

## Peter J.G. Teunissen

## **NETHERLANDS**

**University degrees:** BSc (1978), MSc (1980, cum laude) and PhD (1985, cum laude) Mathematical and Physical Geodesy, Delft University of Technology (DUT). Honorary Doctorate (2014), Chinese Academy of Sciences (CAS).

**Career History:** Christiaan Huygens Fellow (1985-1988) Netherlands Organization for Advancement of Pure Research; Research Fellow Universities of Stuttgart (1987, Germany) and Calgary (1987-1988, Canada). Full Professor and Head Geodesy Department (1988-1998) DUT; Vice-Dean Faculty of Civil Engineering & Geosciences (2001-2002); Director of Education (2002-2003); Head Earth Observation and Space Systems Department, Faculty of Aerospace Engineering (2003-2008); Chairman of the Netherlands Geodetic Commission (1993-2009) and Co-chair of Dutch Earth and Climate Committee (2000-2004). Federation Fellow (2009-2015) of Australian Research Council (ARC), Head of Curtin University GNSS Research Centre (2009-2019); Science Director of the Australian Cooperative Research Centre for Spatial Information (2009-2019). DUT Professor of Geodesy and Satellite Navigation and Honorary Professor of five international universities (current).

**Research field:** Peter's research field covers Geodesy and GNSS-science, where his work ranges from fundamental geodetic theory (mixed-integer model estimation, quality control and reliability theory) to innovations with global adoption in GNSS applications. His Least squares AMBiguity Decorrelation Adjustment (LAMBDA) method, which revolutionized high-precision GNSS positioning capabilities, has become the standard for fast and optimal carrier-phase interferometric ambiguity resolution. His geodetic theory of mixed-integer estimation underpins ultraprecise GNSS parameter estimation and validation through inclusion of new estimation principles and new classes of estimators. The theory now lies at the heart of many GNSS PNTA sensing applications, and was implemented as computational PPP-RTK model by several agencies in recognition that it brings 'unique and unparalleled satellite positioning capability (CEO, Geoscience Australia)'.

**Distinguished Fellowships and Awards:** Fellow of International Association of Geodesy (1991, IAG), Fellow of Royal Netherlands Academy of Arts and Sciences (2000, KNAW), Tan Chin Tuan Fellow (2002) of Nanyang Technological University, Linkage Fellow (2007) of Australian Research Council, Fellow of USA Institute of Navigation (2014, ION), Fellow of UK Royal Institute of Navigation (2016, RIN), Distinguished PIFI Fellow (2021) of Chinese Academy of Sciences. Research Awards: *Steven Hoogendijk Prize* (1985) of the Batavian Society of Experimental Philosophy; IAG *Guy Bomford Prize* (1987); *Alexander von Humboldt Research Award* (1996), *Curtin Innovation Award* (2010); ION *Johannes Kepler Award* (2019); *Vening Meinesz Medal* (2022) of European Geoscience Union.

**Editorial Positions:** Founding Editor-in-Chief *Journal of Geodesy* (1995-2003), Editor-in-Chief *IAG Bulletin* with Communication and Outreach (1991-1995), Associate Editor *Encyclopedia of Geodesy* (2019-), Editorial Board member of 13 peer-reviewed international scientific journals, Co-editor textbook *GPS for Geodesy* (Teunissen and Kleusberg, 1998) and *Handbook of GNSS* (Teunissen and Montenbruck, 2017).

Fellow (2023) of the International Union of Geodesy and Geophysics (IUGG)

