical museum RAS. The majority of them (480 items) was cataloged to the systematic collection, 156 specimens – to the deposits collection, 108 – to the collection of formation and transformation of minerals, 34 – to the crystal collection and 19 – to the gem and lapidary arts collection. Along with that, 43 specimens were cataloged to the newly formed separate (within the main collection) collection of meteorites, tectites and impact rocks. The structure of the Museum main collection and criteria of new acquisitions were published described in the previous reviews (Belakovskiy, 2001, 2003).

More than three quarters of the cataloged items (670 specimens) arrived to the museum in 2008 – 2010s, the others were acquired earlier and were coming through various processing (preparation, diagnosis etc.). **This review comprehends only those specimens, which were cataloged in the inventory books of the main collection of the Museum during 2009–2010s. Here is no data on acquisitions of this period, which are undergoing preparation for the following cataloguing or were decided to get moved to the exchange or scientific collection.**

Distribution of acquisitions by mineral species

Systematic collection was replenished with 339 mineral species, 90 of which are new to the Museum (Table 1). Forty-two mineral species are represented by the type minerals – holotypes, co-types or their fragments, acquired from the authors of description. Five of these mineral species were discovered in collaboration with the Museum staff. Two new mineral species, pertsevite-OH and cбmaraite, were discovered on the specimens from the Museum collection.

The distribution of the mineral species by the number of specimens acquired is given in the Table 1.

We will change the tradition of reviewing the new acquisitions to the Museum (Belakovskiy, 2003, 2004, 2006) and describe first the most remarkable and significant part of acquisitions in these two years – the characterizing collection of the Rubtsovsk complex ore deposit in the Altai mountains, Russia. This collection (more than 70 specimens) is mostly the joint donation by Igor V. Pekov, Mikhail Yu. Anosov, Viktor V. Levitskiy and Alexander B. Nikiforov. Another, smaller part of the specimens was purchased by the Museum. Spectacular specimens of dendritic native copper were first discovered at this deposit several years ago, but the most gorgeous material was mined out in 2010. Besides of specimens of copper with cuprite (fig. 1), well-terminated cuprite crystals (fig. 2) and copper pseudomorphs after cuprite crystals (fig. 3), these collection include specimens, displaying various morphologic types of cuprite and native copper, and also various mineral associations of the Rubtsovsk deposit. This collection contains splendid specimens of iodides: iodargyrite (well-terminated crystals from several mm up to 1 cm) (fig. 4), and also marshite CuI (crystals up to 2 cm and pseudomorphs after azurite and cuprite) (fig. 5) and miersite – a

Table 1. **Number of mineral species cataloged. New mineral species are in bold script, type minerals and fragments are marked with 't' after the name**

1.	Quartz	60	63.	Ferberite	3	125.	Alunite	1	187.	Cancrisilite	1
2.	Calcite	26	64.	**Fluorcanasite**	3	126.	Alunogen	1	188.	**Kanonaite**	1
3.	**Magnetite**	21	65.	Zincolivenite	3	127.	Algodonite	1	189.	**Kapundaite**	1
4.	Marshite	18	66.	Schorl	3	128.	Almandine	1	190.	Carbonate-fluorapatite	1
5.	Copper	18	67.	**Alumoåkermanite t**	2	129.	**Alpersite**	1	191.	**Carobbiite**	1
6.	Fluorite	17	68.	Analcime	2	130.	Andesine	1	192.	Carrollite	1
7.	Topaz	13	69.	**Åskagenite-(Nd) t**	2	131.	Andorite	1	193.	Kaersutite	1
8.	Epidote	12	70.	Astrophyllite	2	132.	Annabergite	1	194.	**Kyanoxalite t**	1
9.	Azurite	10	71.	Aurichalcite	2	133.	Arrojadite	1	195.	**Kinichilite**	1
10.	Elbaite	10	72.	Baddeleyite	2	134.	**Arsenoflorencite-(La) t**	1	196.	Cinnabar	1
11.	Aragonite	9	73.	Bournonite	2	135.	**Auriacusite t**	1	197.	**Clinoptilolite-Ca**	1
12.	Spodumene	8	74.	Vanadinite	2	136.	Afghanite	1	198.	Covellite	1
13.	Hematite	7	75.	Vesuvianite	2	137.	**Balliranoite t**	1	199.	Coiraite	1
14.	Goethite	7	76.	Gypsum	2	138.	Bafertisite	1	200.	Collinsite	1
15.	Corundum	7	77.	Graphite	2	139.	**Bentorite**	1	201.	Cordierite	1
16.	Sphalerite	7	78.	Decrespignyite-(Y)	2	140.	Behoite	1	202.	Coronadite	1
17.	Beaverite	6	79.	**Dickthomssenite**	2	141.	Turquoise	1	203.	Coesite	1
18.	Galena	6	80.	Dolomite	2	142.	**Bitikleite-SnAl t**	1	204.	Kröhnkite	1
19.	Harmotome	6	81.	**Cámaraite t**	2	143.	**Bitikleite -ZrFe t**	1	205.	**Cryptophyllite t**	1
20.	Hemimorphite	6	82.	Kyanite	2	144.	Britholite-(Ce)	1	206.	Xenotime-(Y)	1
21.	Iodargyrite 2H	6	83.	Coquimbite	2	145.	**Burovaite-Ca t**	1	207.	Xocotatlite	1
22.	Cassiterite	6	84.	Conichalcite	2	146.	Wadeite	1	208.	**Kuksite t**	1
23.	Smithsonite	6	85.	Creedite	2	147.	Valentinite	1	209.	**Kumtyubeite t**	1
24.	Spessartine	6	86.	Cryptohalite	2	148.	Vivianite	1	210.	**Kurilite t**	1
25.	Andradite	5	87.	Cryptomelane	2	149.	Whitlockite	1	211.	Labradorite	1
26.	Barite	5	88.	Cuprite	2	150.	Veatchite	1	212.	Lazurite	1
27.	Danburite	5	89.	**Cuproneyite t**	2	151.	Vlasovite	1	213.	**Lafossaite**	1
28.	**Oxyphlogopite t**	5	90.	Lamprophyllite	2	152.	Vauquelinite	1	214.	**Lecoqite-(Y) t**	1
29.	Prehnite	5	91.	Lepidocrocite	2	153.	Vauxite	1	215.	Löllingite	1
30.	Silver	5	92.	Lepidolite	2	154.	Volkovskite	1	216.	Libethenite	1
31.	Fluorapatite	5	93.	Linarite	2	155.	Wollastonite	1	217.	**Lindbergite**	1
32.	Antlerite	4	94.	Lindgrenite	2	156.	**Voloshinite t**	1	218.	Lithiophorite	1
33.	Boulangerite	4	95.	Lorenzenite	2	157.	**Vorlanite t**	1	219.	Litochlebite	1
34.	**Voronkovite t**	4	96.	**Manganoeudialyte t**	2	158.	Wulfenite	1	220.	Lovozerite	1
35.	Hübnerite	4	97.	Millerite	2	159.	Vuoriyarvite-K	1	221.	Laumontite	1
36.	Jamesonite	4	98.	Arsenic	2	160.	Halite	1	222.	**Magnesiocopiapite**	1
37.	Diopside	4	99.	Natrolite	2	161.	Haüyne	1	223.	**Magnesioneptunite t**	1
38.	Dioptase	4	100.	Nifontovite	2	162.	Hedenbergite	1	224.	Magnesite	1
39.	Clinochlore	4	101.	Nontronite	2	163.	Heulandite-Na	1	225.	**Maikainite**	1
40.	**Miersite**	4	102.	Pyrite	2	164.	Heterogenite	1	226.	Manganogrunerite	1
41.	Manganoneptunite	4	103.	Pearceite *Tac*	2	165.	Hydrogrossular	1	227.	Marialite	1
42.	Molybdenite	4	104.	**Protoferro-anthophyllite**	2	166.	**Hydroxylwagnerite**	1	228.	Meionite	1
43.	Oxammite	4	105.	Rockbrisgeite	2	167.	Hydrocerussite	1	229.	Melanterite	1
44.	Rhodochrosite	4	106.	Rutile	2	168.	Hydrozinkite	1	230.	**Meniaylovite**	1
45.	Uvite	4	107.	Sanidine	2	169.	Hypersthene	1	231.	Metaborite	1
46.	Forsterite	4	108.	Scorodite	2	170.	Glauberite	1	232.	Microcline	1
47.	Stibnite	3	109.	Stilbite	2	171.	Hollandite	1	233.	**Minrecordite**	1
48.	Arsenopyrite	3	110.	**Stranskiite**	2	172.	Goyazite	1	234.	**Mozgovaite**	1
49.	Beryl	3	111.	Antimony	2	173.	Graftonite	1	235.	**Momoiite**	1
50.	Brewsterite	3	112.	Tveitite-(Y)	2	174.	Davidite	1	236.	Murmanite	1
51.	Wavellite	3	113.	Tetraferriphlogopite	2	175.	**Depmeierite t**	1	237.	Murunskite	1
52.	Bismuthinite	3	114.	Tyrolite	2	176.	**Jaipurite**	1	238.	Muscovite	1
53.	Hambergite	3	115.	Titanite	2	177.	Ginorite	1	239.	Natrosilite	1
54.	Goethite	3	116.	Chalcantite	2	178.	**Johnsomervilleite**	1	240.	Nepheline	1
55.	Malachite	3	117.	**Chovanite t**	2	179.	Dickite	1	241.	**Nickeltalmessite t**	1
56.	**Oxyvanite t**	3	118.	**Chegemite t**	2	180.	Dovyrenite	1	242.	Nordite-(Ce)	1
57.	Osarizawaite	3	119.	Jarosite	2	181.	Dravite	1	243.	**Numanoite**	1
58.	**Paraershovite t**	3	120.	**Averievite**	1	182.	Durangite	1	244.	**Obradovicite**	1
59.	Pyrophyllite	3	121.	Agrellite	1	183.	**Zigrasite t**	1	245.	Okenite	1
60.	Rostite	3	122.	Adamite	1	184.	Kainosite-(Y)	1	246.	Opal	1
61.	Siderite	3	123.	**Adranosite**	1	185.	Kaliophilite	1	247.	Orthoclase	1
62.	Stichtite	3	124.	Actinolite	1	186.	Cancrinite	1	248.	**Osumilite-Mg**	1

Table 1.

249. Palenzonaite	1	272. Lead	1	295. **Wilcoxite**	1	318. **Huanzalaite**	1
250. Paralaurionite	1	273. Segnitite	1	296. Ulexite	1	319. Celestine	1
251. Patronite	1	274. Semseyite	1	297. **Wakefieldite-(Nd)**	1	320. Cerussite	1
252. **Pertsevite-OH t**	1	275. Serendibite	1	298. Fayalite	1	321. **Jinshajiangite**	1
253. Picropharmacolite	1	276. Serpentine	1	299. **Fernandinite**	1	322. **Jixianite**	1
254. Pyrope	1	277. Szmikite	1	300. Fersmite	1	323. Cllindrite	1
255. Pyrrhotite	1	278. **Stedindite-(Ce)**	1	301. **Fivegite t**	1	324. Zinnwaldite	1
256. **Plumbophyllite**	1	279. **Stronadelphite t**	1	302. Phlogopite	1	325. Znucalite	1
257. **Plumbotsumite**	1	280. Strontianite	1	303. Florencite-(Ce)	1	326. Zoisite	1
258. **Proshchenkoite-(Y) t**	1	281. Strontioginorite	1	304. Fornacite	1	327. Challacolloite	1
259. Pseudobrookite	1	282. Strontiopyrochlore	1	305. **Phosphofibrite**	1	328. Chevkinite-(Ce)	1
260. **Pseudocotunnite**	1	283. Suredaite	1	306. Phosphophyllite	1	329. Chabazite-Ca	1
261. **Poudretteite**	1	284. Tennantite	1	307. Foshagite	1	330. **Shlykovite t**	1
262. **Pumpellyite-(Fe")**	1	285. Tenorite	1	308. Freibergite	1	331. Spinel	1
263. Piemontite	1	286. Tetrahedrite	1	309. **Friedrichbeckeite**	1	332. Schröckingerite	1
264. **Redgillite**	1	287. Tiemannite	1	310. **Fluorbritholite-(Y) t**	1	333. Shcherbakovite	1
265. Redledgeite	1	288. **Timroseite**	1	311. **Fluoro-potassichastingsite**	1	334. Eudialite	1
266. **Refikite**	1	289. Tinzenite	1	312. **Fluorphosphohedyphane**	1	335. **Eurekadumpite t**	1
267. Romanèchite	1	290. Todorokite	1	313. Chalcocite	1	336. Edgarite	1
268. **Rruffite t**	1	291. Thorianite	1	314. **Heftetjernite t**	1	337. Edenite	1
269. Santabarbaraite	1	292. **Toturite t**	1	315. Chloritoid	1	338. **Elbrusite-Zr t**	1
270. Sanjuanite	1	293. Tremolite	1	316. Holfertite	1	339. **Eringaite t**	1
271. Sassolite	1	294. Triplite	1	317. **Chromatite**	1		

cubic modification of AgI (yellowish-green crystals up to 1 mm across). Marshite and miersite were the new mineral species for the Museum and specimens of iodargyrite are of a much better quality than the specimens from deposits in Kazakhstan and Broken Hill deposit in Australia, the Museum had before. Quite a complete number of the acquired minerals which occur at this deposit (silver, beaverite, redgillite, osarizavaite, cerussite etc.) corresponds to the mineral associations described in the monograph by Igor V. Pekov and Inna S. Lykova (2011).

Following our usual way of review, we would begin it with quartz, which is almost always on the top of the table (60 specimens). Amongst new material one should note cluster of morion crystals up to 12 cm long, from pegmatites of Airtau massif in Central Kazakhstan. These are similar to the ones from Ortau massif, but terminated with more perfect and shiny faces. Interesting specimens with grayish-green on their surface, needle-like crystals, co-grown with calcite and siderite, came from the Nikolayevskiy mine, Dalnegorsk, Primorye. Quartz after apophyllite crystals up to 4 cm long, from the Krutoye deposit, Nizhnyaya Tunguska river valley, was donated by Viktor V. Levitskiy and Alexander B. Nikiforov. Among the purchased notable specimens of amethyst there are: twinned crystals by Japanese law, from the Obman deposit in Yakutia; crystal crust – a cast after calcite crystals which were dissolved later, from Rio Grande, Brazil; and new material from Baobab mine, Kitui, Kenya – scepter crystals up to 14 cm long resembling amethyst from Vatikha, the Urals. A series of 23 agate slabs, generally from British localities, was donated by the National Museums of Scotland, Edinburgh. Besides, druses of synthetic amethyst and citrine, along with synthetic quartz twinned by various laws, synthetized in VNIISIMS, Aleksandrov town, were also cataloged.

Six specimens of calcite, out of 26, came from the Dalnegorsk deposits, Primorye. Amongst them there are autoepitaxial clusters of crystals of various habit from the 2nd Soviet mine, and also parallel pyramidal clusters, that consist of gray blocked rhombohedral crystals, covered with a fine crust of shiny quartz crystals, from the Nikolaevsky mine (fig. 6). The gem and lapidary arts collection was replenished with transparent orangy-yellow, faceted as trigon-tristetraherdon, 5 cm calcite from Nizhnyaya Tunguska river valley. To the collection of formation and transformation of minerals were added the druse of needle-like scalenohedral calcite crystals up to 4 cm long – gray, due to numerous sand inclusions, from South Dakota, USA. This specimen is similar to classic "sand calcite" from Fontainebleau, near Paris, France. To the same collection was cataloged calcite "basin" with calcite pisolites ("cave pearl") – the result of a modern mineralization in an abandoned mine at the Belorechenskoye deposit, North Caucasus, Russia (fig. 7).

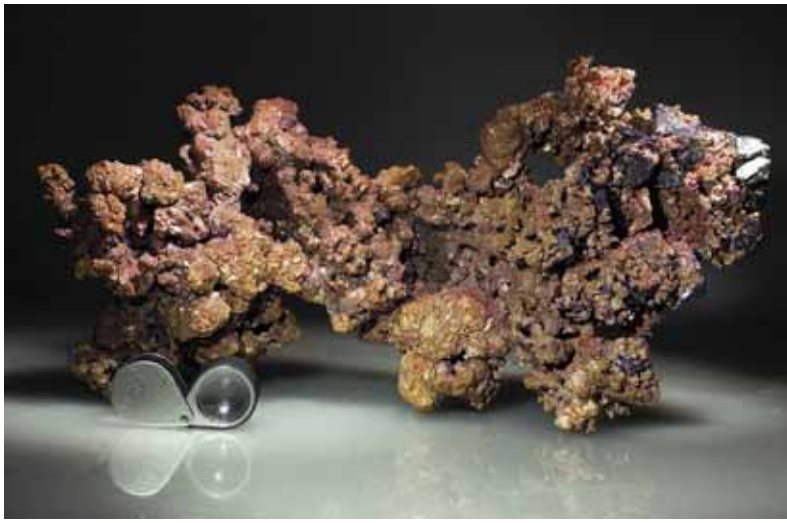

Fig. 1. Dendritic aggregate of native copper with cuprite crystals. Size 24 cm. Purchase. №93214. Photo by Mikhail Moiseev.

Fig. 2. Cuprite. Octahedral crystal modified with rhombododecahedral faces. Size 5cm. Rubtsovsk mine, Altai, Russia. Purchase. № K-5010. Photo by Mikhail Moiseev.

Fig. 3. Pseudomorph of native copper after octahedral cuprite crystals up to 1.5 cm across. Rubtsovsk mine, Altai, Russia. Purchase. № OP-2585. Photo by Mikhail Moiseev.

Fig. 4. Twinned crystal of iodargyrite 2H on limonite. Rubtsovsk mine, Altai, Russia. Donation by Igor V. Pekov. Fragment of specimen № 92960. Photo by Igor V. Pekov & Anatoliy V. Kasatkin.

Fig. 5. Marshite. Partial pseudomorph after azurite concrection. Rubtsovsk mine, Altai, Russia. Donation by Mikhail Yu. Anosov, Victor V. Levitskiy, Alexander B. Nikiforov. № OP-2577. Photo by Mikhail M. Moiseev.

Fig. 6. Parallel cluster of gray rhombohedral crystals of calcite with fine quartz crystals on its faces. Nikolayevskiy mine, Dalnegorsk. Primorye, Russia. Donation by Dmitriy I. Belakovskiy. № OP-2503. Photo by Mikhail M. Moiseev.

The majority of magnetite acquisitions, on the 3rd place by the number of specimens cataloged, is donated by the collector Boris Z. Kantor and is represented by a set of 16 genetic specimens of druses and clusters, from Dashkesan deposit in Azerbaijan and Korshunovskoye deposit in Angaro-Ilimsky region, Russia. The cluster of small magnetite crystals on clinochlore (from Kurzhunkul, North Kazakhstan), donated by Vladimir A. Popov and Sergey G. Epanchintsev, is curious because some of these crystals are twinned along {111}.

All the specimens of marshite and majority of copper specimens, which are on the 4th

and 5th positions in the Table 1, and also specimens of azurite, beaverite, iodargyrite, native silver, miersite, osarizavaite, cuprite and smithsonite, occupying the lower positions, are from the Rubtsovsk deposit.

Among 17 specimens of fluorite the most interesting are, undoubtedly, the druses of bright-green crystals twinned along {111}, up to 4 cm, showing blue fluorescence under sunlight. These were collected by Maria S. Alferova at the classic Rogerley mine, Weardale, UK. She also donated specimens with big (up to 13 mm) harmotome crystals (#19 in the Table) from Bellsgrove quarry, Strontian, UK.

More than half of 13 topaz specimens were collected in 2010 at the well-known locality Maynard's claim, Thomas Range, Utah, USA. These are spectacular clusters of transparent wine-colored crystals with inclusions of rhyolite (fig. 8).

11 of 12 epidote specimens are collected by Dmitriy I. Belakovskiy and Douglas Toland in 2010 at the classic deposit Green Monster Mt., Prince of Wales Island, Alaska, USA. The are represented by well-terminated dark-green twinned crystals. The biggest crystal is 5 cm in size.

Amongst the acquisitions of elbaite there the most remarkable specimens: sectorial slabs – the cross-cuts of giant crystals from Anjanabonoina, Madagascar. These are the best specimens of the kind at the Museum.

Eight of nine specimens of aragonite are pseudohexagonal trilling hopper-crystals from Corocoro, Bolivia, in full or partially replaced with native copper. They belong to the collection of Alexander Novitskiy – Argentinean geologist, native Russian (see below). The same collection contains almost all newly cataloged spodumene specimens, majority of hematite, goethite, sphalerite, galena and cassiterite specimens.

The most interesting specimens of corundum are bluish-gray spindle-like crystals in association with dravite, from Snezhinsk, Chelyabinsk region, the Urals, donated by Igor N. Savin.

Amongst the specimens with galena we would note a cluster of distorted crystals approximately 5 cm across on a fluorite druse, from the Belorechenskoye deposit.

Hemimorphite specimens arrived as drusy colorless split crystals from Ojuela, Durango, Mexico, and as bright-blue crusts of bud-like aggregates which incrust leaching cavities in the rocks from Wenshan, Yunnan province, China.

The most spectacular spessartine specimen is the isometric tetragon-trisocthedron, 7.5 cm across from Morogoro, Tanzania (fig. 9), donated by Dmitriy I. Belakovskiy, Mikhail Yu. Anosov, Alexander B. Nikiforov and Viktor V. Levitskiy. Also very interesting specimens of orange-red transparent hopper-crystals of spessartine up to 3 cm from Navegadora mine in Brazil, donated by Jeffrey E. Patterson.

One of the best specimens of andradite from Dashkesan, Azerbaijan, is the druse of reddish-brown tetragon-trisoctahedral crystals up to 3 cm across (fig. 10). This is one of the Museum acquisitions from the 1960s. Another variety of andradite is represented by two pieces with druses of demantoid crystals from Antetezambato, Madagascar. This material is recent.

Among barite acquisitions there are pale blue transparent crystals from Stoneham, Weld Co., Colorado, USA.

Fig. 7. Calcite pisolites (cave pearl) in calcite "basin". Formed within approximately 7 years in an abandoned mine. Belorechenskoye mine, Adygei republic, Russia. Donation by Mikhail M. Moiseev & Victor V. Levitskiy. № OP-2501. Photo by Mikhail M. Moiseev.

Fig. 8. Topaz. Crystal cluster from rhyolites. Size 4.5 cm. Maynard's Claim, Thomas Range, Juab Co., Utah, USA. Donation by Dmitriy I. Belakovskiy. № 93039. Photo by Mikhail M. Moiseev.

Fig. 9. Spessartine. Tetragon-trioctahedron, 7.5 cm across. Nani, Loliondo, Arusha region, Tanzania. Donation by Dmitriy I. Belakovskiy, Mikhail Yu. Anosov, Victor V. Levitskiy, Alexander B. Nikiforov. № 93063. Photo by Mikhail M. Moiseev.

The Museum was lucky to purchase one of the specimens of danburite in aggregate with datolite, found at the Borosilikatnoe in Dalnegorsk, Primorye.

The following minerals arrived in five specimens each: recently discovered mineral species oxiphlogopite from Eifel, Germany; prehnite (spherolites with epidote from Kayes, Mali and pseudostalactites from Totwa, New Jersey, USA); fluorapatite (the most remarkable one — green crystal in phlogopite from Snezhinsk, Chelyabinsk region, Urals, donated by F. Baaz, anf dark-blue crystyal 11 cm long from Valadares, Brazil.

The other 311 mineral species which arrived to the Museum as 1 and up to 4 samples, marked in bold in the Table, besides new for the Museum and type specimens, there should be noted tetrahedrite crystal approximately 6 cm across, in epitaxial aggregate with blocked tetrahedral sphalerite crystals (fig. 11). Specimens of the kind occurred at the 2nd Soviet mine, Dalnegorsk, Primorye, in spring-2009. Besides, new arrivals comprise rocks, synthetic minerals, stone art pieces etc.

Geography of acquisitions

Acquisitions of 2009-2010 arrived from 62 countries and Antarctica. Their quantitative distribution among countries is given in the Table 2.

Russia (283)

The majority of Russian specimens arrived from the Altai mountains (79), from the mentioned earlier Rubtsovsk mine and some others in the same region. In addition, the number of specimens of deep purple stichtite in green serpentine from the new finds in the river Kaznakhta valley (Terektinskiy ridge, Gorny Altai), were donated by Mikhail Yu. Anosov, Viktor V. Levitskiy and Alexander B. Nikiforov.

New acquisitions from Kola peninsula got the second place and list 58 specimens; Khibina massif sourced 26, Lovozero and Kovdor massifs — 13 each, Keivy — 2 specimens. In addition to seventeen specimens of new-discovered mineral species and donated by Alexander P. Khomyakov, Igor V. Pekov, Nikita V. Chukanov, Yulia V. Azarova and Zoya V. Shlyukova, one should draw attention to the gorgeous piece with bright-red well-terminated 2 cm long crystal of manganoneptunite in gray natrolite (fig. 12). This one of the best specimens of manganoneptunite in the Museum was collected near Marchenko Peak, Khibiny Mts. It was found and donated by Grigory L. Ryabinin.

Fig. 10. Andradite. Druse of tetragon-trioctaherdal crystals up to 3 cm across. In association with epidote and magnetite. Dashkesan, Azerbaijan. Purchase. № 93056. Photo by Mikhail M. Moiseev.

Table 2. **Geography of acquisitions by the number of mineral specimens**

1.	Russia	283	17.	Peru	8	33.	Sweden	4	49.	Burkina Faso	1
2.	USA	110	18.	Czech Republic	8	34.	Israel	3	50.	Vietnam	1
3.	Bolivia	55	19.	Egypt	6	35.	Turkmenistan	3	51.	Guinea	1
4.	Argentina	42	20.	Morocco	6	36.	Ukraine	3	52.	Spain	1
5.	United Kingdom	36	21.	Oman	6	37.	Sri Lanka	3	53.	Congo	1
6.	Kazakhstan	26	22.	Tanzania	6	38.	Austria	2	54.	Cuba	1
7.	China	24	23.	Australia	5	39.	Belgium	2	55.	Kyrgyzstan	1
8.	Greece	21	24.	Afghanistan	5	40.	Botswana	2	56.	Libya	1
9.	Mexico	16	25.	Canada	5	41.	Venezuela	2	57.	Mauritania	1
10.	Brazil	13	26.	Congo DR	5	42.	Iran	2	58.	Malawi	1
11.	Germany	13	27.	Tajikistan	5	43.	Kenya	2	59.	Nigeria	1
12.	Italy	13	28.	India	4	44.	Mozambique	2	60.	Pakistan	1
13.	Azerbaijan	12	29.	Mali	4	45.	Nepal	2	61.	Poland	1
14.	Bulgaria	11	30.	Namibia	4	46.	Slovakia	2	62.	Finland	1
15.	Madagascar	11	31.	Norway	4	47.	RSA	2		Antarctica	1
16.	Chile	11	32.	Romania	4	48.	Japan	2		Unknown	5

He, together with the Museum curator Mikhail M. Moiseev collected specimens of baddeleyite, forsterite, vesuvianite for the Kovdor mineral collection. Igor V. Pekov also donated specimens of spray and star aggregates of lamprophyllite from Sengischorr Mt., Lovozersky massif – of better quality than was at the Museum before. Anatoly P. Akimov donated interesting specimens of corundum from Dyadina Gora, Tedino village, Karelia.

Acquisitions from the Russian Caucasus (16) came equally from Verkhnechegemskiy plateau in Kabardino-Balkaria and Belorechenskoye deposit in Republic of Adygea. From the first locality there arrived type specimens of the new mineral species of chegemite, toturite, kumtyubeite, vorlanite and also new amazing silicon-free minerals of the garnet group – bitikleite-SnAl, bitikleite-ZrFe and elbrusite. These minerals were discovered and donated by Irina O. Galuskina, Eugeny V. Galuskin and Nikolay N. Pertsev. The acquisitions from the Belorechenskoye deposit, besides the above-mentioned galena and cave pearls, are graphite, cinnabar, coronadite and schröckingerite.

Among 24 specimens from the Urals, first of all, one of the most interesting one is a crystal of redledgeite (up to 5 mm long) from the Saranovskoye deposit, donated by Mikhail M. Moiseev. This is one of the best specimens of this species. The type specimen of arsenoflorencite-(La) from the locality Grubependity, Polar Urals, was donated by Pavel M. Kartashov. The same place (Maldynyrd ridge) was the source of a large pink crystal of florencite-(Ce) up to 1.5 cm in size and xenotime-(Y), both donated by S.A. Repina. It would be worthwhile to mention coarse-grained aggregate of arsenic from the Vorontsovskoye deposit, Krasnoturyinsk, donated by A.S. Klepikov, and a drusy fornasite up to 2 mm with crocoite – donation by A.S. Batalin and D.V. Davydov. Green apatite from Snezhinsk was mentioned before.

Siberia is represented by the minerals from the river Nizhnyaya Tunguska valley, among which we should note a big crystal of heulandite in a basalt cavity, donated by Viktor V. Levitskiy and Alexander B. Nikiforov.

Irkutsk and Baikal regions sourced 19 specimens, majority of which are magnetite and clinochlore from Korshunovskoye deposit, Angaro-Ilimskiy region. The most remarkable sample is the piece approximately 60cm in size, consisted of big buds of clinochlore. This is a good addition to s series of previous acquisitions of the cross-cuts of clinochlore stalactites and buds.

The most interesting acquisitions from Transbaikal (16 specimens) are hambergite, apatite, topaz and other minerals from pegmatites of Malkhan Ridge, Chita region, donated by Igor N. Savin.

Among a few specimens from Yakutia (7), there are holotypes of pertsevite-(OH), proshchenkoite-(Y) and eringaite, and also minerals from kimberlites and kimberlite rocks.

Almost all the acquisitions from Primorye (20) occur from the Dalnegorsk region deposits. In addition to the specimens mentioned above it is worthwhile to note clusters of needle-like slightly splitted pyrrhotite crystals with bent vertices (fig. 13). Such specimens appeared at the Nikolayevsky mine in November 2009.

Another specimens from Russian Far East (9) are: the type specimen of the new mineral kurilite from the Prasolovskoye deposit, Kunashir island, discovered and donated by Vladimir A. Kovalenker; rare minerals meniaylovite and averievite from the Tolbachik



Fig. 11. Tetrahedrite. Crystal (approximately 6 cm across) with epitaxial inrgrowths of blocked sphalerite crystals. Chalcopyrite forms epitaxial overgrowths on tetrahedrite and sphalerite. 2nd Soviet mine, Dalnegorsk. Primorye, Russia. Purchase. № OP-2544. Photo by Mikhail M. Moiseev.

Fig. 12. Manganoneptunite. 2 cm long crystal within natrolite. Marchenko Peak, Khibiny Mts, Kola peninsula, Russia. Donation by Grigoriy L. Ryabinin. № 93167. Photo by Mikhail M. Moiseev.

Fig. 13. Pyrrhotite. Cluster of columnar crystals with bent apices, 9 cm. Nikolayevskiy mine, Dalnegorsk. Primorye, Russia. Donation by Dmitriy I. Belakovskiy. № OP-2504. Photo by Mikhail M. Moiseev.

volcano fumaroles, Kamchatka, resulted from an exchange; "wood tin" from the Tyrkneyskiy ore region, Chukotka (donation by Gennadiy N. Kaplenkov).

Former Soviet republics:

Kazakhstan (26)

Morion from Airtau and magnetite from Kurzhunkul were mentioned in the previous chapter. Blue topaz approximately 5 cm across, from the Ortau massif pegmatite, was purchased by the Museum. More than ten specimens of smithsonite, hemimorphite, rhodochrosite, barite and calcite from Shaimerden, Kustanay region, were donated to the Museum by Sergey G. Epanchintsev. Among rare minerals there arrived: veatchite, volkovskite, metaborite from the salt domes Shoktybay, Satimola and Chelkar (donation by Igor V. Pekov) respectively. The new mineral species cámaraite was discovered by Elena V. Sokolova *et al*. on the museum specimen of bafertisite from the old collections.

Acquisitions from **Azerbaijan (12)** are interesting mostly by the above-mentioned number of specimens of magnetite and big cluster with andradite crystals, from the iron-ore skarns of Dashkesan deposit.

Tajikistan (5) was the source of cryptohalite and stranskiite from the coal fire near the former kishlak Ravat, nordite-(Ce) from the Dara-i-Pioz massif and tyrolite from Dgani, Darbaza, Zeravshan Ridge.

Turkmenistan (3) is represented by gypsum from the Fata-Morgana cave, Gaurdak village, and also by fragments of meteorite Kunya-Urgench (see below).

Ukraine (3) is represented by the big cluster of vivianite crystals replaced with santabarbarite, Kerch, Crimea (donated by V.A. Morozov), by prehnite with gyrolite and okenite from Trudolyubovka village, Crimea and cerussite after galena and boulangerite from Esaulovka, Nagolny Kryazh.

Only one specimen was cataloged from **Kyrgyzstan** – anthraxolite from Mednaya Gora quarry, Khaidarkan (V.I. Stepanov's old collection).

North America:

The United States of America (110)

Almost half of all the acquisitions from 16 states of the USA were collected by the Museum staff. The majority of specimens were collected in **Alaska (27)**. These are specimens from the skarn locality of Green Monster mountain, Prince of Wales Island. Besides epidote crystals and clusters, the samples collected are: 'Japanese' quartz twins, muschketowite, andradite, goethite pseudomorphs after pyrite. T. Hanna donated several specimens of pearceite-*Tac* and native silver from the Greens Creek mine, Admiralty Island.

The material collected from Utah is represented with tiemannite, dickthomssenite (new to the Museum) and 16 specimens from Thomas Range region. Sometimes clusters of topaz crystals is crowned with tetragon-trisoctahedronal pseudomorph of topaz and hematite aggregate, probably, after garnet

(Fig. 14). There also occur such single "crystals" up to 3cm across. Other minerals cataloged to the Museum collection are: red beryl, pseudobrookite, holfertite and durangite – collected by Dmitriy I. Belakovskiy and Maria S. Alferova.

Maria S. Alferova also collected specimens of elbaite from the Stewart mine San Diego Co., California, crystals and small druses of dioptase from the Table Mountain mine and gemmy forsterite nodules in basalts of San Carlos Indian reservation, Arizona.

Phosphates – arrojadite, whitlockite, rockbridgeite, collinsite *et al*. were collected in pegmatites Top quarry, Custer Co., S. Dakota, by Mikhail M. Moiseev, Dmitriy I. Belakovskiy and Igor V. Pekov. The same team collected manganese uvite in purple manganese tremolite (hexagonite) from the talk deposit Balmat talc mine, Lawrence Co., NY. Fragments of the co-types of auriacusite (Black Pine mine, Montana) and eurekadumpite (Centennial Eureka mine, Utah) were donated to the Museum by Stuart Mills and Igor V. Pekov respectively.

Canada (5)

Igor V. Pekov discovered the new mineral species – lecoqite-(Y), from Mont Saint-Hilaire and handed over its co-type. Mikhail N. Murashko donated jaipurite (Langis mine, Ontario) – a new mineral species for the Museum; Dmitriy I. Belakovskiy donated vlasovite with gittinsite margin within eudialyte and agrellite from Kipawa complex, Quebec; also he donated fersmite from Mount Brussilof mine, British Columbia.

Mexico (16)

Among Mexican specimens the most interesting are colorless, transparent finely-terminated crystals of nifontovite up to 3.5 cm long with inclusions of probertite from San Luis Potosi. The second rank have hollow spherical clusters of creedite crystals, from colorless to bright-orange due to inclusions (fig. 15). Several big lots of the such specimens were mined during the last years from Navidad, Durango Mine. We would note pale-pink danburite crystal (14 cm long) from Charcas mine, close to San Luis Potosi, and also clusters and druses of colorless and pale-pink hemimorphite crystals from Ojuela mine, Mapimi, Durango. One should also mentioned rare minerals kinichilite and xocoolatlite – from Aztec for "chocolate" – from Bambolla, Sonora.

South America:

Bolivia (55), Argentina (42), Chile (11), Venezuela (2) – Alexander Novitskiy collection

The overwhelming majority of mineral specimens cataloged to the Museum collections in 2009 – 2010s from these countries, belong to the collection of ethnically Russian geologist Alexander Novitskiy, who lived in Argentina. This collection was brought together for his life-long time in Latin America, where he worked as a geologist and taught in

Fig. 14. Aggregate of topaz crystal with topaz&hematite pseudomorph after tetragon-trioctahedra crystal of, presumably, garnet group mineral. Maynard's Claim, Thomas Range, Juab Co., Utah, USA. Donation by Dmitriy I. Belakovskiy. № OP-2547. Photo by Mikhail M. Moiseev.

Fig. 15. Hollow spheroidal aggregates of creedite crystals up to 1.5 cm. Size of the specimen 27 cm. Navidad Mine, Durango, Mexico. Donation by Dmitriy I. Belakovskiy. № 92829. Photo by Mikhail M. Moiseev.

Buenos Aires. At the end of his life, he already being gravely ill, decided to donate his collection to Russia. He got in contact with the Fersman Mineralogical museum RAS via Russian diplomats. One of museum curators, Dmitriy A. Romanov traveled to Buenos Aires in 1989 to describe this collection and to prepare for shipment. Later, this collection was shipped via diplomatic channels to Russia. Unfortunately, A. Novitskiy's illness made the complete attribution of this collection impossible. In many cases it was impossible to recover geographic names. Due to this fact, in order to sort this material out, one needed a long time. At present, there described and cataloged to the main collection of the Museum 105 specimens (a little less than a half). The part of the collection cataloged comprehends many classic deposits. It is represented by phosphates, molybdates and copper sulfates from Chuquicamata, Chile; famous Bolivian copper pseudomorphs after aragonite from Corocoro; phosphophyllite, cassiterite and other minerals from Potosi; sulfosalts from San Jose near Oruro and hьbnerite from Tasna. Minerals of Argentina are represented by rhodochrosite from Capillitas, spodumene from San Luis region, antimony from Cerro de Los Leones and number of others.

Acquisitions from these countries also include rare minerals suredaite and coiraite from the mining district Irquitas in Argentina, donated by Werner Paar and litochlebite from El Dragon, Potosi, Bolivia, from Anatoly V. Kasatkin.

Brazil (13)

Amongst amethyst, spessartine and blue apatite mentioned above, one should mention: well-terminated zonal blue-green transparent kyanite crystal, 12 cm long, from Ouro Preto and fragment of strongly resorbed tabular colorless crystal of beryl. Recently discovered manganoeudialyte from Pocos de Caldos is represented by the holotype, that was donated by Nikita V. Chukanov.

Peru (8)

The most interesting specimens from Peru are: hexagonal-prismatic crystals of coquimbite, up to 3 cm long, from Javie mine, Ayacucho department; hubnerite crystals up to 5 cm long within the rock crystal druses and also new mineral species huansalaite ($MgWO_4$, wolframite group) from Huanzala and fernandinite from Ragra.

Europe:

The United Kingdom (26)

Fluorite, harmotome and agates acquired from this country were mentioned before. We can also mention green crystals (up to 5mm) of scorodite from Hemerdon mine, Devon, donated by Jolyon Ralph.

Greece (21)

All the specimens from Greece originate from the mining district Lavrion and were donated by Igor V. Pekov. They are represented mostly by supergene minerals and also new-born minerals within antique metallurgic slag, affected by seawater. The minerals are: zincolivenite, aurichalcite, paralaurionite etc.

Germany (13)

The major part of specimens arrived belong to mineralization of alkaline basalts from Eifel region. These are mostly samples of recently discovered oxiphlogopite, donated by Nikita V. Chukanov.

Italy (13)

The material acquired from Italy originate mostly from the recent collecting in active volcanic crater La Fossa, Vulkano island. These are fumarolic minerals, such as lafossaite, adranosite, pseudocotunnite, challacoloite, sassolite, mozgovaite. Kaliophillite and balliranoite from Monte Somma, Vesuvius, are also volcanic.

Bulgaria (11)

This time the majority of specimens are represented with zeolites (harmotome, chabasite-Ca etc.) and collected by Svetlana N. Nenasheva at the locality Zlatolist, adjacent to Krumovgrad town.

Among the acquisitions from the other European countries there are remarkable specimens of millerite, rostite and dickite from siderite concretions in coal from Kladno town in **Czech Republic**; specimens of cuproneyite from the mining district Baita in **Romania** and chovanite from Male Zelezne в **Slovakia**, both donated by Dan Topa; new mineral species åskagenite-(Nd) from Askagen в **Sweden**, and also new for the Museum stetindite-(Ce) and holotypes of heftetjernite and fluorbritholite-(Y) from **Norway**.

Africa:

The majority of 62 specimens acquired from 19 African countries originate from **Madagascar (11)**. In addition to mentioned above demantoid and slabs of zonal & sectorial cross-cuts of elbaite-liddicoatite crystals there are big and well-terminated schorl crystals up to 12 cm long from Alaotra, Ambatondrazaka, and polished specimen of iridescent labradorite from Tulear province. **Egypt, Oman, Libya, Nigeria, Mauritania, RSA** and **Burkina Faso** are represented, in

general, by meteorites and tectites described below. Fanciful pseudomorphs of goethite after pyrite also arrived from **Egypt**. **Morocco** had sourced calcite, variously colored with cobalt, from Bou-Azzer and holotype of nickeltalmessite; **Tanzania** – holotype of alumoekermanite from Ol Doinyo Lengai active volcano, donated by Anatoliy N. Zaitsev, and spessartine, mentioned above; **DR Congo** – specimens of velvet malachite and heterogenite from Shaba province, and also faceted orange andesine (donated by M. Vishnevetskiy). Prehnite and epidote sets were replenished with the new specimens from Kayes region, Mali. Agates arrived from **Botswana**; stranskiite, minrecordite and maikainite – from **Namibia**. Amethyst from **Kenya** was already mentioned above.

Asia:

China (24)

The most interesting specimens added to the Museum collection from Celestial Empire are: the specimen with large hexagonal crystals of molybdenite from Guanzhou (Fig. 16) and pseudomorph of jamesonite after bournonite from Yaogangxian mine, Hunan province. The same mine provided bournonite, crystals and clusters of arsenopyrite; Wenshan mine from Yunnan province – bright light-blue hemimorphite. Gem and lapidary arts collection was supplemented with faceted triplite and dendritic 'landscape' argillite (Fig. 17).

India (4)

Selection of minerals from basaltic amygdales from Poona region was completed with specimen of stilbite and spray aggregate of okenite on a chalcedony-quartz lamellar aggregate ('settler').

Acquisitions from **Nepal (2)** are colorless orthoclase crystal from Ganesh Himal and marialite from Dhading region donated by Oleg A. Lopatkin. The Museum collection was replenished by specimens from **Afghanistan**: afghanite crystals within calciphyre from Sar-e-Sang and crystals of albaite and spodumene crystals donated by by Farid Wafi. **Pakistan** is represented by one specimen – big well-terminated crystal (approximately 8 cm large) chevikinite-(Ce) from Arondu, Basha Valley, Baltistan (fig. 18). Poudrettite, a new mineral species to the Museum arrived from **Sri-Lanka** as faceted stone (3 x 2 mm), donated by M. Vishnevetskiy. Large piece of marble with crystals of pink spinel (up to 3.5 cm) and green pargasite ingrowths, from Luc Yen, **Vietnam**, was acquired by the Museum (Fig. 19). K. Watanabe donated momoiite and numanoite, both from Fuka mine, **Japan** – the new mineral species for the Museum.

Australian samples are represented by the new for the Museum mineral species, including alpersite and kapundaite. Remarkable acquisitions from other countries are: bentorite and chromatite from Hatrurim Formation, **Israel**, and petrified wood – pseudomorph of chalcedony after wood – from Beaver lake, **East Antarctica** (donated by M.B. Sergeev).

Extraterrestrial acquisitions

The collection of meteorites that was compiled for the Mineralogical museum of Russian Academy of Science, in 1939 was transferred to the newly-organized Meteorite Committee (CMET). Part of this collection, along with many meteorites collected by CMET expeditions, is displayed at the Mineralogical museum, still being owned by the Museum of Extraterrestrial matter at the

Fig. 16. Molybdenite. Crystals up to 7 cm in quartz. Guanzhou, Jianxi province, China. Purchase. № 93029. Photo by Mikhail M. Moiseev.

Fig. 17. Landscape argillite with iron and manganese oxides as a decorative agent. Guilin Guangxi, China. Donation by Dmitriy I. Belakovskiy. № PDK-8101. Photo by Mikhail M. Moiseev.

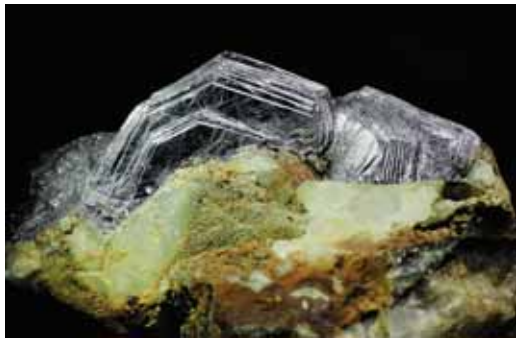

Fig. 18. Chevkinite-(Ce). 6 cm long chevkinite crystal. Arondu, Basha valley, Skardu district, Pakistan. Donation by Dmitriy I. Belakovskiy. № 93165. Photo by Mikhail M. Moiseev.

Fig. 19. Spinel. Octahedral crystals up to 3.5 cm with ingrowths of green pargasite in marble rock. Sungate Mine, An Phu, Luc Yen, Yenbai Province, Vietnam. Purchase. № 93215. Photo by Mikhail M. Moiseev.

GEOKHI RAS. In 2008 they decided to build on the collection of meteorites, tektites and impactites within the Main collection at the Museum as: (1) meteorite matter is a subject of mineralogical study, and (2) Mineralogical museum receives new arrivals of meteorite objects. This decision was implemented and by the end of 2010 collection of meteorites contained 43 items. Amongst them there are fragments of 27 different meteorites, two types of tektites (Libyan glass and moldavite) and a sample of impactite from meteorite crater Lappajarvi in Finland. The vast majority of these arrivals are donations since 1985 till 2010 from 19 people and one organization; 4 items resulted from exchange.

The iron meteorites cataloged in the collection are: Sikhote-Alin, Seymchan, Gibeon, Canyon Diablo, Nantan, Muonionalusta, Campo del Cielo, Dronino, Morasko. Among the stony-iron meteorites there are Omolon, Seymchan, and among the stony meteorites — Kunya-Urgench, Sayh Al Uhaymir 067, Ozernoe, Gujba, Dar al Gani 400, Dhofar 935, Dhofar 007, Peekskill, Potter, Jiddat Al Harrasis 020 & 055, Gold Basin, Tamdrakht, Holbrook, El Hammani, Gao, Sulagiri (Hosur).

Type & source of acquisitions, acknowledgements

It is nice to note that number of donations among the new arrivals dramatically increased in comparison with the previous period (Belakovskiy, 2003, 2004, 2006; Belakovskiy & Pekova, 2008). At present donations make up almost 77% of all arrivals (644 specimens) including 5% (42 specimens) representing type specimens. Donations were received from 105 people and 2 organizations (**Natural history museum of the North-East Interdisciplinary Science Research Institute RAS, Far East branch and National Museum of Scotland, Edinburg, UK**). Amongst the donors there are 82 citizens of Russian Federation and 23 — of the USA, Canada, Argentina, Great Britain, Germany, Czech Republic, Netherlands, Japan and Australia. Quite often donations were made by the group of people.

The donors to the Museum are (by the number of specimens donated): **D.I. Belakovskiy (123), I.V. Pekov (114), A. Novitskiy (105), A.B. Nikiforov (86), M.Yu. Anosov (85), V.V. Levitskiy (85), A.V. Kasatkin (22), B.Z. Kantor (18), M.S. Alferova (15), M.M. Moiseev (14), N.V. Chukanov (14), S.G. Epanchintsev (12), I.N. Savin (12), A.P. Khomyakov (11), E.V. Galuskin & I.O. Galuskina (8), V.M. Gazeev (7), J.E. Patterson (6), M. Vishnevetskiy (6), V.N. Kalachev (6), D.V. Lisitsin (5), T. Hanna (4), D. Topa (4), F. Wafi (4), J. Watson (3), S.V. Afanasyev (3), S. Vasil'ev (3), A. E. Zadov (3), G.N. Kaplenkov (3), G.S. Nikolayev (3), N.N. Pertsev (3), L.Z. Reznitskiy (3), D.A. Sadilenko (3), S.J. Mills (2), W. Paar (2), K. Watanabe (2), A.M. Abdrakhimov (2), A.P. Akimov (2), L.B. Bulgak (2), A.G. Bushmakin (2), I.F. Gablina (2), S.V. Gritsyuk (2), A.V. Ivonin (2), K.I. Klopotov (2), O.I. Kotlyar (2), S.V. Petukhov (2), V.V. Ponomarenko (2), S.A. Repina (2), E.M. Spiridonov (2), V.M. Chalisov (2), I.V. Chaplygin (2), F. Baatz, J. Bernard, F. Burger, D. Edwards, J. Heatley, G. King, A. Langeinrich, R. Lavinskiy, P. Megaw, M. Origlieri, J. Ralph, D. Toland, Y.V. Azarova, A.S. Batalin, P.A. Beschetnov, E.A. Borisova, A.Yu. Bychkov, V.K Garanin, M.E. Generalov, O.I. Gritsenko, Y.D. Gritsenko, D.V. Davydov, M.D. Dorfman, A.N. Zaitsev, L.M. Ioffe, P.M. Kartashov, D.V. Kachalin, E.V. Kislov, A. S. Klepikov, A. Klyuchkin, V.A. Kovalenker, V.N. Kolesnikov, I.E. Kushnarev, O.A. Lopatkin, N.N. Mitskevich, M.P. Mogileva, V.A. Morozov, N.A. Mokhova, M.N. Murashko, L.V. Olysych, G.N. Osipov, V.A. Popov, Y.K. Poustov, N.I. Rymskaya, G.L. Ryabinin, N.V. Savelyev, M.B. Sergeev, E.V. Sokolova, V.I. Stepanov, E. Terekhov, V.A. Tuzlukov, N.I. Frishman, K.I. Chepizhniy, Z.V. Shlyukova.**

The Museum is thankful to all who contributed to the collections; we also hope for the future collaboration. **MANY THANKS!!!**

Since 2010 the Fersman Mineralogical museum RAS awards the donors with donation certificates. These certificates were prepared for all whose donations were included in the main collections in 2009–2010 and then presented at the Museum meeting in December 2010. We plan to keep this tradition.

The acquisitions of material collected by the Museum staff include 103 specimens – 12% of the total number of acquisitions. 6 Museum curators were involved in the field collecting: Mikhail M. Moiseev (donated 43 specimens), Dmitriy I. Belakovskiy (40), Maria S. Alferova (23), Svetlana N. Nenasheva (11). Grigoriy L. Ryabinin, Igor V. Pekov, Petko Petrov and Viktor V. Levitskiy also participated in collecting. The Museum is grateful for that.

As a result of exchange with Russian and foreign collectors and organizations, the Museum acquired 54 specimens (6.5%). 26 specimens (3%) were purchased, 13 (1.5%) – arrived from a difference source.

Special thanks to Igor V. Pekov, Mikhail M. Moiseev, Alexander A Evseev, Elena N. Matvienko and Elena L. Sokolova for assistance in compiling this review and important comments.

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