

1910

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DER PFLEGE ERWEITERUNG VEREDLUNG
DES GEWERBSFLEISSES DER BÜRGERKUNSTE DES HANDELS
FRANZ DER ERSTE

ISPRS Fellows 2010

Curricula vitae

TECHNISCHE HOCHSCHULE

**Centenary General Assembly
Vienna, 4 July 2010**

The following persons have been selected to receive ISPRS Fellowships by the Fellowship Nomination Committee which comprised Kohei Cho (Japan), Gottfried Konecny (Germany), Marguerite Madden (USA), Petros Patias (Greece), John Trinder (Australia and Chair).

Costas Armenakis (Canada)

Ivan Antipov (Russia)

Manos Baltsavias (Switzerland)

Marcio Barbosa (Brazil)

Klaas Jan Beek (The Netherlands)

Wolfgang Foerstner (Germany)

Li Deren (China)

Stan Morain (USA)

Klaus Szangolies (Germany)

Kennert Torlegard (Sweden)

Roy Welch (USA)

George Zarzycki (Canada)

Résumés of Recipients of ISPRS Fellowships in 2010

Ivan Antipov

Ivan Antipov was born in 1926. At the beginning of 1945 he was drafted to the Soviet Army where has received a rank of a sergeant and a specialist as a sapper. After demobilization from the army Ivan entered NIIGAiK where he graduated in 1952, and then worked for two years at the chair of photogrammetry as an assistant in the institute. From 1954-57 he was a postgraduate student of MIIGAiK and received a scientific degree of a Candidate of Technical Science. Over the next 10 years Ivan progressed from assistant to the head of the chair of photogrammetry and the deputy director of the institute in NIIGAiK.



In 1969 the State Geodetic and Cartographic Survey of the USSR organized the first computer centre and Ivan Antipov accepted an invitation to head the programming office of this center and later became the chief of the centre. Under Antipov's leadership the first programmes were developed for different geodetic calculations with reference to computers used at that time. Analytical phototriangulation became the main topic of scientific interest of Ivan Antipov. During this period he prepared his Doctor's dissertation, receiving Dr.Sci.Tech in 1974.

In 1977 he was appointed as the director of Research Institute of Applied Geodesy (NIIPG) and remained at this post for almost 12 years. In 1989-1992 he was on an official mission to the Republic Cuba where worked to significantly improved photogrammetric technologies in Cuba. After his return he was appointed as a scientific employee of NIIPG (Research Institute of Applied Geodesy, later transformed into the Center "Sibgeoinform"). In 1998 he returned to teaching activities in the Siberian State Academy of Geodesy (SSGA, former NIIGAiK). Nowadays he is a honorary professor of SSGA.

In 1976 on XIII Congress of the ISPRS in Helsinki Ivan was elected as the President of the Technical commission III, and at the next Congress in Hamburg as Second Vice President of the Society.

Costas Armenakis

Costas Armenakis holds a Dipl Ing degree in Rural and Surveying Engineering from the National Technical University in Athens, Greece and MScE and PhD degrees in Surveying Engineering from the University of New Brunswick, Canada. He is an Associate Professor of Geomatics Engineering in the Department of Earth and Space Science and Engineering at York University in Toronto. He is also the Director of the Geomatics Engineering Program and Co-Director of the GeoICT Lab.



His research interests include rapid mapping, feature extraction and terrain modeling, low-cost unpiloted mobile mapping systems, 3D building modeling; geovisualization, disaster and emergency management; and monitoring landscape changes in the Canadian North.

His involvement with ISPRS began in 1984 when, as a graduate student, he submitted a paper to the 1984 Rio de Janeiro XVth ISPRS Congress. Since then he has participated in numerous ISPRS sponsored events including all the ISPRS Congresses since 1992. Between 2000 and 2004 Costas served as President of the Technical Commission IV on Spatial Information Systems and Digital Mapping. His ISPRS services also include: Financial Committee, Resolution Committee, Regional Coordinator, National Correspondent, Advisor and Head of the Canadian Delegation, Vice-Chair and Chair of the National CIG-ISPRS Committee, technical and scientific committees, and the ISPRS books. Currently Costas serves as Co-Chair of the ISPRS IC WG IV/VIII on Updating and Maintenance of Core Spatial Databases. Costas is a member of the Canadian Institute of Geomatics and the American Society for Photogrammetry and Remote Sensing and is a Professional Engineer in the Province of Ontario.

Manos Baltasvias

Manos received his Dipl. Ing. in Surveying and Rural Engineering at the National Technical University of Athens in 1981, MSc in Digital Photogrammetry in 1984 from Ohio State University and his PhD. on image matching in 1991 from ETH in Zurich.



His activities in research and development include: development of adaptive image matching techniques for precise and reliable point positioning and surface measurement ; automation of anthropogenic and natural object extraction from aerial and space images, focussing on buildings, roads and vegetation parameters ; geometric modelling of airborne and spaceborne, especially high-resolution, sensors and quantitative processing of data from such sensors for DTM and orthoimage generation, and extraction of objects ; data fusion ; development and implementation of image analysis algorithms for photogrammetric and remote sensing applications; implementation of photogrammetric and remote sensing techniques in various applications. He has held over 120 presentations on the above topics and has participated in about 200 scientific events and over 60 international and national, often interdisciplinary projects. He is (co-)author of about 220 publications on the above mentioned topics and two book chapters, and (co-)editor of the proceedings of five conferences and four books.

Manos was Second Vice President of ISPRS from 2004 – 2008; Editor-in-Chief, ISPRS Journal of Photogrammetry and Remote Sensing (1/7/1997-31/12/2004); Associate Editor, ISPRS Journal of Photogrammetry and Remote Sensing (1992 – 12/1996); responsible of Council for the newly formed Student Consortium and the scientific publications of ISPRS (2004 - 2008); Chair, Working Group “Promotion of the Profession to Young People” (2008-2012); Chair, Working Group “Education and Training” (2000-2004), Chair, Intercommission Working Group "Integration of Image Analysis and GIS" (1996 - 2000); Chair, Intercommission Working Group "Image Sequence Analysis" (1992 - 1996); Secretary of the U.V. Helava Award jury (1998-2004).

Awards: 1992, 2000, 2004, "ISPRS President’s Award of Honourable Mention", 2004, "ISPRS Schwidefsky Medal" for “his significant contribution as Editor of the ISPRS Journal of Photogrammetry and Remote Sensing”, and 2007 Hansa Luftbild Award.

Marcio Barbosa

Born in 1951, Marcio Barbosa holds a B.Sc. degree in Mechanical Engineering (1972) from the Catholic University of Petropolis, Rio de Janeiro, Brazil, and a M.Sc. degree in Systems Analysis and Applications (1975) from the National Institute of Space Research (INPE), São José dos Campos, Brazil. After two years as a Production Control Analyst in the private sector, in 1973 Marcio Barbosa joined the Brazilian National Institute of Space Research (INPE) where he was promoted to the post of Head of the Data Bank Division (1975-1976), before becoming Head of the Image Production Department (1976-1983), Deputy Director of INPE (1982-1985), and Director of Remote Sensing at INPE (1985-1989).



From 1989 to February 2001, he served as Director-General of INPE with a staff of 1,200 and a budget of US\$ 100 million. In this capacity, he led the restructuring and modernization of INPE, as well as its research and development programme resulting in the launch of the first four Brazilian satellites. From February 2001 to February 2010, Marcio was the Deputy Director-General of UNESCO, where he supervised and coordinated the implementation of the vast programme of reforms launched by the Director-General Koïchiro Matsuura. From 2002 until the end of his mandate, Marcio represented the Director-General in the negotiations between Israelis and Palestinians on UNESCO-related matters.

Marcio attended or chaired numerous international meetings and symposia both in his personal capacity and as a representative of the Brazilian Government and later UNESCO. In the 90's, he was elected Chairman of the International Committee on Earth Observation Satellites (CEOS) and of the Integrated Global Satellite Observing System (IGOS). From 1996 to 2000, he was Second Vice President of the International Society for Photogrammetry and Remote Sensing (ISPRS) and, from 2000 to 2004, President of the International Astronautical Federation (IAF). Marcio Barbosa has authored, co-authored or edited many books, manuals, reports and articles in his fields of specialization, and is a recipient of many Brazilian and international awards and distinctions.

From March 2010, Marcio is acting as the General Manager of The Doha (Qatar) Cultural Village, a recently launched initiative of the Qatari government in the domain of culture and development.

Klaas Jan Beek

Klaas Jan was born in 1935 and gained his MSc and PhD from Wageningen University, The Netherlands.

Career: 1960-1961 he undertook soil surveys in Grijalva Lowlands, Tabasco, Mexico. Ministry of Hydraulic Resources; from 1963-1974 he was a Soil Scientist with FAO, Land and Water Development Division, with duty stations in Rome (HQ), Brazil, Mexico and Chile, Duties were: World Soil Map sheets South America, soil survey and land evaluation, soil - land suitability- and agro-ecological mapping Latin American region; from 1974-1980 senior he as a soil scientist International Institute for Land Reclamation and Improvement, Wageningen; and from 1980-2000 Rector, he was Professor in Land Evaluation, International Institute for Aerospace Survey and Earth Sciences (ITC). He is currently Vice -chair Netherlands Commission for Environmental Impact Assessment; Chair Netherlands Foundation for Water and Climate.



International Scientific Societies: 1984-1988 president Commission VII, 1996-2000 Congress Director/Council member International Society of Photogrammetry and Remote Sensing (ISPRS); 1994-1998 chair Sub-Commission F Land Evaluation for Sustainable Development, 1978-1986 chair Working Group on Land Evaluation of the international Soil Science Society(ISSS).

Previous Board/Committee Memberships: Tropenbos Foundation, Wageningen University Fund, Netherlands Development Consultants (NEDECO), Netherlands University Foundation for International Cooperation(NUFFIC), LEICA AG, LEICA Geosystems, National UNESCO Commission, Rotary International Inter-Country Committee The Netherlands-Germany, International Centre for Integrated Mountain Development (ICIMOD, Kathmandu, Nepal), International Water Management Institute (IWMI, Colombo, Sri Lanka), External Examiner MSc –Course Resource Assessment East Anglia University, UK.

Honorary Appointments: Honorary professor of Wuhan Technical University for Surveying and Mapping (WTUSM), Wuhan China, and of Chinese Academy of Sciences: Commission for integrated Survey of Natural Resources (CISNAR), Beijing; Honorary Fellow of Netherlands Society of Earth Observation and Geoinformatics; International Soil Reference and Information Centre(ISRIC); International Institute for Geo-Information Science and Earth Observation (ITC).

Wolfgang Förstner

Wolfgang Förstner, born in 1946, studied Geodesy until 1971 and received his PhD 1976 at Stuttgart University. After 3 years work at the Survey Department of Northrhine Westfalia in Bonn, he was scientist at the Institute for Photogrammetry of Stuttgart University. Since 1990 he has been head of the Department of Photogrammetry at the Institute for Geodesy and Geoinformation, University Bonn.



His main interests are image analysis, pattern recognition, machine learning, geometric reasoning, statistical and semantic modelling. He published more than 100 papers, supervised approximately 70 Bachelor and Master theses, and more than 20 PhD theses.

He was Vice President of the German Association for Pattern Recognition (DAGM) 1994-2001, president of ISPRS Commission III 'Photogrammetric Computer Vision' from 2004-2008 and chairs the ISPRS Intercommission Working Group in 'Pattern Recognition in Remote Sensing'. Since 2006 he is associated editor of the journal IEEE Transactions of Pattern Analysis and Machine Intelligence.

He received the Carl Pulfrich Award in 1987, the ISPRS Cassinis Award 2000 and the ASPRS Fairchild Award 2005.

Li Deren

Prof. Dr. Deren Li, scientist in photogrammetry and remote sensing, 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. At present, he is Professor and PhD supervisor of 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.



In the 1980s, Prof. Deren Li was mainly engaged in the studies of observation errors and processing methods in geodesy and photogrammetry. In 1985, he completed theoretical research in the separability of model errors, which advanced the reliability theory to the separability phase. The result of this study received the 1988 Best Paper Award of the German Society of Photogrammetry and Remote Sensing, and Hansa Luftbild Award. From 1990 up to now Prof. Deren Li has concentrated on the research and education in geo-spatial information science and technology represented by remote sensing (RS), global positioning system (GPS) and geographic information systems (GIS). Since 1989, Prof. Deren Li has supervised 155 Ph.D students (108 having graduated, 47 still under supervision). So far, he has supervised 11 post doctoral candidates (9 having finished the research work, 2 still doing the research). He has published over 615 papers and 9 books.

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

Stan Morain

Stan Morain is a biogeographer whose career interests centered on applications of remote sensing and spatial analysis of terrestrial environments. He has been funded continuously by NASA since 1970 for research and applications in natural resources. He has been PI on multi-university and multi-disciplinary teams of scientists and modelers, geospatial analysts, and remote sensing technologists developing tools for health information and decision making. He has been a frequent advisor to FAO, UNDP, UNEP, US/AID, and private consulting firms on projects in both developed and developing countries of Western and Eastern Europe, Africa, China, India, Central America and Australia.



Dr. Morain is the 2007 recipient of the joint NASA/USGS Pecora Award; the 2008 recipient of the Association of American Geographers Medal of Achievement from the Remote Sensing Specialty Group; and the 2010 recipient of the Lifetime Achievement Award from the New Mexico Geographic Information Council. In addition, he is an elected Fellow in both the American Society for the Advancement of Science, and ASPRS. His service record for ASPRS includes four years as an officer of ASPRS, six years as Editor-in-Chief of PE&RS, and membership on many committees.

His service record for ISPRS includes Chair, Technical Commission VI, Working Group 4, (1992-1996), President, Technical Commission I (2000-2004), Treasurer (2004-2008), and Technical Secretary, Commission VIII, Working Group 2 (2008-2012).

Klaus Szangolies

Klaus Szangolies was born on October 10, 1932 in Grabowen, East Prussia in Germany, the son of a farmer and lived at home until the end of World War II. From 1952 to 1957 he studied "Surveying" at Technische Hochschule Dresden. He went directly to Jena and started his 35 year scientific career in Photogrammetry at Carl Zeiss Jena, a large and worldwide company. In the research laboratories of this enterprise he was involved in the development of new stereocomparators, stereo-plotters, orthophoto equipment, analytical and digital photogrammetric technique, image correlation, space photography and remote sensing, writing about 100 scientific publications and developing 15 patents.



With the dissertation "Correction of systematic errors of photographs in aerial triangulation" in 1963 he received the title "Dr.-Ing." from "Technical University Dresden". The same university appointed him 1982 as "Honar-Professor". From 1978 to 1988 he also was "Visiting Professor" at "The City University" London.

Klaus Szangolies has been a member of the "German Society for Photogrammetry" since 1960. Between 1960 and 1990 he belonged to the East German Society, and since 1990 to the unified "German Society for Photogrammetry, Remote Sensing and Geoinformatics" DGPF. He attended all ISPRS Congress from 1968 in Lausanne to 2004 in Istanbul, where he presented papers or reports. He was President of ISPRS Commission II "Data Processing and Analysis" from 1988 till 1992, Chairman of IC Working Group "Space Photography" from 1984 to 1988 and member of several working groups for photogrammetric restitution.

He has organized important international conferences: in September 1987 in Leipzig - "Space Photogrammetry" with top-ranking participation from East and West; the ISPRS Symposium "Data Processing and Analysis" in September 1990 in Dresden with one important conclusion: the unification of the two German societies for Photogrammetry. After retirement in 1995 he became honorary "Editor in Chief" of the official German publication "Photogrammetrie □ Fernerkundung □ Geoinformation" (PFG) for 1997 to 2007 and received the ISPRS "Schwidefsky Medal" in recognition of his efforts during the Congress 2008 in Beijing.

Kennert Torlegard

Anders Kennert Ingemar Torlegård was born Jan 21, 1937 in Sweden. He studied for an engineering diploma (MSc) at the School of Surveying, the Royal Institute of Technology, (KTH), Stockholm from 1957-61. He undertook his PhD studies on a research fellowship at the Department of Photogrammetry, KTH from 1961-67. He was chief photogrammetrist at VIAK AB Consulting Engineers and Surveyors, in Gothenburg from 1967-74, and became full professor for photogrammetry at the Royal Institute of Technology, (KTH), Stockholm in 1974, a position which he held until 2001. Since 2002 he has been Professor Emeritus at Dept of Infrastructure, KTH, Stockholm.



Selected items of his academic career.

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| 1976-80 | President of Commission V (Non-topographic photogrammetry) ISPRS |
| 1977-2001 | Swedish delegate to the Steering Committee of OEEPE, l'Organisation Européenne d'Études Photogrammétrique Experimentale, now EuroSDR |
| 1980-84 | Chairman of an ISPRS Working Group on photogrammetric data capture for digital elevation models |
| 1984-88 | Secretary General of ISPRS |
| 1987-90 | Provost (equivalent to 2nd vice president) and Chairman of the Faculty, KTH, responsible for research program planning |
| 1988-92 | President of ISPRS |
| 1991-97 | Member of the Board of KTH |
| 1992-96 | First Vice President of ISPRS |
| 1992-96 | Chairman of the ISPRS Working Group on Geometric Modeling and Object Reconstruction |
| 1993-95 | Chairman of the Local Organizing Committee for the 1995 summer session of the International Space University, ISU, held at KTH in 1995 |
| 1996-2000 | President of the Science Committee of OEEPE |
| 1998 | Visiting Professor at the ETH Zürich |

Since 1964 he has actively participated in 10 ISPRS Congresses, more than 30 ISPRS symposia, seminars and workshops, 8 FIG surveyors' congresses, 5 ICA cartographic conferences, among others.

Roy Welch

Roy Welch is a Distinguished Research Professor Emeritus at the University of Georgia, Athens, Georgia, USA, where he established the Center for Remote Sensing and Mapping Science (CRMS) and served as its Director from 1984 to 2003. Dr. Welch's involvement in International Society for Photogrammetry and Remote Sensing (ISPRS) activities began in 1966 when, as a student at the University of Glasgow in Scotland, he attended a Commission I Symposium in London. After graduation, he undertook research on the quality of aerospace imagery at Itek Corporation and the U.S. Geological Survey before accepting a position at the University of Georgia. Roy participated in every ISPRS Congress between 1968 and 2000, remaining active until his retirement in 2004. He served as chairman of working groups in Commissions I, IV, and VII, and was President of Commission IV, Mapping and Geographic Information Systems, from 1992 to 1996. In 1980, he spent several months in Japan studying space remote sensing programs. Roy was elected President of the American Society for Photogrammetry and Remote Sensing (ASPRS) in 1984, and a Fellow of ASPRS in 1995. He was a frequent contributor to the International Archives of Photogrammetry and Remote Sensing, Photogrammetria, ISPRS Journal of Photogrammetry and Remote Sensing, Photogrammetric Engineering and Remote Sensing, and Photogrammetric Record. During his career, Roy was a consultant to the National Aeronautics and Space Administration, California Institute of Technology's Jet Propulsion Laboratory, SPOT Image Corporation, and the U.S. Geological Survey. He established R-WEL, Inc., a company responsible for the development of the first stereocorrelation and 3-D mapping programs for personal computers.



George Zarzycki

George was born in Poland, received his MSc.-Eng.(geodesy) from the Warsaw University of Technology in 1948 and Doctorate of Technical Sciences (photogrammetry) from the Swiss Federal Institute of Technology (ETH) in Zurich. He worked at the Institute for Photogrammetry, ETH, under Prof Zeller and at WILD Heerbrugg. In 1940 developed a graphical interpolation method of adjusting aerial triangulation which was adopted in many countries. In 1952 he accepted the position of post-doctorate fellow at the National Research Council of Canada in Ottawa. In the period 1953-66 George worked with Canadian Aero Service as chief engineer and then executive vice president. In 1966 he co-founded Terra Surveys Ltd, and served as Vice President then President until 1974 when he accepted the position of Director, Topographical Survey of Canada. In 1985 he retired from the Federal Public Service of Canada and joined the Ontario Ministry of Natural Resources as Director Surveys Mapping and Remote Sensing Branch, a position he held until retirement in February 1991. He was visiting professor of photogrammetry at Laval University in Quebec City 1969-1975. George is active as a consultant in geospatial information management. During his professional career, George directed the acquisition and management of geographic information, photogrammetric mapping, remote sensing, railway location, geodetic and resource surveys in Canada, South America, Africa, the Middle East, Australia and the Caribbean.



George has lectured at professional and scientific conferences and authored over 90 papers. Starting with the ISP Congress in Stockholm in 1957 he attended all ISP/ISPRS Congresses until 2000. In ISPRS he was President of Technical Commission IV from 1976-1980 and 1st Vice- President for two terms 1980-1988. In the American Society of Photogrammetry and Remote Sensing, he was President 1981-1982, 1st vice-president 1980-1981 and 2nd vice- president 1979-1980. In the Canadian Institute of Geomatics, he was President 1972-1973, Vice president 1970-1972.

He is Honorary member The Canadian Institute of Geomatics, Fellow The Canadian Academy of Engineering, Honorary member The American society of Photogrammetry and Remote Sensing, recipient of the Thomas M. O'Malley Award of the Canadian Geomatics Industry Association, Honorary Professor at the Warsaw Technical University, and Recipient of Officer's Cross of the order of Merit of the Republic of Poland.