The Ruskeala mining history monument: state, perspectives of protection and usage

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The Ruskeala marble quarries represent a mining history of Sweden, Russia, Finland, and Karelia. The quarries are located in the Sortavala District (Republic of Karelia, Russia), in the northwestern part of Ruskeala village on the White and Green hills, named according to the colors of marbles, which formed them.

The Ruskeala deposits belongs to the Sortavala series of the Lower Proterozoic and are composed of amphibolites, amphibole and biotite-amphibole schists with marble layers. The marbles are characterized by fine-grained structure and diverse coloration from dark-grey to white, sometimes with green stripes and nests up to a few centimeters wide. The total thickness of the productive horizon is up to 600 m. Banded marble, characterized by alternation of grey, almost black, green and white stripes has the best decorative properties.

The first exploitation of marble was conducted in the end of the 17th century by Swedes, basically for production of construction lime, and less often for building foundations and walls in vicinities.
In 1721, after the ending of the Northern war, this territory as provided by Peter I decree, was given to private possession and populated with peasants from the central regions of Russia. The exploitation of marble had stopped, but according to a Catherine II decree, it was renewed again in the second half of the 18th century. In the mid 18th-19th centuries, Ruskeala marble was used for decoration of architectural constructions in Saint-Petersburg, such as the Winter and Marble palaces, Isaac and Kazan cathedrals, Mikhailovsky Castle, etc., as well as constructions in the city suburbs. However the Ruskeala marble is insufficiently weatherproof, and will at use in external decorations need partial or full replacement after approximately in 50 - 60 years. During the first restoration of the the Isaac Cathedral in 1870-1890, for example, many plates of Ruskeala marble were therefore replaced with inserts of more homogeneous pale - grey Italian marble.

It is known, that in the period 1770-1830 there were extracted more than 200 thousand tons of marble on the site. However, old quarries working at that time are practically not preserved because their most part got in the operation zone of new larger quarries.

In 1840, extraction of Ruskeala marble for Petersburg was gradually reduced, and with the ending of the building of the Isaac Cathedral it stopped. Some years later, marble extraction was renewed again, but not for the decorative-facing purposes. It was used for burning of construction lime. The Ruskeala marble produced good lime which was applied for plastering walls and ceilings of different constructions in cities and settlements of the Southeast Finland (Makarikhin et al. 2006).

During the II World War, all works in Ruskeala marble quarries stopped, and the main quarry was flooded. After the ending of the war, the Ruskeala factory began to produce lime again, however not from the main quarry but from the new ones, exploited along the periphery of the deposit (Borisov 2007).

In 1973 – 1985 decorative-facing marble was exploited from the quarries with the help of the Italian wire saw machines (Fig.1). After the necessary processing, blocks and plates from the Ruskeala quarries were used in many places of the former Soviet Union, for example as ornaments in underground halls of two metro stations in Saint-Petersburg. In the facing of the Primorskaya metro station, banded grey-green marble supplemented with bas-relief with marine symbols creates the impression of a northern seaport (Fig.2). The exploitation of the Ruskeala marble has pro-
In 1998, according to the Karelia’s Council of Ministers Decree, the area of the Ruskeala quarries was assigned the official status of a nature monument of regional significant. However, practice has shown that without a rational usage of such a geosite, its official status as a protected area cannot provide its conservation. An economic basis for conservation and rational usage of geosites is the development of a regulated tourist activity. Creation of nature-protecting excursion-tourist centres on the basis of geosites is one of perspective directions in this respect. For example, such a center has already been set up on the basis of the Sablino Complex Nature Monument by a group of geologists and ecologists under the leadership of a member of the Russian ProGEO group Yu. Ljahnitskiy. Necessary development and preservation of the geosite are carried out by means of regulated tourism.

The geosite status causes anxiety. First of all, unorganized tourism has a negative effect on it. So, for example, it is known, that in 2000, a group of tourists tried to blow up the "Italian" quarry where exploitation of decorative marble was conducted with usage of Italian equipment. Besides, Ruskeala marble has in some places fractured zones that are caused, particularly, by application of blast-hole drilling during its extraction. The erosive processes caused by activity of water and ice promote destruction of rocks and formation of landslides. Thus, old quarries run gradually the danger of destruction and, finally they can be lost.
Currently, the area of the main quarry, named “Ruskeala Mountain Park” is leased to a private person. It was equipped and used for excursions. A footpath is made around the main quarry as well as through a short adit. The administration of the park provides an opportunity to hire rowing boats for sailing in the main quarry lake (Fig. 3). Diving is also practiced. That allows us to study the flooded drifts and explore the bottom. Extreme rides are also organized in order to attract more tourists, but the level of security on them is still low and this can damage the reputation of the park.

The current situation with the use of the geosite is rather far from perfect. During excursions, insufficient attention is paid to geology and underground mine workings. Currently a team of researchers led by Yu. Lyahnitsky, is conducting exploration of underground cavities and propose to develop a new modern design of their equipment and use. They explore the “Ruskeala Gap” - a unique object that represents a giant sunken many-tier mine working. The gap is located near the main quarry, and after construction of necessary facilities it can be included into a tourist route. Arches of the upper hall about 100 m long are supported by 8 columns-pillars up to 12-16 m high and more than 10 m thick. These large-scale underground workings, where large monoliths of marble were extracted, was exposed to the surface because of an unsuccessful explosion in a small quarry, situated nearby. The entrance to the gap represents a giant sink with a diameter of about 20 m. The water level in the gap is approximately 8 m from the floor, and 6-8 m from the top. The gap is so spacious, that it can be traveled by boats. In winter one can observes picturesque ice forms here (Fig. 5). Usage of such interesting object can be made only after its comprehensive examination and preparation of a professional plan of necessary facilities provision for an underground tour route. At the moment, a contract concerning the beginning of this work is being negotiated with the Ruskeala Mountain Park leaseholder.

The authors express their gratitude to Vladimir Makarikhin for the consultation.

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Vikos-Aoos new European and UNESCO geopark and Lavreotiki aspiring geopark in Greece.

Follow up of the Greek project “Designation of geosites-geoparks, contribution to sustainable development” funded with the 3rd Community Support Framework

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The above mentioned project of the Institute of Geology and Mineral Exploration of Greece (IGME) was running from 2006 to 2009 and had the following aims reflected in its sub-projects:

1. Identification, characterization, evaluation of geosites
2. Compilation of a Database and a Geographic Information System (GIS) for the geosites, geotrails and potential geoparks in the country.
3. Planning of walking and motoring geotrails around the geosites, in combination with other attractions of biotic, archaeological and cultural interest.
4. Specifications of the geoparks’ studies and planning for interpretation, tourism, marketing, development, operation and management. Drafting of complete management proposals for selected areas, in view of their development into geoparks and of their participation in international networks.
5. Compilation and publication of interpretive, marketing material for tourism purposes, and for the community awareness on geological heritage conservation.
6. Promotion of the project’s objectives and benefits in national and international level.

Based on sub-projects 1 and 2 and applying with certain criteria, a number of areas have been identified. Selection criteria have been adopted from the definition of geoparks and the prerequisites for a geopark establishment. The criteria applied are the following:

- important geoscientific values: one-two geosites of international significance, with high scientific value, superb features, mosaics of geological features representative of the area, its geological history, events or processes.
- other values (cultural, natural, archeological etc)
- certain extent
- management, access
- infrastructure, facilities
- protection at least partial
- interest and cooperation of local people and local authorities

14 areas have been initially defined with geoparks potential for further study, in the framework of the project. Availability of scientists, time, budget, and technical means gave priorities to the following areas for the pilot geotrails design, relevant publication of geotrails cards and in situ signs: 1. Maronia area, 2. S. Thassos island, 3. Aoos-Vikos area, 4. Kokkinopilos area, 5. Acheron, 6. Lavreotiki, 7. W. Crete and Gavdos island, 8. Nisyros island. These areas constitute those with potential to evolve to geoparks according to the criteria.

Two of the above mentioned areas, Aoos-Vikos area and Lavreotiki, have outstanding values, maturity in respect to local authorities and people involvement, and large possibilities to serve within a local sustainable development framework. Geopark studies were undertaken for those two areas in close cooperation with local authorities and the private domain. Specifications for these two geopark studies have been prepared following a model, as well as the requirements of the European and Global Geoparks Networks.
Additionally applications dossiers for those two areas to be included in the European and in the UNESCO Global Geoparks Networks have been compiled and duly forwarded to appropriate Bureaus. These candidate dossiers with all enclosures are to be found at http://old.igme.gr/

The whole procedure for Lavreotiki and Vikos-Aoos Greek areas to become members of the European Geoparks Network www.europeangeoparks.org and the UNESCO Global Network of national geoparks www.unesco.org is as follows:


2: Evaluation followed in March 2010, during the vernal meeting of the above mentioned international networks and two experts were appointed in order to visit both areas.

3: The visit of the experts took place between 20-23/6 2010 in Vikos- Aoos aspiring geopark and 23-26/6 2010 in Lavreotiki aspiring geopark. During the visit, they performed an inspection in respect to the geoparks operation and verification of the self-evaluation questionnaires and the applications. They were also briefed on the relevant aspects of each geopark including the following: Geological interest, archaeological, ecological, historical, cultural and other interests, Management structure, Environmental protection, Education programmes, Finances/budgets, Tourism strategies, Economic benefits to the region, Community involvement/support, Sale of geological material.

4: The results of this inspection and the relevant decisions were announced during the following meeting of the international geoparks networks, actually during the 9th Conference of the European geoparks network, which took place in the Lesvos fossilized forest European and Global geopark (www.petrifiedforest.gr), 1-5/10 2010. Thus, Vikos Aoos area was accepted as a new member of the European Geoparks Network and also into the UNESCO global Network of National Geoparks, while Lavreotiki could successfully become a member of the network due to its special mining heritage which is of unparalleled historical significance. However, according to decision, better coordination between the various partners in the area is needed in association with improving the safety risk to potential visitors at certain sites. Consequently the area of Lavreotiki remains in the aspiring status.

The Vikos – Aoos Geopark covers the area of Vikos and Aoos gorges, part of the Northern Pindos national park, in North-Western Greece, Epirus region. Extended in an area of 1.218 km², it is one of the most impressive areas in terms of aesthetics and geodynamic processes, where numerous Geosites, from a wide range of geological aspects, compose a picture of incomparable beauty, with excellent scientific and educational potential. It is also an international top tourist destination with increasing trend.

44 geosites are proposed so far, of which 35 are inside the Northern Pindos National Park boundaries. These includes precipices, glacial lakes, tower-like limestone forms, panoramas unveiling the geological history of the area, karst features, stone forests, springs and faults and other geodynamic features. Field research was done by: P. Paschos, E. Nikolaou, D. Papanikos, geologists of IGME regional Department in Epirus.

Significant and unique geological features characterize the region. The wealth of geological diversity resulted in numerous testimonies of the geological history of the area imprinted in a strongly dissected morphology and karstic landscape. A great number of designated geologists of several countries dedicated a big part of their life studying the fascinating geology of the area. The richness of relevant bibliography approves it.

The area is quite important at the national and European level as it uniquely combines the natural (natural habitats, flora, fauna, landforms, hydrography and landscape) and human environments (traditional settlements, cultural and historic features).
The National park of Vikos and Aoos gorges, is recently incorporated into the broader Northern Pindos national Park, while a part of the area is included in the European Ecological network Natura 2000. Pindos mountain is of particular ecological interest, because of the incomparable diversity of species and ecosystems, which are rare in Greece and Europe. Additionally, the long human presence in the region has left indelible signs on the landscape, creating a superb mountainous landscape. At the same time, the scattered and in some cases specific cultural elements (folk music, popular-traditional arts, etc.) and architectural features (houses, bridges, etc.) combined with its rich history, create a unique synthesis of natural and human elements.

The Lavreotiki aspiring geopark is located in Lavreotiki - a peninsula in the SE part of the Prefecture of Attica, within a distance of approximately 60 km from Athens, the capital of Greece. Lavreotiki peninsula is a famous mining area since antiquity, with several values and designations. There are discussions to be proposed for the World Heritage list. The area of the proposed geopark is 176 km².

Marbles, mica schists, phyllites of Mesozoic age is the geological setting in a complex composition and tectonic relation. Mineralization is due to granodiorite intrusion during Miocene and it is related mainly with hydrothermal solutions but also partially with contact metamorphism. The proposed number of geosites so far is about fifty, 29 of which are inside Sounio National Park boundaries.

These include mining galleries and shafts, mining centres, ore washing plants, marble quarries, mining waste material sites, granodiorites, limestones, evrites, metabasites, etc., occurrences, karstic features, transgressive and stratigraphic contacts, a Cape Sounion geological setting. Field research was accomplished by Z. Janikian, Ir. Theodosiou, A. Photiadis, IGME geologists.

The area of Lavreotiki is famous worldwide for the exploitation of the mixed sulphide ore deposits (Pb-Ag-Zn) and the abundance and variety of mineralogical specimens. Mining and metallurgical activity started with silver exploitation since 3.500 B.C., culminated in 5th, 4th c. B.C., followed by welfare and prosperity of Athenian Democracy, thus contributed greatly to Greek and European culture development.

After 3rd c. B.C. degradation started. Around 1860 started a new history of exploitation. Nowadays, specialists in the domain of Economic Geology and Mining are impressed by the extremely advanced mining and metallurgical technology applied during antiquity as it is evident from the numerous relevant archaeological findings. The significant extent of the ancient mining activity in the area is shown by the abundance of mining and metallurgical wastes constituting geological (“ekvolades”, “plynites”) and technological (silag) material.

The whole area is considered as a geo-technological laboratory; together with other values it comprises a wealth of minerals. Numerous abandoned galleries are natural mineralogical museums as the rare minerals of Lavrion have been formed due to specific conditions of metallogenesis. Mineral names as Lavrionite, Kamarizite, Ktenasite, Thorikozite, Serpierite originate from this very place; These minerals were discovered here,
and are included in the collections of several well known mineralogical museums in a world wide scale.

The above mentioned facts witness the special geological-mineralogical setting and geodiversity of the area under concern. In addition and intimately connected with it, the archeological setting culminating at the Cape Sounion renowned temple of Neptune is of great interest, while the cultural setting including the Technological and Cultural park is significant.

The biotic environment also, is of outstanding beauty and value as the area hosts a National Park (Sounio national Park) and two Natura 2000 sites with several types of important habitats.

But Lavreotiki is not only geology, mineralogy, geomorphology, geodiversity, landscapes and ecology. Not only archeology, metallurgy, folklore, traditions. It is much more than that. It is the human and social history of fagging, labour, sweat and toil of hundreds of people, it is memory written on the stones and narrated by the miners.

And this is cultural, not sensational and nostalgic. It is the special atmosphere, that sometimes more than highlights. Wherever you turn in this area everything whispers, testimonies about the history related to this very place.

The conclusion is that the area of Lavreotiki is considered as a geological, natural and cultural heritage of international significance that can be appreciated through conservation, education and geotourism.

This precious heritage, highlighted, protected and managed properly, will be enjoyed by people all over the world, who wish to visit and learn more about it.
Assoc. Prof. Dr. Alexandru Andrasanu (1959) has been elected new coordinator of ProGEO Working Group of SEE countries for a period from 2011 by general agreement of national representatives met on September 16, 2010 in Elazig, Turkey. Presently he has been lecturer of Bucharest University and scientific coordinator of Hateg Geopark of Romania.

Impressions from the ProGEO WG SE Europe Meeting, Firat University, Elazig, Turkey

Dear Ahmet Feyzi Bingol, Dear Nizamettin Kazanci and Dear Ercan Aksoy!

Turning back to Tirana I’m as in a dream. Walking along the street or sitting in home, before me are opening endless spaces of beautiful landscapes on both side of the high ways to Elazig, Kemaliya, Palu, Adiyaman… Before my eyes all events of this meeting are passing, from the Airport to Elazig, where you were waiting and so cordially greeting us, all participants from Albania, Azerbadgian, Bosnia and Hrzegovina, Bulgaria, Greece, Hungaria, Kosova, Serbia, Romania, and from different cities of Turkey. The accommodation in the tourist Village of the Hazar Lake was ide in accordance with the geotourist topic of the symposium...

The Territory of Firat University is build and managed in an excellent manner. Welcome banderols and the long high hall with poster presentations, showed us, since the first moment getting to the Congress Center, that there was prepared a big ProGEO Meeting - and it really was! In this international ProGEO meeting there were a lot of participants, mainly ProGEO members. It was a pleasure to see many young participants and students, which testify about the role of “Jemirko” in Turkey and ProGEO members in different SE European countries. At the same time it testifies about the efforts of Firat University to support so many participants from Balkan countries and from Turkey.

Oral papers in First and Second sessions (Geological Heritage), in Third session (Geological Heritage and Geotourism) and in Fourth session (Geotourism), and posters were prepared and presented on a high level, while the simultaneous translation made us understand the content of every presentation. In most cases they were complete studies on geosites and geoparks all over Turkey, on the integration of natural monuments with cultural ones and humans since the oldest times, on geocotourist features of landscapes, on abandoned mines, on data bases, inventories and digitalization of geosites and geoparks in different regions of your country, with very interesting geology. Commonly, presented papers show achievements and new steps of Jemirko, universities and Geological Survey of Turkey (MTA) in discovering, description and digitalization of geological sites and geoparks.

Outstanding pictures of Karapinar Sinholes, Earth Pillars in Konya, Fluvial and lacustrine deposits around Elazig, of Gilindire Cave in Aydinçik, of geological structures around Konya-Ksaray-Nevsehir-Nigde, of travertine in Denizli basin and in Kolan (Karakoçan-Elazig) and Bagin (Mazgirt-Tunceli), of Dim Cave in Alanya-Antalya astonished us with their nice views. Special and very interesting presentations were those on Gem Quality Diaspore (Zultanite), Kammererite (Chromium Clinoclore) and Purple Jadeite (Clinopyroxene), unique minerals in Turkey and in the world, and about the Pileki cave as integrated ancient geocultural heritage.
Methodical presentations by Turkish geologists, together with capital methodical studies presented by some representatives of different SE European countries in this symposium, show the intensive work of ProGEO WG-1 SE Europe to put in practice the ProGEO Strategy for Geological Heritage Conservation, for education of young generations and for development of geotourist activities. The Elazig meeting was a significant contribution to ProGEO with respect to the level of papers, number of participants and good organization of symposium and field trips. I hope, it will serve as an inspiration for new work for all participants, ProGEO groups and institutions.

During three days of excursions we have had the chance to see some outstanding geological sites and to watch very nice landscapes during the traveling along with high ways of Elazig-Kemalia-Pale and Adiyaman Region. Before going to Kemalia mountainous region, amongst the smooth landscapes on both side of the road, we will remember for a long time the nice Ocal Village on the top of a high limestone hill with water springs and the ethnographic Museum. The old very kind guide told us about the history of the village and ethnographic objects.

Keban Dam on the big Euphrates River on background of green landscape testifies about great works of the Modern Turkish State. The Kirgoz Springs on the high level of carbonate slope related to tectonic faults is a beautiful hydrogeological site, and from here we watched the old town of Kemaliya and the Great Kemaliya Canyon, so high and so long ….Such great natural monuments are rare all over the Planet Earth.

On the second day we watched the Sivrice Segment of the East Anatolian regional fault and depressions on the south edge of Hazar Lake and in Palu Town. This regional seismogenic wide and very long fault between Anatolian Plate and Arabian Plate represents a regional geosite. The visit up to the Harput Castle, was interesting concerning geology showing outcrops of magmatic rocks of Upper Cretaceous Magmatic Arc, and the limestone cover on the top.

The excursion on third day to Adiyaman was also interesting. I was very glad to see the ophiolite sequence in tectonically relation with the Paleozoic sequence and Upper Maastrichtian-Eocene old sedimentary unit. On the high slope of the river they form a beautiful outcrop. And again we met the East Anatolian seismogenic fault system between Surgu and Celikhan, separating the Anatolian Plate North from the Arabian Plate south. At last we felt ourselves on the Arabian Plate on white limestone rocks.

The oldest known settlement build underground in limestone rock was a miracle. Underground houses (caves) contained small rooms and anterooms. It is very pity that this antique city, with its preserved city walls, the fountain – in use up to reasonably and the Necropolis, is not known and protected by UNESCO.

We had a very nice time in Turkey, due to your hospitality and friendly relations of the Turkish participants. Several times on our trips back to Elazig we were accompanied by popular folks and songs, mainly by young ProGEO members. I’m sure, all participants will remember for long time the days of the Elazig ProGEO Meeting, and you Nizamettin must be proud passing duty of the working group over to Alex.

Thanks! Hoping to meet again on future events!
Afat SERJANI, Tirana, Albania, September, 24. 2010.
1st Meeting of ProGEO Regional Working Group (SW Europe)

Enrique Díaz-Martínez, e.diaz@igme.es

The First Meeting of ProGEO Regional Working for SW Europe met in Caravaca (Murcia, southeast Spain) in September 15th-18th, 2010.

We don't have the exact number of participants in our sessions, as this meeting was done simultaneously with an IGCP event, but it was probably around 40 persons registered for our regional meeting, with a total of 31 presentations (12 posters and 19 oral presentations). Evidently, most of the participants were from Spain, then 2 from Portugal, 1 from Italy and 4 from France, together with invited participants from other European countries (UK, Greece, Serbia, Romania...). Many participants of the IGCP also came and joined into our session, and we had some common keynote conferences with them, as well as the inauguration and closure of the overall event. See the web page for more details: http://www.ugr.es/~mlamolda/congresos/geoevents/

The ProGEO representatives were Patrick De Weber for France, Valentina Marin (in absence of Mario Bentivegna and Cristina Giovagnoli) for Italy, José Brilha for Portugal, and Enrique Díaz-Martínez for Spain.

The last day of technical sessions (Friday, September 17th), we had a WG4 business meeting to discuss the following issues:

Geosites Project: This meeting was useful to provide an up-to-date on how the national inventories are been developed in the 4 countries. In Spain and Portugal, the national inventory of geosites with international relevance is concluded. In Italy, the inventory is being done by the "new" geological survey but with just 6 of the 22 (?) regions. We expected a presentation by Cristina Giovagnoli (ISPRA, geological survey of Italy), but at the last moment she could not come and only sent her poster, which was distributed to everybody. We don't know if they are using the framework's methodology.

In France, the inventory is being done (Patrick de Weber is the main responsible) but not following framework methodology. We all agreed that the formerly approved Geosite Project methodology is the appropriate one to compare geosites between different countries. Patrick is available to define frameworks for France in order to facilitate future works with Spain and Portugal. The Italians will provide information on how exactly the national inventory is being developed.

Italian representative: Better coordination is needed, and integration in the regional meetings is important for all.

Future meetings: We discussed the possibility of organizing a ProGEO International Symposium in June 2011 in France, and a 2nd ProGEO WG Meeting in Italy, both in order to promote ProGEO in these countries. In coordination with the rest of ProGEO this has later been adjusted. The 2nd Meeting of ProGEO Regional Working Group for SW Europe will be in France to commemorate the 20 years of the 1st International Symposium at Digne, France in 1991, when the Declaration of the Rights of the Memory of the Earth was signed. French colleagues offered to organize the 2nd
Meeting of this working group in conjunction with "Forum GeoReg 2011, Géosciences des Régions de France et des pays environnants - Forum de la Fédération Française de Géologie (FFG)", which will take place October 23rd to 27th, 2011, at Villeneuve d'Ascq. More information at: http://geosystemes.univ-lille1.fr/sgn.php?page=forum

ProGEO membership: It is necessary to take actions in order to promote ProGEO and gain more members in our 4 countries, mainly Italy and France.

Regional WG coordination meetings: We decided to organize a yearly meeting with the 4 representatives, one of them coinciding with the regional meeting of the working group (fieldtrips, technical sessions, etc.), and another one just the four of representatives and whoever wants to join for a fieldtrip. Meanwhile, electronic communication will occur.

During the conference we had a meeting with Robert Missoten, chief of the "Global Earth Observation Section", and secretary of the International Geoscience Program (IGP, ex-IGCP) of UNESCO. At the Caravaca meeting he was very interested to learn about the meeting that Enrique had with IUCN director (Julia Marton-Lefèvre) in Madrid last March. Robert offered to transmit this interest and the briefings of the meeting at upcoming meetings of Geoparks and IGP. This is good news, but we don't know yet about the outcome.

Apart from all this organizational issues, the fieldtrips (September 15 and 18) and technical sessions (September 16 and 17) at Caravaca went well, even despite some logistic problems. In general, the whole meeting was quite productive and the general outcome was positive.

Next meeting of the ProGEO working group for South-West Europe:

Guided visit to ultrapotassic volcanic rocks at La Celia Mine geosite, near Jumilla (Murcia).
Geological heritage – Bright evidence of Earth evolution

Volodymyr Grytsenko, favosites@gmail.com


Scientific items:

- Geological Heritage (Identification, Classification, Geological setting, Lithological, Stratigraphical and Mineralogical features, Correlation and so on).
- The Legislative base of Geological Heritage. The Actuality and Perspectives creation of Geological Parks.
- The Standardizing and Application of Geological Heritage.
- Geological tourism and popularity of Geological Heritage (Educational Geological practices, Geological trails, routes, Informational support, Archaeological aspect and so on).

We invite all to take part in conference More information on: www.museumkiev.org.

New European geoparks in 2010

Enrique Diaz-Martinez, e.diaz@igme.es

During the 9th European Geoparks Conference on the island of Lesvos (Greece) from 1 to 5 October 2010, the Global Geoparks Network Bureau admitted eleven new members in nine countries. These include 5 new European geoparks: Basque Coast (Gipuzkoa, Spain), Cilento and Vallo di Diano (Campania, Italy), Rokua (northern Ostrobotnia and Kainuu Regions, Finland), Tuscan Mining Park (Tuscany, Italy) and Vikos-Aoos (Ioannina, Greece). So now there are 42 EGN/GGN geoparks in Europe.

5th World Conservation Congress

Enrique Diaz-Martinez, e.diaz@igme.es

Participation in the 5th World Conservation Congress: Geoconservation groups and associations, geoscience societies and geological surveys working on the conservation of geoheritage and geodiversity should apply for membership to the International Union for Conservation of Nature (IUCN) as soon as possible (early 2011) in order to process their application on time and be able to participate in the 5th World Conservation Congress to take place in 2012 in South Korea.

The resolution 4.040 of IUCN General Assembly on the conservation of geodiversity and geological heritage calls for the organization of related activities at this congress, and we will need to coordinate efforts.

Contact Enrique Diaz-Martinez, (e.diaz@igme.es) for more information, and see: http://www.iucn.org/about/union/members/join/

Meeting of the ProGEO working group for North Europe

Lars Erikstad, lars.erikstad@nina.no

The meeting will be held in Oslo in September. More information will come in the next issue of ProGEO NEWS.

The theme of the meeting will be geoconservation in society. Emphasis will be focused on legislation and management on different scales from sites with international value to local landscape character sites. It will be arranged excursions in the Oslo area focusing on Quaternary geological and paleontology sites.

A post-meeting excursion to the World Heritage site: West-Norwegian fjords. Please express if it is interest for this as soon as possible (lars.erikstad@nina.no).
Deadline next issue of ProGEO NEWS: April 1\textsuperscript{st} 2010

Please do not forget to send contributions to ProGEO NEWS. Members are interested in things that happen all over the world, your experiences, geosites, everyday geotopes and landscapes, geoconservation and geotourism efforts! ProGEO news is published on the internet after ½ year:

www.progeo.se

Please send your contributions 500 – 2000 words with photographs, maps and figures to:

lars.erikstad@nina.no

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