

Happened on this day

1789: birth of Augustin-Louis Cauchy, a famous mathematician
1841: the Venetian blind was patented
1888: the first adding machine that made commercial success was patented

First half is over

The completion of the translations at 3a.m. was the last thing done to ensure the contest could start at 8:30. How did you feel and what did you aim at prior to that?

‘We are confident of ourselves’ — said the Australians the day before — ‘we would like to score medals, even bronze would be good’. This would not be enough for Felix Arends from Germany, who scored bronze last year: ‘I hope to win silver medal’, he says. There are some contestants, especially those who participate in the IOI for the first time, who have no specific expectations and simply want to give it a try.



First day of struggle

On the morning one could feel the tension. The teams arrived at breakfast early: at 7:20 there were few free seats left in the canteen. The Koreans, woken up by their guide, were the first to appear. Crowds began

gathering by the competition rooms. Ignat Meldin from Russia thinks it is good to relax just before entering the contest. ‘I’ve been preparing earlier, now it is too late to do anything’ — he said, when we drew his attention from the newsletter he was reading.

The rustling sound of envelopes being opened filled the rooms at 8:30, followed by the noise of buttons being pressed in hundreds of keyboards. The outcome of these we were supposed to learn before lunch.

Mountains seem to have been the most difficult task — at least that is what most of the contestants claimed after they had left the competition rooms. ‘Not exactly’ — a contestant from Luxembourg added later — ‘it was easy to score half of the points, but hard to code a complete solution’. As for other tasks, they were

(continued on page 3)

FIRST EXCURSION

CONTESTANTS

7.00 - 8.00	breakfast
7.45 - 21.00	excursion to Wieliczka Salt Mine and Cracow

LEADERS

7.00 - 8.30	breakfast
8.45 - 14.00	Dunajec rafting
14.30 - 16.15	lunch
16.30 - 17.30	GA Meeting 5
17.30 - 18.30	translations
18.30 - 20.00	dinner
20.00 -	translations




GUESTS

7.00 - 8.30	breakfast
8.45 - 14.00	Dunajec rafting
14.30 - 16.15	lunch
18.30 - 20.00	dinner

Dear Guests! Please check the departure times of your trips the day before the trip.

WEATHER FORECAST

Good for a trip

morning		17°C / 62°F
afternoon		24°C / 75°F
evening		18°C / 64°F

The time has come to have a rest after the first contest day. Here are the short guidelines as for what you are going to see today. The text below is concerns the contestants' sightseeing programme for today. For the leaders and guests this text will apply in two days.

Wieliczka Salt Mine

See www.kopalnia-wieliczka.pl

Much of your sightseeing activity today will take place deep under the ground - in the shafts, passages and chambers of the Salt Mine in Wieliczka, a small town on the outskirts of Cracow. The exquisite facility was entered into the first UNESCO Cultural Heritage List, as one of the three ones in Poland.

The production of salt by vaporization of water from brine springs began in that area (believe it or not) already around the year 3500BC. Hard salt, however, was discovered much later and the first shafts of the mine appeared about 700 years ago. Just imagine all the technological issues that had to be dealt with only with the aid of the primitive tools then available to begin excavation in the 13th century! Anyhow, salt production became important to the state, resulting in a constant development of the facility.



A chapel in St. Kinga's chamber



Old excavation machines underground

Some numbers? Here you go: the mine operated on 9 levels: the first one 64 m, and the last 327 m deep. As much as 26 top-down shafts were dugged, plus additional 180 between particular levels. The passages, running between 2040 post-excitation chambers, measure 200 km of length and reach far beyond the outline of the town. The salt deposit covers an area of over 10 km².

Nowadays it is mostly a tourist attraction, with 900 thousand guests a year, although some excavation activities are still running. The renovated chambers along the tourist route, possess their own names and feature monuments, exhibitions, carvings, salt-crystal chandeliers, a chapel, an underground lake and even a café bar. The extraordinary size of some of the rooms intensifies the impression of being in an underground city. Part of the network of passages has been converted into a health clinic, where the specific microclimate and salty air helps mainly patients with lung problems, asthma and allergies.

Today you will follow a route ending 135 m below the ground level. The sightseeing will last about 2 hours.

Do not forget your warm clothing — the temperature in the mine is about 15°C (60°F).



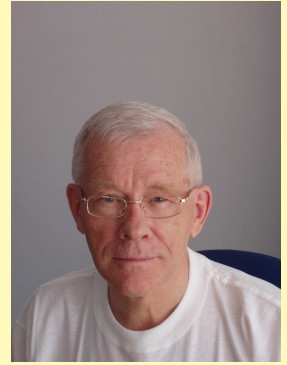
Cracow

The second part of our today's excursion is Cracow — an extremely picturesque city, full of monuments, a former capital city of Poland. You will have a few hours of free time there. We could give you lots of directions as to what to see there, but it seems more sensible if you consult the brochures you received upon arrival, Issue 0 of the newsletter and, of course, your guides. It is entirely up to you how you spend your time and where you eat your lunch in that fabulous place. Have a good time!

A horse carriage awaiting tourists at the Market Square



Who is who



Stanisław Waligórski
Warsaw University
Member of the IOI'2005
Steering Committee



Rob Kolstad
USA

(continued from page 1)

not considered very hard, at least in comparison with the IOI standards. It must have been easy indeed since we saw a contestant who found playing solitaire on his computer more challenging than the competition tasks. Most of you were more or less satisfied and said they did pretty well.

The contestants were more reluctant to reveal their exact results in the afternoon. Allen from South Africa wouldn't say anything except that he did well. However, he was the only one who does not expect the problems on Monday to be harder. 'They will be at a similar level of difficulty' is what he thinks. All our other speakers, such as the deputy leader of the Czech Republic, Zdenek Dvorak, have one answer to the question of whether difficulty will increase: 'Probably'.

And remember: if it is too cold or too hot in the contest rooms, don't hesitate to tell the supervisors. Unless you are in the gym, the air-conditioning is under control.

For some of the contestants the five hours spent in front of the screen were not enough. Joined by some of the leaders and organizers they took part in a TopCoder session late afternoon. How many of them will qualify to the next round? That is the question.



Relaxing before...



...and after the contest

INTERVIEW

with *Stanisław Waligórski*, member of the IOI'2005 Steering Committee
16 years of the Olympiad

- You have been involved in the IOI since its beginning.
- Yes, I was present at the first IOI in Bulgaria in 1989, as well as during the discussions that preceded the introduction of the Olympiads in Informatics. I've been the leader of Polish IOI teams for many years.
- In what way has the IOI changed the most?
- The biggest difference is in the number of participants, of course. There were only 13 countries competing 16 years ago.
- How come the contest grew so large?
- Information spreads quickly. We used to discuss our local initiatives related to the teaching of informatics with representatives of other countries at various meetings and conferences. Thanks to this exchange of news more and more countries learned about the new competition and it went intercontinental.
- What about similarities?
- Informatics and computer science developed in many directions throughout these 16 years, yet the fundamentals of the Olympiad remain unchanged. It always required from the participants the skills of problem analysis and design of efficient algorithms. This is the sense of the existence of the IOI - encouraging young people, pupils, to practice and improve these skills. The rules of the IOI have often been adopted in national contests thus spreading IOI's key ideas wider.
- What are the benefits of the IOI?

- It is the fact that young people get to know each other and share experiences, both in informatics and culture. It must be stressed that they are very talented and hard-working and the contacts made during the IOI tend to continue in their future careers, often in science. It is especially visible during the national Olympiads, that the contestants, having graduated, often get involved in the Olympiads on the organizers' side. This is the case with most of the young helpers at this IOI. It all keeps it like a large family.
- Has it ever been considered to allow more than 4 team members?
- No, not really. For a while there was an idea adopted to allow 5 contestants per country provided that they were both male and female, but it was too controversial and was soon dropped.
- Was it technically difficult to prepare the event at first?
- It took certain skills to get the equipment and software and to provide proper organization, but on the other hand remember that at the very beginning it was a much smaller event.
- Then we guess the IOI has left you with nice memories?
- Yes, plenty of them! Otherwise I would have dropped it and yet I am still here. Each IOI is unique and leaves its participants extraordinary impressions. I wish this to all our guests this year.
- So do we. Thank you.

ENTERTAINMENT

Logic puzzle: Prisoners

There are 23 prisoners in a prison. The wardens granted them a release chance. They will play a game. If the prisoners win it, they will be immediately released. However, if they do not succeed, they will stay in the prison for the rest of their lives.

The rules of the game are as follows: In the prison there is one special room with two switches (each switch can be in two positions: 'on' or 'off'). At the beginning of the game both switches are 'off'. Each day the wardens will take one of the prisoners to that room and the prisoner will have to change the position of exactly one switch. Each prisoner will be taken to that room multiple times. Moreover, each prisoner will be taken to the switch room from time to time (it can not happen that some prisoner will never be taken to that room from some moment in time). The prisoners will have no contact with each other, so they will not know who goes to that room or when and in what order. The game ends, when any of the prisoners says to the wardens: 'Each of us has been in the switch room at least once.' If it is true, the prisoners win, otherwise they lose.

Now the prisoners have time to discuss their strategy. Can you help them?

Logic puzzle: John

There are two brothers, one of whom is called John. One of the brothers is always telling the truth and the other one is a permanent liar. You meet one of them and wish to make up your mind on one of the following issues:

- a) is he John?
- b) is John the one who lies?

asking only one binary (yes/no) question, that consists (in English) of at most 3 words, for each case.

What questions to ask, and how to interpret the answer in a) and in b)?

Personality test

Are you good with computers?

6. A human being has:
 - a) 10 fingers
 - b) 10 fingers and 2 buttons
 - c) 10 fingers, 3 buttons and a scroll
7. How do you spend all your free time
 - a) programming
 - b) playing computer games
 - c) answering e-mails
8. You often e-mail people located:
 - a) on the same floor
 - b) in the same room
 - c) at the same desk
9. To compute $2 + 2 * 2$ you
 - a) use a pocket calculator
 - b) ask Google
 - c) write a Smalltalk program to learn that the result is 8
10. Which year did you fall in love for the first time?
 - a) 95
 - b) 98
 - c) 2000
11. The first word you said as a child was
 - a) yes
 - b) no
 - c) cancel
12. What is your favourite part of the world?
 - a) .com
 - b) .org
 - c) .net

Rush hour

Today's puzzle comes from
www.igoweb.org/~wms/rushHour



Happy birthday to: *Rob Kolstad*
from *USA*

Polish your Polish

mine - **kopalnia**
salt - **sól**
a castle - **zamek**
a lock - **zamek**
a zipper - **zamek**
a ladybird - **biedronka**