

Levallois Medal Laudation for Hermann Drewes

Harald Schuh

The Levallois Medal was established in 1979 to honor Jean-Jacques Levallois (1911-2001) for his long service from 1960 to 1975 as Secretary General of the International Association of Geodesy (IAG). The medal is usually awarded every four years at the IAG General Assemblies, and is presented *in recognition of distinguished service to the association and/or to the science of geodesy in general*.

A committee of eight past Presidents of the IAG, namely Harald Schuh (Committee President), Chris Rizos, Michael Sideris, Gerhard Beutler, Fernando Sanso, Wolfgang Torge, Ivan Mueller, and Helmut Moritz, recommended in 2022 to award two medals at the General Assembly 2023 in Berlin, one to *Hermann Drewes* and one to *Georges Balmino*. Both medalists served as Secretaries General, the former of the IAG, the latter of IUGG, the International Union of Geodesy and Geophysics.

Hermann Drewes, born in 1944 in Breddorf, Northern Germany, spent his youth in the region around Bremen. Already during his military service (1963 – 1965), he received first instructions in geodetic and astronomic positioning. He studied geodesy at the Technical University Hanover (1965 – 1970) where he also defended his thesis entitled *Regional geoid determination using least squares collocation* in 1975.

In the late seventies Hermann was seriously drawn to distant grounds: He spent several years (1977 – 1979) in Venezuela where he worked as university professor in Maracaibo and scientific advisor at the national cartographic service in Caracas. Coming back to Europe in 1979, Hermann made Munich his ultimate base.

He joined the German Geodetic Research Institute DGFI, whose director he was to become 15 years later in 1994. Hermann's major projects at DGFI were his initiative to set up the Geocentric Reference System for South America (Sistema de Referencia Geocéntrico para América del Sur, SIRGAS), which was later extended to all the Americas, the Velocity Model for South America (VEMOS), and the Combination Center of the International Terrestrial Reference Frame (ITRF). As DGFI director, Hermann also successfully initiated a reorganization of the DGFI research program with the aim of investigating the global dynamics of the Earth's body. He officially retired as DGFI's director in 2012, but for many more years he remained being very active in IAG.

Hermann Drewes' fields of interest are gravimetry, physical geodesy (geoid determination), geodetic geodynamics, tectonic plate kinematics, satellite geodesy and reference systems and frames in global and regional scale.

For almost three decades he gave lectures on satellite geodesy and geodetic geodynamics at the Technical University of Munich, where he became an Honorary professor in 1994, and at the University of the Federal Armed Forces in Munich.

Hermann Drewes is an exceptionally deserving recipient of the IAG's Levallois Medal. This fact rests, in my opinion, on four pillars:

1. Hermann was an "officer" of the IAG for 25 years, as Section Chair, then Commission Chair and then Secretary General. It is well possible that this is the longest period of time anyone has ever been an officer in the IAG! In all the positions he has held, Hermann has been full of energy and expertise and has made invaluable contributions to strengthening the services of the IAG. His major positions include:

- Secretary / President of the IAG/COSPAR Commission on “International Coordination of Space Techniques for Geodesy and Geodynamics” (CSTG; 1995 – 2003)
- Member of the International Laser Ranging Service (ILRS) Governing Board (1999 – 2007)
- Member of the Bureau of the ICSU International Lithosphere Project (ILP; 2001 – 2008)
- President of IAG Commission 1 “Reference Frames” (2003 – 2007)
- Representative of the International Union for Geodesy and Geophysics (IUGG) to the United Nations Cartographic Bureau (2003 – 2007)
- IUGG Representative to Pan-American Institute for Geography and History (PAIGH; 2003 – 2011)
- Representative of IAG to the “Group on Earth Observation” (GEO), Committee on Capacity Building (2004 – 2009)
- Steering Committee of IAG’s Global Geodetic Observing System (GGOS; 2005 – 2009)
- Secretary General of the IAG (2007 – 2019)
- IUGG Representative to the United Nations Geospatial Information Section (2015 – 2019)
- last, but not least, he was Representative of IAG to the SIRGAS (since 1994), which leads to pillar No. 2:

2. SIRGAS, of course. Without Hermann, no SIRGAS.

As Representative of IAG to the Sistema de Referencia Geocéntrico para las Américas (SIRGAS), he was responsible for the first ever unification of all South American geodetic reference systems in a common unified reference framework. He thus created the basis for the coordinate inventories and official map series. In Europe, this had already been realized in the years after World War II. In the meantime, SIRGAS has been extended beyond land surveying to include plate tectonics, gravimetry and sea level fluctuations. This created a comprehensive picture of the geotectonic surface processes in South America.

3. His contribution to the founding of the IERS. As far as I know, also the current name was suggested by Hermann.

4. Finally, the 4th pillar has possibly exerted Hermann’s greatest impact on the future of IAG: Hermann Drewes was, together with Gerhard Beutler, Rainer Rummel and Chris Reigber, on the **original planning committee of IGGOS (later called GGOS)** and thus contributed significantly to the founding of GGOS.