From Our Members

KODAK International Educational Literature Award

Application Deadline: 1 October 2004

This award is made to a university or educational institution outside the USA for the purpose of improving the quantity and quality of the literature in its library that deals with the mapping sciences (i.e., photogrammetry, remote sensing, GIS, and related disciplines). It is supported by the KODAK Corporation and the American Society for Photogrammetry and Remote Sensing.

The Award consists of the following:

a. $350 worth of books, manuals, or other literature published by ASPRS;
b. a five-year free subscription to Photogrammetric Engineering & Remote Sensing;
c. Proceedings of the annual conference and fall technical meeting for a five-year period;
d. one free registration to the conference where the award is to be presented for a member of the institution to whom the award is given.

The total value of this award is over $1,500. The materials are to be placed in the libraries of the institutions receiving the award. Any institution that receives the award is ineligible to apply for the award again for a period of five years. Application is by special application form.

The award now also includes the complete catalogue of the ESRI Press, selected titles from Publisher John Wiley & Sons, and a set of conference proceedings from the Geospatial Information and Technology Association (GITA).

For additional information, contact:
Jesse Winch, Program Manager
ASPRS, The Imaging and Geospatial Information Society,
5410 Grosvenor Lane, Suite 210, Bethesda,
MD 20814-2160, USA
P: 1-301-493-0290, ext 101
F: 1-301-493-0208
E: jwinch@asprs.org
W: www.asprs.org

asprs
THE IMAGING & GEOSPATIAL INFORMATION SOCIETY

KODAK International Educational Literature Award

Please provide all the information requested below. Attach additional pages and supporting material (cover letter, brochures, etc.) as needed.

Institution: _____

Department: _____

Address: _____

_____

Country: _____

Representative: _____

Telephone: _____ Fax: _____

Email: _____

1. Describe your institution's photogrammetry, remote sensing, and/or geographic information systems educational programs. Indicate primary disciplines (e.g., geography, forestry, agriculture, civil engineering, etc.) that are involved in these programs. You may submit supplemental materials (brochures, catalogues, etc) to support your application.

2. List your institution's photogrammetry, remote sensing, and other related courses.

Course name	Number of students (annual total)

3. What materials on the subjects of photogrammetry, remote sensing, and geographic information systems are currently available in your library?

4. Provide a brief statement explaining how the educational material provided by this award might be used.

5. Provide a brief description of the library facilities in which these educational materials will be used, and how the materials will be accessible to students and faculty.

Mail, fax or email applications and any supporting material to: ASPRS
Attn: Kodak International Educational Literature Award
5410 Grosvenor Lane, Suite 210
Bethesda, MD 20814-2160
USA
Telephone: (301) 493-0290, x 101
Fax: (301) 493-0208
Email: asprs@asprs.org

Applications must be received no later than 1st October 2004

ASPRS Announces Recipient of the 2004 KODAK International Educational Literature Award

By Jesse Winch

The Department of Geography of the Federal University of Technology, Minna, Niger State, Nigeria was awarded the ASPRS KODAK International Educational Literature Award at the ASPRS Annual Conference in Denver, Colorado, May 2004.

The Department of Geography of the Federal University of Technology, Minna offers an undergraduate program in applied geography with options in Remote Sensing Applications and Applied Meteorology. Masters degrees are also offered in remote Sensing Applications, Applied Meteorology and Environmental Management. Lectures and laboratory exercises are conducted in the Digital Processing and Geographic Information Systems (DIP/GIS) laboratory and the Geography laboratory. These laboratories house tutorial materials on remote sensing, geographic information systems and meteorology. There are plans to keep expanding and improving on the available facilities for the benefit of the academic community.

The University Library Services Department was established in 1984 for teaching and research work for the University and the immediate community. The Department of Geography has set up a Departmental Library where the ASPRS, ESRI, and Wiley publications and PE&RS will be catalogued and available to the students and staff.

Purpose: The Kodak International Educational Literature Award was first bestowed in 1990. Its goal is to improve the quantity and quality of literature in the recipients' libraries that deals with the mapping sciences (i.e. photogrammetry, remote sensing, GIS, and related disciplines) by providing ASPRS educational materials and publications.

The Kodak International Educational Literature Award includes US$ 350 worth of books, manuals, or other literature published by ASPRS; a five-year subscription to PE&RS, proceedings of the Annual Conference and Fall technical meetings for five years; one free registration to the Society's Annual Conference at the time of receiving the award for a member of the institution to whom the award is being given; and a hand-engrossed certificate.

The award has been augmented by a generous grant from the Environmental Systems Research Institute (ESRI) of the complete ESRI Press Library collection, selected titles from the John Wiley and Sons, Publishers, catalogue and conference proceedings from the Geospatial Information Technology Association (GITA).

Past Award Recipients

1990 - University of Lagos, and Universidade Federal de Vicosa
1991 - Cairo University, and Universidade de Concepcion
1992 - University of Malawi Polytechnic, and Sung Kyum Kwan University
1993 - University of Nairobi, and Moi University
1994 - Universidade Estudual Paulista-UNESP, and the University of Botswana
1995 - University of Ljubijana, Slovenia
1996 - Universidade do Amazonas
1997 - Indian Institute of Technology, Bombay, India
1998 - No Award given
1999 - The Institute of Optoelectronics, Bucharest, Romania
2000 - State University of West-Center of Parana, Brazil
2001 - Unique Charity Institute of Geography, Ado-Ekiti, Ekiti State, Nigeria
2002 - The University of the Witwatersrand, Johannesburg, South Africa
2003 - The Institute of Surveying and Mapping, Diyatalawa, Sri Lanka

Report on Workshop 'Advance of Photogrammetry, GIS & RS in Lithuania'

Vilnius, Lithuania from 1-2 June 2004

By Assoc. Prof. Dr Birute Ruzgiene, Chair of Lithuanian Committee for Photogrammetry and Remote Sensing, Dept. of Geodesy and Cadastre, Vilnius Gediminas Technical University,
E-mail: Birute.Ruzgiene@vtu.ap.lt

The workshop "Advance of GIS, Photogrammetry and Remote Sensing in Lithuania" was held on June 1-2, 2004. The meeting was organised by Lithuanian Committee for Photogrammetry and Remote Sensing and sponsored by the Lithuanian private Company HNIT BALTIC. An honourable guest ISPRS president Prof. John C. Trinder par-

ticipating in the meeting supported the Lithuanian specialists to advance in the field of Photogrammetry and Remote Sensing.

The scope of the workshop was to address achievements in Digital Image Processing, Geographic Information Systems Development, etc. There was managed to collect together specialists from the main Lithuanian Institutions that are involved in Photogrammetric mapping as well as scientists from Universities and Institutes. Experience, activity and representations were made from HNIT BALTIC Company, Kaunas Aerial Geodesy Institute, State Forest Management Institute, Vilnius Gediminas Technical University Geodesy Institute and CAD&F Company.

Prof. John C. Trinder made presentation on new technologies gathering geospatial data.

Presentation of ISPRS President Prof. John Trinder.

During the meeting.

Discussions.

Visit to "Europe Geographical Center".

Prof. J. Trinder together with President of Lithuanian Association of Surveyors Vaidotas Sankalas (on the right) and Prof. Albinas Zalnierukas on the "Europe Geographical Center".

During the meeting there were held discussions on "Where is the true Geographical Center of Europe". The Geographical Center of Europe (GCE) was defined by the French National Institute of Geography in year 1989. The GCE was defined by the geographical coordinates 54°54' latitude and 25°19' longitude and is located about 25 km north from Vilnius.

In the occasion of entering EU a monument was build at the location of GCE this year and this place is being developed as tourism attraction. According to the Law on the Protected Areas the territory around the GCE was approved as cartographical reservation, what is a unique case in Lithuania.

The location of GCE is becoming a sensitive issue in many countries and drawn attention even from the politicians. The question "Where is the true Geographical Center of Europe" needs to be answered. Profession representatives have to take responsibility in helping to find a right answer to this question.

Therefore, we kindly invite the international professional organisations of geographers, cartographers, surveyors, photogrammetrists and remote sensing specialists to support the initiative aiming to held scientific discussion on the topic "Where is the true geographical center of Europe". Conclusion could be made weather to acknowledge or disagree on location of the geographical center of Europe.

Report on Geomatica 2004 Conference

Havana, Cuba from 11-15 May 2004

By John Trinder, President, ISPRS Council 2000-2004, E-mail: j.trinder@unsw.edu.au

The Cuban Geomatica 2004 Conference was held in Havana as part of 'Informatica 2004'. Informatica 2004 is an annual conference sponsored by the Ministry of Information and Communications. On this occason it comprised 7 separate conferences, Geomatica being on of them. Over 1100 people attended the Informatica conference with more than 30 countries represented, while approximately 250 people attended Geomatica. The Ministry made a major contribution to the conference with the Deputy Minister chairing the organising committee and the Minister opening the conference. International visitors were also invited to dine with the Minister on one occasion.

I was given an official invitation to attend the conference, present a keynote paper during the opening of Geomatica session and present lectures at the workshop on digital photogrammetry. The President of ICA and the director of the IHO were also in attendance and made similar contributions.

The Geomatica conference commenced with workshops on standards of digital spatial data, given by ICA, hydrographic electronic charting presented by IHO, and digital photogrammetry presented by a number of speakers including myself. In the 3 days of technical sessions of the Geomatica 2004, more than 70 papers were given on such topics as education and training, technologies for capturing and processing of spatial data, spatial data infrastructure, applications of geomatics in society, application of geomatics in agriculture, GI data on the internet, geomatics applied to environmental studies. Finally a round table session was held on electronic navigation charts - ENC - and a panel discussion on trends and opportunities in digital photogrammetry and remote sensing. The overall quality of the papers was good. It is clear that Cuba is rapidly adopting the new technologies in geomatics and using them to good advantage

During the conference I visited GEOCuba Enterprise Group, a government enterprise, which has as main function, among others, to produce and update maps in Cuba. GEOCUBA commenced operations in the 1950s. It has some of the best photogrammetric equipment in Latin America. Currently existing maps are being digitised and updated where required for the NSDI. Initial data capture is based primarily on digital photogrammetry, using DIAP from Canada and the Ukrainian DPS digital workstations, which have a split screen and binocular observing system. Analogue photogrammetry is still used in divisions outside Havana. . Photos are acquired by an RC8 camera and scanned with a Vexcel scanner. The whole country was photographed at 1:30,000 4yrs ago. Havana City is photographed at 1:3500 for mapping at 1:500. Close range photogrammetry is used for mapping of heritage buildings for preservation and restoration. In general Cuba is progressing well in its task of providing the spatial infrastructure for the country.

The next Geomatica conference will be held again in 2006. Attendance of ISPRS would certainly be welcomed by Cuba.

Report on the 4th International Symposium on Mobile Mapping Technology (MMT'2004)

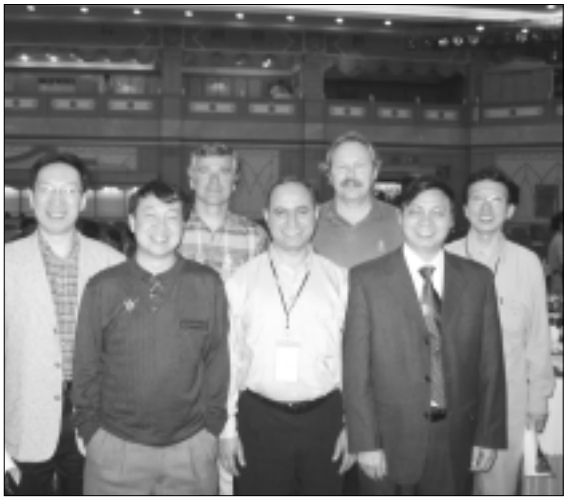
Kunming, China from 29-31 March 2004

By Prof. Vincent Tao, Conference Chair, MMT 2004 Symposium, Canada Research Chair in Geomatics, York University, Toronto, Canada tao@yorku.ca

The 4th International Symposium on Mobile Mapping Technology (MMT 2004) was held on March 29-31, 2004 in Kunming, China. This was the premier event sponsored jointly by working groups from ISPRS, FIG and IAG, including ISPRS Com I, WG II/1, WG II/2, WG IV/2 and WG V/5, FIG WG 5.3 and IAG WG SC4.1.

Symposium Overview

The conference was hosted by Kunming University of Science and Technology, China, and co-organized by York University (Canada), Wuhan University (China), Ryerson University (Canada), Ohio State University (USA), and University of Calgary (Canada). Financial support for the conference was provided by the following sponsors: Optech Inc, Canada; Leador Spatial Ltd, China; Applanix, Canada; and IGI mbH, Germany. Wuhan University contributed $50,000 Chinese Yuan, the largest donation for this symposium. The Symposium gathered 130 participants from over 20 countries. During the 2.5 days, there were 80 presentations separated into 15 technical sessions, one



MMT'2004 organising committee members (from front left: Vincent Tao, Naser El-Sheimy and Jianya Gong, and from back left: Jonathan Li, Charles Toth, Mike Chapman, Gang Deng.

keynote session and three panel sessions. In addition to it's core activities, the conference also organised an exhibition.

MMT'2004 offered a great forum for researchers, developers, system integrators and commercial system vendors in the mobile mapping community. Advancement of Mobile Mapping technology has contributed to many aspects of Geomatics, surveying and mapping. The symposium reflected the latest developments in mobile mapping technology, ranging from algorithm research to system development; from land-based to airborne systems; from direct georeferencing to sensor integration; from mobile data collection to dynamic GIS management; and to mobile sensor networks. The conference addressed the following themes:

- Integration of navigation and mapping sensors
- Advanced and/or low-cost navigation and positioning techniques
- Wireless location techniques for mapping
- Direct georeferencing algorithms and systems
- Multi-sensor systems (Land-based, airborne, shipborne)
- Lidar and IfSAR mapping systems
- Multi-sensor data fusion techniques
- Automatic feature extraction and object reconstruction
- Mobile image sequence analysis
- Mobile GIS, distributed databases and geo-computation
- 3D mobile mapping and GIS integration applications
- Internet or wireless location-based services

The symposium commenced with welcome notes from distinguished guests. Mr. Wu Xiaoqing, Vice Governor of Yunnan Province, Prof. Zhou Rong, President of Kunming University of Science and Technology, and Prof. Li Qingquan, Vice President of Wuhan University. The Keynote session and three panel sessions highlighted the event. Drs John Trinder, Deren Li and Jun Chen offered

MMT 2004 invited speakers for technology and industry panels.

excellent keynote speeches. Our invited technical panel, Drs. Vincent Tao, Naser El-Sheimy and Charles Toth, delivered an excellent review of mobile mapping research, development, and future trends.

151 papers are included in the conference proceedings (CD). The selected conference papers will be peer-reviewed and edited for a new ISPRS book series, entitled "Mobile Mapping Technology for the New Mapping Era" published by an authorised publisher. About 20 papers along with several invited papers will be included in this book.

Kunming, the "city of eternal spring" is located in Yunnan, one of most beautiful provinces in China. It is home to 25 of China's 56 minority ethnical groups. Kunming has been ranked as one of the top tourism sites in China by the International Authority. Through conference events, participants had a chance to explore the world-class landscape and both historic and contemporary facets of Chinese lifestyle and tradition.

The symposium banquet, one of the most magnificent 'dancing' dinners in China, at Kunming World Horti-Expo Garden.

Mobile Mapping Technology: Where Are We Heading ?

Mobile mapping refers to a new means of mapping based on dynamic mobile platforms such as those mounted on vehicles and aircrafts, etc. Nevertheless, the term 'mobile mapping' has never been clearly defined due to the rapid development of this field. It is understood that mapping is essentially mobile, for instance, aerophotogrammetry. So, what makes mobile mapping unique?

MMT 2004 Symposium Opening Session.

Photo taken from MMT 2004 exhibition: LD 2000 mobile mapping system developed by Leader Spatial Ltd., China.

The research on mobile mapping dates back to the late 1980's in North America. It was mainly driven by the need for highway infrastructure mapping and transportation corridor inventory. Video cameras along with navigation and positioning sensors, e.g., GPS and inertial devices, were integrated and mounted on a mobile vehicle for mapping purposes. Objects can be measured and mapped from images that are directly georeferenced by the navigation and positioning sensors. In early days, the research community had used various terms to characterise this exciting research area. I recall that I had changed the title of my thesis proposal several times when I was doing my PhD studies at the University of Calgary since there was no adopted term at that time. Terms like mobile surveying, dynamic mapping, etc. appeared in many publications. Until 1997, the first Mobile mapping symposium was held at the Center for Mapping at Ohio State University. Mobile Mapping became a widely accepted term by both the research and development community.

With the development of direct-georeferencing and multi-sensor integration, the technology has matured to an operational level, with a number of commercial systems developed and in operation. There are many private companies who are offering commercial mobile system development, integration and services.

Photo taken from MMT 2004 industry panel session.

We have experienced impressive development in airborne digital camera systems, Lidar and IfSAR mapping systems. It is believed that mobile mapping is a powerful technological framework that leverages this fast growing area. Mobile mapping is really about integration of direct-georeferencing, multi-sensor integration, data fusion, information extraction and mobile data management and services. It is expected that the joint organization with ISPRS WGs on Lidar and IfSAR mapping can be arranged in the future to strengthen development of the mobile mapping framework.

From a data acquisition viewpoint, clearly, direct geo-referencing has contributed significantly to the development of mobile mapping systems. The MMT symposium series has built a strong vehicle linking researchers and developers from ISPRS, FIG and IAG communities. One of the pertinent issues discussed at this conference related to whether direct-georeferencing technology has matured. From a user perspective it seems airborne direct-georeferencing systems are more mature than those of land-based systems in terms of technical reliability. Partially, frequent GPS signal blockage has made the GPS/INS integration very difficult in urban environments for land-based mobile mapping applications.

The conference has discussed key barriers relating to commercial development and deployment of land-based systems. Compared to aerial mapping, which has been practised for years, land-based mapping systems have not yet achieved large market acceptance. Possible reasons can be summarised as: (a) the technology is primarily developed for transportation applications not for conventional mapping community. It would take a longer time for market penetration. It also takes time to educate a user community that is not familiar with this type of mapping technology; (b) lack of mapping standards may prevent adoption of this technology for large-scale applications; (c) the performance and accuracy of mobile mapping systems vary greatly depending on system configuration; (d) system cost and maintenance can be expensive for early adopters. Despite these barriers we have seen increasing demands for land-based mobile mapping for transportation and highway mapping applications. Some vendors offer road image services or a pay-per-click model to attract customers and to lower market entry for this technology. Instead of owning a system or a software package, the customer can either purchase the road image data collected by the mobile mapping company and only pay for the objects collected from images (pay per click).

Compared to previous MMT symposiums, increasing numbers of papers are being presented on mobile mapping data management and services, as well as mobile GIS. In fact, mobile mapping is used often in Asian communities, with a focus on mobile field data collection or mobile GIS. Clearly, with the increasing technical maturity of mobile mapping systems, by making use of the collected data, mobile mapping services would become more important in this process. One can envision that the future of mobile mapping 'systems' is mobile mapping 'services'.

The next symposium on Mobile Mapping Technology will be held in Padua, Italy 2005, hosted by CIRGEO (Interdepartment Research Center for Geomatics) University of Padua. Hopefully more answers will have emerged by then.

For more information: http://www.geoict.net/mmt2003/index.htm

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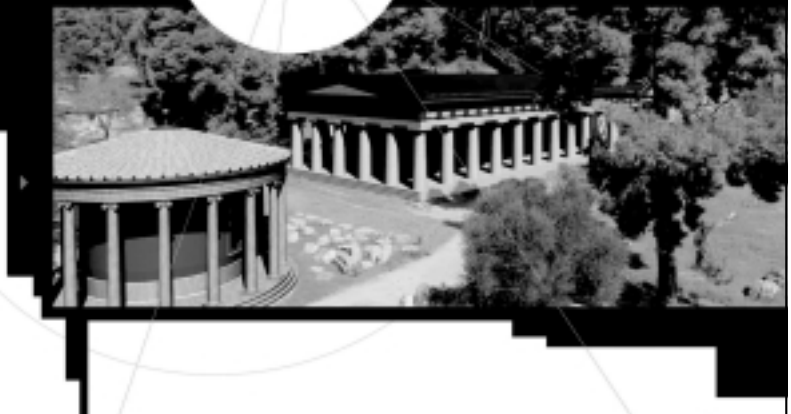

GITC

P.O. Box 112, 8530 AC Lemmer, The Netherlands
Tel.: +31-514-561854, Fax.: +31-514-563898
E-mail: mailbox@gitc.nl, Web-site: www.gitc.nl

www.gitc.nl