

Today's programme

Students		Mentors and Scientific Observers		Guests	
05:30-22:00	Arrivals and registration	05:30-22:00	Arrivals and registration	05:30-22:00	Arrivals and registration
13:00-14:00	Lunch in Gödöllő	12:00-15:00	Lunch at the hotel	12:00-15:00	Lunch at the hotel
19:00-20:00	Dinner in Gödöllő	19:00-20:00	Dinner at the hotel	19:00-20:00	Dinner at the hotel

MKE - Association of Hungarian Chemists

The Association of Hungarian Chemists (Magyar Kémikusok Egyesülete) was founded in 1907 by Fabinyi Rudolf, professor of the University of Kolozsvár. At the beginning the association, with its center in the heart of Budapest, had only 40-50 enthusiastic members, young chemists and professors. Since then, surviving the storms of the two world wars, the association has gone through a period of remarkable growth and development. By the millenium it already consisted of 30 branches. Today the Association of Hungarian Chemists supports chemical education as well as industry and research. Besides that, it issues four remarkable journals of chemistry, a journal for secondary school students (Középiskolai Kémiai Lapok), two scientific journals (Magyar Kémikusok lapja, Magyar Kémiai Folyóirat) and a programme book (Havi közlemények).

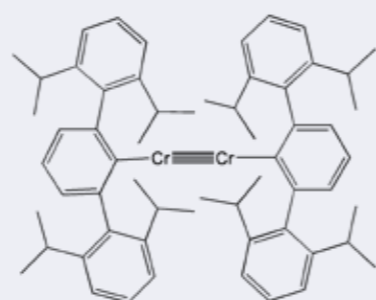
Molecule of the day

Quintuple bonds were unknown in stable compounds before 2005. The organometallic compound shown above is the first example of a structurally characterized molecule containing a formally five-fold covalent bond. This bond is

formed between two sterically crowded chromium(I) centers. The structure of the molecule was determined by X-ray crystallography at 90 K, which also revealed that the distance between the two chromium nuclei is 183.5 pm.

(Science, 2005, 310, 844)

(Lente Gábor)



A quick guide to Hungarian pronunciation

c as in <u>its</u>	a as in <u>not</u>
cs as in <u>church</u>	á as in <u>father</u>
g as in <u>go</u>	é as in <u>day</u>
gy as in <u>duty free</u>	í as in <u>see</u>
j / ly both as in <u>you</u>	ó as in <u>law</u>
ny as in <u>new</u>	ő as in <u>early</u>
s as in <u>ship</u>	ő is the long version of ö
sz as in <u>say</u>	ú as in <u>fool</u>
ty as in <u>Tuesday</u>	ü as in <u>déjà vu</u>
zs as in <u>pleasure</u>	ű is the long version of ü

Fill in the gaps with correct elements from the list below, choose only one for each place.

What does a ship do when it's torpedoed?

When there is no gas left we say it's

What do we do when we are in pain?

sulfur, silicon, boron, zink, copper, mercury, helium, lead, argon

(collection of J. Verhagen)

Weather

We are expecting a hot sunny day with bright sunshine so remember to put on sunscreen.

Colophon

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Catalyzer

Issue No. 2 – Saturday 12 July 2007

Welcome to the 40th International Chemistry Olympiad

Dear colleagues, dear friends,

I am delighted to welcome you to Hungary to the 40th International Chemistry Olympiad. I still vividly remember my feelings from the summer of 1987 when I had the good fortune to participate at the 19th Olympiad in Veszprém, Hungary. The inspiration of representing my country, and the joy of having an excellent company of fellow students for 10 days still bring a smile to my face.

Our objective is to see this same smile on your face in Hungary. For us organizers the 10 days of the Olympiad is the culmination of 2 year's work. We tried to think with your head to imagine what programs would make your stay memorable. The authors tailored their problems to stimulate your mind and the guides and our travel agent put together a program that combines the historical and cultural highlights of Hungary with the joy of a leisurely holiday. During the competition there will be around 160 of us to help and assist you so please don't hesitate to contact us!

I wish you a fair competition and a memorable stay in Hungary!

András Kotschy
Chairman of the Organizing Committee





Gödöllő – a royal home for students

Gödöllő is a scenic town northeast from Budapest situated in the intersection of four valleys on the bank of the Rákos Creek. The surrounding hills are covered with forests which had been royal hunting areas for centuries. The written document in which the town is mentioned is from

had his palatial residence built in 1751, which, as the greatest Baroque manor house in Hungary, is still the principal landmark of Gödöllő. The Grassalkovich family perished in 1841 and the village became a headquarters in the war of independence. After the war had ended the castle was presented to Franz Joseph I as a coronation gift and it soon became one of the favourite summer homes of his wife,



the middle of the 14th century but the original settlement was totally destroyed during the Ottoman reign of the 15th-17th centuries. The 18th century brought a turning-point in the life of the village, when a nobleman called Grassalkovich Antal made it the center of his estate and

the Empress Elisabeth (Sissy). In 1933 it was home to the Boy Scout Jamboree and 26,000 boys from 54 nations camped in the village. In 1966 it was promoted to the rank of a town, and this was the time when it really began to attain its present form. The Saint István University of



Gödöllő (with six faculties) was founded in 2000 by the fusion of five predecessor institutes of higher education. Besides the traditional faculties of agriculture and veterinary science, new ones such as rural development, environmental, technical and economic faculties were founded. The University has buildings in three cities; the University of Agriculture moved to the present central building, which had previously been the home of the Premonstratensian Grammar School, in 1950. This town, with its exceptional historical background, home to one of Hungary's internationally known universities, has many other interesting features as well. The botanical garden, the apiary museum and the sport airport are certainly well worth a visit. We hope you'll spend a memorable ten days in this beautiful environment in the town of Gödöllő.

(Vass Márton)

Margaret Island – a change of scene



The final location hosting mentors' accommodation, translation and jury meetings was chosen to be the Danubius Grand Hotel Margitsziget and Danubius Health Spa Resort Margitsziget in the heart of Budapest, yet far from the bustle of the city, on Margaret Island, which is a 2.5 km long island in the middle of the Danube mostly



covered by landscape parks. This beautiful island is a popular recreational area. Throughout the history of the city it had many different names, the most interesting of them being Island of Rabbits, the result of a mistranslation from Latin. However

it was a popular hunting area of the royal court and it retained the name until the 14th century, when it was given a new one after Saint Margit – daughter of king Béla IV – who lived in the Dominican convent on the island. It is connected to the city by the Margaret Bridge built in 1901, but vehicle entry is limited to buses and taxis. During a walk around the island the explorer can encounter the remnants of several monasteries, the Centennial Memorial commemorating the hundredth anniversary of the city's unification, the Music Fountain near which music is played and light shows are performed in summer, an octagonal Water Tower (functioning today as a lookout tower), a Japanese garden and numerous sports and recreation facilities. The hotels, featuring spas from natural thermal springs, shady terraces and great confer-

ence halls, and renovated in 2000-2001, are located in the northern part of the island. Interestingly the two buildings are connected by a heated underground corridor.

(Vass Márton)

Did you know...

that the element tellurium was discovered in 1782 but not named until 1798? Franz Joseph Muller von Reichenstein, an Austrian mine expert, identified tellurium in a gold ore found in Transylvania. He referred to the new element as *metallum problematicum* (Latin for "problematic metal") and had an extensive correspondence with Ruprecht Antal, a professor at the Mining Academy of Selmecbánya, who also studied the same ore but initially thought that Muller's element was in fact bismuth. Although a famous Swedish chemist, Torbern Olof Bergman confirmed Muller's analysis, the discovery was almost forgotten until Martin Heinrich Klaproth, a chemistry professor in Berlin, became involved in the late 1790s. Klaproth received ore samples from Muller, repeated earlier experiments and devised new ones. Finally he named the new element tellurium after Earth (tellus in Latin). Despite that Klaproth always acknowledged Muller as the discoverer of tellurium, the German professor was drawn into a priority dispute in 1803 by Kitaibel Pál, a botanist in Budapest. Kitaibel claimed discovery of tellurium based on a series of his own experiments, which he carried out in 1789 using a different ore. These results remained unpublished, but, according to the Hungarian professor, Klaproth had informal access to them. Apparently, Kitaibel started the dispute without reading any of the publications. Finally, Klaproth sent these papers to him to prove that Muller was the discoverer.

(Lente Gábor)