

G. Kirchengast – Curriculum Vitae (tabular scientific CV)

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Prof. Gottfried Kirchengast

Born: 14 July 1965, *Nationality:* Austrian

since 2016 also	Honorary Professor, National Space Science Center, Chinese Academy of Sciences
since 2012 also	Adjunct Professor, Geospatial Sciences School, RMIT Univ. Melbourne
2005 – present	Director, Wegener Center for Climate and Global Change, Univ. of Graz
2003 – present	Professor of Geophysics (Alfred Wegener's Chair), Univ. of Graz
1998 – present	Visiting Scientist/Professor at MPI for Meteorology Hamburg, UCAR Boulder, Univ. of Arizona Tucson, GFZ Potsdam, Univ. of Hawai'i Manoa/Honolulu, RMIT Univ. Melbourne, NSSC/CAS Beijing, etc. (typically 2-3 months summer visits)
1992 – 2002	Assist. Professor – Assoc. Professor (as of 1997), Univ. of Graz
1992 – 1994	Max-Planck Postdoc Fellow at MPI for Aeronomy Lindau/Göttingen
1988 – 1995	M.Sc. degree Geophysics (1988), Ph.D. degree Natural Sciences/Geophysics (1992), M.Sc. Physics (1995) (Univ. of Graz; all graduations with highest honors)

Experience and Expertise: (more information: <http://homepage.uni-graz.at/gottfried.kirchengast/>)

Research. Since 1996 focus on atmospheric remote sensing from space and climate research. Atmospheric remote sensing expertise includes occultation methods (like GNSS radio occultation and LEO-LEO occultation) and other coherent-signal and spectroradiometric methods (in infrared and microwave), with the main aim to conceive and develop methods and algorithms, and to provide optimal climate utility of such data. Since 2006 also complementary work on ground-based methods with high resolution for climate applications (e.g., realization of the WegenerNet climate station network). Climate research expertise includes analysis of atmospheric change, validation and improvement of climate modeling by accurate observational constraints (benchmark data), climate change detection and attribution, and integrated climate analysis from global to local scale with a focus on precipitation and hydrological extremes in a warming climate. Methodological expertise includes advanced physical and statistical modeling, including forward and inverse modeling, as well as advanced data analysis, for simulations and optimal estimation in complex systems (e.g., parts of the climate&society system). Before 1996 his research focused on upper atmosphere physics including on thermosphere-ionosphere interactions, high-resolution ionospheric weather modeling, and ionospheric tomography. He is author/co-author of more than 110 peer-reviewed articles (ISI/Scopus/GoS h-index 25/25/34) and more than 160 further scientific articles and reports, and of several books.

Teaching. Developed and delivered university courses (lectures, exercises, seminars, etc.) on many topics of geophysics, meteorology, environmental and space physics, modeling and data analysis, and environmental system sciences. Also supervised M.Sc. and Ph.D. students on a wide variety of topics. More than 35 Ph.D. students and as well more than 35 M.Sc. students have been given guidance to successful completion since 1992, many of whom are successful also in international careers.

Leadership. Founder and leader (since 1996) of the Atmospheric Remote Sensing and Climate System (ARSCliSys) Research Group (about 15 scientists), also head of the Geophysics and Meteorology branch at the Institute of Physics (since 2003), later founder and director (since 2005) of the Wegener Center for Climate and Global Change (WEGC) including ARSCliSys and other partner research groups (about 40 scientists), and (co-)founder of various community network initiatives.

Furthermore, he stands among the European pioneers in GNSS radio occultation science, has conceived and pioneer-explored infrared-laser occultation and reflectometry methods, and is leader of many international and national research projects or of the Univ. of Graz participation in them (with funds from ESA, EU, Austrian Space Application Programme, Austrian Science Fund, etc.). He is also member of many international scientific societies, bodies, and panels as well as scientific meeting organizer, reviewer, evaluator, and consultant in many international contexts and projects.

Awards. Received numerous awards, including (selected main ones): the "START Preis 1998" for research on advanced satellite methods for atmospheric change analysis ["START" prizes are Austria's most prestigious funding awards for young researcher leaders]; the "J. Krainer Würdigungspreis 1999" for exceptional contributions to meteorology and geophysics; the "GRAWE Award 2006" for exceptional climate change research and leadership; the "Forschungspreis des Landes Steiermark 2012" [top state research prize of Styria/Austria] for pioneering work on monitoring the climate. Recognizing his merits so far he has been elected lifetime member of the Austrian Academy of Sciences in 2011.

Languages: German, English, some French