



Today's programme

Students		Mentors and Scientific Observers		Guests	
06:00-08:00	Breakfast	07:00-08:30	Breakfast	07:00-08:30	Breakfast
07:50	Departure for Madách Theatre	09:15	Departure for Madách Theatre	09:15	Departure for Madách Theatre
10:00-12:00	Opening Ceremony	10:00-12:00	Opening Ceremony	10:00-12:00	Opening Ceremony
13:00-14:00	Welcome Reception at ELTE University	13:00-14:00	Welcome Reception at ELTE University	13:00-14:00	Welcome Reception at ELTE University
14:00-18:00	Budapest sightseeing	14:00-16:00	Laboratory Inspection at ELTE University	14:30-18:00	Budapest sightseeing
18:00	Departure for Gödöllő	16:00	Departure for the Hotel	18:00-19:30	Dinner at the Hotel
19:00-20:30	Dinner	16:30-18:00	Meeting with the Authors		
20:30-22:00	Lab safety instruction and Chemistry demonstration	18:00-19:00	Dinner		
		19:00-	1st Jury Meeting		

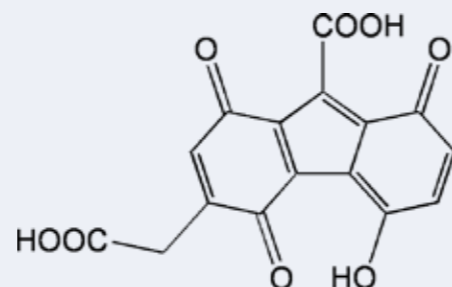
Molecule of the day

Hipposudoric acid was isolated from the sweat of the hippopotamus by Japanese scientists, who named the compound after its occurrence (*sudor* means "sweat" in Latin). Samples were collected from an animal in the Tokyo zoo for about half a year and the compound shown here was identified by several analytical meth-

ods. The sweat of the animal is colourless immediately after perspiration and gradually turns red. Hipposudoric acid is responsible for its color. In addition to its mild antibacterial activity it absorbs a lot of UV and some visible light thus protecting the skin of the hippopotamus from sunburn.

(*Nature*, 2004, 429, 363)

(Lente Gábor)



Useful expressions

Good morning
Good day/afternoon
Good evening
Good night
[An awkward greeting among youth]
What's your name?
My name is...
How are you?
I'm fine, thanks
I (don't) speak Hungarian
Do you speak English?
Can I get my mobile back? (The answer is no)
I love Chemistry
I'm going to win the competition

Jó reggelt
Jó napot
Jó estét
Jó éjszakát
Csácsumicsá
Hogy hívnak?
... vagyok
Hogy vagy?
Köszönöm, jól
(Nem) beszélek magyarul
Beszélsz angolul?
Visszakaphatom a mobilomat?
Imádom a kémiát
Meg fogom nyerni a versenyt

Three reasons to become a chemist

- » You can wear Clark Kent style safety glasses.
- » You can always have access to some 100% pure ethanol.
- » And finally: Because its pHun.

(G. D. McCallion)

Weather

We are looking forward to another hot summer day. No wind, no rain the sun is shining brightly on all those who have come for the IChO.

Colophon

Catalyzer
Journal of the 40th International Chemistry Olympiad
Issue No. 3 July 13, 2008
Editorial team: Darvas Mária, Jagasics Éva, Magyarfalvi Gábor,
Stirling András, Túri László, Vass Márton,
Jon Baker
Layout: Csordás Zoltán, Pál Attila
Photographer: Gillicze Bálint
Press: Prime Rate Ltd. Budapest

Secretariat of the IChO

<http://www.icho.hu>
Pázmány Péter sétány 1/A, Budapest H-1117, Hungary
Telephone: +36 1 372 2910, Fax: +36 1 372 29 31
(during the olympiad: +36 20 779 5210)
E-mail: info@icho.hu
Budapest
Ministry of Education and Culture
Eötvös Loránd University
Faculty of Science
Institute of Chemistry

www.budapest.hu
www.okm.gov.hu
www.elte.hu
<http://ttk.elte.hu>
www.chem.elte.hu

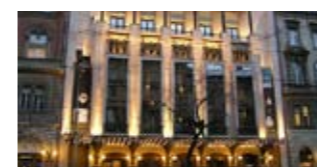


40th International
Chemistry Olympiad
2008 Budapest, Hungary

Catalyzer

Issue No. 3 – Sunday 13 July 2008

Opening Ceremony



The Opening Ceremony will be held in the Madách Theatre. Since its reconstruction in 1999 the theatre has a total capacity of 804 people on three floors; the interior decoration is characterized by Dalmatian and Italian motifs and the mural on the ceiling designed by Götz Béla depicts the masked figures of commedia dell'arte. There is a different world-class musical performed here every season.

The program of the Opening Ceremony

- » Tárogató music by Nagy Csaba
- » Speech by Sólyom László, President of the Republic of Hungary
- » Tárogató music by Nagy Csaba
- » Speech by Hudecz Ferenc, Rector of Eötvös Loránd University
- » Performance by the Baptist Bell Orchestra
- » Speech by Greiner István, vice-president of the Hungarian Chemical Society and Deputy Director for Research of Richter Gedeon Plc.
- » Sebestyén Márta sings, accompanied by Szokolay Dongó Balázs on bagpipes
- » László Szepes, Eötvös Loránd University, Chairman of the 40th IChO
- » Tárogató music by Nagy Csaba and dance
- » Speech by Manfred Kerschbaumer, President of the Steering Committee
- » Sebestyén Márta sings, accompanied by Szokolay Dongó Balázs on bagpipes



Nagy Csaba studied clarinet at the Bartók Béla Secondary School of Music. During the years of his musical studies he learnt to play the “tárogató” of which he has also written several studies. As he says the secret of this instrument lies within the mixture of the sound of the clarinet, oboe and bassoon and with his music he evokes the tunes of Hungarian dances. He has had concerts all over Europe as well as in Japan and Canada.

The **Újpest Baptist Bell Orchestra** was formed in 1991 by music-loving youngsters. The instruments arrived in Hungary from the United States, the set was made up of 37 bells, which makes it possible to play a register of 3 octaves. You can hear them play transcriptions of bells of classical composers as well as adaptations of ecclesiastical songs or works composed on bells.

Sebestyén Márta was born in Budapest (1957). Her mother, a music teacher studied with the great composer and ethnomusicologist, Kodály Zoltán. Having a



wonderful voice, she is one of the most authentic interpreters of the Hungarian traditional folk music. She is giving concerts all over the world both as a solo artist and as a guest performer with Hungarian and international folk groups. Her collaboration with the French group Deep Forest resulted in a Grammy Award in 1996. She recorded with Peter Gabriel and was the voice of the “English Patient” awarded with 9 Oscars (also for the music) in 1997.

Szokolay Dongó Balázs plays folk music and improvisative music inspired by folk music on bagpipe, flute and saxophone. He started the adaptation of folk music after thoroughly studying the folklore of the Carpathian Basin. His own compositions not only bear the musical culture of the past centuries in themselves but also have a modern, contemporary sounding. He holds the title of Young Master of Folk Art. He got an Artisjus Award in 2005.

(Jagasics Éva)



Jalsovsky István and his safety show

This evening, after the lab safety instructions, **Dr. Jalsovsky István** is going to surprise you with an unconventional chemistry demonstration. He teaches organic chemistry on basic and advanced level alike, chemical safety for beginners often jazzed up with spectacular experiments, and holds organic laboratory courses at Eötvös Loránd University. His main research area is the chemistry of cubane derivatives and formerly the stereoselective synthesis of organosulfur compounds. He participated in the 4th IChO (Moscow) where he achieved a good result but at that time there were no medals given out.



Snapshots on arrival

At around ten o'clock the first groups started to gather in the hall of the Hotel in Gödöllő. Coming from the airport all the guys were exhausted from the journey, still their smile revealed their feeling of excitement. Here are the first photos of the arriving groups taken right at the registration:



Did you know...

that magic acid is a two-component mixture being 10^3 - 10^{25} times (depending on the composition) more acidic than concentrated sulfuric acid? It is a super acid containing FSO_3OH (a protic or Brønsted acid) and SbF_5 (a Lewis acid) introduced by Oláh György (a patron of the Olympiad, 1994 Nobel laureate of chemistry). In such a strongly acidic medium, many unusual things can happen, e.g., free carbenium ions (organic cations having three ligands) can form, with long enough life-times to be studied by methods such as NMR and infrared spectroscopy. Even saturated hydrocarbons can be protonated, thus producing organic cations with more than four formal bonds to carbon (they are called carbonium ions). The name “magic acid” for the FSO_3H - SbF_5 system was introduced by one of Oláh's German postdoctoral fellows (Joe Lukas), who after a laboratory Christmas party put the remains of a candle into the acid. The candle dissolved, and the resulting solution gave a clear NMR spectrum of the tertiary butyl cation. Initially the term “magic” was only laboratory slang, but was subsequently introduced into the chemical literature. Finally, one of Olah's graduate students (Jim Svoboda), who started a small company to make some of the superacid systems and reagents available commercially, obtained trade name protection for Magic Acid. It has been marketed as such since that time.

(Pálinkó István)