

**Bulgarian  
Geophysical  
Society**



**Bulgarian  
Geological  
Society**



# GEOSCIENSES 2006

*National Conference  
with international participation*

*Sofia, November 30 — December 1, 2006  
National Palace of Culture*



## PROGRAM

## **ORGANISING COMMITTEE:**

### **Honourable Chairmen:**

Academician Todor Nikolov      Academician Ljudmil Christoskov

### **Chairmen:**

Stefan Shanov      Strashimir Strashimirov  
President of BgGS      President of BGS

### **Scientific commission:**

Eugenia Tarassova — CLMC, BAS (Secretary)	Yotzo Yanev — Geological Institute, BAS
Alexander Tsvetkov — UMG “St. Ivan Rilski”	Radoslav Nakov — Geological Institute, BAS
Emil Botev — Geophysical Institute, BAS	Stefan Dimovski — UMG “St. Ivan Rilski”
Filip Machev — SU “St. Kliment Ochridski”	Denitsa Borisova — STIL, BAS

### **Treasurers:**

Nikola Krastev — Milveks Ltd      Boris Valchev — UMG “St. Ivan Rilski”

### **Technical commission:**

Veselka Radeva — Oil and Gas, AD	Sonya Dimitrova — Geophysical Institute, BAS
Iskra Piroeva — CLMC, BAS	Zlatka Milakovska — Geological Institute, BAS

# Program

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**Thursday, November 30, 2006**

**Hall 10**

08<sup>30</sup> – 09<sup>30</sup>     **Registration**

09<sup>30</sup> – 10<sup>10</sup>     **Opening Ceremony**

Welcome to **GEOSCIENCES 2006**:

*Strashimir Strashimirov*, President of the Bulgarian Geological Society;

*Stefan Shanov*, President of the Bulgarian Geophysical Society;

Address by Official Representative of the EAGE

## **PLENARY SESSION**

**Chairman: Christo Dabovski**

10<sup>10</sup> – 10<sup>40</sup>     *Todor Nikolov*: Astronomic and orbital impacts on the geological chronicle

10<sup>40</sup> – 11<sup>10</sup>     *Lyudmil Hristoskov, Dimcho Solakov, Stefan Shanov, Marin Kostov*: Perspectives and peculiarities of Seismic Hazard Maps elaboration as a basis for harmonization of the Bulgarian Seismic Building Code with the Europeans standards

11<sup>10</sup> – 11<sup>30</sup>     *Ivan Zagorchev*: International Year of the Planet Earth (2008) and the Triennium of Geosciences (2007–2009)

11<sup>30</sup> – 11<sup>50</sup>     *Coffee break*

## **SCIENTIFIC SESSIONS**

**PALEONTOLOGY, STRATIGRAPHY AND SEDIMENTOLOGY**

**Chairman: Slavcho Yanev**

11<sup>50</sup> – 12<sup>10</sup>     *Valeri Sachanski, Necdet Özgül, Esen Arpat*: The graptolite species *Hunnegraptus copiosus* Lindholm, 1991 from the Lower Ordovician of Central Taurus, Turkey

12<sup>10</sup> – 12<sup>30</sup>     *Docho Dochev*: New biostratigraphic data based on inoceramid bivalves from the interval Upper Turonian – Coniacian in Breznik, West Srednogorie Mountains, Bulgaria

12<sup>30</sup> – 12<sup>50</sup> *Ivan Zagorchev, Kiril Budurov*: Geological features of the transgressive part of the peri-Tethyan Triassic type in Bulgaria

13<sup>00</sup> – 14<sup>00</sup> ***Lunch break***

#### PETROLOGY AND GEOCHEMISTRY

**Chairman: Todor Marinov**

14<sup>00</sup> – 14<sup>20</sup> *Albrecht von Quadt, Stoyan Sarov, Irena Peytcheva, Emilia Voinova, Nikolay Petrov, Kamelia Nedkova, Kalin Naydenov*: Metamorphic rocks from northern parts of Central Rhodopes – conventional and in situ U-Pb zircon dating, isotope tracing and correlations

14<sup>20</sup> – 14<sup>40</sup> *Borislav K. Kamenov*: The Velikovets pluton in Strandja Mountains – new petrological data

14<sup>40</sup> – 15<sup>00</sup> *Evgenia Kozhoukharova*: Eclogitization in crust condition on the example of the Rhodope massif

15<sup>00</sup> – 15<sup>20</sup> *Emilia Raeva, Kalin Naydenov, Neven Georgiev, Zlatka Cherneva*: Chemical composition of the rock forming minerals and ductile deformation in Smilyan granite, southeastern part of the Central Rhodopes, Bulgaria

15<sup>20</sup> – 15<sup>40</sup> *Zlatka Cherneva, Maria Ovtcharova, Dimo Dimov, Albrecht von Quadt*: “Baby-granites” in migmatites from Chepinska river valley, Western Rhodope – geochemistry and U-Pb isotope dating on monazite and zircon

15<sup>40</sup> – 16<sup>00</sup> *Irena Peytcheva, Albrecht von Quadt, Ognyan Malinov, Elena Tacheva, Rossen Nedialkov*: Petrochan and Klissura plutons in Western Balkan: relationships, in situ and single grain U-Pb zircon/monazite dating and isotope tracing

16<sup>00</sup> – 16<sup>20</sup> ***Coffee break***

#### PETROLOGY AND GEOCHEMISTRY

**Chairman: Vassil Arnaudov**

16<sup>20</sup> – 16<sup>40</sup> *Yotzo Yanev, Blazo Boev, Carlo Doglioni, Fabrizio Innocenti, Piero Manetti, Zoltan Pecskey, Sonia Tonarini, Massimo D’Orazio*: Late alpine ultra- to high potassic volcanic rocks in Republic of Macedonia: mineralogy, geochemistry, and age

16<sup>40</sup> – 17<sup>00</sup> *Lora Bidzhova, Rosen Nedialkov*: Amphiboles from the Plana pluton, Bulgaria

- 17<sup>00</sup> – 17<sup>20</sup> *Lubomira Macheva, Irena Peytcheva, Albrecht von Quadt, Nikola Zidarov, Evgenia Tarassova*: Petrological, geochemical and isotope features of Lozen metagranite, Belasitza Mountain – evidence for widespread distribution of Ordovician metagranitoids in the Serbo-Macedonian Massif, SW Bulgaria
- 17<sup>20</sup> – 17<sup>40</sup> *Nikolay Bonev, Kaloyan Peychev, Diana Nizamova*: MOR- vs. SSZ-origin of metamafic rocks in the upper high-grade basement unit of the Eastern Rhodope: geochemical diversity and tectonic significance
- 17<sup>40</sup> – 18<sup>00</sup> *Raya Raicheva, Peter Marchev*: Role of magma mixing in the petrogenesis of the volcanic rocks from Zvezdel palaeovolcano
- 18<sup>00</sup> – 18<sup>20</sup> *Philip Machev, Borjana Borisova, Lutz Hecht*: Metaeclogites from the Sredna Gora terrain – petrological features and P-T path of evolution

MINERALOGY

**Chairman: Mihail Tarassov**

- 11<sup>50</sup> – 12<sup>10</sup> *Irina Marinova*: Preliminary data on the morphology of electrum from the layer-like pervasive silicification in Stenata outcrop, Khan Krum gold deposit, SE Bulgaria
- 12<sup>10</sup> – 12<sup>30</sup> *Rossen Nedialkov, Aneta Zartova, François Bussy, Robert Moritz*: Sulfide inclusions in minerals from volcanic rocks of the Panagurishte ore region, Bulgaria
- 12<sup>30</sup> – 12<sup>50</sup> *Rositsa Ivanova, Yotzo Yanev*: An XRD study of the clay minerals from the altered Borovitza caldera ignimbrites (Eastern Rhodopes)
- 13<sup>00</sup> – 14<sup>00</sup> **Lunch break**

SEISMOLOGY AND PHYSICS OF THE EARTH'S INTERIOR

**Chairman: Emil Botev**

- 14<sup>00</sup> – 14<sup>20</sup> *Emil Botev, Rumiana Glavcheva, Blagovesta Babachkova, Silvia Velichkova, Irena Tzoncheva, Konstantina Donkova, Sonya Dimitrova*: Seismicity patterns in Bulgarian area and adjacent lands recorded by NOTSSI in 2001-2005
- 14<sup>20</sup> – 14<sup>40</sup> *Rumiana Glavcheva, Nikolai Dobrev, Kiril Hadjiiski, Sonya Dimitrova, Boyko Rangelov*: The 2006 seismic activation in the Eastern Rhodopes (Mts) – Kurdjali area and some generalization on geological features in the region
- 14<sup>40</sup> – 15<sup>00</sup> *Dessislava Milusheva, Boyko Rangelov*: Tsunamigenic potential of the strong earthquakes near Sumatra (26/12/2004 and 28/03/2005)
- 15<sup>00</sup> – 15<sup>20</sup> *Stela Simeonova, Irena Aleksandrova, Dimcho Solakov, Iliana Popova, Gergana Georgieva*: Observed macroseismic effects from intermediate Vrancea, Romania earthquakes (1940, 1977) on the territory of the town of Rousse
- 15<sup>20</sup> – 15<sup>40</sup> *Cenka Christova, Naoshi Hirata, Aitaro Kato*: Contemporary stress field in the Wadati-Benioff zone beneath North Honshu and the Hokkaido corner by inversion of earthquake focal mechanisms – evidences for 3-planar distribution of the stresses

15<sup>40</sup> – 16<sup>00</sup> *Cenka Christova, Naoshi Hirata, Aitaro Kato*: Contemporary stress field in the Hokkaido Wadati-Benioff zone by inversion of earthquake focal mechanisms – evidence for tearing of the subducting slab

16<sup>00</sup> – 16<sup>20</sup> ***Coffee break***

## SEISMOLOGY AND PHYSICS OF THE EARTH'S INTERIOR

**Chairman: Dimo Solakov**

16<sup>20</sup> – 16<sup>40</sup> *Lilia Dimitrova, Svetlana Nikolova, Dimcho Solakov*: Modernization of the local seismological network in Provadia

16<sup>40</sup> – 17<sup>00</sup> *Svetlana Nikolova, Dimcho Solakov, Nikolai Miloshev*: Advanced seismological digital network in Bulgaria

17<sup>00</sup> – 17<sup>20</sup> *Dimo Solakov, Stela Simeonova*: Earthquake scenarios for the city of Sofia

17<sup>20</sup> – 17<sup>40</sup> *Alexander Gorshkov, Giuliano Panza, Alexander Soloviev*: Seismogenic nodes within mountain belts of Southern Europe

17<sup>40</sup> – 18<sup>00</sup> *Dimitar St. Dimitrov, Ivan Georgiev*: Geodetic Monitoring of Seismogenic Zones – Experience and Achievements of the Central Laboratory of Geodesy, Bulgarian Academy of Sciences

18<sup>00</sup> – 18<sup>20</sup> *Dimitar St. Dimitrov, Jean-Bernard De Chabaliere, Jean-Claude Ruegg, Emil Botev*: The 14 and 18 April 1928 Chirpan-Plovdiv Earthquakes – fault model from geodetic and seismic data

PALEONTOLOGY, STRATIGRAPHY AND SEDIMENTOLOGY

**Chairman: Marin Ivanov**

- 09<sup>00</sup> – 09<sup>20</sup> *Atanas Vassilev, Emil Botev, Raina Hristova*: Dvurechenskii Mud Volcano – age and temporal variable activity from earthquakes, tsunamis and geological samples
- 09<sup>20</sup> – 09<sup>40</sup> *Yordan Evlogiev*: Stratigraphic correlation of Quaternary aeolian and Black Sea deposits
- 09<sup>40</sup> – 10<sup>00</sup> *Kristalina Stoykova, Marin Ivanov*: A complete section of the Paleocene Series near Byala, East Bulgaria – nannofossil data
- 10<sup>00</sup> – 10<sup>20</sup> *Mariana Filipova-Marinova*: Quaternary palynostratigraphy of the Western Black Sea area
- 10<sup>20</sup> – 10<sup>40</sup> *Marlena Yaneva, Maria Lazarova*: Sedimentological and palinological data about young sediments from the Chirpan – Cherna Gora district
- 10<sup>40</sup> – 11<sup>00</sup> ***Coffee break***

MINERAL RESOURCES

**Chairman: Veselin Kovachev**

- 11<sup>00</sup> – 11<sup>20</sup> *Boris Kolkovski, Vladimir Georgiev*: Late Alpine metallogeny of Western and Central Rhodopes
- 11<sup>20</sup> – 11<sup>40</sup> *Valcana Stoyanova, Ryszard Kotlinski*: Mineral resources of the international seabed area: modern challenges of their exploration
- 11<sup>40</sup> – 12<sup>00</sup> *Ivan D. Ivanov*: Metal resources of the northern Appalachians. Geological position, prospecting methods and organization of the geological work
- 12<sup>00</sup> – 12<sup>20</sup> *Oleg Vitov*: Mineralogical study and dividing of Pernik administrative district, Western Bulgaria, based on stream-sediment surveys
- 12<sup>20</sup> – 12<sup>40</sup> *Todor Serafimovski, Goran Tasev*: Sulfur isotope study of sulfides from some mineral deposits from the Lece-Chalkidiki metallogenic zone
- 13<sup>00</sup> – 14<sup>00</sup> ***Lunch break***



## GEOTECTONIC AND STRUCTURAL GEOLOGY

**Chairman: Jordan Malyakov**

- 14<sup>00</sup> – 14<sup>20</sup>     *Alexander Radulov, Carlos Sanz de Galdeano, Marlena Yaneva, Jose Miguel Azanon, Jesus Galindo-Zaldivar, Stefan Shanov: Quaternary faulting in Granada Basin, Southern Spain*
- 14<sup>20</sup> – 14<sup>40</sup>     *Carlos Sanz de Galdeano, Stefan Shanov, Jesús Galindo-Zaldívar, Alexander Radulov, Gabriel Nikolov: Neotectonics in the Tabernas Desert (Almeria, Betic Cordillera, Spain)*
- 14<sup>40</sup> – 15<sup>00</sup>     *Irene Zananiri, Sarantis Dimitriadis, Despina Kondopoulou, Adamantios Kilias: Geotectonic evolution of the Hellenic Rhodope Massif as inferred from magnetic fabric studies in the Vrontou and Symvolon plutons*
- 15<sup>00</sup> – 15<sup>20</sup>     *Mitko Paskalev: Alpine nappe tectonic in the Eastern Balkan region*
- 15<sup>20</sup> – 15<sup>40</sup>     *Neven Georgiev, Ianko Gerdjikov, Julia Statelova: Ductile to brittle-ductile shear zones from the Pre-Mesozoic basement of Tvarditsa Stara Planina area: preliminary field and mesostructural data*
- 15<sup>40</sup> – 16<sup>00</sup>     *Orlin Dimitrov: Neotectonic interpretation of seismostratigraphic date from the outer part of the South Bulgarian shelf*
- 16<sup>00</sup> – 16<sup>20</sup>     *Ianko Gerdjikov, Piere Gautier, Zlatka Cherneva, Gilles Ruffet: The northwestern segment of the North Rhodopean extensional system and related fabrics in the Rila-Rhodopean batholith*
- 16<sup>20</sup> – 16<sup>40</sup>     ***Coffee break***
- 16<sup>40</sup> – 18<sup>00</sup>     Presentation of companies

## MODERN GEODYNAMICS

**Chairman: Dimitar Dimitrov**

- 09<sup>00</sup> – 09<sup>20</sup> *Ivan Georgiev, Dimitar Dimitrov, Lyubka Pashova, Todor Belijashki, Stefan Shanov, Gabriel Nikolov, Georgi Marinov*: Geodetic monitoring of the recent crustal movements in Southwestern Bulgaria
- 09<sup>20</sup> – 09<sup>40</sup> *Ivan Georgiev, Dimitar Dimitrov, Lyubka Pashova, Maya Ilieva, Stefan Shanov, Gabriel Nikolov*: Geodynamic study in the region south of Sofia by GPS
- 09<sup>40</sup> – 10<sup>00</sup> *Tsenko Tsenkov, Ivan Georgiev, Lyubka Pashova, Ivaylo Radev, Dimitar Georgiev*: Monitoring of landslide processes in the region of the Botanical garden of BAC, Sofia
- 10<sup>00</sup> – 10<sup>20</sup> *Ivan Georgiev, Dimitar Dimitrov, Lyubka Pashova, Emil Botev, Stefan Shanov, Gabriel Nikolov, Krassimir Matev*: Results from geodynamic studies in the Krupnik-Kresna region for the period 2002-2005
- 10<sup>20</sup> – 10<sup>40</sup> *Lyubka Pashova*: Comparison of digital elevation models over Southwestern Bulgaria
- 10<sup>40</sup> – 11<sup>00</sup> **Coffee break**

## APPLIED GEOPHYSICS

**Chairman: Alexander Tsvetkov**

- 11<sup>00</sup> – 11<sup>20</sup> *Zheljo Zhelev, Totka Petrova, Fuensanta Montesinos, Ricardo Vieira, Antonio Camacho*: New results of the analysis of the Alcala de Ebro Village (Zaragoza, Spain) gravity anomaly with a set of point sources
- 11<sup>20</sup> – 11<sup>40</sup> *Boyka Mihaylova, Asen Mitev, Aleksey Benderev, Stefan Shanov*: Hydrogeological and geophysical investigations for localization of the river recharge of the ground waters of the Bosnek Karst Region
- 11<sup>40</sup> – 12<sup>00</sup> *Lyuben Gugov*: The thermal inertia of rocks in Eastern Rhodopes
- 12<sup>00</sup> – 12<sup>20</sup> *Stefan Dimovski, Radi Radichev, Georgi Zashev*: Surface correlation between fault tectonics and data from airborne gamma-ray spectrometry for the region of Assarel – Central Srednogorie
- 12<sup>20</sup> – 12<sup>40</sup> *Irene Zananiri, Tzortzeta Memou, Gerasimos Lachanas*: Vertical Electrical Sounding (VES) survey at the central part of Kos Island, Aegean, Greece
- 12<sup>40</sup> – 13<sup>00</sup> *Milena Cukavac, Dragana Jovanovic, Ivana Vasiljevic, Nataša Gerzina*: Geophysical investigations on regional geology profiles in the West Serbia Region

13<sup>00</sup> – 14<sup>00</sup>     **Lunch break**

## GRAVIMETRY AND GEOMAGNETISM

**Chairman: Stefan Dimovski**

14<sup>00</sup> – 14<sup>20</sup>     *Petya Trifonova, Zheljo Zhelev, Totka Petrova*: Estimation of Curie point depths of the Moesian platform using geomagnetic data interpretation

14<sup>20</sup> – 14<sup>40</sup>     *Zheljo Zhelev, Totka Petrova, Vladimir Stanchev, Dimo Dimov*: Some new results of the analysis of the Livingston magnetic anomalies with elementary sources

14<sup>40</sup> – 15<sup>00</sup>     *Radi Radichev, Stefan Dimovski, Milena Tangalova*: Magnetic susceptibility distribution in non-uniform media

15<sup>00</sup> – 15<sup>20</sup>     *Emil Mihailov, Dimitar Dimitrov, Lyubomir Stoyanov, Michelle Everaerts*: Results from Gravimetric Investigations in the Southern Zone of the Sofia Kettle

15<sup>20</sup> – 15<sup>40</sup>     *Georgi Milev, Georgi Valev, Keranka Vassileva*: The new absolute gravity stations in Bulgaria and integration of the basic gravity network of the country to their system

## ENVIRONMENT AND NATURAL HAZARDS

**Chairman: Nikolay Dobrev**

15<sup>40</sup> – 16<sup>00</sup>     *Vassilka Mladenova, Tsvetan Kotsev, Zornitza Cholakova, Ralf-Thomas Schmitt, Irena Ivanova*: Environmental impact of the Golyam Bukovets tailings pond on the soils, plants and some elements of the food chain, Chiprovtsi mining area, NW Bulgaria

16<sup>00</sup> – 16<sup>20</sup>     *Veliko Dachev, Veselin Peychev*: Assessment of the effects of marine construction on hazardous regions of the Bulgarian Black Sea coast

16<sup>20</sup> – 16<sup>40</sup>     **Coffee break**

16<sup>40</sup> – 17<sup>00</sup>     *Dan Secrieru, Marian Traian Gomoiu, Gheorghe Oaie*: Marine environmental assessment of the northwestern Black Sea area

17<sup>00</sup> – 17<sup>20</sup>     *Dimcho Evstatiev, Vanushka Petrova*: On the effect of groundwater level on landslide activation

17<sup>20</sup> – 17<sup>40</sup>     *Dimitar Antonov*: Structural and strength characteristics of the stabilized soil potential screens

17<sup>40</sup> – 18<sup>00</sup>     *Dobromir Grozdev*: Wind wave climate along the Bulgarian Black Sea coast

18<sup>00</sup> – 18<sup>20</sup>     *Mariana Nedelcheva, Petko Slavov*: Stabilization of a deformed road section using lime piles

**POSTER SESSION**

Foyer facing hall 3–2

Discussion: 17<sup>50</sup> – 18<sup>30</sup>

**Conveners: Slatka Milakovska, Denitsa Borisova**

MINERALOGY

*Valentin Ganev, Lubomira Macheva*: Crystal chemical and structural peculiarities of staurolite from rocks undergone different metamorphic evolution: FTIR spectroscopy study

*Zdravko Tsintsov*: The Archaeomineralogy – independent interdisciplinary direction in the archaeometry and the Bulgarian science

*Ioannis Marantos, Constantine Michael, George Kosharis*: Study of the zeolitic alteration in Petrota Tertiary volcanoclastic rocks, Thrace area, NE Greece

*Ljudmil Bozadjiev, Georgi Georgiev, Dimitar Parashkevov*: Synthesis of perovskites and perovskite based technical stones

*Ludmil Bozadjiev, Todorka Dimova, Mihail Doynov*: Solid solutions in the system jacobcrite  $MnFe_2O_4$  – franklinite  $ZnFe_2O_4$

*Konstans Baleva-Ivanova, Mariana Ivanova*: Modern trends, actual problems and prospects to the development of the biomineralogy in the XXI century

*Margarita Vassileva, Kalin Ruskov*: Mineralogical features of Ca-phyllosilicate (rancieite) from the Kremikovtsi deposit

*Natalya Piskunova*: Kinetics of crystal growth from solution by atomic force microscopy data

*Pavle Tancic, Maja Poznanovic, Srebrenka Petrovic*: New occurrence of gypsum in Belgrade city (Serbia)

PETROLOGY AND GEOCHEMISTRY

*Elena Tacheva, Rossen Nedialkov, Irena Peytcheva*: Magma mingling and mixing in Petrochan pluton (Western Balkan): preliminary field, petrological and geochemical evidence

*Momchil Dyulgerov, Irena Peytcheva, Albrecht von Quadt, Rossen Nedialkov*: Source and age heterogeneities between the rocks of Lutzkan pluton

*Peter Marchev, Albrecht von Quadt, Irena Peytcheva, Maria Ovtcharova*: The age and origin of the Chuchuliga and Rozino granites, Eastern Rhodopes

*Svetoslav Georgiev, Albrecht von Quadt, Irena Peytcheva, Peter Marchev, Christoph Heinrich*: Eastern Srednogorie zone – new geochemical data for lateral zonation of magmatism

*Stela Atanasova-Vladimirova, Iskra Piroeva, Kalin Kouzmanov, Bojidar Mavrudchiev*: Amphiboles from the Vitosha pluton as indicators of magmatic evolution

*Julia Statelova*: Variscan high-grade metamorphic rocks in Lazovo complex, Central Stara Planina Mountain

## ENVIRONMENT AND NATURAL HAZARDS

*Gheorghe Oaie, Dan Secrieru, Antoneta Seghedi, Dumitru Ioane, Mihai Diaconescu*: Preliminary assessment of the tsunami hazard for the Romanian Black Sea area: historical and paleotsunami data

*Denitsa Borisova, Hristo Nikolov, Miroslav Danov, Vichko Tsanev, Margarita Tokmakchieva, Banush Banushev*: Combined use of multispectral and thermal data for assessing iron distribution in mine areas

*Dimitrina Dimitrova, Nikolaya Velitchkova, Tsvetan Kotsev, Dimitar Antonov, Zornitsa Cholakova*: Heavy metals and metalloids content assessment in mine waters from Martinovo and Chiprovtsi mines, Northwestern Bulgaria

*Margarita Matova, Shyqyri Aliaj*: Geological hazard for several cultural monuments in Albania and Bulgaria

*Vojin Gordanic, Aleksandra Ciric, Dragan Jovanovic, Milka Vidovic*: Hydrogeochemical characteristics of waters in connection with natural radioactivity of volcanoclastic sediments and metamorphic complex in the part of South Serbia – geoeological status

## PALEONTOLOGY, STRATIGRAPHY AND SEDIMENTOLOGY

*Alberto Venturati*: Twin and bilobated chambered Cretaceous planktonic foraminifera: abnormal forms induced by high paleoenvironmental stress?

*Alberto Venturati*: Benthic foraminiferal response to the K/T boundary event: inferences from the Elles section (Tunisia)

*George Ajdanlijsky, Svetlozar Bakardziev*: Modeling of fluvial sedimentation through the application of Markov-chain processes

## GEOTECTONIC AND STRUCTURAL GEOLOGY

*Alexander Radulov, Kris Vanneste, Koen Verbeeck, Marlena Yaneva, Toon Petermans, Thierry Camelbeeck, Stefan Shanov*: Paleoearthquake correlation in three trenches along Orizovo – Chirpan active fault segment

*Vladimir Georgiev*: Tertiary domes and depressions in the Rhodope massif

*Kalin Naydenov, Emilia Voynova, Nikolay Petrov, Iliana Georgieva, Dobrin Nikolov, Krastina Kolcheva, Stoyan Sarov*: Ductile shear zone between Bachkovo-Dobralak orthogneisses and their parametamorphic rim

*Stoyan Sarov, Nikolay Petrov, Emilia Voynova, Kamelia Nedkova, Kalin Naydenov, Iliana Georgieva, Dobrin Nikolov, Krastina Kolcheva*: Data on strike-slip shearings in the low grade metamorphic section (Thracian unit) in the northern part of the Central Rhodopes

## MINERAL RESOURCES

*Atanas Vassilev, Emanuil Kojuharov, Jean-Paul Foucher, Gilles Lericolais, Jeffrey Poort, Jean Klerkx, Mark De Batist*: Shared optimistic-pessimistic model of the Black Sea gas hydrates

*Oleg Vitov, Irina Marinova, Ivan Dimitrov*: Project “Mercury pollutions and mercury mineralizations in Bulgaria”

*Thomas Kerestedjian, Fernando Gervilla, Jose-Maria González-Jiménez, Joaquin Proenza*: New data on chromitites from Dobromirski, Eastern Rhodopes

***Cocktail – Friday, December 1, 2006, 19<sup>30</sup> h. – Club-restaurant “Yaiceto” – Sofia University “St. Kliment Ohridski”***

ASSAREL MEDET-JSC



*Direct Petroleum Bulgaria Ltd.*



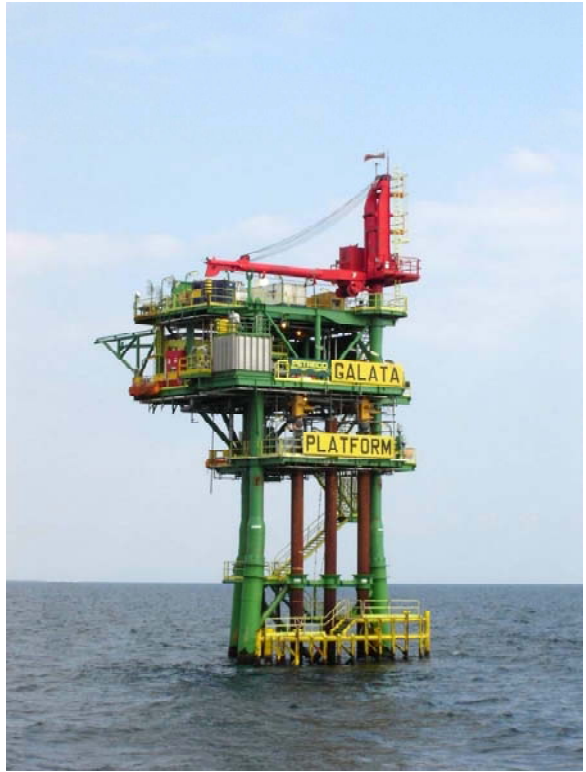
**REXIMseis Ltd.**



Sofia University  
"St. Kliment Ohridski"



Melrose Resources plc



Melrose Resources SARM and Petreco Bulgaria EOOD are 100 % owned by Melrose Resources Plc, a UK company, listed on the London Stock Exchange.

The Concession for development and production of natural gas from the Galata Gas Field, Offshore, Bulgaria, was granted in 2001 with production starting on the 5<sup>th</sup> June 2004. The development of the gas field includes construction of a production platform, offshore and underground gas pipeline with total length of 83 km, compressor station and measuring equipment with an investment to date of over \$120 million. Galata presently provides 16% of Bulgaria's natural gas needs.

In addition to the Production Concession, Melrose Resources SARM is also a Permit Holder of Petroleum Prospecting and Exploration Permits offshore Bulgaria. The company performs extensive exploration activities including acquisition and processing of seismic data, as well as exploration drilling with the aim to find new discoveries and to increase local production.