

Prof. Dr. Johannes Orphal
Head of Division, Division 4 "Natural and Built Environment"
Karlsruhe Institute of Technology (KIT),
Karlsruhe, Germany



Professional career

2020- Head of Division, Division 4 "Natural and Built Environment", KIT, Karlsruhe
2009- Full Professor of Physics, KIT, Karlsruhe
2009-2020 Director, Institute for Meteorology and Climate Research (IMK), KIT, Karlsruhe
2006-2009 Professeur des Universités (Physique), Université de Paris-Est, Créteil, France
2005-2008 Visiting Scientist (3 months per year), University College Cork (UCC), Ireland
2002 Habilitation à Diriger les Recherches, Université de Paris-Sud, Orsay, France
1999-2005 Chargé de Recherche, CNRS, Laboratoire de Photophysique Moléculaire, Orsay, and Laboratoire Interuniversitaire des Systèmes Atmosphériques, Créteil, France
1995-1999 Research Associate (PostDoc), Institute for Environmental Physics (IUP) and Institute for Remote Sensing (IFE), University of Bremen, Germany
1995 Docteur en Sciences (Lasers et Matière), Université de Paris-Sud, Orsay, France
1991-1995 Doctoral Student, Laboratoire de Physique Moléculaire et Applications, CNRS and Université de Paris-Sud, Orsay, France
1991 Diploma in Physics, Division of Molecular Physics, Humboldt University of Berlin
1986-1991 Physics Student, Humboldt University Berlin
1984-1986 Computer Operator, professional training and certificate, VEB DVZ, Berlin
1984 Abitur, Max-Planck-Gymnasium (1st EOS), Berlin

Awards

2019 Corresponding Member, Académie de l'Air et de l'Espace, Toulouse, France
2018 Prix Gay-Lussac - Humboldt of the Académie des Sciences (Paris), France
2017 Gentner-Kastler - Prize (jointly awarded by the DPG and the SFP)
2014 Prix "La Recherche" (France), category "Environnement" (Co-Lauréat), France
2012 Faculty Award for the best Experimental Physics lecture, KIT, Karlsruhe, Germany
2010 50 Years of the Journal of Quantitative Spectroscopy & Radiative Transfer - Milestone Paper Award (3 papers)
2005-2008 EU Senior Research Fellow, Transfer of Knowledge (ToK) Network, University College Cork (UCC), Ireland
2004 Prix de la Valorisation de la Recherche (Prix du Conseil Général de l'Essonne), Université Paris-11 (Paris-Sud), Orsay, France
2003 The Journal of Molecular Spectroscopy Special Review Lecture, 58th International Symposium on Molecular Spectroscopy, Ohio State University, Columbus, USA
1999 Emmy-Noether Fellow of the DFG (Phase 1, individual fellowship)
1992-1994 Marie Curie Fellow of the EU (HCM, CEC DG-XII, individual fellowship)
1991-1992 MICECO Fellow of the French Government (selection by the French Embassy Berlin)

Scientific publications

Over 200 scientific publications since 1993 (ISI WoS: 187 articles, over 14200 citations, h-index 43)

Research management (selected)

KIT representative in the Management Board of the Research Field "Earth and Environment" of the Helmholtz Association (HGF), 2020-

KIT representative on the Scientific Board of Trustees for the German research aircraft HALO (High-Altitude Long-Range Aircraft), 2020-

Chairman of the Board of CEDIM (Center for Disaster Management and Risk Reduction), 2020-

Scientific Spokesperson for the "Atmosphere and Climate" programme, funded by the German government (BMBF) via the Helmholtz Association (HGF), 2012-2020

Member of the Scientific Steering Committee for the German research aircraft HALO (High-Altitude Long-Range Aircraft), 2010-2020

Member of the Mission Advisory Group for the Meteosat Third Generation (MTG) Infrared Sounder (IRS), EUMETSAT, 2017-2020

Vice-President of EUCOR (Association of European Universities on the Upper Rhine), KIT representative, 2014-2015

Scientific Spokesperson of the KIT Center "Climate and Environment", 2011-2015

Chair of the ACSO (Absorption Cross Sections of Ozone) Initiative of the World Meteorological Organization, 2009-2015

Member of the Mission Advisory Group for PREMIER (Earth Explorer 7 candidate), ESA, 2009-2013

Steering Committee of the "Programme National Chimie Atmosphérique" (PNCA), France, 2005-2009

Comité d'Utilisateurs des Synchrotrons SOLEIL, L'Orme des Mérisiers, France, 2002-2008

Committees (selected)

Chair of the Environmental Physics Division, European Physical Society (EPS), 2020-

Chair of the International Prize Committee of the German Physical Society, 2019-

Member (appointed by the Ministry MESRI) of the Conseil Scientifique of the CNRS (France), 2018-

Scientific Expert for the Belgian Federal Science Police Office (BELSPO), Bruxelles, 2015-

Scientific Expert for the Alexander von Humboldt Foundation, Bonn, 2010-

Scientific expert for the research agencies ANR (including EQUIPEX) and AERES/HCERES, 2005-

Member of the KIT Senate, 2011-

Scientific Committee of the "High-Resolution Molecular Spectroscopy" (HRMS) Conferences, 2005-2023

Scientific expert and jury member for the Robert Bosch Foundation, Stuttgart, 2017-2020

Scientific Director of the German-French Initiative of KIT ("KIT-DeFI"), 2012-2019

Member of the Scientific Advisory Council at the European Centre for Medium-Range Weather Forecasts (ECMWF), 2011-2018

Member (elected) of the International Radiation Commission (IRC), IUGG-IAMAS, 2009-2016

Scientific Advisory Council of the Leibniz Institute for Atmospheric Physics, Kühlungsborn, 2013-2016

Scientific Advisory Board of the Leibniz Institute for Tropospheric Research, Leipzig, 2009-2016

President of the AEQES (Belgium) Committee for Physics, Chemistry, Geosciences, 2014-2015

Vice-Chair of the Committee on Space Research (COSPAR) Commission A1 (Atmosphere, Meteorology, and Climate), 2004-2012

Member of the "Conseil National Universitaire" (CNU), Section 30 " Physique Atomique et Moléculaire, Optique, Spectroscopie ", 2006-2009

Member (elected) of the Bureau National of the Société Française de Physique (SFP), 2005-2009

Secretary of the Opening Event "Physics for Tomorrow" of the World Year of Physics, UNESCO, 2005

Member (elected) of the Conseil d'Administration of the Société Française de Physique (SFP), 2003-2005