Past Officers of the International Association of Geodesy (2007 – 2019)

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This Chapter continues the series of articles "History of the International Association of Geodesy". In Geodesist's Handbook 2008 article "Past officers of the International Association of Geodesy (1991-2007)", Bulletin Géodésique (82) 675-679, 2008, *Carl Christian Tscherning* summarises the CVs of the Presidents and Secretaries General during this period. He refers there to a publication of his Secretary General (pre-)predecessor, *Michel Louis*, who wrote a similar article in 1992, and refers on his part to an article on the History of IAG, written by the previous Secretary General *J.-J. Levallois* in 1980.

Michael Sideris President 2007 – 2011



Michael George Sideris was born on August 16, 1958, in Pireaus, Greece. He received his Dipl.-Ing. (honours) degree in surveying engineering from the National Technical University of Athens, Greece, in 1981. In 1982, he moved to Canada to continue his studies in geodesy at the Department of Surveying of

the University of Calgary (UofC). He obtained his MSc degree in 1984 and his PhD degree in 1988. After he graduated, he was offered a tenured faculty position at UofC, and he became full professor of geodesy. He has also served in major administrative positions, as Associate Dean Research in the Faculty of Engineering (1999-2005) and Associate Dean in the Faculty of Graduate Studies (2003-2011). His research work focuses on physical geodesy, such as gravity field approximation, precise geoid determination, vertical datums, satellite altimetry, terrestrial, satellite and airborne gravimetry and gradiometry, geodetic applications of wavelets and spectral methods, and geodetic methods for hazards monitoring and resource exploration. His pioneering research on efficient spectral methods for precise geoid determination and geodetic boundary value problem (Stokes and Molodensky) solutions earned him an international reputation, and the FFT-based software he developed has been commercialized by UofC's technology commercialization office and is being used internationally by universities, national agencies and geophysical industry.

For his contributions to geodesy, he has been awarded an Alexander von Humboldt International Research Fellowship (hosted at the University of Stuttgart, Germany, in 1998) and a Dr. honoris causa honorary doctorate degree (2004) by the University of Architecture, Civil Engineering and Geodesy, in Sofia, Bulgaria.

Michael Sideris was first involved with the IAG in 1984 during the International Summer School on Local Gravity Field Approximation in Beijing, China. Since then, he has served the IAG in many leadership positions, including as Secretary (1995-1999) and President (1999-2003) of IAG's Section III "Determination of the Gravity Field", IAG Vice President (2003-2007) and IAG President (2007-2011). He has also organized numerous sessions at IAG, IUGG, EGU and AGU assemblies. He has taught at nine IAG Schools on the Determination and Use of the Geoid, as well as at the First IAG School on Reference Frames in 2010. At the IUGG General Assembly 2011, he was elected Vice President of the IUGG, and at the General Assembly 2015 President of the IUGG.

Chris Rizos President 2011 – 2015



Chris Rizos was born on October 16, 1952. He received his BSurv in 1975 and his PhD in 1980 from the School of Surveying, University of New South Wales (UNSW), Sydney, Australia. In 1987, he joined the academic staff of UNSW, and was promoted to Professor in 2001. Chris was Head of the UNSW School of Surveying and Geospatial

Engineering (formerly School of Surveying) from 2004 until 2013 when it merged with the School of Civil and Environmental Engineering. Chris has been researching the technology and high precision applications of GPS since 1985, and has established the Satellite Navigation and Positioning Lab at UNSW in the early 1990s - Australia's premier academic R&D group for GNSS and wireless positioning technology and applications.

The principal research interests of *Chris Rizos* include the carrier phase-based kinematic GPS/GNSS positioning on short, medium and long baselines, the development of GPS/GNSS-based deformation monitoring systems, and low-cost GPS systems for survey applications and building monitoring. He conducted studies on a modern geodetic datum for upgrade of the Australian Geodetic Datum using GNSS and ITRF global products and innovative geodetic techniques. Other topics are the integration of GNSS with Interferometric SAR techniques, the development of multifunctional CORS networks and "smart" GNSS receivers. He studied new positioning technologies like indoor positioning, pseudolites, Locata, WiFi and mobilephone positioning, GNSS+INS (and other sensors) integration.

Chris Rizos received the following honours and awards:

- University Medal, UNSW, 1975;
- Commonwealth Postgraduate Scholarship, 1975-78;
- Fulbright Fellowship (Postgraduate Category), 1977-78;
- Rothmans Fellowship, 1979;
- Alexander von Humboldt Fellowship, 1981-83, 1991;
- Fellow of the Australian Institute of Navigation, 1999;
- Fellow of the International Association of Geodesy, 1999;
- Fellow of the U.S. Institute of Navigation, 2012;
- Honorary Professor, Wuhan University, China, 2006.
 The first IAG office of *Chris Rizos* was the membership

in the joint IAG/IHO Advisory Board on the Law of the Sea (ABLOS) from 1995-2011, whose Chair he became in 2009. In the same year, he joined the Steering Committee of the

Asia-Pacific Reference Frame (APREF). In 2004, he was appointed member of the Governing Board of the International GNSS Service (IGS), and in 2006 member of the IGS Executive Committee. After the election as IAG Vice President in 2007, he was elected IAG President in 2011. At the IUGG General Assembly 2015, the IUGG Council elected him Member of the IUGG Bureau, and in 2019 President Elect of the IUGG.

Harald Schuh President 2015 – 2019



Harald Schuh was born on February 27, 1956, in Heidelberg, Germany. He received his Dipl.-Ing. (Geodesy) in 1979 and his Dr.-Ing. in 1986 from the University Bonn. He worked there in the scientific staff of the Geodetic Institute from 1980 to 1986 and became a Junior Professor in 1987. From 1989 to 1995, he was a scientist at the German

Aerospace Center (DLR) and changed then to the German Geodetic Research Institute (DGFI). In 2000, he followed a call as a Professor at the University of Technology, Vienna, Austria, and 2012 as a Professor at the Technical University Berlin, Germany, combined with the Head of the Section Geodesy of the GFZ German Research Centre.

Harald Schuh became internationally known by his research in Very Long Baseline Interferometry (VLBI). The research field includes parts of astrophysics and geodynamics, time series analysis, and monitoring of Earth rotation. His responsibilities in IAG started in 2003 as a representative of the Services in the IAG Executive Committee and the IAG representative to the International IVS Service (VLBI). In the same year, he became member of the Directing Board of the International Center for Earth Tides (ICET). In 2007, he was appointed Chair of the IVS Directing Board and the Sub-commission Interaction of Celestial and Terrestrial Reference Frames. He was elected Vice President of the IAG in 2011 and President in 2015.

From 2007 to 2012, *Harald Schuh* was the President of Commission 19 "Rotation of the Earth" of the International Astronomic Union (IAU), and acted in its Organizing Committee from 2006 to 2015.

Harald Schuh received the following major awards:

 Descartes Prize of the European Commission for the Project "Non-rigid Earth nutation model – Pinpoint positioning in a wobbly world" (team prize);

- Fellow of the International Association of Geodesy, 2007;
- Doctor honoris causa (Dr.h.c.), University for Architecture, Civil Engineering and Geodesy, Sofia, Bulgaria, 2009;
- Vening Meinesz Medal of the European Union, 2011;
- Adjunct Professor of the University Tehran, Iran, 2016;
 Member of the German National Academy of Science and Engineering (acatech), 2017.

Hermann Drewes Secretary General 2007 – 2019



Hermann Drewes was born on April 26, 1944, in Lower Saxony, Germany. He received his Dipl.-Ing. in 1970 and his Dr.-Ing. in 1975 from the Technical University Hannover, Germany. Since 1970, he worked there in the Institute for Theoretical Geodesy as scientific assistant, and since 1976 as chief engineer. From 1977 to 1979, he was granted a leave as professor

at the University of Zulia, Maracaibo, Venezuela. After his return, he changed as a senior scientist to the German Geodetic Research Institute (DGFI), where he became Director in 1994. In the same year he was awarded Honorary Professor at the Technical University Munich, Germany.

The key research fields of Hermann Drewes include gravimetry and geoid determination (since 1970), geodetic geodynamics (since 1979), and reference systems and frames (since 1994). Major international positions are:

- IAG Representative to the South American Reference Frame (SIRGAS) since 1994;
- President of the IAG/COSPAR Commission on Space Techniques for Geodesy and Geodynamics, 1999-2003;
- Member of the Bureau of the International Lithosphere Project (ILP), 2001-2008;
- Chair of the International Terrestrial Reference Frame (ITRF) Combination Centre at DGFI, 2001-2010;
- President of IAG Commission 1 "Reference Frames", 2003-2007;
- IUGG Representative to the UN Cartographic Bureau, 2003-2007;
- IUGG Representative to the Pan-American Institute for Geography and History (PAIGH), 2003-2011;
- Secretary of IAG's Global Geodetic Observing System (GGOS), 2003-2005;
- IAG Secretary General, 2007-2019;
- IUGG Representative to the United Nations Geospatial Information Section, 2015 -2019.

Hermann Drewes received the following major awards:

- Fellow of the International Association of Geodesy (IAG), 1999;
- Cavaleiro do Ordem do Mérito Cartográfico, Brazilian Society of Cartography, Photogrammetry and Remote Sensing, 2005;
- Cross of the Order of Merit of the Federal Republic of Germany, 2007;
- Huesped de Honor Extraordinario, National University of La Plata, Argentina, 2010;
- Fellow of the International Union of Geodesy and Geophysics (IUGG), 2019.