



United Nations
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Slovenian National Committee
of the International Geoscience
Programme

ANNUAL REPORT OF THE SLOVENIAN IGCP COMMITTEE FOR 2015

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*NC chairperson: **Dr. Mirka Trajanova***
Geological Survey of Slovenia
Dimičeva ulica 14
1000 LJUBLJANA, Slovenia
Tel.: +386 01 2809 702
Fax : +386 01 2809 753
E-mail: mirka.trajanova@geo-zs.si

*NC secretary: **Assoc. Prof. Dr. Nina Zupančič***
University Ljubljana, Dept. of Geology
Aškerčeva 12
1000 LJUBLJANA, Slovenia
Tel.: +386 01 470 45 00
Fax : +386 01 470 45 60
E-mail: nina.zupancic@ntf.uni-lj.si

ANNUAL REPORT OF THE SLOVENIAN IGCP COMMITTEE FOR 2015

1. Members of the Slovenian IGCP National Committee

Unfortunately we have to start this year report with a sad news that our highly respected Prof. Dr. Matija Drovenik, Emeritus Professor, regular Member of the Slovenian Academy of Science and Arts, and the first Chairman of the Slovenian IGCP National Committee, and to the end it's honorary member, has passed away. His work and charismatic personality will remain noted in the history of the Slovenian geoscience.

The Slovenian IGCP NC has now 15 members, one of which is a nonvoting member. The members are:

1. Dr. Mirka Trajanova, Geological Survey of Slovenia (GeoZS), **Chairperson**
2. Assoc. Prof. Dr. Nina Zupančič, University in Ljubljana, Faculty of Natural Science and Technology (UL, NTF), Dept. of Geology, and Ivan Rakovec Institute of Paleontology, Research Centre of the Slovenian Academy of Sciences and Arts (ZRC SAZU), **Secretary**
3. Dr. Miloš Bavec, GeoZS
4. Dr. Katica Drobne, Ivan Rakovec Institute of Paleontology, ZRC SAZU
5. Mgr. Suzana Fajmut Štrucl, Crossborder Geopark Karavanke/Karawanken
6. Assist. Prof. Dr. Luka Gale, UL, NTF, Dept. of Geology, and GeoZS
7. Assist. Prof. Dr. Špela Goričan, Ivan Rakovec Institute of Paleontology, ZRC SAZU
8. Assist. Prof. Dr. Mateja Gosar, GeoZS
9. Marjutka Hafner, Director of the Slovenian Office for UNESCO
10. Assoc. Prof. Dr. Martin Knez, Karst Research Institute, ZRC SAZU
11. Assist. Prof. Dr. Tea Kolar-Jurkovšek, GeoZS
12. Assoc. Prof. Dr. Marko Komac, Sole trader, (nonvoting member)
13. Prof. Dr. Jože Pezdič, Research Organization GEORIS
14. Emeritus Prof. Dr. Simon Pirc, UL, NTF, Dept. of Geology
15. Bojan Režun, Univ. Dipl. Ing. Geol., Geopark Idrija

2. SHORT INFORMATION ON THE IGCP NC ACTIVITIES IN THE YEAR 2015

At the 38th General Assembly of UNESCO in Paris an important amendment has been adopted, which concerns the IGCP programme. Geoparks were placed under the auspices of UNESCO and the current IGCP was associated with Geoparks into a joint programme for Geosciences and Geoparks with a new acronym IGGP (International Geoscience and Geoparks Programme). This fact will also shift the IGCP programme priorities in direction of closer cooperation with the Geoparks. Both programmes will run in parallel, but with mutual complementarity and hopefully, with creation of joint projects in the future.

At the 38th General Assembly, Slovenia has won a place in the Executive Board of UNESCO, where to Prof. Dr. Stanislav Pejovnik has been elected. We congratulate him sincerely and wish him much success in his work.

The research work of Slovenian researchers in the IGCP projects has concerned mainly Slovenian national territory also this year, which is their primary mission. Strengthening the awareness that no country can achieve sustainable development alone gives an emphasis on international cooperation, promoted by UNESCO. Activities of our researchers therefore expanded to the area of Africa and Western Balkans, while collaboration with neighbouring countries continued and was intensified. The role and importance of Earth Sciences in society have strengthened and their applicative value has been recognized in the last decade. In this context, and given the range of topics offered by the IGCP programme, the work of Slovenian researchers was thematically widened. At the meeting on December 22nd 2014 the working plan and a set of IGCP research projects for 2015 have been accepted. The research in 2015 was conducted in 13 projects:

- USGS / IAGC - Geochemical Baselines (M. Gosar),
- Urban Geochemistry (M. Gosar),
- IGCP 598 - Environmental Change and Sustainability and the Karst Systems: relation to climate changes and anthropogenic impact (M. Knez),
- IGCP 594: Impact of Mining on the Environment in Africa (N. Zupančič and M. Dolenc),
- IGCP 588: Preparing for Coastal Change: a detailed process-response framework for coastal change at different timescales (B. Celarc),
- IGCP 610: From the Caspian to Mediterranean: Environmental Change and Human Response During the Quaternary (M. Dolenc),
- IGCP 600: Metallogenesis of Collisional Orogens (M. Dolenc),
- IGCP 609: Climate-Environmental Deteriorations During Greenhouse: causes and consequences of short-term Cretaceous sea-level changes (K. Drobne), representing continuation of the IGCP 393 and 555 - Taphonomy and Fossilization,
- IGCP 630: Permian-Triassic Climatic and Environmental Extremes and Biotic Response (T. Kolar-Jurkovšek),
- IGCP 632 - Continental Crises of the Jurassic (T. Kolar-Jurkovšek),
- IGCP 543: Low-Temperature Thermochronology – prolonged project (J. Pezdič) and
- Geoparks programme - Geopark Idrija (B. Režun) and Geopark Karavanke-Karawanken (S. Fajmut Štrucl).

The Slovenian Office of UNESCO approved a sum of 27,000.00 EUR to the IGCP Committee for cofounding of international cooperation for the year 2015. The funds were distributed among researchers involved in the above mentioned projects with consensus of the NC.

3. SHORT PRESENTATION OF PROJECTS CONTENTS (SLOVENIAN PART TO THE IGCP PROGRAMME IN 2015)

This year, ten national project leaders, of which one is also co-leader of the international project, participated in thirteen IGCP projects in Slovenia. Most researchers treated environmental themes and geohazard. Five projects deal with pollution indicators, which are based mainly on geochemical parameters. Their interweaving with geological hazards is a clear indication that pollution and ground beneath our feet go hand in hand and cannot be separated. Depending on the "sensibility" of the ground that human threatens with his activities the degree of our own endangerment depends on. In addition, we have to take into account naturally conditioned geological risks to which man has no influence. With their consideration, rational treatment and planning we could largely avoid one and the other.

The issue of climate change has stirred our spirits for years. Their actuality in Slovenia is reflected by the fact that we have been engaged in five projects on this topic. Climate changes are a concern, but the political decision-makers respond to them very slowly, except in cases where they need to generate political points. We cannot stop climate changes, because they are part of the natural process, as evidenced by numerous examples from geological history. However, it is quite clear, that man accelerates them by his activity. And just there is the space where we have to act, because, as it is often said, we need the Earth for our survival, it does not need us! Some optimism is inspired by commitments which were adopted at the end of 2015 at the Conference on Climate Change in Paris.

The results obtained within the project GEMAS (Geochemical Mapping of Agricultural and Grazing land Soil in Europe), in our country under the leadership of Assist. Prof. M. Gosar, are certainly among more important achievements of the IGCP topics in 2015. The project team has released two monographs, for which a very praising review has been published in the journal Elements. The work and results of this project were especially praised at the IGCP 43. Assembly in Paris. The results supplement with those obtained in the project Urban Geochemistry, carried out by the Expert Group for Geochemistry of the Geological Surveys of Europe (EEC). They represent an important contribution to both, an insight into the quality of arable land as well as urban soil, and the basis for a long-term planning of land use.

Using their knowledge and experience the Slovenian researchers have continued their active role in the work beyond the national borders. In this respect, and according to the IGCP priorities, research of karst in Slovenia, China, the Russian Federation, Austria and America continued. Co-proposer and one of the leaders of this international project is Assoc. Prof. M. Knez, which is a great recognition of professionalism to our researchers of this fragile ecosystem.

Cooperation with Africa was held in Guinea-Bissau on mineral resources and the associated pollution. At the same time education and creating conditions and capacity for work of local researchers was carried on. Part of the Slovenian contribution to the IGCP projects represents a comparative study of the effects of mining, metallurgical and industrial activities on the environment. A specialty is represented by research for identifying past, even prehistoric human impact on the environment, which takes place in cooperation with the archaeologists.

The climate change topic is incorporated into the research of coastal areas and recent sediments, where it can be seen most clearly. Recent assessment of the erosion degree, the amount of sediment accumulation, the sea level change and associated with all this the coast migration indicate directly

the impact of active tectonics and climate change. Significantly greater oscillations in sea level based on the type of sediment and biota, especially on sensitive benthic foraminifera are recorded in the not too distant geological past. In contrast, the conodonts and their assemblages can take us much farther back in geological history. Based on their habitat, the Permo-Triassic extreme climate change and a somewhat milder one at the beginning of Jurassic can be inferred. Biota responded on the new environment, in part through adoptions, but mostly through their mass extinction.

Any rapid change in climate is generally reflected in the composition and amount of gases in the atmosphere. From this perspective, it is important to study the kinetics of reactions in the carbon cycle, indirectly the crystallization kinetics of calcite, especially in low-temperature conditions, that is at temperatures of the natural environment. This was the topic of the prolonged IGCP project 543, Low-Temperature Thermochronology. We detected and confirmed formation of calcite rhombohedra crystals with dimensions of a few nanometers already after a few minutes to a few hours. Also further growth was quick.

Identification and assessment of geological factors and their close links are vital for the sustainable development of society. Geoparks successfully carry out their mission of promotion and education in the field of geosciences, and the integration thereof with the material and immaterial cultural heritage. For this aim, the Geopark Karavanke and Geopark Idrija organized a conference this year entitled *Interpretation of geology for a wider public*. Participation of representatives of our Geoparks in international meetings means primarily the promotion and comparison of contents of our and other Geoparks. At the same time, it is one of the ways of education of the activity holders. These were the main objectives of the meeting in the Rokua Geopark in Finland. Visit of the Geopark, a meeting of the Coordination Committee of the European Geoparks Network (EGN), and the 13th Conference of EGN were organized there.

4. PUBLISHED AND PRESENTED WORKS BY PROJECT

IUGS/IAGC: Geochemical baselines (Assist. Prof. Mateja Gosar, GeoZS)

Albanese, Stefano, Sadeghi, Martiya, Lima, Annamaria, Cicchella, Domenico, Dinelli, Enrico, Valera, Paolo, Falconi, Marco, Demetriades, Alecos, De Vivo, Benedetto, Gosar, Mateja, et al. GEMAS: cobalt, Cr, Cu and Ni distribution in agricultural and grazing land soil of Europe. *Journal of geochemical exploration*, 2015, vol. 154, pp. 81-93, doi: [10.1016/j.gexplo.2015.01.004](https://doi.org/10.1016/j.gexplo.2015.01.004).

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Janik, Leslie J., Forrester, Sean T., Soriano-Disla, Jose M., Kirby, Jason K., McLaughlin, Michael J., Reimann, Clemens, Gosar, Mateja, et al. GEMAS: prediction of solid-solution phase partitioning coefficients (Kd) for oxoanions and boric acid in soils using mid-infrared diffuse reflectance spectroscopy. *Environmental toxicology and chemistry*, 2015, vol. 34/2, pp. 235-246, doi: [10.1002/etc.2821](https://doi.org/10.1002/etc.2821).

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Négre, Philippe, Sadeghi, Martiya, Ladenberger, Anna, Reimann, Clemens, Birke, Manfred, Gosar, Mateja, et al.: Geochemical fingerprinting and source discrimination of agricultural soils at continental scale. *Chemical geology*, 2015, vol. 396, pp. 1-15, doi: [10.1016/j.chemgeo.2014.12.004](https://doi.org/10.1016/j.chemgeo.2014.12.004).

Ottesen, R.T., Gosar, M., Reimann, C., Birke, M. GEMAS project: mercury in European agricultural and grazing land soils. V: 12th International Conference on Mercury as a Global Pollutant, June 14-19, 2015, Jeju, Korea. *Today's action, saving the future: abstract*, 2015, pp. 170.

URGE: Urban Geochemistry (Assist. Prof. Mateja Gosar, GeoZS)

Bavec, Š., Gosar, M., Biester, H., Grčman, H. Geochemical investigation of metals in urban soil of Idrija (Slovenia). *Journal of Geochemical Exploration*, 2015, vol. 154, pp. 213-223, doi: 10.1016/j.gexplo.2014.10.011.

Bavec, Š., Biester, H., Gosar, M. Mercury mobility and gastro bioavailability in the urban soil of Idrija town, Slovenia. V: 12th International Conference on Mercury as a Global Pollutant, June 14-19, 2015, Jeju, Korea. *Today's action, saving the future: abstract*, 2015, pp. 368.

Gosar, M., Teršič, T., Biester, H. Anthropogenic mercury loads in stream sediments affected by ancient ore roasting sites, Idrija area, Slovenia. V: 12th International Conference on Mercury as a Global Pollutant, June 14-19, 2015, Jeju, Korea. *Today's action, saving the future: abstract*, 2015, pp. 144.

IGCP 598: Environmental Change and Sustainability in Karst Systems: Relations to Climate Change and Anthropogenic Activities (Assoc. Prof. Martin Knez, IZRK ZRC SAZU)

Meetings and field work: Conference and field work in Washington, USA 26. January to 7. February; Conference in Rome, Italy, 24. - 30. September; Conference and field work in Vienna, Austria, 20.-24. September; Conference and field work in Gorno Altaysk, Republic Altai, Russian Federation 7.-14. September; Conference and field work in Guilin and Kunming, China 24. October to 4. November.

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GUTIÉRREZ DOMECH R., KNEZ M., SLABE T.: Felo Pérez Mogote (Viñales, Pinar del Río, Cuba): typical shaping of rock surface below dense tropical vegetation. *Acta carsologica*, 2015, 44, 1, 47-57.

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MIHEVC A.: Location, topography, climate. In: Zupan Hajna N. (ed.). *Life and water on Karst: monitoring of transboundary water resources of Northern Istria*, ZRC Publishing, Ljubljana, 2015, 36-41.

MULEC J., KRIŠTŮFEK V., CHROŇÁKOVÁ A., OARGA-MULEC A., SCHARFEN J., ŠESTAUBEROVÁ M.: Microbiology of healing mud (fango) from Roman thermae Aquae lasae archaeological site (Varaždinske Toplice, Croatia). *Microbial ecology*, 2015, 69, 2, 293-306.

MULEC J., OARGA-MULEC A., SCHILLER E., PERȘOIU A., HOLKO L., ŠEBELA S.: Assessment of the physical environment of epigean invertebrates in a unique habitat: the case of a karst sulfidic spring, Slovenia. *Ecohydrology*, 2015, 8, 7, 1326-1334.

MULEC J., OARGA-MULEC A., TOMAZIN R., MATOS T.: Characterization and fluorescence of yellow biofilms in karst caves, southwest Slovenia. *International journal of speleology*, 2015, 44, 2, 107-114.

MULEC J., PRELOVŠEK M.: Freshwater biodissolution rates of limestone in the temperate climate of the Dinaric karst in Slovenia. *Geomorphology*, 2015, 228, 787-795.

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PROJECT IGCP 594: Impact of Mining on the Environment in Africa and

PROJECT IGCP 600: Metalogenesis of Collisional Orogens (Assoc. prof. dr. Matej Dolenc, UL, NTF)

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IGCP 610: From Caspian to Mediterranean: Environmental Change and Human Response during Quaternary (Assoc. Prof. Matej Dolenc, UL, NTF)

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IGCP 630: Permian-Triassic Climatic and Environmental Extremes and Biotic Response (Assist. Prof. T. Kolar-Jurkovšek)

KOLAR-JURKOVŠEK, Tea, CHEN, Yanlong, JURKOVŠEK, Bogdan, RICHOZ, Sylvain, ALJINOVIĆ, Dunja. An Early Triassic conodont sequence from Slovenia (Mokrice and Idrija-Žiri areas). V: 18th International Congress on the Carboniferous and Permian, August 11-15, 2015, Kazan, Russia. NURGALIEV, Danis K. (ur.). *Abstracts volume*. Kazan: Kazan University Press, 2015, str. 96. [COBISS.SI-ID [2431317](https://www.cobiss.si/id/2431317)]

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IGCP 632 - Continental Crises of the Jurassic (Assist. Prof. T. Kolar-Jurkovšek)

GALE, Luka, CELARC, Bogomir, CAGGIATI, Marcello, KOLAR-JURKOVŠEK, Tea, JURKOVŠEK, Bogdan, GIANOLLA, Piero. Paleogeographic significance of Upper Triassic basinal succession of the Tamar Valley, northern Julian Alps (Slovenia). *Geologica Carpathica*, ISSN 1335-0552, 2015, vol. 66, no. 4, str. 269-283, doi: [10.1515/geoca-2015-0025](https://doi.org/10.1515/geoca-2015-0025). [COBISS.SI-ID [1215070](#)]

KOLAR-JURKOVŠEK, Tea, JURKOVŠEK, Bogdan. The geological study of the Classical Karst Region – Kras (Slovenia). V: *Abstract Book*. The 2nd Symposium of International Geoscience Programme Project 632, Geologic and biotic events on the continent during the Jurassic/Cretaceous transition, September 12-13, 2015, Shenyang, China.

Project WOLF in IGCP 609: Climate-Environmental Deteriorations during Greenhouse: Causes and consequences of short-term Cretaceous sea-level changes (Dr. Katica Drobne)

Attended conferences: Graz, STRATI 2015, Osijek; 5. Croatian geological congress, Zagreb; International scientific meeting on the occasion of the 100. anniversary of academician Vanda Kochansky Devidé.

Drobne, K., 2015: Vanda Kochansky-Devidé u mojem obrazovanju. In: Mauch-Lenardić, J., Hernitz-Kučenjaj, M., Premec-Fuček, V., Sremac, J. (eds), *Međunarodni znanstveni skup – 100-ta obljetnica rođenja akademkinje Vande Kochansky-Devidé. International sci. meeting – 100th birth anniversary of Vanda Kochansky-Devidé, full member of Academy. Knjiga sažetaka / Abstracts*, 22-34, Pl. 1, Zagreb.

Ćosović, V., Drobne, K., Čretnik, J., Turk, J., Hohenegger, J., Golež, M., 2015: From oriented to virtual sections of foraminiferal test, new insights in architecture of larger benthic foraminifera. In: Mauch-Lenardić, J., Hernitz-Kučenjaj, M., Premec-Fuček, V., Sremac, J. (eds), *Međunarodni znanstveni skup – 100-ta obljetnica rođenja akademkinje Vande Kochansky-Devidé. International sci meeting – 100th birth anniversary of Vanda Kochansky-Devidé, full member of Academy. Knjiga sažetaka / Abstracts*, 57, 58, Zagreb.

Miletić, S., Miletić, D., Premec-Fuček, V., Drobne, K., Toman, M., 2015: Contribution of paleontology to determination of the provenance of stone building material. In: Mauch-Lenardić, J., Hernitz-Kučenjaj, M., Premec-Fuček, V., Sremac, J. (eds), *Međunarodni znanstveni skup – 100-ta obljetnica rođenja akademkinje Vande Kochansky-Devidé. International sci meeting – 100th birth anniversary of Vanda Kochansky-Devidé, full member of Academy. Knjiga sažetaka / Abstract*, 60, 70, Zagreb.

Drobne, K., Ćosović, V., Hohenegger, J., Čretnik, J., Baumgartner-Mora, C., Robinson, E., Rögl, F., Ferrandez Cañadell, C., Zuchin, M., Dolenc, T., 2015: Link between complex internal structures and stratigraphy: Xradia – ZEISS MicroXCT-400 of genus *Sphaerogypsina* Galloway 1933. *Ber. Inst. Erdwiss. K.-F.-Univ. Graz*, 21, STRATI 2015, 86, CDrom, Graz.

Ibrahimpašić, H., Premec-Fuček, V., Hernitz-Kučenjaj, M., Drobne, K., Celarc, B., Placer, L., 2015: Paleogene NW Adria block surrounded by deeper basins; study by plankton, small and larger form. amnifera on the drowning time in Late Ilerdian, Late Cuisian and Middle Lutetian (N Italy, SW Slovenia, SW Croatia – Istria, Kvarner). *Ber. Inst. Erdwiss. K.-F.-Univ. Graz*, 21, STRATI 2015, 172, CDrom, Graz.

Premec-Fuček, V., Hernitz-Kučenjaj, M., Drobne, K., Ibrahimpašić, H., Celarc, B., Placer, L., 2015: Tri potapanja Paleogenske Jadranske karbonatne platforme tijekom eocena (JZ Slovenija, JZ Hrvatska – Istra) dokumentirana

planktonskim foraminiferama. <Three Eocene submersions of the Paleogene Adriatic Carbonate Platform (SW Slovenia, SW Croatia-Istria) based on planktonic foraminifera >.5. *Hrvatski geol. Kongres. Knjiga sažetaka-Abstracts book*, 218, 219, CDrom, Osijek.

Özcan, E., Ahmed, I., Drobne, K., Boukhalfa, K., Govidan, A., Al-Sayigh, A.,: Early Eocene orthophragminids and alveolinid from the Jafnayn Formation, N Oman: significance of *Nemkovella stockari* Less & Özcan, 2007 in Tethys. *Geodinamica Acta*. In print.

Muzej Velenje & Revivas: O mastodontu in nakdanjih Škalah. Gostje dr. K. Drobne, dr. V. Pohar, J. Pohar. M. Prestor, dr. M. Markič, pogovor vodil V. Mihelak, organizator: M. Ževart, V. Pogačar, DVD, 98 minut, Velenje 2015.

Drobne, K., Čosović, V., Hohenecker, J., Briguglio, A., Čretnik, J., Turk, J., Golež, M., Cimerman, F., Dolenc, T., Cotton, L., Ferràndez-Cañadell & Rögl, F., 2014, 2015: MicroXCT_400 tomografski posnetki in film recentnih in fosilnih primerkov notranje strukture hišic rodu *Sphaerogypsina* Galloway, 1933. v: Rožič, B., Verbovšek, T. & Vrabc, M (ur.) Povzetki in ekskurzije, 4. Slov. Geol. Kongres, Ankaran, 8.-10. oktober 2014, NTF, Odd. za geologijo, SGD, 14-15, Ljubljana, STRATI 2015, Graz Avstrija. filmska ekipa: I.J. Simončič, J. Vejrup Ostan, B. Perovšek, B. Vrhovec, prevajalca S. Pirc in M. Valetine, DVD 20 minut, Ljubljana.

Geopark Idrija and Crossborder Geopark Karavanke/Karawanken

Conference »Interpretation of Geology for wider audience« organized, co-financed by the Slovenian National Commission for UNESCO in the frame of the IGCP.



Figure 1: Visit of the megalodontid shells occurrence at Krekovše. Photo: Geopark Idrija



Figure 2: Visit of the interpretational spot »Idrija uncovers the rocks« at Lajšt, Idrijska Bela. Photo: Geopark Idrija

Attendance at the 36. Meeting of the EGN coordination committee and at the 13. Conference of the EGN (Rokua Geopark, Finland) between 1. and 5. September 2015; attendees were Bojan Režun from Geopark Idrija with presentation »UNESCO heritage educational activities in Geopark Idrija«, mag. Suzana Fajmut Štrucl from Geopark Karavanke/Karawanken and Sanja Marija Pellis (Geopark Idrija).



Figure 3: Sanja Marija Pellis, Bojan Režun and Suzana Fajmut Štrucl at the 13. conference of the EGN, Oulu , Finska.



Figure 4: Suzana Fajmut Štrucl and Bojan Režun at the excursion in the Rokua Geopark, Finland.

Activities of the IGCP NC chairperson

In the course of the year, information and suggestions related to the IGCP projects were forwarded to the NC and project co-workers via e-mail. More important issues were discussed on two regular and two correspondence meetings. Some activities are listed below.

- On the NC regular meeting in January 2015, realization of the IGCP 2014 plan and plan for 2015 have been discussed; at the December meeting we overviewed this year activities and plan for 2016.
- Summary of the 2014 IGCP projects results and activities was forwarded to the 43. Open Session of the Scientific Board of the International Geoscience Programme (IGCP) in Paris, and a PPT presentation was prepared.

- Newspaper article on the role and importance of the IGCP entitled Geoscience is as important as a good ground for a house (*Geoznanost je kot dober temelj za hišo*) has been published in honouring the 70. Anniversary of UNESCO in the newspaper DELO.
- Comprehensive suggestions based on questionnaire were prepared for the strategy (2021) of the Slovenian National Commission for UNESCO (SNCU).
- On 23. 10. 2015, a meeting of all UNESCO national partakers was held at Portorož. For this forum, a contribution *Role of Earth sciences in the sustainable development of society* has been prepared, combined with the PPT presentation of the Slovenian IGCP council activities.
- Chairperson of the IGCP NC attended meetings of the SNCU and the UNESCO-L'Oreal *For women in science* national board.
- IGCP NC Annual report for 2015 and plan for 2016 were prepared.

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Ljubljana, 2016-1-29

Report prepared by
Dr. Mirka Trajanova, Chairperson
Slovenian IGCP National Committee

