ProGEO NEWS
http://www.progeo.se NO. 3. 2009

"Interior and exterior forces". Photo: Lars Erikstad

Geo-art

Lars Erikstad, lars.erikstad@nina.no

In ProGEO NEWS No 1, 2008 Toni Eerola had an article of geoaestetics (art in geology, geology in arts). This article was interesting of many reasons. Firstly it is clear that the shapes and structures of the earth, in landscapes as well as rocks on all scales, fascinate people and have been a traditional inspiration of art. Secondly it is also clear that the aesthetic use of geological material also is recognition of geological heritage and as such should be interesting to the Geoheritage community.

The aesthetic use of geological material goes far beyond art as Eerola points out. Building material and polished rock for facades, and decorative uses in homes and buildings are prominent examples. For my own part I have been puzzled over this market as I think it is fascinating how often the origin of the rock is ignored.

It is therefore of special interest when one suddenly discovers an artist that not only use rocks in his art, but also seem to have an unusual level of integration with Geoheritage in the sense that both the geological and geographical origin of the rocks are integrated in the artwork. Moreover it is special when you discover this artist literally on your own doorstep and after some research finds it is an old colleague that previously worked in the Ministry of Environment in Norway.

The introduction to the millennium exhibition at the city-hall of Oslo.

The artist, Svein Knudsen, has specialized in stone, and not only marble and granites, but common and local stones. His figures consist typically of a big body and a head, carefully selected from raw stone blocks of different, often local stone. The shape of the stone is very carefully shaped leaving the raw impression that make the stone itself talk. The shape of the figures changes from different viewpoints and with different light and trigger personal imagination. They celebrate the diversity of this earth, trough all times.

Typical is the two figures outside my office entrance at the SCIENCE centre at the University of Oslo (the front page photo). The irregular shape makes the figures give the installation different character from different angles and a careful artificial light give a special and different impression in the dark. The bodies are made of local Silurian clay- and limestone and the two heads from a local lava rock (rhomb porphyry) and a breccia of meteoric origin from the meteor crater of Garnås some 10s of km west of Oslo. It is named “Interior and exterior forces”, a fine multi-dimensional title that work both for the human and geological aspects of the sculpture.

One of three figures watching over the landscape at a resting place along E16 west of Oslo. Photo: Lars Erikstad

"Neptun's Eye" placed at Sellafield, England. The project is financed by private persons as a protest against nuclear waste. Photo: www.sveinknudsen.no

The same could clearly been seen in a millennium exhibition in the city hall of Oslo. The name of the exhibition was "Time, man and the earth". And some few short poems were also presented in the exhibition introduction. These do also tell about the perspective of this artist as it is linked directly to Geoheritage - "the memory of the earth". In a crude translation a couple of these poems can be sited:

"When the cosmic elements of earth hardened
The stone- family was born
And stone became the calendar of earth
From the earliest times, Cambrium-Silurian and Quaternary"

"The stone has its own life
Weathers and change shape
Crumbles into sand
To again become stone
In the metamorphosis of time"

Stone has time and the basic forces within them, Svein says, to use stone from different geological periods makes it possible to visualize and dramatize in a way that is not possible with any other material. With stone we do approach the basics. Stone is time….

"Woman from Calvi" ("Dame de Calvi") placed near a memorial after a ship catastrophy on Corsica. Photo: www.sveinknudsen.no

Intensive Course on Geodiversity and Geological Heritage Assessment

Ricardo Fraga Pereira
PhD Student at the University of Minho

During 9-13 September 2009, the “Intensive Course on Geodiversity and Geological Heritage Assessment" took place in Braga (Portugal).

The course was organized by the staff of the Earth Sciences Department of the University of Minho with the collaboration of other entities, namely: the International Association of Geomorphologists (which offered a grant for one student), the Portuguese Association of Geomorphologists, ProGEO, the European Geoparks Network, the Naturtejo Geopark, the Arouca Geopark, the Portuguese Committee for the International Year of Planet Earth, and the Foundation for Science and Technology (Portugal). The course had 33 participants, coming from 11 different countries (Brazil, Chile, Croatia, Italy, Iran, Malta, Mozambique, Poland, Portugal, Slovenia, and Switzerland), most of them master and PhD students from different universities.

The speakers were:

- José Brilha - University of Minho
- Diamantino Pereira - University of Minho
- Paulo Pereira - University of Minho
- Luis Carcavilla Urqui - Mining and Geological Institute of Spain
- Emmanuel Reynard - University of Lausanne (Switzerland)
- Nikolaus Zouros - University of The Aegean (Greece)

The subjects treated during the course were related to definitions and methodologies for the assessment of geodiversity and geosites and also the present situation of geoconservation and inventory of geological and geomorphological heritage in Portugal, Spain, Switzerland, and Greece. Nikolaus Zouros also made a very informative lecture about the Global and European Geoparks Networks, talking about the management and implementation strategies of these networks and their contribution for the raise of the sustainable development around the world.

In a section called "New Researchers on Geoconservation", all participants presented the projects that they are presently worked with. This was very interesting, as it allowed the exchange of experiences between the members of the group and also made possible for all, to have an idea of ongoing research projects about geodiversity and geoconservation in many countries, located in different continents around the world. It must be pointed out, the presence of a member of the Geological Survey of Iran, who made a lecture about the Iranian geodiversity, which surprised most of the participants with the variety of landscapes and different is-

Participants of the fieldtrip at Peneda-Gerês National Park

Participants during lectures at the University of Minho

sues related to its diversity.

During the course it also was a field trip to the Peneda-Gerês National Park, where the workshop "Geosites Assessment" took place. For this activity, the main group was divided in small groups and the methodology proposed by Pereira (2006) was used as a hands-on exercise. Later the results of each group were presented and discussed with all the course members. This exercise was very helpful to practice the quantification of geosites in a real situation.

In the closure of the course it was a field trip to the Arouca Geopark, that is the second Portuguese Geopark to become a member of UNESCO Global Geoparks Network. It was possible for all to observe and discuss in situ practical aspects of geoparks implementation and management.

After the course, a group called "Geological Heritage" was created in the FACEBOOK, by some members of the course, where some discussions and information are still being exchanged and also a photo gallery about this issue was started. For those who have an account in this virtual social network, it would be worthwhile to come in…

The mineralogical exhibition of the National Museum of Natural History in Sofia (Bulgaria) - 120 years of its establishment

Svetoslav Petrussenko, Chavdar Karov, Ilia Dimitrov, National Museum of Natural History, Bulgarian Academy of Sciences, svet_petrussenko@yahoo.com, ch_karov@abv.bg, lakichepelare@abv.bg

Being abound with spectacular collections of the living and the non-living nature, the National Museum of Natural History of the Bulgarian Academy of Sciences is one of the biggest museum institutions dealing with the natural history heritage of the Balkans. It was founded in 1889 as "Natural History Museum" by Prince Ferdinand I (1861-1948) on his own small personal collection of birds, insects and mammals. Later the Museum rapidly grew and was enriched by valuable specimens of birds and mammals from Africa and India, as well as with shells, insects etc, acquired as a personal gifts. Among the most outstanding donations was the extensive ornithological and oolitical collection of Dr. Paul Leverkuhn, the first Private Secretary to Prince Ferdinand. Subsequently Dr. Paul Leverkuhn took the position of the first Director of the Museum of Natural History. In 1902 Dr. Kurt Kamlach`s donation of a mineralogical collection consisting of 675 mineral samples of 150 mineral species, gathered by his grandfather Hermann Angerstein, set the beginnings of the mineralogical collection. The collection contained

minerals of all classes from famous locations in Europe as Andreasberg, Erzgebirge, Přibram, Zinnwald, Siebengebirge, Ural, Almaden etc. Mineralogical collections were enriched by the donations of Dr. Ebner von Eschenbach – obsidian from Mexico and Dr. Wheeler's personal collection, comprising 139 minerals.

The museum was officially opened to the public in 1907. A luxury 484 page catalogue came out, Collection du Musee d`Histoire naturelle de San Altesse Royal Ferdinand I de Bulgarie, describing the exhibits, including 899 minerals and organic mineral products. The subsequent development of the Museum was closely linked with the work of the outstanding Bulga-

Calcite, Burgas region

rian zoologist Dr. Ivan Buresch (1885-1980), who was Director from 1914 to 1959. At this time the Royal Museum of Natural History became the centre of naturalist studies in Bulgaria. A large number of new mineral samples and fossils enriched the museum collections, allowing the establishment in 1920 of a mineralogical and geological section. The exhibits included the collections of Prof. G. Zlatarski, Prof. G. Bonchev, Prof. R. Popov, numerous donations from mining engineers and many other geologists. In 1935 a new building on the site of the previous one was completed and housed the Museum (see photo).

The 50th anniversary of the museum coincided with the renovated and extended exposition of about 1200 minerals and rock samples exhibited in 18 windows in a hall with an area of 100 sq m. It contained all foreign samples as well as those from newly established sites in the Rhodope, Rila, Pirin and Balkan Mountains. In the eve of the Second World War the Royal Museum of Natural History was at its height, being the largest and best one on the Balkans. It was a well known centre for research for the naturalists in Bulgaria and the neighboring countries.

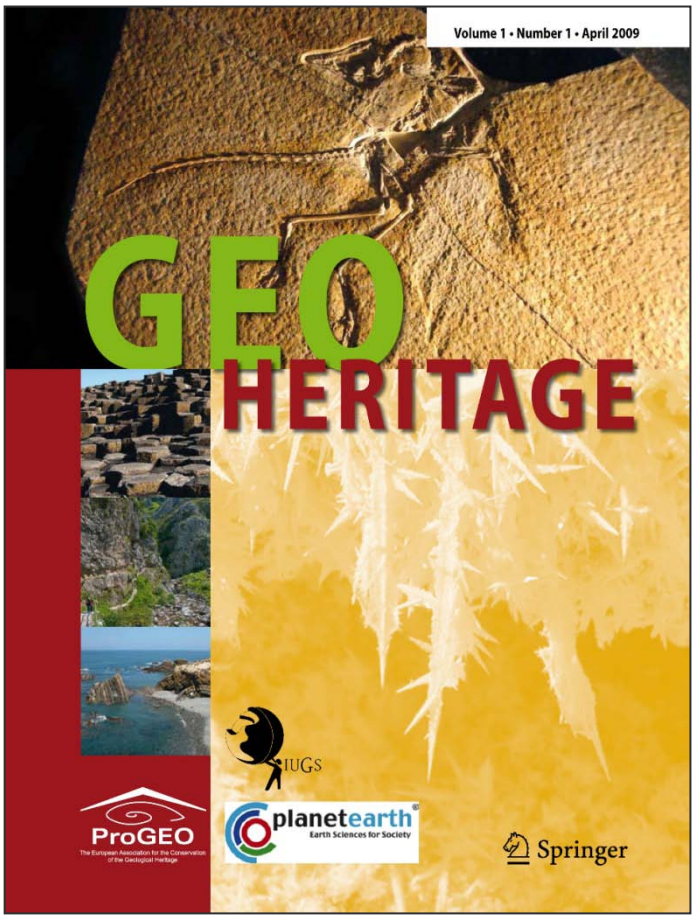
The war considerably affected the work of the museum when on the 30th of March 1944 an air strike directly hit the Museum and badly damaged the building. In 1947 the Museum was placed under the Bulgarian Academy of Sciences, establishing three separate institutes - of Geology, of Botany and of Zoology. Specialists from the Institute of Geology were entrusted with the mineralogical exposition. At this time the first fine samples from the Madan region with hydrothermal ore bodies in the Rhodope Mountains were acquired. In 1962 the Botanical and Geological Sections of the Museum were closed down and during 12 years the public was deprived of access to museum collections. In 1974 the Museum was restored as a separate research unit under the Bulgarian Academy of Sciences under the name National Natural History Museum. Acad. Ivan Kostov (1913-2004) was appointed as a Director, giving start of the modern history of the museum.

The subsequent period has been a time of the restoration of the exhibition area and rearrangement of the samples. A Department of Mineralogy, Paleontology and Botany has been established. The mineralogical collection grew considerably and today comprises 15000 specimens, acquired through collections, expeditions, purchase and exchange. Cooperation with collectors and numerous museums has been established. Annual mineral samples gathering and inter-museum exchanges are the main source of acquisitions; however numerous public organizations, mines, foreign guests and private persons have also made donations to the museum.

The mineralogical collection is repeatedly improved by specimens from Bulgaria and from abroad. Since 1990 the name was changed to National Museum of Natural History in Sofia. The mineralogical exposition is currently arranged in 3 halls (300 sq m) under the following topics: “Composition, structure, and properties of the minerals”, “Systematic of minerals”, (the systematic classification of Acad. Kostov), and “Genesis of the minerals”. The samples are attended by original structural models, schemes, diagrams and pictures. The mineralogical collection keeps unique samples from Bulgarian localities (e.g. Madan ore district, Bourgas ore field etc.), as well as from foreign mineral deposits (e.g. Kola Peninsula, Greenland and Australia). Until the end of 2007, an inventory of 8667 samples has been taken, and today the mineralogical collection is known to contain 949 mineral species and 94 mineral varieties, minerals from 216 type-localities and 203 mineral species from Bulgaria. The collection includes the holotypes of minerals such as strashimirite, kostovite, balkanite. Some of the samples are author’s specimens of Bulgarian and foreign scientists. The museum cares also Russian and American mission samples from the Moon. Through its notable scientific collections and its impressive exhibitions, the Museum has gained the reputation of a widely respectable institution over the years.

Amethyst, Blagoevgrad region

GEOHERITAGE and ProGEO NEWS - contributions wanted!



ProGEO has two major publications in addition to our web-site: www.progeo.se – GEOHERITAGE and ProGEO NEWS. It is vital for our organization that we use these channels for communications. Please remember ProGEO NEWS for all big and small information bits and pieces relevant for you ProGEO colleagues and GEOHERITAGE for scientific publication.

GEOHERITAGE covers all aspects of geoheritage and its protection. GEOHERITAGE details all aspects of our global geoheritage, both in situ and portable. It examines conservation of sites and materials--use, protection and practical heritage management--as well as its interpretation through education, training and tourism.
The journal covers all aspects of geoheritage and its protection. Key topics include:
- Identification, characterization, quantification and management of geoheritage
- Integration of biodiversity and geodiversity in nature conservation and land-use policies
- Geological heritage, sustainable development, community action, practical initiatives and tourism
- Geoparks: creation, management and outputs
- Conservation in the natural world, Man-made and natural impacts, climate change;
- Geotourism definitions, methodologies, and case studies
- Pedagogical use of geological heritage: publications, teaching media, trails, centers, on-site museums.

Please check out the web-site for practical information: http://www.springer.com/earth+sciences/geology/journal/12371

Deadline next issue of ProGEO NEWS: December 20th 2009

ProGEO: European Association for the Conservation of the Geological Heritage● **Address:** Box 670, SGU, SE-751 28 Uppsala, Sweden.● **Treasurer:** Sven Lundqvist. ● **Bank:** SWEDBANK, SE-105 34 Stockholm, Sweden. Swiftcode: SWEDSESS. **IBAN**: SE81 8000 0838 1697 3296 5174● **Membership subscription:** personal: € 50 (including GEOHERITAGE subscription), 25/yr.(without journal subscription), institutional: €185/yr. ● **President:** W.A.P. Wimbledon, Postgraduate Research Institute for Sedimentology University of Reading, Whiteknights, READING RG6 6AB, United Kingdom.● **Executive Secretary:** Lars Erikstad, NINA, Gaustadaleen 21, NO-0349 Oslo, Norway. **ProGEO NEWS** - A ProGEO newsletter issued 4 times a year with information about ProGEO and its activities. Editor: Lars Erikstad, NINA, Gaustadaleen 21, NO-0349 Oslo, Norway, Phone: + 47 73 80 17 08, Fax: +47 22 60 04 24, e-mail: lars.erikstad@nina.no. Contributions preferred on diskette (Word- or ASCII-format) or by e-mail if possible.