

TECHNICAL COMMISSION VI: Education and Communications

Compile by T.Lukman Aziz Commission President

WG VI/1: EDUCATION

Chair person: Tania Maria SAUSEN (Brazil)

Co chair: Walter SCHUHR (Germany)

Working Group Activities during 1998

The 18th annual meeting of the German Society for Photogrammetry and Remote Sensing was held in Munich from October 14th to October 16th. The educational part of this meeting, chaired by H. Kantelhardt, concentrated on educational requirements for teaching Photogrammetry and Remote Sensing. Within this frame W. Förstner described the role of universities in general, while P. Reiß pointed to governmental requirements and R. Schroth described the part of private companies. Finally W. Höflinger reported on the educational requirements in Austria.

As a trend to be discussed, the Technical University for Applied Sciences in Hamburg, for Photogrammetry and Remote Sensing in particular, plans to change the traditional additive discipline oriented curriculum into a so-called integrating way of study, as carried out by Kohlstock. Core of this programme is a 2 weeks project at the end of every semester.

The German government promotes a programme to improve Faculty standards, by the following 10 action items: competition for best students; improvements of the educational management; investments in computerizing and modularization; adapting the credit point system; improvement of practical aspects; stressing the importance of international aspects, shortcuts to studying; improving personal care; promotion of graduates and undergraduates; mobilization of financial resources, by, e.g., private partnership.

Since October 1997 the author is in charge of a new course for surveying and mapping including Photogrammetry and Remote Sensing at the Technical University for Applied Sciences in Magdeburg (Germany).

Other Relevant Information

In order to improve the public acceptance of our profession, ISPRS should carry out a competition to create an attractive term, replacing the antique tongue breaker "Photogrammetry and Remote Sensing".

Early Suggestions for this new term, suited for the year 2000 are, e.g. "Photomatics" as a part of Geomatics. Both subjects supposed to belong to "Mediamatics", to be precisely defined.

Additional candidates for a renaming of our Society are according to CASE "Spatial Information Sciences" or "Iconic Informatics", as suggested by ISPRS Honorary Member Professor Wang Zhizhou.

An engagement in this matter will lead to a queue of 6 topics, which are the basis for teaching Photogrammetry and Remote Sensing in the year 2000, but are also suited to replace the current ISPRS commissions:

This draft 6 topics are

- * Professional Matters
- * Projects (suited for the use of Photomatics)
- * Sensors
- * Image-Generation(including image and text data bases available via, e.g. world wide web)
- * Image-Rectification (including digital image processing, GIS etc.) and
- * Image-Interpretation (including artificial intelligence etc.)

In particular for undergraduate education, for the visualization of photogrammetric relations, the multiplex principle is obligate. Therefore every School, teaching Photogrammetry, beside digital aids, should possess at least 2 multiplex related projectors.

ISPRS/SBSR 98 - EDUCATION SEMINAR

During the IX Brazilian Remote Sensing Symposium, September 11 to 13, a one day ISPRS Education Seminar, in Santos, São Paulo State, Brazil.

WG VI/2: COMPUTER ASSISTED TEACHING

Chairperson : Kohei Cho (Japan)
Co-Chairperson : Joachim Hohle (Denmark)

1.State of Science and Technology of Working Group Topics

(1) Home Page

The home page of the WG was established in 1997 for information, software, data dissemination and exchange of the WG. The WG is announcing the WG activities in timely manner using this HP. <http://www.tric.u-tokai.ac.jp/research1/cat/cat.html>

(2) Software distribution

The WG is collecting/developing non-commercial software for computer assisted teaching. The following software are currently available via internet:

(a) LDIP and ORTO(by Prof. Hohle , Aalborg University, Denmark)

Computer assisted teaching software for photogrammetry which runs on Macintosh (LDIP), IBM-PC/MS-DOS(ORTO)

An Internet-version of LDIP is called LDIPInter and can be used at the address <http://www.sunsite.dk/LDIPInter>.

The browser NETSCAPE 4.5 or MS EXPLORER 4.0 have to be used.

(b) WinASEAN(by Dr. Duong of NCSR, Vietnam)

A image processing software for remote sensing which runs on IBM-PC/MS-Windows environment.

<ftp://ftp.tric.u-tokai.ac.jp/pub/outgoing/catbin>

(c) GIWIN(by Dr. Fuhu Ren of ESTO)

A GIS software package which runs on IBM-PC/MS-Windows environment.

<ftp://ftp.tric.u-tokai.ac.jp/pub/outgoing/catbin>

2. Accomplishments of Working Group During 1998

According to the rapid advancement of the computer technology and internet environment, various activities are going on related to the WG. The following are some of the highlights.

(1) Important conferences on CAT/CAL

Working group members participated in the XXI FIG congress in Brighton. J. Hohle presented in the Commission II of FIG the paper "Computer-assisted Learning and Teaching on PC's and the Internet".

Other contribution of interest are: K. Artimo, "CAL - the educational tool of the future", P. Grussenmeyer, "Learning the orientation of a digital photogrammetric stereomodel", K. Koistinen, "CAL for the design and visualization of photogrammetric measurements".

The mentioned papers are printed in the proceedings.

(2) Remote Sensing Navigator CD-ROM development

Under the sponsorship of the NASDA, a software package CD-ROM called Remote Sensing Navigator (RS-Navi) was developed in Japan. RS-Navi is a guiding software for the beginners to learn how to process/analyze remote sensing data. The texts were originally written in Japanese, and the English version is under development.

(3) Cooperation with other organizations/working groups

Many other professional organizations also have working groups on CAT/CAL, for example International Federation of Surveyors' (FIG's) working group on CAL, headed by Prof. Kirsi Artimo, HUT, Finland. The members of our WG are exchanging information and cooperating with these groups.

3. Working Group News

(1) International Conference

The Fourth international conference on computer based learning in science is planned to be held at the University of Twente, The Netherlands from July 2nd to 6th, 1999. J. Hohle will participate and present a paper about his Internet version of the program "Learning Digital photogrammetry".

(2) Issuing of Newsletters

The WG VI/2 has been issuing CAT News Letters since 1994 and the No.5 will be issued in 1999. The newsletters are distributed to the members of the WG and the others who are interested in CAT.

(3) WG meeting and CAT software show

The WG plans to hold the WG meeting and a software show at the Com.VI Symposium to be held in Bandung, Indonesia in April, 1999.

ISPRS WG VI/3: International Cooperation and Technology Transfer

Chair: Luigi MUSSIO (Italy)

Co-chair: Mojca KOSMATIN (Slovenia)

Accomplishment of WG VI/3

Activities within ISPRS

Members of the ISPRS WG VI/3 attended all the Mid $\frac{1}{2}$ Term Symposia of the ISPRS TC $\frac{1}{2}$ s, with the aim to participate actively in the ISPRS fundamental events. The positive results proved the importance of a direct contact, discussion and cooperation, avoiding the risk of isolated activities.

Activities with the Regional Members

The ISPRS WG VI/3, according to its Terms of Reference, fostered relationship between Regional Member organizations, with the aim to develop relation and promotion.

The President of the OEEPE Prof. Riccardo Galetto welcomed the participants in the ISPRS WG VI/3 Padua Meeting together with the former President of the ISPRS TC VI Prof. Klaas J. Villanueva.

The Working Group staff attended the 1st Workshop on Education in Remote Sensing 'Mercosul Wide' (Camboriu Beach - Brazil), co - organized by SELPER and the ISPRS WG VI/1.

According to some decisions of the ISPRS Council, the Working Group staff attended the 2nd Regional Conference of the AARSE "Lesson of Experience and the Way Forward" (Abidjan - Cote d'Ivoire), looking forward to future opportunities in Africa.

A High Level Tutorial is in preparation, on occasion of the Mid - Term Symposium of the ISPRS TC VI. It recognizes the central role of the AAARS in Asia, particularly in the South - East regions; therefore Prof. Shunji Murai was invited to chair it. The hope of this difficult task was to encourage and, if it is possible, to help developing countries and less favored areas to positively overcome the critical current situation.

Activities with the Sister Societies

The ISPRS WG VI/3, according to its Terms of Reference, promoting and improving the general understanding of our profession, met several Sister Societies: FIG, IAG and ICA.

In this frame, the participation in the International School "Data Analysis and Statistical Foundation of Geomatics" (Crete - Greece), organized by the IAG Special Commission on Mathematical and Physical Foundation of Geodesy, was important. Prof. Armin Gruen was a member of the Scientific Committee and Prof.'s Wolfgang Foerstner and Martien Molenaar were two Lecturers, in a group of six. The direct contacts showed the global environment, with chances and challenges, in which our profession and discipline is currently embedded.

Perugia Meeting

The WG VI/3 "International Cooperation and Technology Transfer" organized in October 1997 a one-week meeting in Bahia Blanca, Argentina. Since Argentina is far enough from Europe, the Italian Society of Surveying and Photogrammetry kindly offered a repetition of Bahia Blanca in Perugia - Italy. The one-week meeting consisted of six technical sessions, two half-day tutorials and a business session. In total two lectures in the framework of tutorials and 21 papers were presented. The main topics of the meeting were: digital and close range photogrammetry, computer cartography, surveying and applied geodesy, cooperation & education and data processing. Again, the variety of subjects covered by the meeting clearly shows that the WG VI/3 aims at bringing together experts from various disciplines.

In the technical session on cooperation and education, Prof. F. Crosilla reported on An Advanced Professional Training Program at CISM (International Center for Mechanical Sciences) located in Udine - Italy. A half-day tutorial on color was the last technical event. Dr. Gunnar Tonnquist from Sweden gave lectures on interdisciplinary color science covering the physical, physiological, psychological and psychophysical aspects of color. Materials from the lectures are available from Internet <http://www.abc.se/~m10660>

The most important emerged result realizes that the market, as well as some academic affairs, are able to transfer technologies. However it is often in conflict with the spirit

of the cooperation which implies co-generation of scientists, technicians and users, independent of their country of origin.

WG VI/3 News

Mid - Term Symposium

On behalf of the ISPRS TC VI former and current Presidents and in cooperation with the ISPRS WG VI/1 Chair-person, the ISPRS WG VI/3 is organizing a High Level Tutorial. It will be held in Bandung (Indonesia), in the two days before the ISPRS TC VI Mid - Term Symposium.

According to its Terms of Reference, the Working Group kept close contacts with AIT (Asean Institute of Technology), engaged it as Cooperating Organization and kindly invited Prof. Shunji Murai not only to give a lecture, but also to become its Chairperson. Furthermore the ISPRS WG VI/3 is organizing two Technical Sessions of the ISPRS Mid-Term Symposium, with the aim to contribute to its success positively.

Further activities

ISPRS WG VI/3 will organize a conclusive meeting in Ljubljana (Slovenia), at the beginning of February 2000. The topics will summarize all the activities of the Working Group in this four - year period.

A second opportunity may be the co - organization of meeting in Benin (West Equatorial Africa) in which topics will be Technology Transfer, Education and Networking.

Some volumes of International Archives of Photogrammetry and Remote Sensing series (at present time, no. XXXII - parts 6W1 and 6W4) will collect all the papers presented at the meetings.

WORKING GROUP VI/4: Internet Resources & Spatial Data Sharing

Chair person: Tuan-chih CHEN

Cc-chair: John FELKNER

WORKING GROUP ACTIVITIES DURING 1998

1. State of Science and Technology

- The Internet provides a superhighway for information access and transfer.
- The Internet offers an unprecedented source of information.
- The potential of the Internet for research purposes and for education, is immense.
- The use of powerful Internet search engines offers enormous potential for information retrieval and sharing.

2. Bibliography

INTERNET AND WEBPAGE GUIDELINES FOR ISPRS

-- approved by ISPRS Council at the meeting in Stuttgart, 11-13 September 1998 and will be placed on the ISPRS Web Page.

3. Accomplishments

-- INTERNET AND WEBPAGE GUIDELINES FOR ISPRS.

-- As official ISPRS point of contact with CEOS/WGISS in the collaboration.

-- Rescheduling the Commission VI Mid Term Symposium.

4. Working Group News

-- Joining the Commission VI Mid Term Symposium in Bandung - Indonesia on 15-16-17 April 1999 as Chairman of session 2.

-- Establishing a Yellow Pages of databases on the Internet for ISPRS Highlights and CIESIN, CEO, CEOS, ISIS, NASA, etc.

-- Promotion of creating home pages for all ISPRS Members.

5. Other Relevant Information

-- Promotion of using the on-line ISPRS Jobs Directory.