



The ISPRS Foundation Requests Your Support

**Assistance to the Photogrammetry, Remote Sensing and
Spatial Information Sciences**

Annual Report 2012



www.isprs.org/foundation/

The ISPRS Foundation at a Glance

The ISPRS Foundation is an independently registered philanthropic entity that has been established SOLELY for providing financial assistance to advance the benevolent purposes of the International Society for Photogrammetry and Remote Sensing (ISPRS), an international, non-profit, non-governmental organization (NGO) composed of more than 181 societies and organizations from more than 120 countries. The Foundation is designed to provide a variety of grants annually and is enabled to foster linked relationships with other foundations and trusts established in the ISPRS Member countries and regions for sustaining international sharing for the common good of the sciences, technologies and disciplines represented by the ISPRS. The Foundation is required to spend less than 2% of donated funds for its administrative costs. At least 98% of every donation goes to grantees!

The ISPRS Council annually assesses needs and submits requests for support to The ISPRS Foundation. Based on availability of funds, The Foundation Trustees qualify the merits of the requests and are the approval authority. Multinational committees (no more than two committee members may be of the same nationality) support the Trustees in evaluating the requests.

To fulfill its aim, The ISPRS Foundation raises, invests and grants funds to provide assistance to qualified individuals and organizations around the world.

The ISPRS Foundation programs benefit the international community by enabling improved education, training and tools to be shared with the less privileged, especially those in emerging markets and regions. In addition to recognizing and rewarding outstanding candidates and achievements, The Foundation promotes and facilitates international cooperation and collaboration by supporting research initiatives for advancing the capabilities and beneficial applications of the sciences, technologies and disciplines of the photogrammetry, remote sensing and spatial information sciences.



The primary aim of The ISPRS Foundation (TIF) is to support Young Researchers

Contents

| | |
|---|----|
| The ISPRS Foundation at a Glance..... | 1 |
| Message from The ISPRS Foundation Board of Trustees Chairman..... | 3 |
| Message from The ISPRS Foundation Operations Officer | 4 |
| Message from The ISPRS Foundation Finance Officer | 5 |
| New Board Members | 6 |
| Report of The ISPRS Foundation to the ISPRS General Assembly | 8 |
| 2012 ISPRS Melbourne Congress TIF Travel Grant Recipient Report..... | 9 |
| Awards Funded by The ISPRS Foundation..... | 14 |
| Main Decisions of The ISPRS Foundation Board of Trustees Meeting at the ISPRS Melbourne Congress | 17 |
| TIF Fundraising Dinner at the 2012 ISPRS Congress in Melbourne | 18 |
| The ISPRS White Elephants Dinner at the 2012 ISPRS Congress in Melbourne | 19 |
| Fundraising for The ISPRS Foundation by the Private Sector..... | 20 |
| TIF Financial Overview 2012..... | 25 |
| The Trustees of The ISPRS Foundation..... | 26 |

Message from The ISPRS Foundation Board of Trustees Chairman



Welcome to the Annual Report 2012. Another successful year for The ISPRS Foundation (TIF) passed by which was highlighted by the ISPRS Congress in Melbourne, Australia. The ISPRS Congresses always attract a large number of people - the 2012 Congress registered 1941 participants coming from 78 countries and 78 exhibitors, who presented most recent hardware, software and workflows for Photogrammetry, Remote Sensing and related Spatial Sciences. More than 1700 abstracts were submitted, from which 1000 papers could be published and discussed in oral and poster presentations. What a success!

The ISPRS Foundation (TIF) was established during the ISPRS Congress in Istanbul and since then has been active in providing financial assistance for ISPRS affairs. In comparison with other international foundations it is still young and therefore our financial resources are limited. But so far TIF has successfully managed to increase fund raising and to provide grants to assist qualified individuals and organizations around the world. Furthermore it supports all kinds of innovation and knowledge dissemination for advancing the sciences and technologies of ISPRS. TIF is offering several awards, such as awareness education, distance learning, exchange programs, fellowships, grants, internships, preservation and archiving, research initiatives, scholarships, standards projects, tools and literature and travel grants. TIF finances are regulated by Bylaws according to regulations for exemption from US Federal and other taxation. The Bylaws provide for controlling the outflow of annual grant funds and therefore restrict the Annual Amount. For example, the amount spent in 2012 was in total USD 40,552. The TIF Board of Trustees approve every finance item to be covered by TIF.

The Annual Report 2012 continues the style in offering a comprehensive issue as compared to the reports given at the time of its launching period. We would like to share the positive feedback of the ISPRS scientists and grantees with you, our past and future sponsors. But we are in need of more donations from individuals, institutions and companies. May this report encourage you to continue your efforts for philanthropic issues, especially for the benefit of Photogrammetry, Remote Sensing and Spatial Information Science. Every donation is highly appreciated. In these times of financial struggle, a very low range of interest rates for capital funds, it is even more important for let the TIF capital stock to grow. We, the TIF Board of Trustees have given a clear sign during the Melbourne meeting, that this must be an important aspect of TIF policy for the next years to come.

Dieter Fritsch

Stuttgart, December 2013

Message from The ISPRS Foundation Operations Officer



Welcome to the 2012 Annual Report of The ISPRS Foundation. As Operations Officer I am responsible for the day-to-day operations of the Foundation, which include: receipt of correspondence; preparations and minute taking of The ISPRS Foundation Board of Trustees meetings; preparation of announcements of new Foundation grants, receiving applications, transmission of the applications to the Grants Evaluation Committee and notifying the applicants of success or otherwise; gaining approval for expenditure from the Board of Trustees; Trustee correspondence; and overall management of the Foundation.

We often receive ad hoc requests from individuals for funds to travel to various conferences and in many cases we have to refuse these requests. The reason for this is that The ISPRS Foundation provides funding for travel to meetings following recommendations from the ISPRS Council. If the ISPRS Council does not recommend providing support for travel to a particular conference, then The ISPRS Foundation cannot act unilaterally to fund travel grants to that conference. As well, the ISPRS Foundation has limited funds and cannot fund travel to all worthy meetings. The ISPRS Council's first priority is to fund travel grants to ISPRS sponsored events.

The Foundation has been successful in funding travel grants to deserving individuals from developing and reform countries since its inception in 2004. However, to continue funding such activities, the Foundation depends on donations from individuals, corporations and institutions. Please consider donating to The ISPRS Foundation on a regular basis. It is only by continued financial support that The ISPRS Foundation can continue to successfully fund deserving individuals from developing and reform countries to improve their abilities to work efficient in the fields of photogrammetry, remote sensing and spatial information sciences.

John Trinder

Sydney, December 2013

Message from The ISPRS Foundation Finance Officer



Under the guidance of long standing Finance Officer, Lawrence Fritz (USA), in 2012 I continued my transition to take over the duties of The ISPRS Foundation (TIF) Finance Officer. In this position I am a member of the TIF Executive Committee and work closely with the Chair of the TIF Board of Trustees (Dieter Fritsch) and TIF Operations Officer (John Trinder). Although our Skype meetings can be challenging to schedule due to our geographic distribution from Australia to Germany to the USA, we confer regularly to further the TIF goals of soliciting donations and dispersing funds for travel grants, summer schools, workshops and research initiatives. As Finance Officer, I manage the TIF bank account with Charles Schwab Bank, deposit donations, reinvest all dividends and distribute funds to the recipients of the various grants, awards and workshops. The TIF Schwab accounts include a cash account that serves as flow through for incoming and outgoing funds and four to five investment accounts. Total assets at the beginning of 2012 were USD 190,915 and at the end were USD 170,206 with over USD 40,552 distributed to mainly to individuals for awards and travel grants associated with the August 2012 Melbourne Congress.

The ISPRS Foundation depends on donations as its major source of income and we are extremely fortunate to have 4-year pledge totaling CHF 20,000 from Leica Geosystems AG, Switzerland that is designated for use as unrestricted grants. Since 2010, Leica has annually donated CHF 5000 and as we approach the end of the term for this pledge, Leica has agreed to extend their pledge for an additional 4-year term. TIF is truly grateful for this generous level of support and has designated Leica Geosystems as a Platinum TIF Donor. Additionally, the China State Bureau of Surveying & Mapping (SBSM) began donating funds for the Professor Wang Zhizhou Award that is granted every four years at the ISPRS Congress. Initiated in 2008 at the Beijing, China Congress, The SBSM has pledged CHF 7500 to fund the Zhizhou Awards in 2012, 2016 and 2020. In 2012, the SBSM donated USD 2,642 to support the Wang Zhizhou Award that was presented to Professor Wenzhong Shi from Hong Kong Polytechnic University. Donations are sometimes associated with the registration for ISPRS sponsored conferences. Melbourne Congress Director, Professor Cliff Ogleby, and members of the Melbourne Local Organizing Committee provided TIF with nearly USD 5,000 from Congress registration donations combined with a portion of the dinner ticket for the Congress TIF fund-raising dinner. Finally, but most importantly, individuals from around the world are dedicated to supporting TIF and providing funds especially for students and individuals from developing countries to participate in ISPRS events. In 2012, Professor Ammatzia Peled, University of Haifa, Israel, was most generous in his donation of USD 600 to cover his long-term pledge to TIF. In addition, nearly USD 1,600 of the 2012 annual pledges has been received to-date from 12 members of the ISPRS White Elephant Club. These donations, along with over USD 10,000 in dividends from investment accounts, provided the nearly USD 30,000 in 2012 income for TIF.

Marguerite Madden

Athens, December 2013

New Board Members

The TIF Board of Trustees comprises 11 members as listed in the last page of this report. As the ISPRS Council members are always newly elected by the ISPRS General Assembly at the ISPRS congress Ian Dowman and Mike Renslow had to be replaced by two new Council members.

ISPRS President Professor CHEN Jun and ISPRS Treasurer Professor Jon Mills are the two members of ISPRS Council who have joined The ISPRS Foundation Board of Trustees. In addition, Akihiro Yamaura's term has expired and he has been replaced by Professor Li Deren from China.



Professor CHEN Jun

Chen Jun obtained his qualifications in photogrammetry and remote sensing at the Wuhan Technical University of Surveying and Mapping (WTUSM) and at the National Geographic Institute of France during 1981-1982. In September 1983, He became a faculty member of WTUSM, where he progressed to professor and Ph.D. supervisor. He was the executive director of the National Key Laboratory of Information Engineering on Surveying, Mapping and Remote Sensing (LIESMARS) during the period of 1990-1995. At the end of 1995, he joined the National Geomatics Center of China (NGCC) as its deputy president. He is currently responsible for the development of global land cover mapping program at the National Geomatics Center of China. He has previously served as ISPRS Secretary General (2008-2012), Congress Director (2004-2008) and Technical Commission President (2000-2004).

His research interests include: Geographic Database Update; Voronoi dynamic spatial data models; spatio- temporal data model; three-dimensional spatial data model; GIS spatial relationship; data and sharing services of multi-dimensional geospatial fundamental framework; spatial decision support system; and surveying development strategies.



Professor Jon Mills

Jon Mills is Professor of Geomatic Engineering and the current Head of the School of Civil Engineering and Geosciences at the University of Newcastle in UK. He leads the school's research into photogrammetry and laser scanning, developing optimised photogrammetric and laser scanning solutions for measurement, mapping, monitoring and parameterisation of engineering models. Jon's research has been disseminated through the publication of over 130 papers in refereed journals, conference proceedings and professional periodicals. Jon Mills is a Chartered Surveyor with experience in the provision of individually tailored CPD courses and specialist consultancy projects in geomatics related subjects. e.g. specifications,

professional guidance and short courses. He has previously served as President of ISPRS Technical Commission V on close range image measurement techniques (2008-12), and Chair of ISPRS Working Group I/4 on airborne digital sensor systems (2004-08). Jon is a Fellow of the Higher Education Academy (FHEA), Member of the Royal Institution of Chartered Surveyors (MRICS), Fellow Chartered Institution of Civil Engineering Surveyors (FCInstCES) and Member of the Remote Sensing and Photogrammetry Society. He has had industry experience as a chartered Surveyor in the provision of individually tailored CPD courses and specialist consultancy projects in geomatics related subjects. e.g. specifications, professional guidance and short courses.



Professor Li Deren

Deren LI is scientist in photogrammetry and remote sensing, with dual membership of both the Chinese Academy of Sciences and the Chinese Academy of Engineering, member of the Euro-Asia International Academy of Science, and honorary doctorate of ETH. He is Professor and PhD supervisor at Wuhan University, Vice-President of the Chinese Society of Geodesy, Photogrammetry and Cartography, Vice-president of Hubei Association for Science and Technology (HAST), Chair of the Academic Committee of Wuhan University and the State Key Laboratory of Information Engineering in Surveying, Mapping and Remote Sensing. He is an Honorary Member of ISPRS. From 1990 to the present Deren Li has concentrated on research and education in geo-spatial information science and technology represented by remote sensing (RS), global positioning system (GPS) and geographic information systems (GIS). His recent main contributions include: 1) Development of GeoStar, an Object-Oriented GIS software Systems with 12 related softwares; 2) Development of MMS LD2000, a mobile mapping system with GPS/INS, CCD and GIS; 3) Set up the theory of generalized and specialized spatial information grid and using these theory to develop a Geo-spatial grid for urban management and service of City Wuhan; 4) Extension of DEM, DOQ, DLG, DRG with DMI (Digital Measurable Images) and Set up Image City-Wuhan on Web (map.wuhan.net.cn), a real image supported LBS system; 5) Contribution to the Chinese Space Program and the activities of photogrammetry and remote sensing in Asia.

Since 1989, Deren Li has supervised 155 PhD students and 11 post doctoral candidates. And he has published over 615 papers and 9 books. He won three prizes of the National Great Invention Award, three prizes of the National Science and Technology Progress Award, one prize of the National Excellent Textbook Award and one prize of the Award of the Excellent Educational Achievements.

Deren Li served as President of ISPRS Technical Commissions III and VI from 1988-1992 and 1992-1996 respectively, worked for CEOS in 2002-2004 and was the first president of Asia GIS Association (2003-2006). He received the ISPRS Samuel G. Gamble Award at the ISPRS XXI Congress in 2008 and received an award of appreciation and recognition of the outstanding contribution to the success and achievements of the MOST/ESA Dragon Programme 2004 to 2007.

Report of The ISPRS Foundation to the ISPRS General Assembly

By Dieter Fritsch

On Monday morning, August 25, 2012 the ISPRS Foundation gave its quadrennial report to the ISPRS General Assembly. The Chairman of the Board of Trustees, Professor Dieter Fritsch, introduced with some general remarks about the foundation: It is managed by a Board of Trustees, currently 11 highly esteemed persons from academia, international organizations and industry, two are seconded from the ISPRS Council. The BoT is responsible for fund raising, investment, management and approval for grants. The day-to-day operations are managed by the Executive Committee, comprising the chair, the operations officer and the finance officer. TIF decisions are made by electronic voting - the BoT meets biennially in even numbered years, other meetings are held electronically. The foundation is assisted by four committees: the Marketing and Promotions Committee, the Grants Evaluation Committee, the Large Grants Procurement Committee and the Audit Committee.

Finances are regulated in the Bylaws according to regulations for exemption from US Federal and other taxation – the bylaws provide also for controlling the outflow of annual grants. Annual operation costs must be less than 2% of the annual outflow. All operations of TIF are dependent on donations from individuals and companies. The Dutch Society's contribution to the TIF funds identified as 'Trust Fund Amsterdam 2000' has been expended and was closed in 2010.

For the reporting period 2008-2012 the following grants were given by TIF: 2008 in total USD 24,236, mainly as Travel Grants for the 2008 ISPRS Beijing Congress, 2009 in total USD 23,928 for travel grants and two Science Initiatives, 2010 in total USD 39,475 for travel grants and the two Science Initiatives which started already 2009, 2011 in total USD 38,049 for travel grants and the two Science Initiatives, and 2012 in total USD 34,905 for travel grants for the 2012 ISPRS Melbourne Congress and the two Science Initiatives. In total an amount of **USD 160,593** could be offered.

The quadrennial report was summarized saying that the ISPRS Foundation is well underway. A first printed (hardcopy) and softcopy illustrated version of the Annual Report 2011 was given to all GA Delegates. More than 102 grants have been made during the period 2008-2012, and finally, all members of ISPRS are encouraged to seek donors for the ISPRS Foundation. This is an ongoing activity and will ensure continued success of TIF.

2012 ISPRS Melbourne Congress TIF Travel Grant Recipient Report

By Marguerite Madden

TIF Travel Grants totaling USD 26,600 were provided for 12 grantees from 11 countries to attend the ISPRS Congress in Melbourne. The following reports and testimonials document the value of this opportunity to the academic and professional careers of the recipients.

Dear Prof. Madden,

Thank you for your email and also for the travel grants from the ISPRS Foundation. I had a memorable trip in Melbourne at the Congress. With help from the ISPRS Foundation, I was able to present my work to researchers from all over the world. I received very helpful comments in there. With a tremendous number of participants, ISPRS is so successful and influential. As a PhD student at the beginning of my academic career, it is extremely helpful for me to attend the congress. I met a few people doing research in very close fields. I exchanged my ideas with them. And being able to listen to many great presentations from senior researchers, I expanded my scope of knowledge and got a better understanding of the principles. It's a very informative and inspiring experience.

Thank you again for the help from ISPRS Foundation !

Best regards,

Xun Li

PhD Candidate
School of Surveying & Geospatial Engineering
The University of New South Wales
Sydney 2052 AUSTRALIA
T: 02 9385 4185 | E: xun.li@student.unsw.edu.au

Dear Marguerite,

The Grant provided to me by the ISPRS Foundation provided me a great possibility to participate at the Congress. I met a lot of new people here and had many interesting scientific discussions with strong researchers in my scientific area. Also I had some very important position proposals which definitely changed my career. I'm very grateful to the ISPRS Foundation for this support which made real my visit of the Congress.

Kind regards,

Alexander

Alexander Velizhev [avelizhev@graphics.cs.msu.ru]

The ISPRS Congress 2012 held in Melbourne was my first attendance in an international event of the Remote Sensing (RS) community. It is my pleasure that I had the opportunity to take part in such a wonderful festival of the RS world which enabled me to benefit greatly from fructuous oral presentations and interactive sessions. In addition, presenting my own research paper in an international platform and discussion with other participants allowed me to establish myself and to gain new insight into possible research interests. The most prominent and stimulating benefit of the congress was making friendship with young and also experienced scientists of photogrammetry and RS domain across the globe. So that I have got more involved in ISPRS Student Consortium (SC) activities and as a result now I am acting as a board member of Asian Association on Remote Sensing Student Group (ASG).

The XXII ISPRS Congress in summary brought me lots of amazing and outstanding experiences, motivation and positive pulses for future researches and of course making valuable friends. Hereby, I would like to take this opportunity to appreciate The ISPRS Foundation (TIF) for the chance provided me to receive a Travel Grant, which enabled me to make the trip to Melbourne.



Milad Niroumand Jadidi

MSc in Remote Sensing Engineering
Department of Photogrammetry and Remote Sensing Engineering
Geomatics Engineering Faculty
K.N. Toosi University of Technology
Tehran, Iran
E: milad.niroumand@yahoo.com
T: +989144920228

W: <http://sina.kntu.ac.ir/~niroumand>

The motivation for participating in the ISPRS Conference 2012 was its relevance to my field of study and it is an important event in the calendar for scientists in the field of RS and GIS. I found the presented work really interesting. It helps me to get insights into the current research activities in the field of mapping and monitoring of land cover. The active and healthy participation from scientists from all over the world greatly contributes to my confidence.

Regards,
Amjad Ali

Faculty of Geo-Information Science and Earth Observation (ITC)
University of Twente
Enschede, The Netherlands
Email: a.ali-1@utwente.nl
Email2: amjadalee65@yahoo.com

Dear Marguerite,

Attending the ISPRS in Melbourne was not possible without the grant that I got from the conference as a PhD Student from a third world country (Iraq).

Since the ISPRS Congress is held every 4 years, it happened one time for a PhD student in this field to attend. It is a great opportunity for the student to widen his knowledge and meet with scientists from all over the world.

I participated with my peer reviewed paper "Optimal camera network design for 3d modeling of cultural heritage" in Commission III.

<http://www.isprs-ann-photogramm-remote-sens-spatial-inf-sci.net/I-3/7/2012/isprsannals-I-3-7-2012.pdf>

This paper was the start to improve my research and to publish my work in the Journal of Cultural Heritage.

<http://www.sciencedirect.com/science/article/pii/S1296207412001872>

The exhibition was also something that I attended for the first time where many international companies present their products in this field with many interesting offers.

I got the chance to buy the Manual of Photogrammetry with a very good price which is not possible elsewhere. In my turn, I prepared some contacts between my home university in Iraq and one of the Chinese companies to buy some products for the lab training.

Finally, I attached some of my photos taken in Melbourne. Thanks and hope this information is useful.

Kind regards,

Bashar Alsadik

b.s.a.alsadik@utwente.nl



Dear Dr. Madden,

I am very thankful to the ISPRS Foundation for providing me with a travel grant to attend the XXII International Society for Photogrammetry & Remote Sensing Congress 2012, (ISPRS-2012) held in Melbourne during 25 August to 1 September, 2012. Without this travel grant it was quite difficult for me to meet the huge expenses of registration, travelling and lodging.

I presented (oral) my double blind peer reviewed researcher paper on "Super-Resolution of Hyper spectral Images using Compressive Sensing based Approach" in (GROUP-VII/3) Paper number: 0637 as a part of my PhD Research work.

During the Congress I got a chance to meet eminent researchers in the field of remote sensing.

The oral presentation and discussion provided me an opportunity to share my ideas with many international researchers and professors already working in the hyperspectral domain. Keynote address and Invited talks during the conference were very helpful in understanding the current research in the areas of my interest that motivated me to enhance my research skills. Visiting the exhibition center was really a wonderful experience for me to meet the vendors of different companies demonstrating the new tools in my area of researcher, as well as in other areas of remote sensing. This had inspired me to setup a laboratory using these kinds of tools in my institute for experimental research in the field of spectroscopic analysis.

Over all, the visit to ISPRS was very fruitful in terms of getting expert reviews on our paper, useful interactions with other researchers, exposure to recent innovations, ideas and developments, and formulation of new problems for further investigations, to contribute to the international society.

A few photos of the Congress are also attached herewith. Once more, thank you very much to "ISPRS Foundation" for promoting researchers by providing financial assistance to attend such kind of conferences.

Regards,

Rakesh C. Patel

patel_rakesh12@yahoo.co.in



Awards Funded by The ISPRS Foundation

By John Trinder and Marguerite Madden

The Fred Doyle Award

The ISPRS White Elephant “Knowledge Transfer” Committee and the ITC Foundation decided in 2010 to honor the exemplary career of the late Frederick J. Doyle as a role model to inspire followers and newcomers in the photogrammetry, remote sensing and spatial information sciences and technologies. Highlights of Fred’s illustrious career included: As a Civil Engineer on a Fulbright Fellowship he attended the International Training Center (ITC) for Aerial Survey as the first student of ITC under Rector Schermerhorn. He received the NASA Exceptional Scientific Achievement Medal for the development of the Apollo Orbital Photo Science systems; was principal investigator on Landsat and Skylab; and led the scientific development and deployment of the Large Format Camera. As ISPRS President he diplomatically led international cooperation and collaboration within ISPRS and with its sister societies.

The Frederick J. Doyle Award consists of a silver medal and a monetary grant and will be bestowed every four years to an individual who, like Fred Doyle, has exhibited outstanding and sustained qualities in the profession worthy of being emulated for inspiring new engineers and scientists to the ISPRS disciplines and has made significant accomplishments in advancing the photogrammetry, remote sensing and spatial information sciences and technologies. A recipient of the award should typically be less than 50 years of age and have outstanding stature within the ISPRS community.



The winner of the first award at the 2012 ISPRS Congress in Melbourne was Christian Heipke from Leibniz University Hannover Germany. Professor Dr Christian Heipke’s experience in all aspects of photogrammetry and remote sensing at a time when geographic information systems were being developed and used operationally to integrate and analyze digital data led to his

well-rounded career in geoinformation. In his capacity as Head of the Institute of Photogrammetry and GeoInformation at Leibniz Universität Hannover, Professor Heipke has supervised more than 20 Ph.D. theses. He and his students have written over 270 scientific publications with 70 in the top peer reviewed journals of our field including *ISPRS Journal of Photogrammetry and Remote Sensing*, *Photogrammetric Engineering & Remote Sensing*, *International Journal of Geoinformation Science*, *Planetary and Space Science*, *Machine Vision and Applications*, *Geoinformation* and *Photogrammetric Record*.

Professor Heipke deserved the ISPRS Frederick Doyle Award because of his outstanding leadership in digital photogrammetry, remote sensing, image analysis, sensor orientation, GIS and computer vision.

The Wang Zhizhuo Award

The Chinese Society of Geodesy, Photogrammetry and Cartography (CSGPC) initiated the Wang Zhizhou Award in 2004 to encourage advancement of the spatial information sciences in memory of Professor Dr. WANG Zhizhuo, initiator of photogrammetry and remote sensing in China, Professor and Honorary President of Wuhan Technical University of Surveying and Mapping, a senior Academician of the Chinese Academy of Science, and elected Honorary Member of the International Society for Photogrammetry and Remote Sensing (ISPRS) in 1988.



The winner at the 2012 ISPRS Congress in Melbourne was Wenzhong Shi, Professor in GIS and Remote Sensing, Department of Land Surveying and Geo-Informatics, and Director of Advanced Research Centre for Spatial Information Technology, The Hong Kong Polytechnic University. Wenzhong Shi has proposed and developed important principles of modelling uncertainties in spatial data and spatial analyses in the last twenty years.

This can be regarded as a significant contribution to the progress and knowledge accumulation of an important field of geographic information science: data quality and uncertainty modelling for spatial data and spatial analysis. Professor Michael Goodchild comments on Wenzhong Shi's book on the principles (2009) as follows: "Both statistical and fuzzy frameworks are covered in this book, which provides a comprehensive overview of the current state of the field. At the same time it strongly reflects Wenzhong Shi's own approaches, and the very significant contributions he has made."

CATCON Prizes

At the ISPRS Congress in Melbourne, CATCON (Computer Assisted Teaching Contest) Prizes were awarded to authors of newly developed computer assisted teaching software. The main objective of the contest is to promote the development and dissemination of good, user-friendly software packages, www contents and data sets for computer assisted teaching, which preferably are non-commercial and free. Typically the prizes consist of a Gold Award (CHF 3,000), Silver Award (CHF 2,500), and Bronze Award (CHF 1,500) and a certificate. The contest is organized by ISPRS Technical Commission VI and funded by The ISPRS Foundation.

In the following the CATCon6 Award winners of the ISPRS Congress in Melbourne are presented.

First Prize Award: Landscape Visualisation on the Internet

M.P. Imhof, M.T. Cox, D.W. Harvey, G.E. Heemskerk, and C.J. Pettit, Future Farming Systems Research Division, Department of Primary Industries, Australia

The Victorian Resources Online (VRO) website (<http://www.dpi.vic.gov.au/vro>) is the principal means for accessing landscape based information in Victoria. In this contribution we introduce a range of online landscape visualisations that have been developed to enhance existing static web content around the nature and distribution of Victoria's landforms and soils as well as associated processes. Flash is used to develop online

visualisations that include interactive landscape panoramas, animations of soil and landscape processes and videos of experts explaining features in the field as well as landscape "flyovers". The use of interactive visualisations adds rich information multimedia content to otherwise static pages and offers the potential to improve user's appreciation and understanding of soil and landscapes. Visualisation is becoming a key component of knowledge management activities associated with VRO – proving useful for both "knowledge capture" (from subject matter specialists) and "knowledge transfer" to a diverse user base. A range of useful visualisation products have been made available online, with varying degrees of interactivity and suited to a variety of users. The use of video files, animation and interactive visualisations is adding rich information content to otherwise static web pages. These information products offer new possibilities to enhance understanding of landscapes and the effectiveness of these will be tested as the next phase of development.

Second Prize Award: PW, Photogrammetry Workbench

Diego Gonzalez-Aguilera, Diego Guerrero, David Hernandez-Lopez, Pablo Rodriguez-Gonzalez, Marc Pierrot, Jesus Fernandez-Hernandez, University of Salamanca, Spain

A photogrammetric workbench that encloses automation, flexibility and quality for image-based modelling has been developed, being a real low-cost alternative to laser scanning systems. On the one hand, the automation and flexibility in the management of any block of images (from vertical stereo to convergent oblique) and any type of camera (calibrated or non-calibrated), makes it possible to get closer to users and disciplines where the automation in 3D reconstruction from images is highly in demand. On the other hand, the quality and scientific rigor of the results through the corresponding photogrammetric pipeline (e.g., feature extraction and matching, image orientation, surface reconstruction, texture mapping and accuracy assessment) allows its use in more advanced and sophisticated tasks such as support for decision-making and problem-solving. Last but not least, the software is supported by simulators of computer vision and close-range photogrammetrists. These capabilities, together with a statistical quality control tool, create an excellent didactical approach for computer assisted teaching in photogrammetry.

Third Prize Award: The E-FOTO project: A (Free) Digital Photogrammetric Workstation for Educational Purposes Developed under the GNU/GPL Paradigm.

Aguilar, R.A. Brito, J.L.N.S. Badolato, I.S. Bernardo Filho, O. Coelho Filho, L.C.T. Pupin, P.A.B. Reolon, P.F. Ribeiro, J. Ribeiro, J.A. Silveira, F.J.C. Silveira, M.T. The Rio de Janeiro State University (UERJ), Cartographic Engineering, Brazil

The acronym "E-FOTO" stands for a "Free Educational Digital Photogrammetric Workstation." The E-FOTO software possess photogrammetric functionalities that allow for the development of professional photogrammetric mapping projects using data sources of aerial photogrammetric images obtained by both aerial film cameras and digital sensors. The software can be freely downloaded from the E-FOTO web page, available at: www.efoto.eng.uerj.br. The following content is available: (a) successive versions of the E-FOTO software with source code and executable modules for Linux, Windows and MacOS; (b) data and example packages; (c) Tutorials in pdf and video versions, and; (d) a guest book and a forum.

Main Decisions of The ISPRS Foundation Board of Trustees Meeting at the ISPRS Melbourne Congress

By Dieter Fritsch

On Monday afternoon, August 27, 2012 a regular TIF Board of Trustees Meeting was held in the Melbourne Congress Center facilities. The TIF BoT Chairman Dieter Fritsch welcomed the BoT members and chaired a very successful meeting. An agenda was sent 4 weeks ahead of the meeting, which was approved at the beginning and allowed for an open discussion of all its items. The minutes of this meeting in all its details is a closed document - the main decisions are shortlisted.

1. Replacement of the ISPRS Council representatives on the Board of Trustees. The new members are the ISPRS President, Professor Chen Jun and the ISPRS Treasurer, Professor Jon Mills. As given by TIF Bylaws they replace the former BoT members Professor Ian Dowman and Mike Renslow.
2. Recommendation to appoint Professor Li Deren to the Board of Trustees
3. The membership of The ISPRS Foundation Committees: the Marketing and Promotion, the Grants Evaluation and the Audit Committees were recommended
4. Recommendations on revisions to the Marketing Plan for The ISPRS Foundation led by Juergen Dold. The Foundation should market to the commercial sector that the benefits gained by recipients of travel grants from The ISPRS Foundation can also benefit the companies by increasing the number of potential new users of their products. Therefore the commercial sector is strongly urged to support The ISPRS Foundation.
5. The financial report for 2011 was approved. Regarding financial management, it was agreed that The Foundation:
 - Should aim to maintain its capital base of a minimum of \$200,000 and therefore it must increase its donations
 - Trustees should aim to boost capital by 5% per year after expenditure.
 - Should no longer fund science initiatives in future
 - Should aim to allocate \$30,000 per year

With these decisions and recommendations The ISPRS Foundation received further directions for maintenance for the next few years. It was planned to have another BoT Meeting in the ISPRS Symposia year 2014. This series of biennial personal meetings has proved successful. In between decisions and actions are taken via email communication and Skype meetings of the TIF operation officers.

TIF Fundraising Dinner at the 2012 ISPRS Congress in Melbourne

By Dieter Fritsch

A fund raising dinner for The ISPRS Foundation was held on Wednesday 29 August 2012 during the ISPRS Congress in Melbourne. A total of 28 people attended the dinner in a local restaurant in a warm and friendly atmosphere which also provided financial benefit to The ISPRS Foundation.

The TIF Board of Trustees Chairman Dieter Fritsch opened the Fundraising Dinner with a welcome address. He gave a short report about the TIF 2012 grants and science initiatives. He stated that this fundraising dinner replaces the 2008 TIF Beijing Raffle, also an idea to get extra donations for TIF, but was very time consuming to organize.

This first TIF Fundraising Dinner was a success – the guests enjoyed the excellent Australian kitchen and a selection of famous Australian white and red wines. A total of AUD 2,248 or USD 2,337 was received from this fund raising event. In addition The ISPRS Foundation received AUD 850 or USD 884 from donations from delegates at the time of their registration.



Scenes from the TIF Fundraising Dinner

The ISPRS White Elephants Dinner at the 2012 ISPRS Congress in Melbourne

By Dieter Fritsch

Another successful event contributed for TIF fundraising purposes – the White Elephant Dinner on Thursday, August 30, 2012. This dinner was organized by WE member Professor Clive Fraser in a cozy restaurant northeast of the Congress Center location. PASCO, a Japanese geospatial company, sponsored the dinner in a very pleasant and relaxed atmosphere. The WE Chairman, Professor Armin Gruen welcomed the WE members and spouses for this important social event to keep the WE network alive and to discuss new initiatives for the benefit of ISPRS. A total of 20 people attended the dinner (see photo below)

The TIF Board of Trustees Chairman Dieter Fritsch asked the WE members for their personal contributions to donate lump sums for the ISPRS Foundation. All WE members agreed to donate an annual amount of USD 150 minimum starting in 2012. This leads to an overall donation of about USD 2,500 per year, which can be used in restricted or unrestricted mode. The final decision of the WE network for a specific grant within TIF is pending.



Group photo of the White Elephants and spouses

Fundraising for The ISPRS Foundation by the Private Sector

By Dieter Fritsch

As stated at the beginning of this Annual Report The ISPRS Foundation is heavily dependent on donations. It is therefore with great pleasure to introduce in the following two main donors who made a significant donation in 2012 and are committed to continue their support for the years to come.

The first company which realized the value of TIF is Hexagon Corporation, London, UK. As a world leader in geospatial hardware, software and solutions it has given its renewed commitment to sponsor TIF for the period 2012-16. This is very much appreciated, thanks to Dr. Juergen Dold, President of Hexagon Geosystems, Heerbrugg, who is also member of the TIF Board of Trustees. The following two pages represent the mission of Hexagon “Shaping Change with Geospatial Technologies”

The second company is GeoCue Corporation, Madison, USA. As a small software development and consulting services company it provides an integrated end-to-end processing framework, dealing with dissemination, management, exploitation and production of point clouds and its deliverables, resulting from laser scanning. The GeoCue founder and CEO, Lewis Graham, who is also member of the TIF Board of Trustees, is very much in favor of TIF objectives. The GeoCue donation 2012 to pay the costs for the printing of the Annual Report 2011 and its delivery to the Congress Center Melbourne is very much appreciated.

These two TIF partners from the private sector represent the type of sponsor TIF needs. It is a well-known fact for many years that the private sector is looking continuously for highly motivated and well-educated personnel in geospatial technologies, coming from all continents. Thus the objectives of TIF to offer grants to young researchers from all over the world, in particular to attend the 2012 ISPRS Congress in Melbourne, offered the grantees the option to get directly in touch with the ISPRS Exhibition partners. Thus, there is obviously a win-win situation of TIF donors and TIF itself.

It is the hope of TIF that those two partners will lead in future a list of many donors from the private sector, who would like to have access to brilliant young researches in the geospatial arena through TIF channels.

HEXAGON – SHAPING CHANGE WITH GEOSPATIAL TECHNOLOGIES

Our planet is changing at an exponential rate. The population is growing, aging and on the move, putting pressure on the world's infrastructure, resources and ability to manage change.

There will
be close to
9.5
billion people
on Earth by 2050

Global
infrastructure needs
could accumulate to
US \$ 400
trillion in 25 years

Oil is predicted
to run out in
46.2
years

Population growth
is pushing the limits
of our global food
supplies and energy
resources

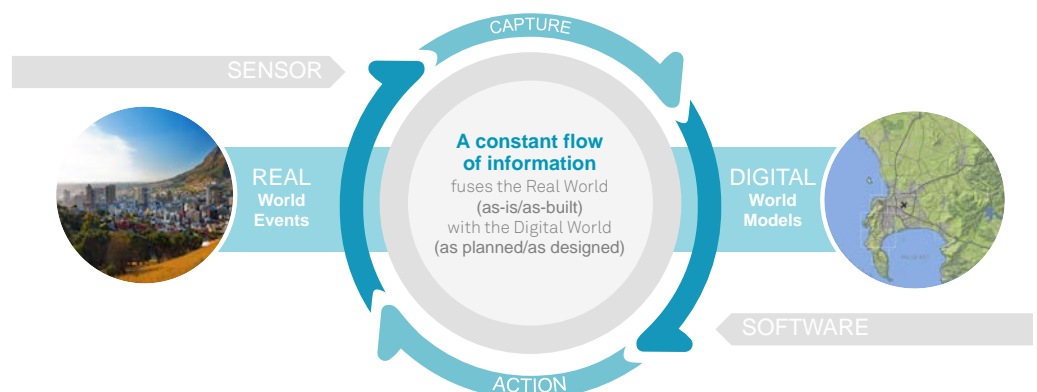
GLOBAL CHALLENGES REQUIRE A GLOBAL RESPONSE

In these extraordinary times, technology is imperative to address world issues, and Hexagon is at the forefront with our design, measurement and visualisation technologies. We provide access to vital information needed to act with greater intelligence that will help guide the present and shape the future.

THE HEXAGON ADVANTAGE

Access to vast quantities of disparate and constantly changing information and data is a powerful decision-making tool when presented in an intuitive and purposeful format. Hexagon's technologies do just that, providing the means to create, manage, understand and act upon a constant flow of information.

The key to this is the Hexagon Advantage, a fusion of the real world and digital world. Through sensors that capture the world as is and software that interprets the data, fusing the real and digital worlds enables our customers to better manage real conditions through the use of accurate and up-to-date digital depictions.





HEXAGON

Smart Solutions

At the core of the Hexagon Advantage is our smart solutions strategy. Built from custom combinations of our geospatial and industrial foundational technologies, Hexagon Smart Solutions are focused on four key areas – safety, infrastructure, resources and manufacturing – and are responsible for improvements in some of the world's most important industries including agriculture, energy, transportation, public safety, security and defence.

As our world continues to grow and change, these industries will become more essential as the need for more resources, manufacturing and infrastructure heightens.

HEXAGON'S GEOSPATIAL EXPERTISE

With decades of experience in the geospatial industry, Hexagon's dynamic geospatial portfolio gives confidence in and total control of entire workflows to professionals involved in important decision-making processes. Our geospatial suite includes hardware, software and sensors that capture the constant, real-time changes of our geography through satellite imagery, terrestrial and aerial photography, remote sensing, CAD and GIS, transforming raw geospatial data into relevant information.

THE POWER OF COLLABORATION

Integrating hardware, software and sensors from Intergraph® and Leica Geosystems, Hexagon geospatial solutions capture the complete, real-time changes of our world. Our solutions transform raw data into actionable intelligence on desktop, web, mobile applications and cloud, giving customers and users full control of the geospatial workflow.

The ability to create a live geospatial blueprint brings a new era in socialising geography beyond the traditional geospatial genres of surveying, photogrammetry, remote sensing, GIS and CAD to a new genre of geospatial users in areas such as government agencies, public safety and defence organisations and the agriculture industry.

More industries are requiring the kind of technology to capture and fuse dynamic geospatial data into relevant information that can be shared and delivered to the right people at the right time. With the world's richest geospatial portfolio, Hexagon brands have the key ingredients to capture raw data and fuse them into relevant information that enables governments, communities and the world to take action.

LEICA GEOSYSTEMS SELECTED FOR LOW-ALTITUDE, ENGINEERING-GRADE MAPPING

In spring 2011, redevelopment plans called for mapping a 45-acre section of Chicago's Grant Park at engineering-grade spatial resolution and accuracy. The mapping was initially planned with a film camera, but a major problem arose. To capture imagery at the requested spatial resolution, the aircraft would have to fly uncomfortably close to the tops of downtown Chicago skyscrapers.

So project managers chose Midwest Aerial Photography, a firm that had purchased a Z/I DMC II 140 digital camera a year earlier with outstanding results. Known for its crisp, sharp imagery, the digital mapping system satisfied the project specifications on many levels. Most important, it captured the 5-centimeter imagery at 2 100 feet AGL, about 1.6 times higher than the film camera, providing adequate vertical clearance above the buildings.

Discover Hexagon Geospatial Solutions

Learning more about the world can make a difference in the way we work and live.

To find out more about Hexagon's geospatial offerings, visit hexagon.com/geospatial.

GeoCue Group.



GeoCue Corporation is a software development and consulting services company specializing in geospatial production management solutions. GeoCue production management products provide an integrated end-to-end processing framework that, when combined with industry leading production tools, significantly reduces production time from data acquisition to finished product. Please visit our website at www.GeoCue.com for more information.

Dissemination

Manage point cloud data and deliver it to desktops with familiar tools such as Google Earth and ArcGIS. Ask about Project Sheridan, our new Geocue Online technology.

Management

GeoCue workflow management tools allow you to monitor each step of the production journey and take corrective actions in time to ensure that you arrive at your intended destination, on schedule and on budget. GeoCue Project Dashboard provides web accessible Key Performance Indicators of all of your projects in a single, synoptic view. Stop guessing and start delivering!

GeoCue Group

9668 Madison Blvd., Suite 202
Madison, AL 35758, USA
1-256-461-8289
1-256-461-8249 (fax)
www.GeoCue.com
www.LP360.com

Investing in the Future.

QCoherent Software is an innovative provider of high-capacity LIDAR software. Our extensive knowledge of LIDAR and geospatial software has been applied to LP360 and LIDAR Server for point cloud visualization and distribution. With unparalleled performance in point cloud processing, classification, extraction, and operating environment options, QCoherent is the provider of choice for LIDAR software. Free evaluation software is available at www.LP360.com.

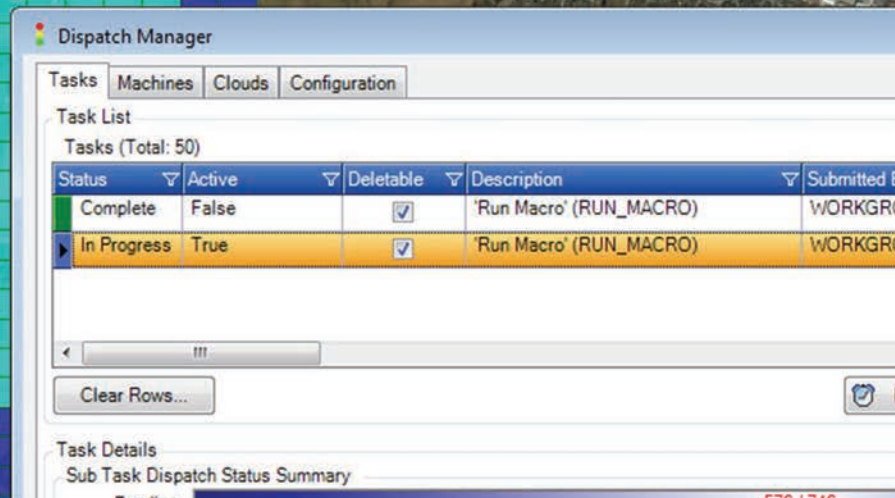


Exploitation

LIDAR data showing various stages of automatic feature extraction including bare earth (brown), planar surfaces (red), vectorization (white), and above ground vegetation (green). All tasks accomplished in LP360 Advanced edition.

Production

The GeoCue Departmental Server processing environment includes a high performance, spatially aware dispatched and distributed processing system. Multiple tiles of LIDAR data can be staged for distributed processing of a TerraScan classification macro. This command is invoked from a user's GeoCue desktop using the integral "distribute to cloud" function.



TIF Financial Overview 2012

By Marguerite Madden

| | | | |
|--------------------------------|--|------------------|-------------------|
| Starting Balance | January 1, 2012 | | 190,914.99 |
| Income | | | |
| Investment Earnings | | | 10,041.60 |
| Donations | | | |
| | Restricted Wang Zhizhou | 2,642.00 | |
| | Unrestricted | 12,479.60 | |
| | Research Initiatives | 0.00 | |
| | | | 15,121.60 |
| Bond Gain | | | 4,816.58 |
| Total Income | | | 29,979.78 |
| | | | |
| Expenses | | | |
| Administration Expenses | | | 1,350.00 |
| Bond Loss | | | 0.00 |
| Grants | | | |
| | Travel Grants | | |
| | 11 Melbourne Congress Travel Grants | 26,600.00 | |
| | Wang Zhizou Award | 2,560.00 | |
| | Frederick J. Doyle Award | 2,500.00 | |
| | CATCon6 Awards | 2,250.00 | |
| | Total | 33,910.00 | |
| | Science Research Initiatives | | |
| | A Comprehensive, On-line Terrestrial Laser Scanning Bibliography | 994.54 | |
| | Total | 994.54 | |
| | Doyle Award Medal | | |
| | Total | 5,647.54 | |
| | International Workshops | 0.00 | |
| | Total | | |
| | | | 40,552.08 |
| Total Expenses | | | 41,902.08 |
| End Balance | December 31, 2012 | | 170,206.27 |

All units in US Dollar

The Trustees of The ISPRS Foundation



Prof Dr. Dieter Fritsch

(Chair)

Institute for Photogrammetry (ifp)
University of Stuttgart
Germany



Prof Emeritus John C. Trinder

(Operations Officer)

University of New South Wales
Australia



Prof Dr. Marguerite Madden

(Finance Officer)

Center for Remote Sensing and
Mapping Science (CRMS)
University of Georgia, USA



Lawrence W. Fritz

Senior Scientist Emeritus
Lockheed Martin Corp, USA



Lewis Graham

President and Chief Technical Officer
of GeoCue Corporation
USA



Dr. Jürgen Dold

CEO of Leica Geosystems AG,
Heerbrugg
Switzerland



Vanessa Lawrence CB

Director General and Chief Executive
Ordnance Survey, UK



Prof Dr. CHEN Jun

ISPRS President
National Geomatics Centre of China
CHINA



Prof Dr. Jon Mills

ISPRS Treasurer
School of Civil Engineering and
Geosciences
Newcastle University, UK



Dr. Mazlan Othman

Deputy Director-General of the
United Nations Office at Vienna
(UN-OOSA)
Austria



Prof Dr. Deren Li

LIESMARS
Wuhan University
CHINA

Authored and Edited: Dieter Fritsch, Marguerite Madden and John Trinder

Layout: Markus English

Cover Photo: View from Melbourne Convention and Exhibition Center to the City
of Melbourne, Australia