



MAGYAR GEOFIZIKUSOK EGYESÜLETE

MAGYARHONI FÖLDTANI TÁRSULAT

**XLIII.
Ifjú Szakemberek Ankétja**

2012. március 30-március 31.

Tatabánya

www.isza.hu

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30 March 2012 (Friday)

OPENING

1st session

INVITATION

to the Meeting of Young Geoscientists

30-31 March 2012

Tatabánya, Hotel Árpád

Fő tér 20.

www.hotelarpad.hu

Useful information:

Accommodation and meals are available only for pre-registered participants.

The talks are open and public.

Official languages of the conference are English and Hungarian.

Registration desk open: From 8.30 am, 30 March onwards

Organisers

elements. The results were compared with the compositional data of Early and Middle Avar Age beads in order to trace the changes in the glass making technology.

Petrographic study on upper mantle ultramafic xenoliths from the central part of the Nógrád-Gömör Volcanic Field (Medves Plateau and Babi Hill)

Levente Patkó, Nóra Liptai, László Aradi

Eötvös University, Department of Petrology and Geochemistry,

Lithosphere Fluid Research Lab

Poster

A possible method for gaining information about the upper mantle is the examination of ultramafic xenoliths, brought to the surface by melts of alkali basalt, kimberlite and lamprophyre. Upper mantle xenoliths from the five volcanic fields of Plio-Pleistocene alkali basalts in the Carpathian-Pannonian region (Styrian Basin, Little Hungarian Plain, Bakony-Balaton Highland, Nógrád-Gömör, Perşani Mountain) have provided matter to petrologic and geochemical studies in the last few decades.

In our work we concentrate on the Nógrád-Gömör Volcanic Field (NGVF), located at the northern part of the Carpathian-Pannonian region. We collected xenoliths from the central part of the area, including five quarries from Medves Plateau and Babi Hill that have barely been studied before.

Out of the 200 collected xenoliths, over 80 were chosen for detailed petrographic examinations. The main aim was to determine texture types and modal compositions of the xenoliths regarding the rock-forming minerals, as well as describe fabrics of the mantle minerals (olivine, orthopyroxene, clinopyroxene and spinel). Based on the results, we present a detailed summary about the NGVF xenoliths, showing how they can be correlated with xenoliths originating from better researched marginal areas, and introducing a texture type (poikilitic), as well as a rock type (wehrlites) that have not been mentioned before in earlier studies on the central part of the NGVF. It will also be presented that wehrlites show features of different texture types in the form of clinopyroxene-spinel aggregations sitting in the original texture, which indicates possible mantle metasomatism that took place before the ascension.

Results of „in situ” remediation

contaminants

Péter

MinG

Pos

Last year a new measurement method for monitoring „in-situ” remediation process was developed. Before execution of the remediation work, the concentration of contaminants was measured on the site to build up a site-specific model. Based on the results we could calculate the 2D distribution of contaminants in the system by means of modeling program. This method with highest resolution, but it is very expensive and quickly comes to an end. Six measurements were taken out, the first before the injection, and repeated measurements were taken during the remediation process. The results of the microbiological processes. The spatial distribution of contaminants have been tracked by 3D images of the site.

Submarine hydrothermal processes

Szarvaskő Basalt Formation

Domokos Pásztor (Supervisor)

Eötvös Loránd University,

Pos

The Jurassic magmatic complex of the Szarvaskő area consists of gabbro, rarely ultramafic rocks, etc. The formation of this series is most probably related to the development of a back-arc basin during the history of the area. The study is focused on a pillow basalt outcrop near the village of Szarvaskő.

After the field work, macroscopic and microscopic (SEM+EDX) observations were performed in order to characterize the rocks.

The investigated rocks of the Szarvaskő area (i.e. local admixture of basaltic lava and sediment) of a subaqueous lava flow. The study of the outcrop a dolerite-block can help to understand the relationship with the pillow basalt series.