

ProKARSTerra



**INTERNATIONAL
COMPETITION
2005
2012**



United Nations
Educational, Scientific and
Cultural Organization

With the support of
**Participation
Programme**

KARST UNDER PROTECTION –
GIFT FOR THE FUTURE GENERATIONS
EXHIBITION CATALOG



THE INTERNATIONAL COMPETITION
“KARST UNDER PROTECTION –
GIFT FOR THE FUTURE GENERATIONS”
IS A PART OF THE PILOT EDUCATIONAL
STRATEGY PROKARSTERRA-EDU,
AIMING AT ATTRACTING YOUNG PEOPLE FROM
DIFFERENT COUNTRIES
TO EXPAND THEIR KNOWLEDGE ABOUT THIS
SENSITIVE NATURAL
ENVIRONMENT AND ITS PROBLEMS.
THIS COMPETITION
IS A BULGARIAN INITIATIVE.
THE MAIN ORGANIZERS ARE THE INSTITUTE
OF GEOGRAPHY AT THE BULGARIAN ACADEMY
OF SCIENCES (SINCE 2010
DEPARTMENT OF GEOGRAPHY OF THE
NATIONAL INSTITUTE FOR GEOPHYSICS,
GEODESY AND GEOGRAPHY - BAS)
AND THE FOUNDATION
CENTER OF KARSTOLOGY “VLADIMIR POPOV”.

-
- Drawing
 - Work with natural materials
 - Card
 - Poster
 - Video
 - Multimedia presentation
 - My unusual lesson
 - Scientific essay
 - Art Installation
 - Photo Composition

THE COMPETITION HAS TWO EDITIONS: IN 2005 AND IN 2012

2005

The idea for the competition arose about the First international conference in Bulgaria, dedicated to protected karst territories: „Protected karst territories - conditions, problems, perspectives“ (18-21 October 2005, Shumen, Bulgaria, <http://www.prokarstterra.bas.bg/karst2005>). The contest was included into the Conference program. At a special ceremonial session prizes were awarded to the winners and the best works were officially presented at an exhibition in the city of Shumen and later in other Bulgarian cities.

2012

The second contest was held in 2012 and was also associated with a large International scientific-practical forum „Protected karst territories - monitoring and management“ (16-20 September, Shumen, Bulgaria, <http://www.prokarstterra.bas.bg/forum2012>). This forum stated in its resolution that this competition deserves high praise and it should become traditional. The second edition was held under the auspices of the Bulgarian Academy of Sciences and UNESCO. The competition motto was the same as the Conference motto: „Protected karst territories - bridges to the future“.

2015

The third edition will be held in 2015 in Sofia, Bulgaria again. It will be a part of the next big scientific-practical conference „Protected karst territories - education and training“.



THE COMPETITION IS HELD IN FIVE SEASONED CATEGORIES

1. For pupils:
 - 1.1. Up to 12 years old:
 - Drawing or work with natural materials
 - 1.2. Over 12 years old:
 - Poster
 - Card or multimedia presentation
 - Video
2. For teachers:
 - My unusual lesson
3. For students:
 - Scientific essay or multimedia presentation
 - Art Installation
4. For nature lovers, photographers:
 - Composition (3 to 5 photos)

CRITERIA FOR EVALUATION OF WORKS

- ✓ Originality of the idea realized with this work
- ✓ Knowledge of Karst
- ✓ Artistic value
- ✓ Emotionality
- ✓ Technical skills
- ✓ Professional autonomy in making

PARTICIPANTS

2005

In the first contest participants from Bulgaria, Japan and Scotland UK offered works. Professor Nakano and his students from the Yamaguchi University, Japan presented an original exhibition “Phantom in Karst”.

INTERNATIONAL JURY

Professor Wieszeslaw ANDREJCZUK, Dr.Hab. - Chairman (Geographer, Faculty of Earth Sciences, University of Silesia, Poland), Associate professor Yoshihisa NAKANO, PhD (Artist, Yamaguchi University, Japan), Petar STEFANOV (Geographer, Institute of Geography - BAS, Foundation Center of Karstology “Vladimir Popov” and “Geographic Education” review, Bulgaria), Darina IVANOVA (Biologist, Directorate of Nature Park “Shumen Plateau”, Shumen, Bulgaria), Daniel DIMOV (Painter, Shumen, Bulgaria)

FOR PUPILS



Up to 12 years old:
 — Drawing or work with natural materials

Over 12 years old:
 — Poster / Card

FOR TEACHERS:

— My unusual lesson



FOR STUDENTS:

— Scientific essay

FOR NATURE LOVERS, PHOTOGRAPHERS:

— Composition

AWARDS



The International jury awarded 6 prizes (3 first, 2 second and 1 third) and 1 encouraging prize.



The prize pool for the first edition of the competition was provided by the Directorate of Nature Park “Shumen Plateau”, Shumen, Bulgaria.

CATEGORY
DRAWING

First prizes

Kurumi Tawara

Shuho Cho, Yamaguchi prefecture, Japan



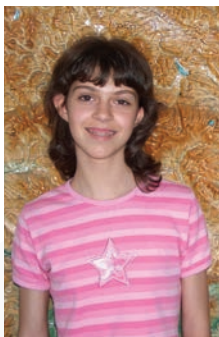
Loquat tree (Eriobotrya japonica) in the Akiyoshi karst

CATEGORY
POSTER

First prizes

Nikolina Georgieva

Samokov, Bulgaria



Rhodope karst - amazing decor of the inspiring natural spectacle! Look at him!

The Rhodope karst

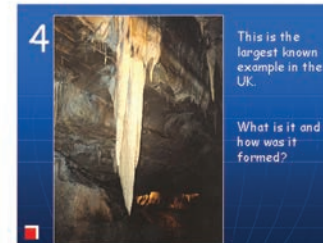
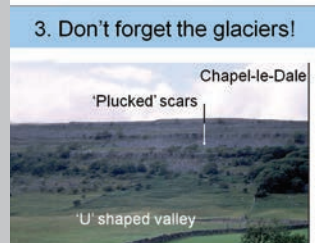
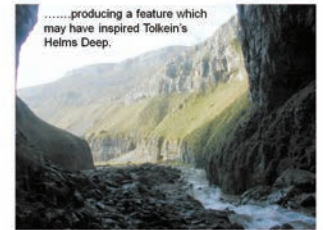
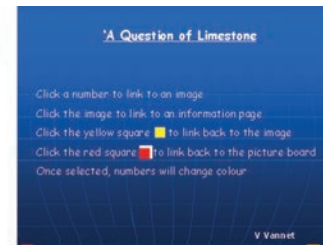
CATEGORY MY UNUSUAL LESSON

First prizes

Val Vannet

Dunee, Scotland UK

S e l e c t e d s h o t s



Limestone landscapes - Yorkshire Dales National park

CATEGORY DRAWING AND WORK WITH NATURAL MATERIALS

Third Prize
Ralitza Tzoneva
Shumen, Bulgaria



Second Prize
Nikolai Lazarov,
Shumen, Bulgaria



Encouragement
Tsubasa Tanaka
Shuho Cho, Yamaguchi, Japan

PHANTOM IN KARST

Honorary Diploma for outstanding participation in the competition was awarded to a group of children from Shuho Cho elementary school (Japan) and a group students of Yamaguchi university (Japan) for the Art-composition “Phantom in Karst 1”.



Ritsuko Fujiki
Where is God Place



Kumiko Jitsukawa
Doline in Akiyoshi plateau

PARTICIPANTS

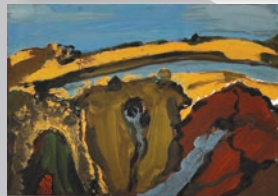
2012

The second edition of the competition already had 107 participants from 10 countries: Armenia, Bulgaria, Croatia, Czech Republic, Estonia, Kazakhstan, Latvia, Lithuania, Russia and Japan. They presented 104 works in total. For the second time Professor Nakano and his students from the Yamaguchi University took part, presenting an original exhibition "phantom in Karst - 2".

INTERNATIONAL JURY

Professor Yoshihisa NAKANO, PhD - Chairman (Artist, Yamaguchi University, Japan),
RNDr. Petr ZAJICHEK (Geologist, Photographer, Cave Administration of the Czech Republic),
Pavla DVORSKÁ (Artist, Teacher, Czech Republic), Associate professor Dilyana STEFANOVA,
PhD (Geographer, University of Shumen, Bulgaria), Associate professor Todorka KRUSSTEVA, PhD
Khristo KICHIKOV (Geographer, Teacher, Gabrovo, Bulgaria)

FOR PUPILS



Up to 12 years old:

- Drawing or work with natural materials

Over 12 years old:

- Poster / Card or multimedia presentation / Video

FOR TEACHERS:

- My unusual lesson



FOR STUDENTS:

- Scientific essay or multimedia presentation
- Art Installation



FOR NATURE LOVERS, PHOTOGRAPHERS:

- Composition

AWARDS

Originality, sincerity and compelling emotion were the main features of most of the works. This made the job of the International jury very difficult, especially in the category of pictures. 15 works were awarded: 1 grand prize, 5 first prize, 4 second prize and 5 with third prize; Other 13 participants received incentive awards. In the exhibition 35 works were additionally included, winning the jury recognition.

Table 1

Total number of participants	107
Total number of entries received	104
Entries by category:	
Drawings	76
Works with natural materials	1
Poster	1
Multimedia presentations/pupils	10
Multimedia presentation/University student	1
Video-clips	3
Photo-compositions	7
My unusual lesson	3
Essay	1
Combination - presentation, drawing, paper	1
Total: 104	
Participants by countries:	
Armenia	12
Bulgaria	6
Croatia	17
Czech Republic	1
Estonia	5
Kazakhstan	31
Latvia	4
Lithuania	5
Russia	13
Japan	13
Total: 107	





The prize pool for the second edition of the competition was provided by the Bulgarian Ministry of Education and Science.

Table 2



Country	Grand prize	First prizes	Second prizes	Third prizes	Encouraging prizes	Total
1. Kazakhstan	1	1	1	1	1	5
2. Croatia		2	1	-	-	3
3. Bulgaria		1	-	2	2	5
4. Japan		-	1	1	1	3
5. Lithuania		1	1	-	-	2
6. Armenia		-	-	1	1	2
7. Russia		-	-	-	5	5
8. Czech Republic		-	-	-	1	1
9. Latvia		-	-	-	1	1
10. Estonia		-	-	-	1	1
Total:	1	5	4	5	13	28

CATEGORY
WORK WITH
NATURAL MATERIALS

Amina Mushtakova
Nariman Abdigapparov

Grand prizes



Karst cave

For Grand prize for creative achievement the jury nominated four competition works by 4 different categories. After processing the results, convincingly headed out the mural “Karst cave” (Category “Work with natural materials”) developed by Amina Mushtakova (10 Age) and Nariman Abdigapparov (11 Age) from the UNESCO associated school “BEST” (Almaty, Republics of Kazakhstan). They are the first winners of the Grand Prix of this contest and were invited to be guests of honor at the International Forum in Shumen, Bulgaria in September 2012.

Amina Mushtakova



В нашей школе я посмотрела презентацию учёного о пещерах. Это очень красиво, интересно и мне захотелось участвовать в конкурсе рисунков чтобы привлечь внимание людей для сохранения этого чуда природы для будущих поколений.

In our school I listened to a presentation of a scholar about caves. It was very beautiful and interesting. Then I felt I would like to participate in the competition for pictures, to attract people's attention to preservation of this wonder of nature for the future generations.

Nariman Abdigapparov



Пещера это очень таинственно, загадочно и красиво. Очень жаль если они будут разрушены человеком и временем. Я хочу, чтобы люди задумались об их охране. Этот загадочный мир не должен исчезнуть! Поэтому я решил участвовать в конкурсе.

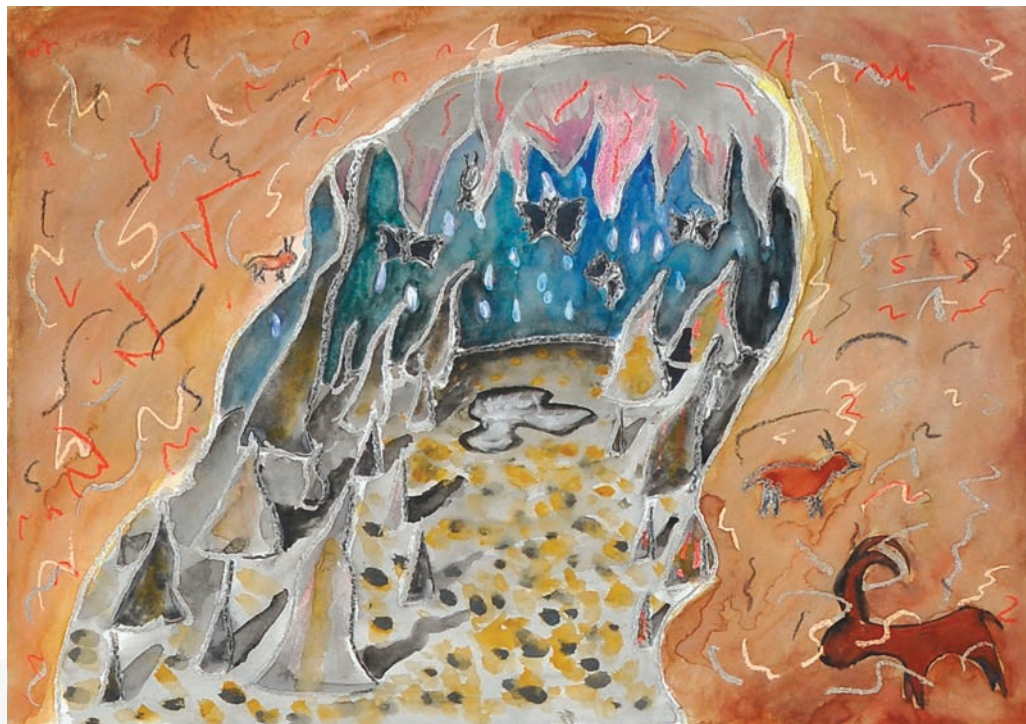
Caves are very mysterious, mystic and beautiful. It will be very sad if they are destroyed by people and time. I would like people to think about their protection. This mystic world should not disappear! That is why I decided to participate in this competition.

CATEGORY DRAWING

First prizes



I participated in this competition to attract people's attention and to tell them: "Look, this is beautiful and should be preserved!"



*Я участвовала в конкурсе,
чтобы привлечь внимание людей,
сказать им: "Посмотрите, это красиво,
это надо сохранить!"*

Cave painting

Alissa Nikishina

UNESCO associated school "BEST"
Almaty, Kazakhstan

CATEGORY
DRAWING

Second prizes

Daiki Hayashi

Hongo elementary school 897
Iwanaga Shuho town, Mine city, Yamaguchi prefecture, Japan



*If you are a creator at heart and an artist
by vocation, reproduce what you have seen,
experienced and learned about karst and caves...*

Output things in the Cave

From "Invitation to Competition"

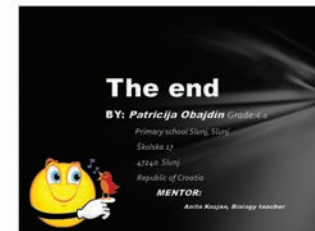
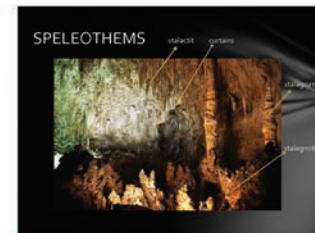
CATEGORY MULTIMEDIA PRESENTATION FOR PUPILS

Patricija Obajdin

Elementary school Slunj, Croatia

Second prizes

S e l e c t e d s h o t s



Karst landscape in my Homeland

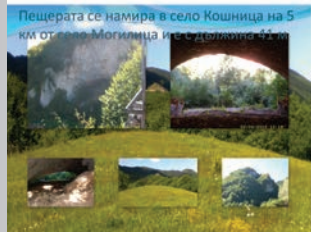
CATEGORY MULTIMEDIA PRESENTATION FOR PUPILS

Danail Hadzhiev

v. Mogilitsa, Smolyan, Bulgaria

Third prizes

Selected shots



Karst of the Middle Rhodopes

Let's keep Bulgarian karst areas for the next generation!

CATEGORY
VIDEO-CLIP

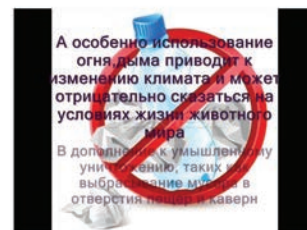
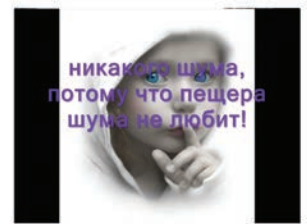
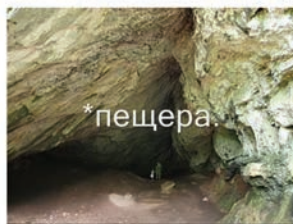
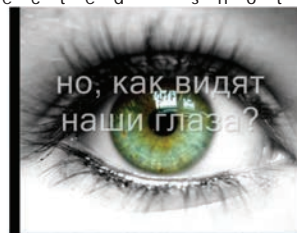
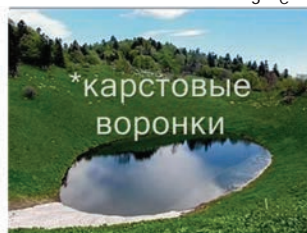
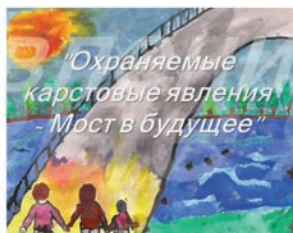
First prizes

Special Prize
of the Organizing
committee

Evelina Mikoleiko

Gymnázium "A. Mickevicha", Vilnius, Lithuania

S e l e c t e d s h o t s



Protected karst areas - Bridges to the Future

CATEGORY UNIVERSITY STUDENTS - MULTIMEDIA PRESENTATIONS

Nina Pivcevic

Institute of Mineralogy and Petrology,
Faculty of Science, University of Zagreb, Croatia

First prizes



S e l e c t e d s h o t s

01

Geochemical mechanisms of carbonate equilibria in the system
CO₂ - H₂O - CaCO₃

Author: Pivcevic Nina
Institute of Mineralogy and Petrology, Faculty of Science, University of Zagreb, Horvaticovog Prilaza 80, 10000 Zagreb, Croatia

02

Contents:

- Basic geological facts
- Basic chemical terms
- Simple system (CO₂ - H₂O)
- Resources of CO₂ dissolved in soil
- Dissolution of CaCO₃
- Precipitation of CaCO₃
- Physicochemical precipitation of limestone
- Biochemical precipitation of limestone

03

Basic geological facts

carbonate sediments:

04

Basic chemical terms

Chemical equilibrium (Le Chatelier):
A + B ⇌ C + D

General: $K = \frac{[C][D]}{[A][B]}$ $K = \frac{a_C a_D}{a_A a_B}$

* activity (effective 'availability' of component)

05

Simple system (CO₂ - H₂O)

$\text{CO}_2(\text{atm}) \rightleftharpoons \text{CO}_2(\text{soil}) \rightleftharpoons \text{CO}_2(\text{aq}) \rightleftharpoons \text{H}_2\text{CO}_3^*$

$\text{H}_2\text{CO}_3^* \rightleftharpoons \text{H}^+ + \text{HCO}_3^- \rightleftharpoons \text{CO}_3^{2-} + 2\text{H}^+$

$K_{\text{CO}_2} = \frac{[\text{CO}_2(\text{aq})]}{p_{\text{CO}_2(\text{atm})}}$ $K_{\text{H}_2\text{CO}_3^*} = \frac{[\text{H}_2\text{CO}_3^*]}{[\text{CO}_2(\text{aq})]}$

06

respiration of soil
 $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{O}_2 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$

acidification of soil
 $\text{C}_6\text{H}_{12}\text{O}_6 + 6\text{H}_2\text{O} + 6\text{CO}_2 \rightarrow 3\text{C}_2\text{H}_4(\text{OH})_2 + 6\text{H}_2\text{CO}_3^*$

solubility of CaCO₃
 $\text{CaCO}_3 + \text{H}^+ \rightleftharpoons \text{Ca}^{2+} + \text{HCO}_3^-$

Results of these processes:
• $p_{\text{CO}_2} = 10^{-3.5}$ Pa
• $\text{pH} = 4$
• CO_2 → CO_3^{2-} → CaCO_3

The positive factors:
• CO_2 → H^+ → CaCO_3 → Ca^{2+} → HCO_3^- → CO_2 → H^+

MINERALS:
• CaCO_3 → Ca^{2+} → HCO_3^- → CO_2 → H^+

MINERALS:
• CaCO_3 → Ca^{2+} → HCO_3^- → CO_2 → H^+

07

Dissolution of CaCO₃

$\text{CO}_2 + \text{H}_2\text{O} \rightleftharpoons \text{H}_2\text{CO}_3^* \rightleftharpoons \text{H}^+ + \text{HCO}_3^-$

$\text{CaCO}_3 + \text{H}^+ \rightleftharpoons \text{Ca}^{2+} + \text{HCO}_3^-$

$\text{CaCO}_3 + \text{H}_2\text{CO}_3^* \rightleftharpoons \text{Ca}^{2+} + 2\text{HCO}_3^-$

$\text{CaCO}_3 + \text{H}^+ \rightleftharpoons \text{Ca}^{2+} + \text{CO}_3^{2-}$

$\text{CaCO}_3 + \text{H}_2\text{CO}_3^* \rightleftharpoons \text{Ca}^{2+} + \text{CO}_3^{2-} + \text{H}_2\text{O}$

Legend:
• H_2CO_3^*
• HCO_3^-
• CO_3^{2-}
• H^+

08

Precipitation of CaCO₃

$\text{CaCO}_3 + \text{H}_2\text{CO}_3^* \rightleftharpoons \text{Ca}^{2+} + 2\text{HCO}_3^-$

$\text{H}_2\text{O} + \text{CO}_2 \rightleftharpoons \text{H}_2\text{CO}_3^*$

CO₂ outgassing:
1. equilibrium shift "down"
2. equilibrium shift to the left
3. equilibrium shift to the left
4. equilibrium shift to the left

Precipitation of CaCO₃

09

Physicochemical precipitation of limestone

CO₂ outgassing and its transfer over the water/soil/sediment surface:

- **by water/soil/sediment evaporation** (reduction of the distribution of gas)
- **by water evaporation** (concentration increase of CO₂ in the water)
- **waterfalls** (Kрка (falls), shallow sea (oasis))
- **by water outgassing into the atmosphere** (hot springs)

Legend:
• **waterfalls** (Kрка (falls), shallow sea (oasis))
• **cones** (stalagmites and stalactites)
• **hot springs** (travertine)

Geochemical mechanisms of carbonate equilibrium in the system CO₂-H₂O-CaCO₃

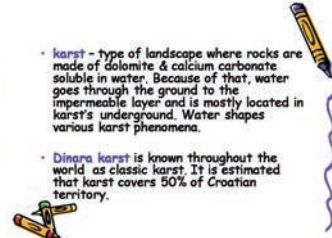
CATEGORY MY UNUSUAL LESSON

First prizes

Smiljana Baran,
teacher

Antuna Mihanovica Elementary school, Zagreb, Croatia

S e l e c t e d s h o t s



Project „KARST”

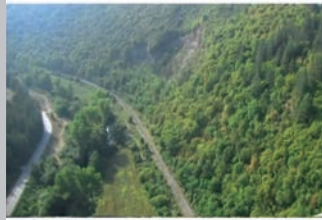
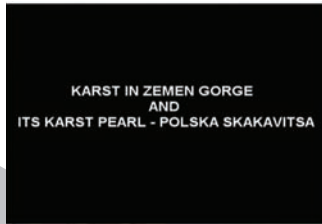
CATEGORY MY UNUSUAL LESSON

Reneta Valkova,
teacher of English

Angel Kanchev Secondary school, Sofia, Bulgaria

First prizes

S e l e c t e d s h o t s



*It was a pleasure to take part in the competition ...
My unusual lesson- film for implementation of the
communicative approach in English language teaching
in a karst environment is only the beginning of a
new model for Foreign Language Learning.*

Film „Zemen Gorge and Its Karst Pearl
Polska Skakavitsa”

CATEGORY
FOR NATURE LOVERS,
PHOTOGRAPHERS

Anna Parvanova

St. Konstantin-Kiril Filosov Secondary school, Plovdiv, Bulgaria

Third prizes



West Rhodopes, Bulgaria

The Giants'foot

CATEGORY
FOR NATURE LOVERS,
PHOTOGRAPHERS

Aleksandra Sidorova, age 14

Lyceum № 6, Voskresensk, Russia

Encouragement



Caves of Krim, Ukraine

“Agent 007” (Chater-Dag: Marble Cave)

SPECIAL CASES
DRAWING

Encouragement

Svetlana Shkuratova

Lyceum № 6, Voskresensk, Russia



The caves of the Caucasus

Unearthly beauty - Novoafonska cave

SPECIAL CASES SEVERAL CATEGORIES

Encouragement

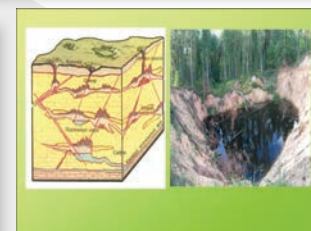
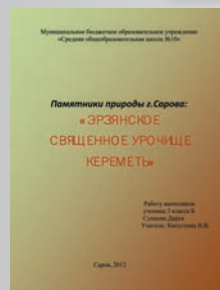
Darya Suntsova

Secondary school 10, Sarov, Nizhny Novgorod Region, Russia



Drawing
Karst lake

Project
Natural monuments
Sarov: Erzyansk
sacred place:
Keremet



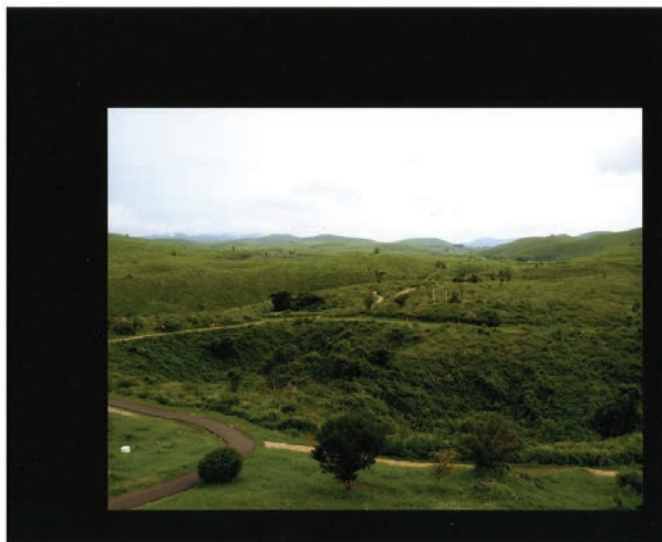
Multimedia presentation

PHANTOM IN KARST

2

ARTIEST

- Ai Ikeda
- Akiko Asada
- Hiroko Miura
- Kyoko Sawanobori
- Tomoko Kimura
- Toshihiro Ueyama
- Yoshihisa Nakano



Akiyoshida karst plateau Shuho-town Mine-city Yamaguchi Prefecture Japan



Ai Ikeda
Window of memories

Toshihiro Ueyama
Pic_nick



Akiko Asada
The ground of a mask



Tomoko Kimura
Tomorrow of 200 million years

**INTERNATIONAL
COMPETITION**
KARST UNDER PROTECTION –
GIFT FOR THE FUTURE GENERATIONS

List of prizewinners

2005

**Category
Drawing**

First Prize:
Kurumi Tawara
*(Shuho Cho,
Yamaguchi, Japan)*

Second Prize:
Nikolay Lazarov
(Shumen, Bulgaria)

Third Prize:
Ralitza Tzoneva
(Shumen, Bulgaria)

Encouragement:
Tsubasa Tanaka
*(Shuho Cho,
Yamaguchi, Japan)*

**Category
Poster**

First Prize:
Nicolina Georgieva
(Samokov, Bulgaria)

**Category
My Unusual Lesson**

First Prize:
Val Vannet
(Dundee, Scotland UK)

Second Prize:
Maria Giulemetowa
(Pazardzhik, Bulgaria)

2012

**Category
Work with natural
materials**

Grand Prize:
Nariman Abdigapparov
Amina Mushtakova
*(Almaty, Republic of
Kazakhstan)*

Category Drawing

First Prize:
Alisa Nikishina
*(Almaty, Republic
of Kazakhstan)*

Second Prize:
Daiki Hayashi
*(Iwanaga Shuho town,
Mine city, Yamaguchi
prefecture, Japan)*
Jan Tagbergenov
*(Almaty, Republic
of Kazakhstan)*

Third Prize:

Erke Nakisbekova
(*Almaty, Republic of Kazakhstan*)

Yuto Mishima
(*Iwanaga Shuho town, Mine city, Yamaguchi prefecture, Japan*)
Ernest Badikyan
(*Yerevan, Republic of Armenia*)

Encouragement:
Areg Balasanyan
(*Yerevan, Republic of Armenia*)

Karina Altaeva
(*Almaty, Republic of Kazakhstan*)
Hibiki Takayama
(*Iwanaga Shuho town, Mine city, Yamaguchi prefecture, Japan*)
Helena Laganovska
(*Riga, Latvia*)

**Category
Multimedia
presentation**

Second prize:
Akvilė Montrimaitė,
Gintautė Pieslekaitė
(*Gargždai, Lithuania*)
Patricia Obajdin
(*Slunj, Croatia*)

Third prize:
Danail Hadzhiev
(*v. Mogilitsa, Smolyan, Bulgaria*)

Encouragement:
Kirill Mokshin
(*Samara, Russia*)
Bilger Yahov
(*Ruse, Bulgaria*)

**Category
Multimedia
presentations
(University students)**

First prize:
Nina Pivcevic
(*Zagreb, Croatia*)

**Category
Video-clip**

First prize:
Evelina Mikoleiko
(*Vilnius, Lithuania*)

Encouragement:
Roland Engel
(*Haabneeme, Harjumaa, Estonia*)

**Category
My Unusual Lesson**

First prize:
Smiljana Baran
(*Zagreb, Croatia*)
Reneta Valkova
(*Sofia, Bulgaria*)

Encouragement:
Marina Martinova,
Nina Zinchenko
and Natalya Shkuratova
(*Tomsk, Russia*)

**Category
Nature-Lovers -
Photographers**

Third prize:
Anna Parvanova
(*Plovdiv, Bulgaria*)

Encouragement:
Aleksandra Sidorova
(*Voskresensk, Russia*)
Marin Ivanov
(*Pleven, Bulgaria*)

Special Cases

**Encouragement:
Project**
Darya Suntsova
(*Sarov, Russia*)
Essay
Ladislav Kubišta
(*Ústí nad Orlicí, Czech republic*)
Drawing
Svetlana Shkuratova
(*Voskresensk, Russia*)

ACKNOWLEDGMENTS

We express our sincere gratitude to the people who contributed to the organization of this competition for their hard work.

We thank all contestants for their interesting works and the compelling emotion expressed in them. We sincerely hope that karst will continue to inspire them.

We owe special thanks to all members of the International Jury for their responsibility and high professionalism evaluating the competition works.

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*We have seen a lot of preparation and genuine enthusiasm
for the development of the competition works.
We would like to express our sincere gratitude to all participants.
We remain with the hope they will keep their interest in karst and its secrets.
And what could be better if after a time they become our colleagues in Karstology..*

Peter Stefanov
Competition initiator and chief organizer

INTERNATIONAL COMPETITION
“KARST UNDER PROTECTION – GIFT FOR THE FUTURE GENERATIONS”
EXHIBITION CATALOG (2005, 2012)

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ProKARSTerra
Education and Training

ProKARSTerra

THE INTERNATIONAL COMPETITION
"KARST UNDER PROTECTION - GIFT FOR THE FUTURE GENERATIONS"
CONTRIBUTES MUCH TO ATTRACT A WIDE RANGE OF YOUNG PEOPLE
TO EXPLORE KARST, TO GET INSIGHT INTO THE CHARACTERISTICS
AND PROBLEMS OF THIS SPECIFIC ENVIRONMENT. IT OFFERS THEM
A CHANCE TO COMMUNICATE THROUGH THE LANGUAGE OF ART
AND KNOWLEDGE OF THE KARST PHENOMENA.



THE INTERNATIONAL COMPETITION
"KARST UNDER PROTECTION - GIFT FOR THE FUTURE GENERATIONS"
IS IN LINE WITH ONE OF THE BULGARIAN INITIATIVES TO PROCLAIM
INTERNATIONAL YEAR OF KARST (SUPPORTED BY UNESCO).
