

Международна  
научно-практическа конференция

„ЗАЩИТЕНИ КАРСТОВИ ТЕРИТОРИИ –  
ОБРАЗОВАНИЕ И ОБУЧЕНИЕ“  
(23-26 септември 2015 г., София)

# ДОКЛАДИ



International  
scientific and practical conference

„PROTECTED KARST TERRITORIES –  
EDUCATION AND TRAINING“  
(September 23-26, 2015, Sofia, Bulgaria)

# PROCEEDINGS

ТерАрт  
София '2015'



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## СБОРНИК ДОКЛАДИ

International Scientific-Practical Conference  
**PROTECTED KARST TERRITORIES –  
EDUCATION AND TRAINING**  
Bulgaria, Sofia  
September 23-26, 2015

## PROCEEDINGS

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## **KARST FOR THE STUDENTS**

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Until a year ago we didn't know what karst is, we had just heard this word from the television or at school. We made a decision to participate in the out-of-classroom section "Young karst researcher" in 2014/2015 school year, because it was interesting for us to learn more about the phenomenon called karst as it was not covered in detail at school. The participation in the section gave us the unique opportunity to understand what karst really meant for our existence. We visited very interesting places such as Krushuna waterfalls, "Devetashka Cave", "Eagle Wood" cave, "Saeva Dupka" cave and "Batcho Kiro" cave. We have learned a lot about each place that we visited. Thus our knowledge of karst has been enriched. We know now that karst is split in several types of forms like: caves, karst springs and others. The most interesting part of the study of it has been the chemical reactions and its natural forms. For us it will be interesting to have the opportunity to see other karst regions and forms and nature landmarks and we would also like to have the chance to do the examinations which are connected with the research of karst.

What got us here today has been the participation in the Third International competition "Karst under protection – gift for the generations" conducted under the auspices of UNESCO and we won first prize in the category "Painting for students above 12 years" with our painting "The magic of the water".

The travelling summer school of karst with out-of-classroom directed study has also been a great adventure for us. Within 10 days we had the chance to learn more for the essence of karst and its creations. We will tell you about some of them which impressed us the most.

For example the cave "Eagle Wood" – its location is near Ruse and it's the second biggest cave in Bulgaria. The interesting part for us was its complex system of tunnels and halls and its ceiling which represent relief of polished forms made by the underwater whirlpools. In front of the entrance of the cave we had the chance to use personally the technique of the one rope, which the climbers and explorers use.

Krushuna waterfalls on the other hand took us by surprise with theirs picturesque nature. They are located near the village of Krushuna, the Lovech district. The interesting part about them is that they have formed karst terraces and the water is painted in clear blue, because of the travertine in the water.

Close to the waterfalls is the "Devetashka Cave", which captured us with its proportions and the variety of animal species. The cave was a secret military object and it was used for storing petrol. It is home to thousands of bats and it's the third most important shelter for hibernating of bats in Europe.

And now it's time to tell about the knowledge...

During the out-of-classroom directed study we learned a lot about the karst and we did a lot of experiments. Probably all of you know about what is the karst but to make it sure we will tell what it is. Karst is the name of group of geomorphological forms which are formed by dissolution of the

layers of carbonates or other soluble rocks such as limestone and dolomites. There are different kinds of karst forms such as: caves, karst springs and others.

We have also visited the cement factory “TITAN” and we have learned more about the production of the cement and its usage.

Now let's say about the friendship which has been born during the summer school.

During those 10 days everyone found a friend in the face of the other. Although we have never met each other, we had the feeling that we have known each other forever. We helped one another, we shared everything, we had fun, we even cried together. Not even for a second we have felt that we are alone, because then we were part of one big, beautiful family on which we could depend all the time. You can see for yourself how hard it was for us to say one last goodbye at the end.

The out-of-classroom directed summer school has been an incredible opportunity to get in touch with the magic of nature and to learn more about it. And you could share your time with positive and happy people. It has been a ticket to an unforgettable adventure and making new friends and a tool for creating new memories, which will forever stay in our minds. Definitely it has been an interesting and efficient way to expand your knowledge when you are in touch with the nature. We hope to have another chance to participate in this kind of competitions.

## **КАРСТЪТ ЗА УЧЕНИЦИТЕ**

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До преди една година нямахме представа какво е карст, просто бяхме чували тази дума по телевизията и веднъж, два пъти в училище. Решихме да се включим в извънкласната секция „Млад изследовател карстолог“ през 2014/2015 учебна година, защото ни беше интересно да научим повече за феномена наречен карст, тъй като в училище не му се обръща особено внимание. Участието в извънкласната секция ни даде уникалната възможност да разберем какво е карста всъщност и колко е важен той за съществуването ни. Посетихме много интересни места например Крушунските водопади, Деветашката пещера, пещерата Орлова чука, пещерата Съева дупка и Бачо Киро. Научихме много и различни неща за всяко място, което посетихме. Знанията ни за карста се обогатиха, вече знаем, че карста се разделя на няколко вида карстови форми например: пещери, ували, понори, кари, карстови извори и други. Най-интересното при неговото изучаване са химичните реакции и природните форми, които той образува. За нас било интересно да имаме възможността да видим и други карстови райони и образувания, както и природни забележителности, също така бихме желали сами да извършваме опити свързани с изследването на карст.

Ще ви разкажем и за нашите придобити знания по време на пътуващото лятно училище с насочено извънкласно обучение за карста през 2015 година.

За начало, нека ви кажем защо и как се озовахме тук днес. Взехме участие в третия Международен конкурс „Карст под защита – дар за поколенията“, проведен под егидата на ЮНЕСКО и спечелихме първо място в категория „рисунка на ученици над 12 години“ за нашата рисунка „Магията на водата“. Най-голямата ни награда беше участието в пътуващото лятно училище за карста 2015 година.

В рамките на 10 дни ние имахме възможността да се запознаем по-отблизо със същността на карста и красивите му творения в природата: пещерата „Орлова чука“, Крушунските водопади, Деветашката пещера.

А сега е ред на познанието...

По време на извънкласното обучение ние научихме много за карста и правихме много опити. Имахме възможността да посетим циментовият завод „TITAN“ и да научим повече за производството на цимента и неговото приложение.

А сега нека обърнем внимание на приятелството, което се поражда по време на лятното училище.

То е едно от най – значимите неща в живота. През тези 10 дни всеки от нас намери приятел в лицето на другия. Лятното извънкласно училище е една невероятна възможност да се докоснеш до магията на природата и да научиш повече за нея, споделяйки времето си с позитивни и усмихнати хора. Определено е интересен и ефикасен начин да обогатиш знанията си, докосвайки се до природата.

Надяваме се отново да имаме възможността да вземем участие в такъв формат.

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