

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



**Professional career**

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| 2020-     | Head of 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**

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| 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 German DPG and the French SFP)   |
| 2014      | Prix "La Recherche" (France), category Environnement (Co-Lauréat), France  |
| 2012      | Faculty Award for the best Experimental Physics Lecture, KIT, Karlsruhe, Germany   |
| 2010      | Milestone Paper Award (3 papers) – 50 Years of the Journal of Quantitative Spectroscopy & Radiative Transfer   |
| 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, Award received at the 58th International Symposium on Molecular Spectroscopy, Ohio State University, Columbus, USA |
| 1998-1999 | "Emmy Noether" Fellow of the German Research Foundation (DFG, individual fellowship)   |
| 1992-1994 | "Marie Curie" Fellow of the European Commission (CEC DG-XII, individual fellowship)  |
| 1991-1992 | MICECO Fellow of the French Government (awarded by the French Embassy Berlin)  |

## **Scientific publications**

250 scientific publications, 190 peer-reviewed papers (ISI), 16000 citations, h-index 52 (Google Scholar)

## **Research management (selected)**

Management Board of the Research Field "Earth and Environment", Helmholtz Association (HGF), 2020-  
Board of Trustees for the German research aircraft HALO ("High-Altitude Long-Range Aircraft"), 2020-  
Board of Trustees for the High-Altitude Research Station "Schneefernerhaus" (Mt Zugspitze), 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"), 2014-2015

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

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

## **Committees (selected)**

Member of the International Selection Committee, Institut Universitaire de France (IUF), 2024-

Chair of the Research and Transfer Committee of the European University Alliance EPICUR, 2023-

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

Member (appointed by the Ministry MESRI) of the Conseil Scientifique of the CNRS (France), 2018-2024

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-

Chair of the International Prize Committee of the German Physical Society, 2019-2023

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

Member of the KIT Senate, 2011-2020

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

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

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

Scientific Advisory Board 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 of the Bureau National of the Société Française de Physique (SFP), 2005-2009

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