

1. Czech IGCP National Committee

Chairman: Dr. Jan PASAVA, CSc.
Czech Geological Survey
Klarov 131
118 21 Praha 1
Czech Republic
phone: (+420)-251085506
fax: (+420)-251818748
e-mail: pasava@cgu.cz

Secretary: Dr. Anna VYMAZALOVA
Czech Geological Survey
Klarov 131
118 21 Praha 1
Czech Republic
phone: (+420)-251085501
fax: (+420)-251818748
e-mail: anvym@cgu.cz

2. Members of the Czech IGCP National Committee:

Ing. M. Eis (*Severoceske doly, a.s., Chomutov*), Dr. O. Fatka (*Faculty of Science, Charles University*), Dr. P. Havlicek (*Czech Geological Survey, Prague*), Dr. J. Hladil (*Geological Institute, Czech Academy of Sciences*), Dr. P. Kraft (*Faculty of Science, Charles University*), Dr. R. Mikulas (*Geological Institute, Czech Academy of Sciences*), Dr. S. Oplustil (*Faculty of Science, Charles University*), Dr. J. Pasava (*Czech Geological Survey, Prague*), Ing. P. Skupien (*Technical University, Ostrava*), Dr. V. Sibrava (*emeritus - UNESCO*), Ing. P. Skoda (*Czech Commission for UNESCO*), Mgr. K. Verner (*Faculty of Science, Charles University / Czech Geological Survey*), Dr. A. Vymazalova (*Czech Geological Survey, Prague*), Dr. J. Zajic (*Geological Institute, Czech Academy of Sciences*)

3. Number and title of projects in which the Czech Republic has participated:

A/ Projects with project leaders from the Czech Republic:

Project # 469 - Variscan terrestrial Biotas and Palaeoenvironments
Project leaders: C.J. Cleal (United Kingdom), S. Olustil (Czech Republic),
Y. Tenchov (Bulgaria), E. Zodrow (Canada)
Czech Representative: S. Oplustil (oplustil@natur.cuni.cz)

Activities in 2007:

1.1. General scientific achievements and social benefits

- Integrated data sets suggest essential climatic stability during late Moscovian times
- New Total Species Richness data from Central Bohemia, the Intra Sudetic Basin
- Palynological spectra for Central and western Bohemia and the Intra Sudetic Basin were analysed in term of the species (both total and per major plant groups diversity during the Pennsylvanian times. Comparison with other basins under study suggests only minor

changes in general vegetation patterns during late Moscovian times, probably related to localised changes in drainage patterns

- Refinement of systematics of calamostachyaleans, lycopsids, cordaitaleans, lyginopteridaleans and medullosaleans, improving their value for palaeofloristic and diversity analyses
- Revised palaeoentomological species inventory for Czech basins

1.2. List of meetings with approximate attendance and number of countries

1. Birmingham, UK (April). 23 delegates from 7 countries including 7 Czech guests.
 2. Leiden, the Netherlands (October). 20 delegates from 6 countries including 6 Czech guests.
- In all, 5 Czech participants of the IGCP 469 team attended the International Congress on Carboniferous and Permian held in June in Nanjing.

List of most important publications:

- Oplustil, S., Cleal, C. J. 2007. A comparative analysis of some Late Carboniferous basins of Variscan Europe. *Geological Magazine*, **144**, 417-448.
- Prokop J., Nel A. 2007. An enigmatic Palaeozoic stem-group: Paoliida, designation of new taxa from the Upper Carboniferous of the Czech Republic (Insecta: Paoliidae, Katerinkidae fam. n.). *African Invertebrates*, **48**, 77-86.
- Simunek, Z. 2007. Cuticular analysis of medullosalean pteridosperms from the Radnice Member (Pennsylvanian) of the Central and Western Bohemian basins (Czech Republic). In: Wong, Th. E (ed.) *Proceedings of the XVth International Congress on Carboniferous and Permian Stratigraphy. Utrecht, the Netherlands, 10-16 August 2003*. Royal Netherlands Academy of Arts and Sciences, Amsterdam, pp. 389-402.
- Simunek, Z. 2007. New classification of the genus *Cordaites* from the Carboniferous and Permian of the Bohemian Massif, based on cuticle micromorphology. *Sbornik Narodniho Muzea v Praze, Serie B, Prirodni Vedy*, **62**, 97-210.

Activities planned in 2008:

We request an extension of the project until after the IGC, where the results will be presented (for justification see the final report of the Project). We intend to prepare a proposal for another IGCP project ready for submission in 2008. The aim of this second project will be to keep together the strong team of specialists that has been established during IGCP 469, and to extend their activities into SE Europe.

Results of the IGCP 469 will be published in a form of monograph and presented at the 33rd International Geological Congress held in 2008 in Oslo.

An informal meeting of some of the IGCP 469 team will be held in July at Prague, at a conference on coal geology. This will give us the opportunity to discuss the final report of the project, to iron-out any possible problems, and to develop an application for a successor IGCP project.

Project #497 - The Rheic Ocean: Its Origin, Evolution and Correlatives

Project Leaders: U. Linnemann (Germany), R. D. Nance (USA), M. de Wit (South Africa), E. Bozkurt (Turkey), P. Kraft (Czech Republic), F. Pereira (Portugal), R. A. Strachan (UK)

Czech Representative: P. Kraft (kraft@natur.cuni.cz)

Activities in 2007:

Two conferences and field meetings were organized in 2007:

- (1) The field meeting "The rootless Variscan suture of NW Iberia (Galicia)" in NW-Spain was hosted by Spanish colleagues. There was presented a contribution by Kachlik, V.,

Slama, J., Kusiak, M. and Dunkley, D.J.: Evidence for transition from Island Arc to passive setting on the continental margin of Gondwana: U-Pb zircon dating of neoproterozoic metaconglomerates from the SE margin of The Tepla-Barrandian Unit, Central Bohemian Massif.

- (2) Joint conference and field meeting of IGCP 485 and IGCP 497 in Morocco organised especially by Moroccan geologists. Three Czech geologists and paleontologists attended. Two contributions were presented: Kachlik, V.: Early to Late Palaeozoic volcanism in the Czech part of the Krkonose-Jizera Crystalline Unit (Czech Republic): from Early Palaeozoic rifting to Variscan closure of the Saxothuringian seaway and Kraft, P., Lehnert, O., Fryda, J.: The history of a northern Gondwana rift-basin (Prague Basin) and its relation to evolution of the Rheic Ocean. All contributions have reflected results and directions of the present study of Gondwanan margin of the Rheic Ocean in the Bohemian Massif. Those investigations also show some other questions to be studied in close future.

List of Publications:

The **main result** of the project is a proceeding "Linnemann, U., Nance R.D., Kraft, P., Zulauf, G. (eds.): The evolution of the Rheic Ocean: From Avalonian-Cadomian active margin to Alleghenian-Variscan collision" published as The Geological Society of America Special Paper 423 in this year. This book is composed of 29 contributions, co-authors five of them are from the Czech Republic.

Planned activities in 2008:

Two meetings are planned in 2008:

- (1) The Central American conference and field meeting "The western end of the Rheic Ocean" in Mexico; February 23 to March 2, 2008.
- (2) (2) Final meeting of the projects IGCP 497 and IGCP 499, 20th International Senckenberg-Conference and 2nd Geinitz-Conference, and field trip Frankfurt-Dresden "From Gondwana and Laurussia to Pangaea: Dynamics of Oceans and Supercontinents" in Germany; October 1–10, 2008.

Details available at <http://www.snsd.de/igcp497/>

C/ Projects with active working groups in the Czech Republic:

Project # 479 – Sustainable Use of Platinum Group Elements

Project leaders: J. Mungall, M. Iljina, C. Ferreira-Filho

Czech Correspondent: I. Knesl (knesl@cgu.cz)

Activities in 2007:

Activities in 2007:

Our activities were focused on the study of PGE fractionation in basic and ultrabasic rocks of the Svitavy anomaly and we also sampled basic lithological types of the neighbouring Letovice metaophiolite complex, which belongs to one of prosperous localities for PGE geochemistry in the Bohemian Massif. Our results were presented at the 9th SGA Biennial Meeting in Dublin and summarized in the following paper:

List of Publications:

Pasava, J., Vymazalova, A., Knesl, I., Ackerman, L. (2007): PGE in ultramafic rocks of the hidden ophiolite complex near Svitavy, Bohemian Massif.. In Andrew, C.J.: Digging Deeper

(editors): Proceedings of the 9th Biennial SGA Meeting, s. 1591-1594. Irish Association for Economic Geology. Dublin. ISBN 0-950989-4-4.

Planned activities in 2008:

This IGC project is finishing in this year and we plan to carry out a comparative study of basic and ultrabasic rocks of the Svitavy anomaly with the Letovice metaophiolite complex with the aim to find out if both these units belong to one meta-ophiolite complex.

Project # 486 - Au-Ag-Telluride-Selenide Deposits

Project leaders: N.J. Cook (Norway), K.Kojonen (Finland)

Czech Representative: A. Vymazalova (anvym@cgu.cz)

Activities in 2007:

The activities of the Czech working group were focused on experimental studies (Pd-Sn-Te, Pd-Pb-Te, and Pd-Au systems). Within Pd-Sn-Te system ternary phases were investigated (in terms of crystal structure). The system Pd-Pb-Te has not been studied so far. Therefore experimental works were focused on marginal binary phases at the first stage and afterwards the phase relation has been studied in the system at 400°C. A new ternary phase was described within the system and its natural analogue will be submitted to the commission for approval as a new mineral. The results will be presented at the 33rd IGC in Oslo, in August 2008.

List of publications:

Laufek, F, Vymazalova, A., Plasil, J. (2007): Crystal structure and powder diffraction pattern of high-temperature modification of Pd₇₃Sn₁₄Te₁₃. J. Powder diffraction (in print).

Project 491 - Middle Palaeozoic Vertebrate Biogeography, Palaeogeography and Climate

Project leaders: M. Zhu (P.R. China), G. Young (Australia)

Czech Representative: J. Zajic (zajic@gli.cas.cz)

Duration: 2003-2007

Activities in 2007:

This was the last year of the project with the following activities:

- The comparative collections of fossil non-marine Upper Carboniferous and Lower Permian vertebrates were studied in the Geologisches Institut of the Bergakademie Freiberg and in the Naturhistorische Museum Schloss Bertholdsburg in Schleusingen
- Both the "Acanthodian web" (www.gli.cas.cz/acanthodians) and the acanthodian PaleoTax (<http://www.paleotax.de>) world database are slowly filled with data.
- The new extensive and wide-ranging list of all non-marine Permo-Carboniferous fauna of the Czech Republic (apart from the paralic Upper Silesian Basin) is prepared by Stanislav Stamberg and Jaroslav Zajic as a book.
- First (chronologically) oral communication was presented at the "8th Paleontological Conference (Czech – Slovak – Polish)" in Bratislava (Slovakia):
Stamberg S.: Carboniferous fauna of the Krkonose Piedmont Basin.
Second oral communication was presented at the "40th Anniversary Symposium on Early Vertebrates/Lower Vertebrates" in Uppsala (Sweden):
Zajic J.: Upper Carboniferous non-marine Euselachiids of the Czech Republic.

List of publications:

Stamberg S. (2007): Permo-Carboniferous Actinopterygians of the Boskovice Graben. Part 1. Neslovicella, Bourbonnella, Letovichthys, Elonichthys. - Museum of Eastern Bohemia, pp.155. Hradec Kralove.

Stamberg, S. (2007): The collection of actinopterygian fishes from the Vrchlabi Formation (Lower Permian, Asselian) of the Krkonose Piedmont Basin (Bohemia) at the Natural History Museum in Vienna. - Acta Musei Reginaehradecensis S. A., 32 (2007), 5 - 10. Hradec Kralove.

Zajic J. (2007): Carboniferous Fauna of the Krkonose Piedmont Basin. - Acta Musei reginaehradecensis, S. A, 32 (2007), 11-15. Hradec Kralove.

Planned activities in 2008:

Compilation of the database “Acanthodians of the World” will continue with help of the programme PaleoTax (<http://www.paleotax.de>). The acanthodian web page will be completed gradually.

The book concerning the new extensive and wide-ranging list of all non-marine Permo-Carboniferous fauna of the Czech Republic will be finished.

The subsequent “5th Symposium on Permo-Carboniferous Faunas” will be organized in Hradec Kralove (Czech Republic; July 7-11, 2008). <http://www.gli.cas.cz/shk/SymposiumHK.htm>

Project 499 – Evolution of Ecosystems and Climate in the Devonian

Project Leaders: P. Konigshof (Germany), J. Lazauskiene (Lithuania), E. Schindler (Germany), V. Wilde (Germany), N. Yalcin (Turkey)

Czech Correspondent: O. Fatka (fatka@natur.cuni.cz)

Activities in 2007:

Activities in 2007:

Activity of the Czech group was limited in this year.

List of publications:

Brocke, R., Fatka, O. (2007): Morphologic variability and method of opening of the Devonian acritarch Navifusa. - Review of Palaeobotany and Palynology. Amsterdam.

☛ See also the supplementary information with an extensive list of publications related to IGCP-499 which was completed at the end of the year ☛

Project 502 – Global comparison of volcanic-hosted massive sulphide districts: the controls on distribution and timing of VMS deposits.

Project Leaders: R. Allen (Sweden), F. Tornos (Spain), J. Peter (Canada), N. Çagatay (Turkey)

Czech Correspondent: J. Pasava (pasava@cgu.cz)

Activities in 2007:

2007 was the fourth year of the project. This project aims to compare a number of the world's important VMS districts in order to define the key geological events that control the distribution and timing of high-value VMS deposits; and thereby develop new criteria for locating these ore deposits. Czech participants (Jan Pasava and Anna Vymazalova from the Czech Geological Survey) continued research on the distribution of PGE in major VHMS deposits of the Iberian Pyrite Belt in Spain and Portugal (Pasava et al. 2007a). We also kept on our collaboration with people from IFM-GEOMAR (Germany) on the study of the PGE fractionation in seafloor hydrothermal systems on examples from mafic- and ultramafic-hosted hydrothermal fields at the slow-spreading Mid-Atlantic Ridge. The results were summarized in Pasava et al. (2007b).

In 2007 we also received new samples from the two only known high-temperature vent fields in the Indian Ocean (Kairei and Edmond vent) that are under study and expected to be published during 2008.

List of publications:

Pasava, J. - Vymazalova, A. - Tornos, F. (2007a): PGE distribution in massive sulfide deposits of the Iberian Pyrite Belt. *Mineralium Deposita*. 42. 3. s.309-314. DOI 10.1007/s00126-006-0117-z.

Pasava, J. - Vymazalova, A. - Petersen, S. (2007b): PGE fractionation in seafloor hydrothermal systems: examples from mafic- and ultramafic-hosted hydrothermal fields at the slow-spreading Mid-Atlantic Ridge. *Mineralium Deposita*. 42. 4. s.423-431. ISSN 0026-4598. DOI 10.1007/s00126-006-0117-z.

Project 503 – Ordovician Palaeogeography and Palaeoclimate

Project Leaders: T. Servais (France), D.A.T. Harper (Denmark), J. Li (China), A. Munnecke (Germany), W. Owen (U.K.), P.M. Sheehan (USA)

Czech Representative: O.Fatka (fatka@natur.cuni.cz)

Activities in 2007:

Activities in 2007:

In the year 2007 Czech scientists took part in four international conferences where they presented the following contributions:

(1) Lyell Meeting (Early Palaeozoic peri-Gondwanan terranes: new insights from tectonics and biogeography), organized by Geological Society of London, February 2007.

Fatka, O., Mergl, M. (2007): Origination, development and history Perunica (Proterozoic and Cambrian). (Abstract, invited oral presentation, manuscript submitted)

(2) ISOS (International Symposium on Ordovician System), organized by Academia Sinica, June 2007.

Two oral presentations and two published papers:

Budil, P., Kraft, P., Kraft, J., Fatka, O. (2007): Faunal associations of the Sarka Formation (Middle Ordovician, Darriwilian, Prague Basin, Czech Republic). - *Acta Palaeontologica Sinica*, 46 Suppl., 64-70. Beijing.

Mergl, M., Fatka, O., Budil, P. (2007): Lower and early Middle Ordovician trilobite associations of the Prague Basin (Perunica, Czech Republic). - *Acta Palaeontologica Sinica*, 46 Suppl., 320-327. Beijing.

(3) Eighth Czech-Slovak-Polish Palaeontological Conference in Bratislava, July 2007.

Three oral presentations and extended abstracts

Budil, P., Kraft, P., Kraft, J., Fatka, O. (2007): Arthropod associations of the Sarka Formation (Middle Ordovician, Darriwilian, Prague Basin, Czech Republic). – *Statny geologicky ustav Dionyza Stura, Zlinska, A. (ed.). 8. paleontologicka konference, Zbornik abstraktov. 25-27. Bratislava.*

Fatka, O., Szabad, M., Vokaè, V. (2007): Middle Cambrian associations of miomerid trilobites from Barrandian area (Czech Republic). – *Statny geologicky ustav Dionyza Stura, ZLINSKA, A. (ed.). 8. paleontologicka konference, Zbornik abstraktov. 32-34. Bratislava.*

Tonarova, P., Fatka, O. (2007): Morphological variability of the acritarch genus *Eliasum Fombella* 1977. – Statny geologicky ustav Dionyza Stura, Zlinska, A. (ed.). 8. paleontologicka konference, Zbornik abstraktov. 96-97. Bratislava.

(4) 77. Jahrestagung der Palaeontologischen Gesellschaft in Freiberg, September 2007

Four oral presentations and extended abstracts, excursion guide to the pre-symposium excursion. Fatka, O., Szabad, M., Sinagl, M., Vokac, V. (2007): Associations of Cambrian echinoderms and miomerid trilobites in the Barrandian area (Czechia). – In: ELICKI, O. & SCHNEIDER, J.W. (eds.): Fossile Ökosysteme. Wissenschaftliche Mitteilungen, Institut für Geologie 36, 37. Freiberg.

Tonarova, P., Fatka, O. (2007): Morphological variability of the acritarch genus *Eliasum Fombella* 1977. – In: ELICKI, O. & SCHNEIDER, J.W. (eds.): Fossile Ökosysteme. Wissenschaftliche Mitteilungen, Institut für Geologie 36, 154-155. Freiberg.

Buschmann, B., Fatka, O., Maslennikov, V.V. (2007): Fossils from a Late Ordovician deep-sea black smoker complex: record of food webs in a ventilated ocean. – In: ELICKI, O. & SCHNEIDER, J.W. (eds.): Fossile Ökosysteme. Wissenschaftliche Mitteilungen, Institut für Geologie 36, 22-23. Freiberg.

Fatka, O., Kraft, P., Moravek, R., Budil, P., Manda, S., Mergl, M., Storch, P. (2007): Excursion E1: Lower Palaeozoic of the Barrandian area. – In: ELICKI, O. & SCHNEIDER, J.W. (eds.): Fossile Ökosysteme. Wissenschaftliche Mitteilungen, Institut für Geologie Excursionsführer, 1-47. Freiberg.

More details are available at <http://sarv.gi.ee/igcp503/>

Project 510 - A-type granites and related rocks through time

Project leaders: Roberto Dall’Agnol (Brazil), Carol D. Frost (USA), O. Tapani Rämö (Finland)

Czech representative: M.Rene (rene@irms.cas.cz)

Activities in 2007:

Some new studies of accessory minerals in highly fractionated granites were performed (Melechov, Cerinek, Krasno, Cinovec, Hora sv. Kateriny). In highly evolved S-type granites of northern part of the Moldanubian batholith (Melechov, Cerinek) fluorapatite occurs in three population groups. All these apatites display yellow to green cathodoluminescence with highly variable oscillatory zoning and include variable amounts of monazite and zircon inclusions. In P-high and P-low topaz granites of the Saxothuringian Zone the P-, Y- and Hf-enriched zircon was found. For both granite varieties are significant intergrowths of zircon with xenotime. In the P-low granite from the Hora Svate Kateriny stock As-enriched zircon, zircon-cernovite and zircon-thorite transitional phases were found. The P-high topaz granites from the Krasno area were newly dated using EMPA monazite dating (320.9 ± 3.7 Ma).

Recognition of felsic, Y-garnet-bearing A-type granites in the Brno pluton. The garnet seems to be main phases controlling the distribution of Y and HREE in granite. Small bodies of hyperpotassic ($K_2O > 7\%$) granulite with garnet or pyroxene occurring in the calc-alkaline Blansky les granulite body (Moldanubian Zone) are characterised by high concentrations of Cs, Rb, Ba and U at variable enrichments in Zr and Hf. These granulites are interpreted as Visean igneous rocks, which originated by non-eutectic partial melting of common Moldanubian calc-alkaline granulites.

In the southern part of the Hruby Jeseník Mts. (Silesicum) granitic orthogneisses and quartz-feldspars mylonites occur that were variously deformed, metamorphosed and imbricated with the overlying Devonian volcanosedimentary complex during the Variscan orogeny. The

fairly primitive tonalite ($^{87}\text{Sr}/^{86}\text{Sr}_{550} = 0.7034\text{--}0.7038$, $\varepsilon_{\text{Nd}}^{550} = +3.8$ to $+3.1$) and metagranite ($\varepsilon_{\text{Nd}}^{550} = +1.9$ to $+2.9$) suites probably belong to a single Cadomian calc-alkaline association, which, together with acid–intermediate plutonic rocks of the eastern Brunovistulicum, represent dismembered fragments of a continental-margin magmatic arc system. The whole-rock geochemical signature and initial Nd isotopic composition of the leucogranite suite ($\varepsilon_{\text{Nd}}^{550} = +0.8$ and $+2.3$) is consistent with its formation by a Variscan remelting of the metaigneous Cadomian crust. The within-plate granite affinity of the leucogranite suite is most likely related to the break-up of the Brunovistulicum during the Variscan orogeny.

List of publications:

- Prochazka V., Matejka D. (2007): Fluorapatite in granites of the northern part of the Moldanubian Batholith. - *Geochemie a mineralogie 1* (in Czech).
- Harlov D.E., Prochazka V., Förster H.J., Matejka D. (2007): Origin of monazite-xenotime-zircon-fluorapatite assemblages in the peraluminous Melechov granite massif, Czech Republic. – *Mineralogy and Petrology* (in print).
- Breiter K., Copjakova R., Mlcoch B., Skoda R. (2007): Arsenic-rich mineral assemblage in granite from Hora Sv. Kateriny. – *Geoscience Research Reports for 2006*, 116-120 (in Czech).
- Janousek V., Krenn E., Finger F., Mikova J., Fryda J. (2007). Hyperpotassic granulites from the Blansky les Massif (Moldanubian Zone, Bohemian Massif) revisited. - *Journal of Geosciences* 52, 73–112.
- Janousek V., Krenn E., Finger F., Mikova J., Fryda J. (2007). Potassic granulites from the Blansky les Massif (Moldanubian Zone, Bohemian Massif). - In: *CzechTec 07. 5th meeting of the Central European Tectonic Studies Group (CETeG) and 12th Meeting of the Czech Tectonic Studies Group (CTS)*. Prague: Czech Geological Survey.
- Hanzl P., Janousek V., Zacek V., Wilimsky D., Aichler J., Erban V., Pudilova M., Chlupacova M., Buriankova K., Mixa P., Pecina, V. (2007). Magmatic history of granite-derived mylonites from the southern Desna Unit (Silesicum, Czech Republic). - *Mineralogy and Petrology* 89, 45–75.
- Leichmann J., Höning S., Novak M., Hola M., Mozna V. (2007): Y-bearing spessartine controlling HREE distribution in leucogranite-pegmatite suite of the Brno pluton. – In: *Abstracts volume and excursion guide of the 3th meeting of the Czech geological society*, 48. (in Czech).

Activities planned in 2008:

Advancing study of accessory minerals in highly fractionated granites of the Moldanubian batholith and in topaz-bearing granites of the Krusne Hory batholith (Krasno, Vysoky Kamen, Hora sv. Kateøiny). Study of the UST fabrics in evolved leucogranites of the Krusne Hory batholith (Vysoky Kamen, Hora sv. Kateøiny) and the Brno pluton. Crystallization experiments to constrain of the stability of Ta-Nb-Ti-oxides in topaz-bearing granites and viscosity determinations extremely evolved granitic melts (together with University of Hannover, F. Holtz, joint project of AS CR and DFG).

Meetings and field trips related to IGCP-510

1. Corsica, France, *A Field Conference to Corsica in the Propriano-Bonifatto area*.
2. Oslo, Norway, *33rd IGC*, August 6-14th 2008, *MPI-03 Granite classification - a never-ending problem*.

4. IGCP meetings held in the Czech Republic in 2007

none

5. IGCP meetings planned for 2008

none

6. Other relevant information

In order to promote IGCP activities in the Czech Republic the Committee has also continued in seeking funds for the IGCP National Committee special foundation established in 1996. Generous donations, which enabled to offer 7 grants in the total amount of 140 000,- Czk was kindly provided by the following sponsor of the Czech IGCP National Committee:

Metrostav, a.s., Kozeluzska 2246, 180 00 Praha 8, Czech Republic

SMP CZ, a.s.,
Evropska 1692/37,
160 41 Praha 6, Czech Republic

Mostecká uhelna, a.s.
V. Rezace 315
434 67 Most, Czech Republic

Ceske lupkove zavody, a.s.
Nove Straseci c.p.1171
271 11 Nove Straseci, Czech Republic

Severoceske doly, a.s.
Bozeny Nemcove 5359
430 01 Chomutov, Czech Republic

The website address of the Czech IGCP National Committee is <http://www.gli.cas.cz/igcp/>

The Czech IGCP NC is actively involved in the preparation of IYPE activities on national level in 2008.

supplementary information

IGCP 499 - 2007

I. The subgroup around the Academy of Sciences in Prague

A/ Nature, rheology and environmental constraints on stromatolite pattern structures, particularly in Devonian sediments.

CHAPTERS IN BOOKS:

Hladil, J., Ruzicka, M., 2007. Stromatolite patterns formation in geological sediments: field observations versus experiments. In: Geurts B.J., Clercx H., Uijtewaal, W. (eds), Particle-Laden Flow - From Geophysical to Kolmogorov Scales, 430 p., ERCOFTAC Series (European Research Community on Flow, Turbulence and Combustion Series), Vol. 11, Part I - Dispersion in environmental flows: 85-94. Springer. Dordrecht, NL.

PAPERS:

Hladil, J., Koptikova, L., Ruzicka, M., Kulaviak, L., 2007. Experimental effects of surfactants on the production of stromatolite-shaped cavities in artificial carbonate sediments. *Bulletin of Geosciences* 82(1): 37-50. Prague, CZ.

+++ ABSTRACTS & SHORT NOTES: i.e. +++ (about related work themes)

Kulaviak, L., Vecer, M., Ruzicka, M., Hladil, J., 2007. Rheology features of geological dispersions. In: Markos, J., Stefuca, V. (eds) Proceedings of the 34th International Conference of Slovak Society of Chemical Engineering 1: 75. Bratislava, SK.

Kulaviak, L., Vecer, M., Ruzicka, M., Drahos, J., Hladil, J., 2007. Rheological properties of geological material. In: Grizzuti, N., Maffettone, P.-L. (eds), 4th Annual European Rheology Conference (AERC 2007), Napoli, Italy, April 12-14, 2007 - Book of Abstracts, Industrial Rheology and Processing - Posters, P2.51: 269. Napoli, IT.

B/ Facies, high resolution stratigraphic correlation, sedimentary dynamic and contributions to solution of environmental mosaics.

PAPERS:

Babek, O., Prikryl, T., Hladil, J., 2007. Progressive drowning of carbonate platform in the Moravo-Silesian Basin (Czech Republic) before the Frasnian/Famennian event: facies, compositional variations and gamma-ray spectrometry. *Facies* 53(2): 293-316. Springer. New York, US (Erlangen, DE).

Carls, P., Slavik, L., Valenzuela-Rios, J.I., 2007: Revisions of conodont biostratigraphy across the Silurian-Devonian boundary. *Bulletin of Geosciences*, 82(2), 145-164. Prague, CZ.

Slavik, L., Valenzuela-Rios, J.I., Hladil, J., Carls, P., 2007. Early Pragian conodont-based correlations between the Barrandian area and the Spanish Central Pyrenees. *Geological Journal*, 42 (5), 499-512. John Wiley & Sons Ltd., Liverpool, UK.

Vacek, F., 2007. Carbonate microfacies and depositional environments of the Silurian-Devonian boundary strata in the Barrandian area (Czech Republic). *Geologica Carpathica*, 6, xxx-xxx (in press).

+++ ABSTRACTS & SHORT NOTES: i.e. +++ (about related work themes)

Carls, P., Slavik, L., 2007: Zonation concept in stratigraphic correlation – a discussion. 8th Czech-Slovak-Polish Paleontological Conference, Abstract Book: 30. Bratislava, SK.

Carls, P., Slavik, L., Valenzuela-Rios, J., 2007. Succession of Biostratigraphic marks for the Early Emsian. In: Over, D.J., Morrow, J. (eds) Subcommission on Devonian Stratigraphy and IGCP 499 Devonian Land Sea Interaction, Eureka NV 9-17 Sep 2007, Program and Abstracts: 22-23.

Gilikova, H., Buriánek, D., Filipiak, P., Hanzl, P., Hladil, J., Jachowicz, M., Otava, J., 2007. Finally... i.e., what has been becoming apparent to us from all that we have found out about sediments in the 'Lanovka' outcrop (Tisnov-Predklasteri). In: Famera, M., Kropac, K. (eds), Moravian-Silesian Paleozoic 2007, Collection of Abstracts, Faculty of Science, Palacky University: 10-11. Olomouc, CZ.

Hladil, J., Koptikova, L., Gersl, M., Langrova, A., Pruner, P., Galle, A., Babek, O., Frana, J., Otava, J., Chadima, M., 2007. A multiple-parameter approach to analyzing the mid-punctata zone anomalous signatures in pure limestones (Moravian Karst, Brunovistulian terrane, central Europe). In: Over, D.J., Morrow, J. (eds) Subcommission on Devonian Stratigraphy and IGCP 499 Devonian Land Sea Interaction, Eureka NV 9-17 Sep 2007, Program and Abstracts: 42-45. Geneseo NY, US.

Janecka, J., Melichar, R., 2007. Small-scale fault-propagation fold in the hanging wall of the Tachlovice Fault (Barrandian, Prague Synform). CzechTec 07 – 5th meeting of the Central European Tectonic Studies Group (CETeG) and 12th Meeting of the Czech Tectonic Studies Group (CTS), Proceedings and excursion guide (Ed.: Zdenek Venera): 32-33. Prague, CZ.

Koptikova, L., Hladil, J., Slavik, L., Frana, J., 2007. The precise position and structure of the Basal Chotec Event: lithological, MS-and-GRS and geochemical characterisation of the Emsian-Eifelian carbonate stratal successions in the Prague Syncline (Tepla-Barrandian unit, central Europe). In: Over, D.J., Morrow, J. (eds) Subcommission on Devonian Stratigraphy and IGCP 499 Devonian Land Sea Interaction, Eureka NV 9-17 Sep 2007, Program and Abstracts: 55-57. Geneseo NY, US. Geneseo NY, US.

Slavik, L., Hladil, J., Koptikova, L., Carls, P., Valenzuela-Rios, J.I., 2007. Integrated stratigraphy of the Lower Devonian in the Barrandian area, Czech Republic – A preliminary data from the Lochkovian. Field Meeting IGCP 499 (IUGS/UNESCO) Devonian land-sea interaction: evolution of ecosystems and climate, Paper (Lecture), 13.5. - 23.5. 2007, Universidad Nacional de San Juan, Argentina. Abstract book (Ed.: G. Acenolaza, M. Vergel, S. Peralta, R. Herbst): 80-83. San Juan, AR.

C/ Paleobiology and nature of reef forming organisms, their growth modes and rate, increments and sclerochronology, environment.

PAPERS:

Hladil, J., 2007. The earliest growth stages of *Amphipora*. In Hubmann, B., Piller, W.E. (eds) Fossil Corals and Sponges, Proceedings of the 9th International Symposium on Fossil Cnidaria and Porifera. Osterreichische Akademie der Wissenschaften, Schriftenreihe der Erdwissenschaftlichen Kommissionen 17: 51-65. Vienna, AT.

II. The subgroup around the Czech Geological Survey in Prague

\$\$\$ CHAPTERS IN BOOKS:

Fryda, J., Blodgett, R.B., 2008, in press. Paleobiogeographic affinities of Emsian (late Early Devonian) gastropods from Farewell terrane (west-central Alaska). – The Terrane Puzzle - New Perspectives on Paleontology and Stratigraphy from the North American Cordillera, Geological Society of America, Special Paper.

Fryda, J., Nützel, A., Wagner, P.J., 2008, in press. Paleozoic gastropods. 237-268. In: Ponder, W. and Lindberg, D. L. (eds), PHYLOGENY and EVOLUTION of the MOLLUSCA, University of California Press, 466 pp., Berkeley and Los Angeles, California.

\$\$\$ PAPERS:

A) Evolution of Devonian gastropods (including papers containing a discussion on the Devonian gastropods):

Fryda, J., Blodgett, R.B., Lenz, A.C., Manda, S., 2008, in press. New Porcellioidean gastropods from Early Devonian of Royal Creek area, Yukon Territory, Canada, with notes on their early phylogeny., *Journal of Paleontology*, x, x: xxx-zzz, Lawrence, U.S.A., ISSN 0022-3360.

Cook, A., Nutzel, A., Fryda, J., 2008, in press. Two Mississippian caenogastropod limpets from Australia and their meaning for the ancestry of the Caenogastropoda., *Journal of Paleontology*, 82, 1:83-187, Lawrence, U.S.A., ISSN 0022-3360.

Nuzzle, A., Fryda, J., Yancey, T.E., Anderson, J.R., 2007. Larval shells of Late Palaeozoic naticopsid gastropods, Neritopsoidea: Neritimorpha) with a discussion of the early neritimorph evolution., *Paläontologische Zeitschrift*, 81/3: 213–228.

Fryda, J., Heidelberger, D., Blodgett, R.B., 2006. Odontomariinae, a new Middle Paleozoic subfamily of slit-bearing euomphaloidean gastropods, Euomphalomorpha, Gastropoda)., *Neues Jahrbuch für Geologie und Paläontologie, Mh.*, 4: 225-248.

Fryda, J., Farrell, J.R., 2005. Systematic position of two Early Devonian gastropods with sinistrally heterostrophic shells from the Garra Limestone, Larras Lee, New South Wales., *Alcheringa*, 29, 229-240. ISSN 0311 5518.

B) Evolution of planktotrophy , including papers containing a discussion on the Devonian.

Nuzzle, A., Lehnert, O., Fryda, J., 2007. Origin of planktotrophy, evidence from early molluscs: a response to Freeman and Lundelius., *Evolution and Development*, 9:4, 312 –317.

C) Devonian predation:

Berkyova, S., Fryda, J., Lukes, P., 2007. The first documentation of unsuccessful predation on the Middle Paleozoic plankton., *Acta Palaeontologica Polonica*, 52, 2: 407-412.

\$\$\$ ABSTRACTS:

Berkyova, S., Fryda, J., 2007. The sedimentological, paleontological and geochemical implications of the Basal Chotec event, Middle Devonian, Eifelian) in Prague Basin, Czech Republic)., *Geo.Alp, Sediment 2007*, vol.4.ISSN: 1824-7741

Berkyova, S., Fryda, J., Lukes, P., 2006. The first evidence of unsuccessful predation on the Middle Palaeozoic plankton., *Ancient life and modern approaches, Abstract of The second International Palaeontological Congress*, Qun Yan, Yongdong Wang, Elizabeth A. Weldon, eds), 353, ISBN 7-312-01956-0.

Elrick, M., Atudorei, V., Berkyova, S., Fryda, J., Sharp, Z., 2007. Evaluating the origins of Early-Middle Devonian 3rd-order sea-level changes using oxygen isotopes of conodont apatite., *Subcommission on Devonian Stratigraphy and IGCP 499 Devonian Land Sea Interaction*, Eureka, Nevada, Program and Abstracts, 35-36, SUNY-Geneseo, Geneseo, New York.