

**6th International Geoid School on
"The Determination and Use of the Geoid"
31 January - 5 February, 2005**

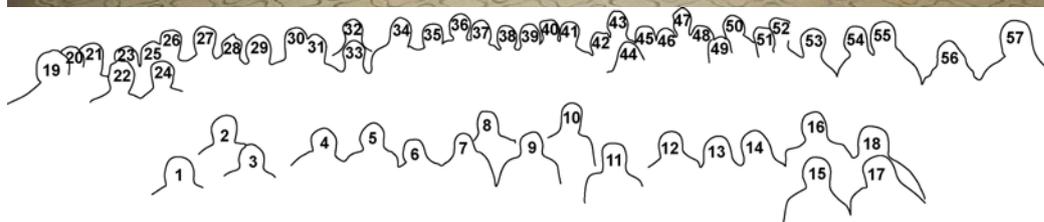
The Department of Geodesy and Surveying of the Budapest University of Technology and Economics (BUTE) in collaboration with the Research Group for Physical Geodesy and Geodynamics of the Hungarian Academy of Sciences (HAS) hosted the International School for „*The Determination and Use of the Geoid*” in Budapest, Hungary. The School took place between January 31 and February 4, 2005 and continued the tradition of International Geoid Schools, started in Milan (Italy, 1994) and continued in Rio de Janeiro (Brasil, 1997), Milan (1999), Johor (Malaysia, 2000) and Thessaloniki (Greece, 2002). The School was organized by the International Geoid Service (IGeS) and BUTE/HAS. The members of the Local Organizing Committee were: József Ádám (Chairman), Lóránt Földváry, Szabolcs Rózsa (Secretary) and Gyula Tóth.

After a short welcome speech given by Fernandó Sansó (IGeS President) and József Ádám (LOC Chairman), the lectures started immediately. The courses have been given by *Fernandó Sansó* (A compendium of physical geodesy in view of geoid computation and related height questions), *Riccardo Barzaghi* (The Global Geopotential Models), *Christian C. Tscherning* (Geoid Determination by least-squares collocation using GRAVSOF), *Michael G. Sideris* (Geoid Determination by FFT Techniques) and *Ilias N. Tziavos* (The Terrain Effects in Geoid Estimation). One seminar on „Present Day Activities of the International Gravimetric Bureau (BGI)” was presented by M. Abbasi and Th. Fayard from BGI, France.

The lecture notes of these courses were prepared in a printed volume and CD. The CD contained exercises, data sets and software as well. Each student received one copy of the printed Lecture Notes and one CD.

The Lecture Notes on Global Geopotential Models was prepared by *Peter Schwintzer* (GeoForschungsZentrum, Potsdam), who passed away before the School. His Lecture Notes titled as „The gravity field of the Earth: global gravitational potential models” is dedicated in memory of Peter Schwintzer.

All courses, but for the first one, have been followed by computer exercises, where the software available at IGeS have been used. A 160-seat-lecture room equipped with overhead projector, PC-beamer and multimedia tools (DVD, VHS) was provided for the lectures. The same room was used for the computer exercises, when simultaneously 21 computers could run the software. The computer exercises on FFT techniques and terrain effects were assisted by Post Doctoral Fellows *Georgia Fotopoulos* (Calgary, Canada) respectively *Vassilios Grigoriadis* (Thessaloniki, Greece).



| | | | | | | | | | | | |
|----|----------------|----|--------------|----|--------------|---|-------------|---|---------------|---|---------------|
| 1 | K. Shahzad | 11 | F. Sansó | 21 | Sz. | 3 | M. | 4 | J. Müller | 5 | V. |
| | | | | | Rózsa | 1 | Sideris | 1 | | 1 | Grigoriadis |
| 2 | B. Barisic | 12 | F. Kartal | 22 | B. Erol | 3 | T. | 4 | F. Wild | 5 | W. van der |
| | | | | | | 2 | Horváth | 2 | | 2 | Wal |
| 3 | A. Shahzad | 13 | A. Kartal | 23 | L. | 3 | I. Ali | 4 | D. | 5 | D. |
| | | | | | Földváry | 3 | | 3 | Markovi | 3 | Sampietro |
| | | | | | | | | | novic | | |
| 4 | R. Barzaghi | 14 | R. Yanar | 24 | P. | 3 | T. Olszak | 4 | H. | 5 | J. Ferko |
| | | | | | Zaletnyik | 4 | | 4 | Skourup | 4 | |
| 5 | M. Vasconcelos | 15 | Z. Abidin | 25 | J. Ádám | 3 | M. Sadiq | 4 | T. | 5 | O. |
| | | | | | | 5 | | 5 | Fayard | 5 | Nesvadba |
| 6 | D. Garcia | 16 | M. Abbasi | 26 | B. | 3 | C.C. | 4 | M. | 5 | E. Fantino |
| | | | | | Devaraju | 6 | Tscherni | 6 | Nazar | 6 | |
| | | | | | | | ng | | | | |
| 7 | M. Grzyb | 17 | U. Schirmer | 27 | G. Timár | 3 | J. Bogusz | 4 | J. Kolar | 5 | R. Duchnowski |
| | | | | | | 7 | | 7 | | 7 | |
| 8 | J.F. Navarro | 18 | G. Ramillien | 28 | M. Imran | 3 | M. Kuhar | 4 | G. Buble | | |
| | | | | | | 8 | | 8 | | | |
| 9 | H. Askri | 19 | O. Firat | 29 | G. Beutler | 3 | O. Renkevic | 4 | G. Fotopoulos | 9 | |
| | | | | | | 9 | | 9 | | | |
| 10 | A. S. Almas | 20 | H. Kutoglu | 30 | C. Schneider | 4 | A. Maggi | 5 | M. Veicherts | 0 | |
| | | | | | r | 0 | | 0 | | | |

Participants of the International Geoid School

49 participants arrived to the school from the following 19 countries: Canada (3), Croatia (3), Czech Republic (1), Denmark (3), France (3), Germany (3), Greece (1), Hungary (5), Italy (3), Malaysia (1), Pakistan (8), Poland (4), Portugal (1), Saudi Arabia (3), Slovakia (1), Slovenia (1), Spain (2), Turkey (2) and Ukraine (1) (see photo of the school students and teachers).

The number of participants from Developing Countries as well as from the countries of Central- and Eastern-Europe is quite significant. The largest group of 8 participants arrived from Pakistan. Most of the school participants are being involved since several years in geodetic, geophysical, cartographic or surveying jobs.

A welcome speech was also delivered to the School participants by the IAG President, *Gerhard Beutler* who arrived in Budapest only for one day for the IAG Bureau Meeting (BUTE, 1 February, 2005) (see photo of the IAG Bureau meeting participants).



From right to left: F. Sansò (IAG Past President), C. Schneider Petersen (IAG Central Bureau Secretary), G. Beutler (IAG President), C.C. Tscherning (IAG Secretary General), M. Sideris (IAG Vice President), J. Ádám (IAG COB Chairman, as host).

Participants of the IAG Bureau Meeting (Budapest, 1 February, 2005).

Since the International Geoid School had a full-week intensive program, therefore it was counted as an external full graduate course. A few doctorate (PhD) students took a written exam to accomplish this school as a graduate course. For this purpose school teachers provided exam questions. The students took this exam at the end of each lecture day. The questions were theoretical and for a small numerical exercise. Finally IGeS President prepares a document on the exam assessment which will be delivered to these students and their graduate schools. In the closing ceremony *I. N. Tziavos* (Vice President of IAG Commission 2 – Gravity Field) kindly delivered an evaluation of the school, and finally each student received a Certificate signed by M. G. Sideris (IAG Vice President) and J. Ádám (LOC Chairman) that certifies the participation in the International School on “The Determination and Use of the Geoid”.

This training course provided a good opportunity to familiarize with the latest developments in geoid determination, as well as to enhance the international collaboration in gravity field modeling by building contacts to the professionals

dealing with geoid determination in various countries. We hope that the successful format and atmosphere established by the previous geoid schools continued in Budapest, and the school will be continued in next years.

JÓZSEF ÁDÁM AND SZABOLCS RÓZSA