

## Publication statistics

	2008	2009
<b>Total number of publications</b>	<b>205</b>	<b>263</b>
Books (author, editor)	0	1
Book sections	6	8
Conference proceedings	43	62
Publications, peer-reviewed	74	114
Publications, other	4	3
Lectures, invited	10	12
Lectures, other	70	57

## Publications

## 2008

- Allan, J. D., Baumgardner, D., Raga, G. B., Mayol-Bracero, O. L., Morales-García, F., García-García, F., Montero-Martínez, G., Borrmann, S., Schneider, J., Mertes, S., Walter, S., Gysel, M., Dusek, U., Frank, G. P. and Krämer, M. 2008. Clouds and aerosols in Puerto Rico - A new evaluation. *Atmos. Chem. Phys.*, **8**, 1293-1309.
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### Awards

#### **Publication award of the Leibniz Institute for Tropospheric Research 2008**

Berndt, T., et al. (2008), SO<sub>2</sub> oxidation products other than H<sub>2</sub>SO<sub>4</sub> as a trigger of new particle formation. Part 1: Laboratory investigations, *Atmos. Chem. Phys.*, **8**, 6365-6374.

#### **Publication award of the Leibniz Institute for Tropospheric Research 2009**

Jebens, S., O. Knöth, and R. Weiner (2009), Explicit two-step peer methods for the compressible Euler equations, *Mon. Wea. Rev.*, **137**, 2380-2392 (doi:2310.1175/2008MWR2671.2381).

#### **Cross-departmental publication award in 2009**

van Pinxteren, D., E. Brüggemann, T. Gnauk, Y. Iinuma, K. Müller, A. Nowak, P. Achtert, A. Wiedensohler, and H. Herrmann (2009), Size- and time-resolved chemical particle characterization during CAREBeijing-2006: Different pollution regimes and diurnal profiles, *J. Geophys. Res. - Atmos.*, **114** (Campaigns of Air Quality Research in Beijing and Surrounding Region: 2006 (Special Issue CAREBeijing-2006)), D00G09, doi:10.1029/2008JD010890.

Birmili, W., B. Alaviippola, D. Hinneburg, O. Knöth, T. Tuch, J. Borcken-Kleefeld, and A. Schacht (2009), Dispersion of traffic-related exhaust particles near the Berlin urban motorway: Estimation of fleet emission factors, *Atmos. Chem. Phys.*, **9**, 2355-2374.

### University courses

Lecturer	Course	WS 2007/ 2008	SS 2008	WS 2008/ 2009	SS 2009	WS 2009/ 2010
Ansmann, A. Müller, D. Wandinger, U.	Active remote sensing (LIDAR) in environmental and atmospheric research and passive aerosol remote sensing		x		x	
Heintzenberg, J. Stratmann, F. Wiedensohler, A.	Atmospheric Aerosols I Lab	x		x		x <sup>2)</sup>
Heintzenberg, J. Tegen, I. Wiedensohler, A.	Atmospheric Aerosols II		x			
Heintzenberg, J. Dubois, R. Klugmann, D. Siebert, H. Spindler, G.	Modern Meteorological Instruments I		x			
Heintzenberg, J.	Modern Meteorological Instruments II	x		x		
Heintzenberg, J.	Frontlines of Atmospheric Research	x		x		
Heintzenberg, J.	Guest lecture: 125 <sup>th</sup> public experimental lecture, topic: "Cloud research in Leipzig," University of Leipzig, Faculty of Physics and Earth Science			x		
Heintzenberg, J.	Guest lecture: "Atmospheric Chemistry and Radiation in the Atmosphere," Stockholm University, Department of Meteorology, Sweden			x		
Hellmuth, O.	Guest lecture: "Weather Prognosis (NWP)" within the series of lectures "Sources, Pathways and Receptors of Extreme Floods" (FLOODmaster Programme (Integrated Flood Risk, Management of Extreme Events)), Technische Universität Dresden		x		x	
Hermann, M.	Guest lecture: two lectures in the course of the EUFAR Summer School for Airborne Cloud and Aerosol Science, Utrecht, The Netherlands		x			
Herrmann, H.	Atmospheric Chemistry I Atmospheric Chemistry Seminar Atmospheric Chemistry Lab	x		x <sup>1)</sup>		x
Herrmann, H.	Atmospheric Chemistry II Practice Atmospheric Chemistry Seminar		x		x	
Kahnt, A.	Practices in general and anorganic chemistry			x		

Lecturer	Course	WS 2007/ 2008	SS 2008	WS 2008/ 2009	SS 2009	WS 2009/ 2010
Müller, D.	Guest lecture: bloc lecture "Remote Sensing Techniques and Data Analysis", Universidad de Granada, Department of Applied Physics, Spain		x			
Müller, D.	Guest lecture: "Remote Sensing of Aerosols", Gwangju Institute of Science and Technology, Department of Environmental Science and Engineering, Republic of Korea			x		
Renner, E. Knoth, O. Wolke, R. Hellmuth, O. Tegen, I. Grützun, V.	Mesoscale Meteorological Modeling/ Regional Climate Modeling		x		x	
Renner, E.	Modeling of Transport and Chemical Transformation of Air Pollutants	x		x		x
Tegen, I.	General Circulation G2					x <sup>3)</sup>
Wandinger, U.	Atmospheric Optics	x		x		
Ziemann, A. (University Leipzig) Heintzenberg, J. Herrmann, H.	Fundamentals of Cloud Physics	x				

<sup>1)</sup> Only "Atmospheric Chemistry Seminar"

<sup>2)</sup> Lecture was held by A. Wiedensohler and F. Stratmann

<sup>3)</sup> Lecture was held by I. Tegen (substitute for Prof. Metz, Leipzig Institute of Meteorology)

### Habilitation, Doctoral theses, Diploma, Master of Science and Bachelor of Science

Degree <sup>1)</sup>	Name	Title	Year	Faculty
Habil.	Tegen, I.	Soil dust aerosol and climate	2008	University of Leipzig, Faculty of Physics and Earth Science
Ph. D.	Grützun, V.	Influence of aerosol particles on deep convective clouds: Investigations with the new model LM-SPECS	2009	University of Leipzig, Faculty of Physics and Earth Science
Ph. D.	Heinold, B.	Regional modeling of Saharan dust in the framework of the SAMUM (SAharan Mineral dUst experiMent) field project	2008	University of Leipzig, Faculty of Physics and Earth Science
Ph. D.	Schepanski, K.	Characterising Saharan dust sources and export using remote sensing and regional modelling	2009	University of Kiel, Faculty of Mathematics and Natural Sciences
Ph. D.	Tilgner, A.	Modelling of the physico-chemical multiphase processing of tropospheric aerosols	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Achtert, P.	Klassifizierung der hygroskopischen Wachstumsfaktoren von atmosphärischen Aerosolen in der nordchinesischen Tiefebene	2008	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Berghof, M.	Variation des Mischungszustandes nicht flüchtiger Aerosolbestandteile in stark verschmutzten Regionen in China	2008	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Bräuer, P.	Mechanismusentwicklung zur troposphärischen Halogenchemie	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Ditas, F.	Aerosol number-size distributions inside and outside clouds: Characterisation of a new measurement system and first results	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Frontke, J.	Charakterisierung der Grenzschicht anhand von Vertikalwindmessungen mit einem Doppler-Lidar	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Hartmann, S.	First experimental and theoretical studies concerning heterogeneous ice nucleation at the Leipzig Aerosol Cloud Interaction Simulator	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Herold, C.	Wasserdampf- und Temperaturmessung mittels Lidar während COPS und SAMUM	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Katzwinkel, J.	Investigation of the thermodynamics of deliquescence / efflorescence induced hysteresis in hygroscopic growth of soluble particles	2009	University of Leipzig, Faculty of Physics and Earth Science

Degree <sup>1)</sup>	Name	Title	Year	Faculty
Dipl.	Kopka, K.	Variabilität des Aerosols und Partikelneubildung in und an Wolken	2008	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Köppe, M.	Charakterisierung der Submikrometer-Aerosolpartikel in der oberen Troposphäre und unteren Stratosphäre	2008	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Kunze, T.	Einfluss der Rand- und Anfangsbedingungen sowie der Eisnukleation auf die Starkregenvorhersage des COSMO-DE am Beispiel des Elbehochwassers 2002	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Preißler, J.	Geometrische und optische Eigenschaften von Aerosolschichten aus verschiedenen Quellregionen Europas	2008	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Schmidt, J.	Aufbau und Test von Mehrfachstreu-detektionskanälen zur Messung der Wolkentröpfchengröße mit einem Ramanlidar	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Schrödner, R.	Aerosolkammeruntersuchungen und CE/ESI-MS Analyse partikulärer Produkte der Ozonolyse von Alkenen	2009	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Walter, J.	Charakterisierung einer kleinen Nebelkammer	2008	University of Leipzig, Faculty of Physics and Earth Science
Dipl.	Weber, S.	Aufbau und Charakterisierung einer Apparatur zur zeitaufgelösten breitbandigen UV-VIS-Untersuchung chemischer Reaktionen in einer optischen Faser	2009	University of Applied Sciences Jena, SciTec Department
M.Sc.	Meusinger, C.	Calibration of a spectral particle absorption photometer for determination of atmospheric mineral dust concentrations and measurements on Cape Verde Islands	2009	University of Leipzig, Faculty of Physics and Earth Science
B.Sc.	Höpner, F.	Einfluss von Wolken auf die Aerosolpartikelkonzentrationen in der oberen Troposphäre	2009	University of Leipzig, Faculty of Physics and Earth Science

<sup>1)</sup> Habil.: Habilitation, Ph. D.: Doctoral theses, Dipl.: Diploma, M.Sc.: Master of Science, B.Sc.: Bachelor of Science

### Guest scientists

Name	Period of stay	Institution
Shaw, R.	01.01. - 31.07.08	Michigan Technological University, Atmospheric Physics, Houghton, Michigan, USA
Maßling, A.	04. - 25.01.08	National Environmental Research Institute, Roskilde, Denmark
Frey, A.	16. - 30.01.08	Finnish Meteorological Institute, Helsinki, Finland
Costabile, F.	12.02. - 12.08.08	Italian National Research Council - Institute for Atmospheric Pollution (CNR-IIA), Rom, Italy
Covert, D.	17.03. - 25.04.08	University of Washington, Department of Atmospheric Sciences, Washington, USA
Burkart, J.	31.03. - 18.04.08	University of Vienna, Austria
Schneider, J.	31.03. - 18.04.08	Max Planck Institute for Chemistry, Mainz, Germany
Schmale, J.	31.03. - 18.04.08	Max Planck Institute for Chemistry, Mainz, Germany
Reitz, P.	31.03. - 18.04.08	Max Planck Institute for Chemistry, Mainz, Germany
Mentel, Th.	31.03. - 18.04.08	Forschungszentrum Jülich, Germany
Spindler, Ch.	31.03. - 18.04.08	Forschungszentrum Jülich, Germany
Martinez, A.	01.04. - 30.09.08	Universidad de Valencia, Burjassot, Spain
Kolgotin, A.	01. - 18.05.08	Physics Instrumentation Center of General Physics Institute, Troitsk, Moscow region, Russia
Perez, D.	03.08. - 24.10.08	Universidad de Granada, Centro Andaluz de Medio Ambiente (CEAMA), Grupo de Física de la Atmósfera, Granada, Spain
Chuang, P.	10.09. - 01.10.08	University of California, Santa Cruz, California, USA
Ruehl, Ch.	10.09. - 01.10.08	University of California, Santa Cruz, California, USA
Sipilä, M.	02. - 07.10.08	University of Helsinki, Finland
Guzman, F. N.	03. - 19.10.08	Universidad de Granada, Centro Andaluz de Medio Ambiente (CEAMA), Grupo de Física de la Atmósfera, Granada, Spain
Mamouri, R.-E.	06. - 23.10.08	Physics Department, Technical University of Athens, Greece
Deng, Z.	08.11. - 06.12.08	Peking University, China
Liu, P.	08.11. - 06.12.08	Peking University, China
Malinka, A.	20. - 27.11.08	B. I. Stepanov Institute of Physics, National Academy of Sciences of Belarus, Minsk, Republic of Belarus
Noh, Y.	01. - 31.12.08	Gwangju Institute of Science and Technology (GIST), Republic of Korea
Shaw, R.	08. - 20.12.08	Michigan Technological University, Atmospheric Physics, Houghton, USA
Morozov, I.	09. - 19.12.08	Russian Academy of Sciences, Institute for Chemical Physics, Moscow, Russia
Shen, X.	03.01. - 03.02.09	Chinese Academy of Meteorological Sciences, Beijing, China
Rizzo, L.	02.02. - 11.02.09	University of São Paulo, Brazil

<b>Name</b>	<b>Period of stay</b>	<b>Institution</b>
Reitz, P.	19.03. - 10.04.09	Max Planck Institute, Mainz, Germany
Kessel, S.	19.03. - 10.04.09	Max Planck Institute, Mainz, Germany
Petters, M.	19.03. - 10.04.09	Colorado State University, Fort Collins, Colorado, USA
Reimann, B.	19.03. - 10.04.09	Goethe University Frankfurt, Germany
Buchholz, A.	19.03. - 10.04.09	Forschungszentrum Jülich, Germany
Sierau, B.	20.03. - 03.04.09	Swiss Federal Institute of Technology Zurich, Switzerland
Stetzer, O.	20.03. - 08.04.09	Swiss Federal Institute of Technology Zurich, Switzerland
Sullivan, R.	26.03. - 09.04.09	Colorado State University, Fort Collins, Colorado, USA
Aiken, A.	01.04. - 08.04.09	Swiss Federal Institute of Technology Zurich, Switzerland
Ma, N.	01.05. - 29.05.09	Peking University, China
Liu, P.	01.05. - 29.05.09	Peking University, China
Deng, Z.	01.05. - 29.05.09	Peking University, China
Slesar, A.	02.05. - 31.05.09	National Academy of Sciences of Belarus, Minsk, Republic of Belarus
Karol, M.	02.05. - 05.06.09	National Academy of Sciences of Belarus, Minsk, Republic of Belarus
Lopatsin, A.	02.05. - 05.06.09	National Academy of Sciences of Belarus, Minsk, Republic of Belarus
Asipenka, F.	02.05. - 05.06.09	National Academy of Sciences of Belarus, Minsk, Republic of Belarus
Pavlovich, A.	02.05. - 05.06.09	National Academy of Sciences of Belarus, Minsk, Republic of Belarus
Shin, D.-H.	04. - 30.05.09	Gwangju Institute of Science and Technology (GIST), Republik of Korea
Shchekin, A.	11. - 18.05.09	St. Petersburg State University, Russia
Filep, A.	22.06. - 10.07.09	University of Szeged, Hungary
Lopez, E. F.	07. - 18.07.09	The University of Manchester, United Kingdom
Jagodnicka, K.	04. - 31.08.09	University of Warsaw, Poland
Zhang, Q.	14. - 20.09.09	University at Albany, State University of New York, Albany, USA
Morozov, I.	21.09. - 16.11.09	Russian Academy of Sciences, Institute for Chemical Physics, Moscow, Russia
Deguillaune, L.	26. - 30.10.09	Le laboratoire de Météorologie Physique, Département de l' Atmosphère, Aubière Cedex, France
Laborde, M.	17. - 27.11.09	Paul Scherer Institute, Villingen, Switzerland
Villano, P.	30.11. - 04.12.09	University Joseph Fourier, Grenoble, France

### Visits of IfT scientists at other research institutions

Name	Period of stay	Institution
Müller, D.	01. - 13.03.08	National Technical University of Athens, Physics Department, Zografou, Greece
Müller, D.	30.03. - 13.04.08	Universidad de Granada, Centro Andaluz de Medio Ambiente (CEAMA), Grupo de Física de la Atmósfera, Granada, Spain
Hellmuth, O.	11. - 19.04.09	Joint Institute for Nuclear Research (JINR) Dubna, Russia
Hellmuth, O.	12. - 26.04.08	Joint Institute for Nuclear Research (JINR) Dubna, Russia
Müller, Th.	18.04. - 16.05.08	National Oceanic and Atmospheric Administration (NOAA), Boulder, Colorado, USA
Heintzenberg, J.	23. - 30.04.08	University of California, Berkeley, California, USA
Heintzenberg, J.	21. - 25.05.08	Stockholm University, Department of Meteorology, Sweden
Seifert, P.	30.06. - 04.07.08	National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA
Heintzenberg, J.	11.10. - 02.11.08	Stockholm University, Department of Meteorology, Sweden
Mattis, I.	21.11. - 20.12.08	Gwangju Institute of Science and Technology (GIST), Department of Environmental Science and Engineering, Atmospheric Remote Sensing Laboratory, Republic of Korea
Müller, D.	30.04. - 09.05.09	Universidad de Granada, Centro Andaluz de Medio Ambiente (CEAMA), Grupo de Física de la Atmósfera, Granada, Spain
Müller, D.	28.09. - 03.10.09	Institute of Methodologies for Environmental Analysis (CNR-IMAA), Potenza, Italy
Seifert, P.	27.11. - 12.12.09	Gwangju Institute of Science and Technology (GIST), Department of Environmental Science and Engineering, Atmospheric Remote Sensing Laboratory, Republic of Korea

### Meetings

Meeting	Date	national/ international	Number of participants
Calibration workshop for particle size spectrometers, Leipzig	25. - 29.02.08	international	22
2 <sup>nd</sup> meeting on the measurement of ultra fine respirable dust in the atmosphere, Leipzig	27.06.08	national	22
3 <sup>rd</sup> International Workshop on Mineral Dust, Leipzig	15. - 17.09.08	international	145
SAMUM Workshop, Leipzig	18./19.09.08	international	35
1 <sup>st</sup> IfT meeting, Kloster Nimbschen, Grimma	01. - 04.12.08	national	80
EARLI09 measuring campaign, Leipzig	04. - 31.05.09	international	25
3 <sup>rd</sup> NA3 S/DMPS Intercomparison Workshop, Leipzig	15. - 24.06.09	international	20
2 <sup>nd</sup> NA4 Absorption Photometer Workshop, Leipzig	29.06. - 10.07.09	international	20
IfT summer school, Rabenberg	16. - 28.08.09	international	31
HALO/ACRIDICON Workshop, Leipzig	04. - 06.10.09	international	22

## International and national field campaigns

Field Campaign	Project partner
<b>AIDA Campaign ACI 02</b> Karlsruhe, Germany IfT: Physics Dept.	Germany, Switzerland, United Kingdom
<b>AIDA Campaign ACI 03</b> Karlsruhe, Germany IfT: Physics Dept.	Germany, United Kingdom, USA, Switzerland
<b>ALPACA</b> <i>Aerosol Lidar measurements at Punta Arenas in the frame of Chilean - German cooperation</i> Punta Arenas, Chile IfT: Physics Dept.	Universidad de Magallanes, Punta Arenas, Chile
<b>AMAZE 2008</b>	AMAZE Consortium
<b>EARLI09</b> <i>EARlinet Reference Lidar Intercomparison 2009</i> Leipzig, Germany IfT: Physics Dept.	EARLINET Consortium; University of Leipzig, Germany; Jenoptik, Germany; Leosphere, France
<b>EARLINET</b> (permanent experiment) <i>European Aerosol Research Lidar Network</i> Leipzig, Germany IfT: Physics Dept.	EARLINET Consortium
<b>EUCAARI</b> <i>European Integrated Project on Aerosol, Cloud, Climate and Air Quality Interactions</i> Brazil, China and South Africa IfT: Physics Dept.	EUCAARI Consortium
<b>EUCAARI</b> <i>European Integrated Project on Aerosol, Cloud, Climate and Air Quality Interactions</i> Forschungszentrum Jülich, Germany IfT: Physics Dept.	EUCAARI Consortium
<b>EUCAARI</b> <i>European Integrated Project on Aerosol, Cloud, Climate and Air Quality Interactions</i> Melpitz, Germany IfT: Physics and Chemistry Depts.	Finland, France, Germany, Switzerland, The Netherlands, United Kingdom, Sweden, Hungary, Norway, Greece
<b>EUSAAR</b> <i>European Super-Sites for Atmospheric Research</i> IfT: Physics and Chemistry Depts.	EUSAAR Consortium: Czech Republik, South Africa, India, Denmark, UAE, Brazil, Israel, Poland, Portugal, Estonia, China
Examination of the Hygroscopicity of Algae-Exudates IfT: Physics Dept.	University of Manchester, United Kingdom
Feinstaubbelastung in städtischen Ballungsgebieten am Beispiel von Dresden und Leipzig IfT: Physics Dept.	Dresden University of Technology, Institute for traffic planning and road traffic, Dresden, Germany; Federal Environment Agency, Berlin-Dahlen, Germany; Humboldt University Berlin, Department of Geography, Berlin, Germany

## Appendices: International and national field campaigns

Field Campaign	Project partner
<b>FROST-II - Freezing of Dust</b> IfT: Physics and Chemistry Depts.	Colorado State University, Fort Collins, Colorado, USA; Swiss Federal Institute of Technology Zurich, Switzerland; Johannes Gutenberg University Mainz, Germany; Goethe University Frankfurt, Germany; Forschungszentrum Jülich, Germany
<b>GUAN</b> <i>German Ultrafine Aerosol Network</i> IfT: Physics and Chemistry Depts.	Umweltbundesamt Langen, Germany; German Research Center for Environmental Health, Munich, Germany; Saxon State Ministry of the Environment and Agriculture, Dresden, Germany; Institute of Energy and Environmental Technology e.V. (IUTA), Duisburg, Germany; DWD Hohenpeißenberg, Germany
<b>HaChi</b> <i>Haze in China</i> IfT: Physics and Chemistry Depts.	Peking University, China; China Meteorological Administration, Beijing, China
<b>IMPACT</b> IfT: Physics Dept.	The Netherlands
Influence of small wood firings on the immission situation - part immission measurement IfT: Physics and Chemistry Depts.	Saxon State Ministry of the Environment and Agriculture, Dresden, Germany
<b>LACIS Campaign FROST-I</b> LACIS, IfT Leipzig, Germany IfT: Physics Dept.	University of Vienna, Austria; Forschungszentrum Jülich, Germany; Johannes Gutenberg University Mainz, Germany; Michigan Technology University, Houghton, Michigan, USA; University of Washington, Seattle, Washington, USA
<b>LACIS Campaign phase Doppler interferometer</b> LACIS, IfT Leipzig, Germany IfT: Physics Dept.	University of California, Santa Cruz, California, USA
<b>Lagrangian Turbulence of Cloud Droplets</b> Umweltforschungsstation Zugspitze, Germany IfT: Physics Dept.	Michigan Technology University, Houghton, Michigan, USA; Max Planck Institute for Dynamics and Self-Organization, Göttingen, Germany
<b>MEGACITIES</b> Zhongshan, China IfT: Physics Dept.	University of Leipzig, Germany; Peking University, China; Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Hefei, China
<b>MEGAPOLI</b> <i>Megacities: Emissions, urban, regional and global atmospheric pollution and climate effects, and integrated tools for assessment and mitigation</i> Paris, France IfT: Physics Dept.	MEGAPOLI Consortium

Field Campaign	Project partner
<b>Melpitz EMEP</b> <i>Co-operative Program for Monitoring and Evaluation of the Long-range Transmission of Air pollutants in Europe</i> IfT: Physics and Chemistry Depts.	Switzerland, Czech Republic, Denmark, Spain, Ireland, Italy, The Netherlands, Norway, United Kingdom
<b>OCEANET</b> <i>Autonome Messplattformen zur Bestimmung des Stoff- und Energieaustauschs zwischen Ozean und Atmosphäre</i> IFM-GEOMAR: Polarstern and IfT: Physics Dept.	Leibniz-Institut für Meereswissenschaften IFM-GEOMAR, Kiel, Germany; GKSS-Forschungszentrum, Geesthacht, Germany; Alfred-Wegener-Institut für Polar- und Meeresforschung AWI, Potsdam, Germany; Universität Bremen, Germany
<b>SAMUM-II</b> <i>Saharan Mineral Dust Experiment</i> Cape Verde IfT: Physics Dept.	SAMUM-II Consortium
<b>SOPRAN</b> <i>Surface Ocean Processes in the Anthropocene</i> Cape Verde IfT: Physics, Chemistry and Modeling Depts.	Germany, United Kingdom, Cape Verde

### Reviews

Reviews	Number	
	2008	2009
Journals	115	140
Projects	18	27
Others	77	6
<b>Total</b>	<b>210</b>	<b>173</b>

### Memberships

Name	Board	Year
Birmili, W.	Editorial Board Member "Atmospheric Chemistry and Physics"	2008
	Member of the advisory board of "Boreal Environmental Research"	2008
Gnauk, T.	VDI/DIN KRdL-AG Messen von Partikeln in der Außenluft	2009
Heintzenberg, J.	DFG-Fachkollegium „Ozeanographie und Atmosphärenforschung“	2008/2009
	Ordentliches Mitglied der Sächsischen Akademie der Wissenschaften	2008/2009
	Außerordentliches Mitglied der Berlin-Brandenburgischen Akademie der Wissenschaften	2008/2009
	Stellvertretender Sprecher der Sektion E der Wissenschaftsgemeinschaft „Gottfried Wilhelm Leibniz“	2008/2009
	Editorial Board "Tellus B"	2008/2009
	Editorial Board "Atmospheric Research"	2008/2009
	Permanent Scientific Advisory Committee of the Centro de Geofísica de Évora, Portugal	2008/2009
	Advisory Board of the Indian Institute of Technology (IIT) in Roorkee, India for the Max-Planck-Partner Group IIT	2008/2009
Mitglied des Wissenschaftlichen Lenkungsausschusses für HALO	2008/2009	
Herrmann, H.	Vorsitz des Arbeitskreises „Atmosphärenchemie“ in der GDCh-Fachgruppe „Umweltchemie und Ökotoxikologie (AKAC)“	2008/2009
	DECHEMA/GDCh/Bunsengesellschaft; Gemeinschaftsausschuss „Chemie der Atmosphäre“	2008/2009
	DECHEMA/GDCh/KRdL Expertengruppe Feinstaub - Mitglied der Lenkungsgruppe	2008/2009
	Mitglied des wissenschaftlichen Beirats der „Kommission zur Reinhaltung der Luft“ (KRdL) des Vereins Deutscher Ingenieure (VDI)	2008/2009
	Fellow of International Union of Pure and Applied Chemistry	2008/2009
Mertes, S.	Assoziiertes Mitglied des DFG-Sonderforschungsbereichs 641 „Die troposphärische Eisphase“	2008/2009
Renner, E.	DECHEMA/GVC-Arbeitsausschuss „Schadstoffausbreitung“	2008/2009
	Scientific Committee of the NATO/CCMS ITM conference series, German member	2008/2009
Siebert, H.	WG4 leader and Management Comity in "COST ACTION MP0806-Particles in Turbulence"	2009
Stratmann, F.	Member of the committee of the International Conference on Nucleation & Atmospheric Aerosols	2008/2009
	Member of the committee of the International Conference on Cloud and Precipitation	2008/2009
	Work Package (WP) Leader EU-Projekt EUROCHAMP 2	2009

<b>Name</b>	<b>Board</b>	<b>Year</b>
Stratmann, F.	Member of the EUROCHAMP 2 User Selection Panel (USP)	2009
Tegen, I.	GESAMP (Group of Experts on the Scientific Aspects of Marine Environmental Protection), Member of Working Group 38, The Atmospheric Input of Chemicals to the Ocean	2008/2009
	ISAR (International Society for Aeolian Research), Board Member	2008/2009
	SDS-WAS (WMO Sand and Dust Storm Warning Advisory and Assessment System), Member of Steering Committee	2008/2009
	ADOM (Atmospheric Dynamics during the last glacial cycle: Observation and Modeling) Co-Chair Eolian Records – Atmospheric Dynamics Working Group of PAGES (Past Global Changes, IGBP)	2008/2009
	Guest Editor “Annales Geophysicae”, Special Issue ‘From Deserts to Monsoons’, 2009	2009
Wandinger, U.	Topical Editor “Applied Optics”	2008/2009
	Member of the ESA-JAXA EarthCARE Joint Mission Advisory Group	2008/2009
	Member of the EARLINET Council	2008/2009
Wehner, B.	Mitglied des GAeF-Vorstands (Gesellschaft für Aerosolforschung)	2008/2009
	Co-Chair der Working Group “Atmospheric Aerosols” within the EAA (European Aerosol Assembly)	2008/2009
Wiedensohler, A.	“Scientific Advisory Group” for aerosols within the “Global Atmosphere Watch”-program of the World Meteorological Organization	2008/2009
	Editorial Board Member “Atmosphere, Water, Air and Soil Pollution”	2008/2009
	VDI-Ausschuss „Partikelzählung in der Atmosphäre“	2008/2009
	Member Scientific Steering Committee (SSC) and Work Package (WP) Leader EU-Projekt ACCENT	2008/2009
	Member SSC EU-Projekt EUSAAR	2008/2009
	Guest Professor “Peking University”, Department of Environmental Science, China	2008/2009
	Leiter Weltkalibrierzentrum für Aerosolphysik im Rahmen von WMO-GAW	2008/2009
	Editorial Board Member “Atmospheric Chemistry and Physics”	2008/2009
	Editorial Board Member “Atmospheric Measurement Techniques”	2009
Wolke, R.	European Geoscience Union (EGU)	2008

### Cooperations

#### International Cooperations

Research project	Cooperation partners
<b>ACCENT</b> <i>Atmospheric Composition Change: A European Network</i>	Italy, France, United Kingdom, Finland, Norway, The Netherlands, Greece, Greenland, Denmark, Czech Republic, Switzerland, Hungary, Ireland, Surinam, Portugal, Lithuania, Latvia, Belgium, Austria, Spain, Bulgaria, Poland
<b>ACTOS</b> <i>Airborne Cloud Turbulence Observation System - Interaction between turbulent mixing processes and cloud micro-physical characteristics in stratiform boundary layer clouds</i>	Michigan Technological University, Department of Physics, Houghton, Michigan, USA
<b>AERONET</b> <i>Aerosol Robotic Network</i>	National Aeronautics and Space Administration (NASA), USA
<b>AIE</b> <i>Atmospheric Environmental Impacts of Aerosol in East Asia</i>	30 partners
<b>ALPACA</b> <i>Aerosol Lidar measurements at Punta Arenas in the frame of Chilean - German cooperation</i>	Universidad de Magallanes, Punta Arenas, Chile
Anthropogenic influence of Asian aerosol on tropical cirrus clouds	National Center for Atmospheric Research (NCAR), Boulder, Colorado, USA
<b>AQMEII</b> <i>Air Quality Model Evaluation International Initiative</i>	Austria, Australia, Belgium, Canada, Switzerland, Cyprus, Germany, Denmark, Finland, France, Greece, Italy, Luxembourg, Malta, The Netherlands, Norway, Poland, Portugal, Sweden, United Kingdom, USA
Atmospheric Nucleation	Universities of Helsinki and Kuopio, Finland
<b>BodEx</b> <i>Quantification of near source dust emission and dust properties in the Bodele Depression</i>	University Oxford, United Kingdom; University College London, United Kingdom; NASA Goddard Space Flight Center, USA; Cornell University, Ithaca, New York, USA
<b>CARIBIC</b> <i>Civil Aircraft for Remote Sensing and In situ measurement in Tropospheric and Lower Stratosphere based on the Instrumentation Container Concept</i>	Germany, United Kingdom, France, The Netherlands, Switzerland, Sweden
<b>CLACE</b> <i>Cloud and Aerosol Characterization Experiment in the free Troposphere</i>	Switzerland, United Kingdom, Finland, Denmark, Germany
<b>CLOUD – ITN</b> <i>Cosmics leaving Outdoor Droplets - International Training Network</i>	Germany, Switzerland, Finland, Austria, United Kingdom

<b>Research project</b>	<b>Cooperation partners</b>
<b>CLOUD</b> <i>Cosmics Leaving OUtdoor Droplets</i>	Germany, Switzerland, Finland, Austria, Portugal, Russia, United Kingdom, Bulgaria
Comparison of regional dust models	France, United Kingdom, Spain, Israel, Italy
Cooperation partners involved in research projects at the IfT Research Station Melpitz	Norway, United Kingdom, Italy, Switzerland, Czech Republic, Hungary, Ireland, Finland, Austria, Sweden, Bulgaria, Belgium, France, Greece, The Netherlands, Spain, Denmark, Latvia, Poland, Portugal
<b>COST</b> <i>Chemistry transport model intercomparison</i>	Germany, The Netherlands, Finland, France
Development and evaluation of methods for the quantification of trace compounds produced by biomass burning	Academy of Science of Taipei, Taiwan
<b>DFG-COPS</b> <i>Convective and Orographically-induced Precipitation Study</i>	Germany, France, The Netherlands, United Kingdom, Italy, Switzerland, USA
<b>EARLINET</b> <i>European Aerosol Research Network</i>	Germany, Italy, Greece, Switzerland, Sweden, Spain, Portugal, Poland, Republic of Belarus, United Kingdom, France, Bulgaria
<b>EARLINET-ASOS</b> <i>European Aerosol Research Network-ASOS</i>	Italy, Germany, Spain, Greece, Switzerland, Sweden, Poland, Republic of Belarus, France, Bulgaria, Romania, Norway, The Netherlands
<b>ESA-ADM</b> <i>European Space Agency, Atmospheric Dynamics Mission</i>	European Space Research and Technology Center (ESTEC), The Netherlands
<b>ESA-CALIPSO</b> <i>EARLINET's Spaceborne-lidar-related Activity During the CALIPSO Mission</i>	European Space Research and Technology Center (ESTEC), The Netherlands; EARLINET Consortium
<b>ESA-EarthCARE</b> <i>European Space Agency, Earth Clouds, Aerosol and Radiation Explorer</i>	European Space Research and Technology Center (ESTEC), The Netherlands; Japan Aerospace Exploration Agency
<b>EUCAARI</b> <i>European Integrated Project on Aerosol, Cloud, Climate and Air Quality Interactions</i>	Norway, Germany, Finland, France, Switzerland, The Netherlands, United Kingdom, Italy, Sweden, Hungary, Ireland, Greece, Czech Republic, Denmark, India, Brazil, South Africa, India, Estonia, Austria, Poland, Portugal, China
<b>EUFAR</b> <i>European Fleet for Airborne Research in the Field of Environment and Geo Science</i>	Germany, United Kingdom, France, Ireland, Sweden

## Appendices: Cooperations

Research project	Cooperation partners
<b>EUROCHAMP</b> <i>Integration of European Simulation Chambers for Investigating Atmospheric Processes</i>	Germany, Italy, Spain, United Kingdom, Ireland, France, Switzerland, Sweden
<b>EUROCHAMP-II</b> <i>Integration of European Simulation Chambers for Investigating Atmospheric Processes</i>	Denmark, Germany, Italy, Spain, United Kingdom, Ireland, France, Switzerland, Sweden
<b>EUSAAR</b> <i>European Supersites for Atmospheric Aerosol Research</i>	United Kingdom, The Netherlands, Finland, Switzerland, Norway, France, Greece, Spain, Bulgaria, Ireland, Lithuania, Germany, Italy, Sweden, Czech Republic
<b>HaChi</b> <i>The regional aerosol in eastern China and its cloud microphysical and optical properties at high relative humidities</i>	China, Germany
<b>IAGOS</b> <i>Integration of routine Aircraft measurements into a Global Observing System</i>	Germany, United Kingdom, France
<b>ICAROHS</b> <i>Observational Requirements for Multi-wavelength HSRL Systems</i>	European Space Research and Technology Center (ESTEC), The Netherlands; Deutsches Zentrum für Luft- und Raumfahrt (DLR), Oberpfaffenhofen, Germany; Royal Netherlands Meteorological Institute (KNMI), de Bilt, The Netherlands; Meteorologisches Institut der Ludwig-Maximilians-Universität, München, Germany; DEIMOS Space S.L., Madrid, Spain
Inter-comparison of dust regional models	LISA - Laboratoire Interuniversitaire des Systèmes Atmosphériques, Université Paris, France; LaMP - Laboratoire de Météorologie Physique, Université Blaise Pascal Clermont-Ferrand, France
<b>IRMA</b> <i>Imager Retrieval Methods and ATLID synergy</i>	European Space Research and Technology Center (ESTEC), The Netherlands; BMT ARGOSS, The Netherlands; University of Bremen, Germany; German Meteorological Service, Richard Aßmann Observatory, Lindenberg, Germany
Laboratory investigations in the field of liquid phase chemistry	National Institute of Chemistry Ljubljana, Slovenia; Université de Lyon, France; Université de Marseilles, France; Semenov Institute of Chemical Physics, Moskow, Russia

Research project	Cooperation partners
<b>LACIS</b> <i>Leipzig Aerosol Cloud Interaction Simulator</i>	USA, United Kingdom, Russia, Denmark, Germany, Finland
Lidar development, Measurement of Asian Aerosols	Gwangju Institute of Science and Technology (GIST), Republic of Korea
<b>MEGACITIES</b> <i>Satellite-Based Aerosol Mapping over Megacities: Development of Methodology and Application in Health and Climate Related Studie</i>	University of Leipzig, Germany; University of Bielefeld, Germany; Peking University, China; Anhui Institute of Optics and Fine Mechanics, Chinese Academy of Sciences, Hefei, China
<b>MEGAPOLI</b> <i>Megacities: Emissions, urban, regional and Global Atmospheric Pollution and climate effects, and Integrated tools for assessment and mitigation</i>	MEGAPOLI-Consortium
Multiple scattering in Raman lidar signals	National Academy of Science of Belarus, Institute of Physics, Minsk, Republic of Belarus
<b>NASA-CALIPSO</b> <i>Cloud-Aerosol Lidar and Infrared Pathfinder Satellite Observations</i> (Lidar ground truth, EARLINET)	National Aeronautics and Space Administration (NASA), USA
<b>PAREST</b> <i>PArtikel-REduktions-STRategien</i>	Germany, The Netherlands
Polar stratospheric clouds	Service d'Aéronomie CNRS/IPSL UPMC, Paris, France
<b>Polly XT</b> (Compact Lidar Development)	Listar GmbH Leipzig, Germany
<b>Polly-Measurements in Brazil</b>	INPA - Instituto Nacional de Pesquisa da Amazônia, Manaus, Brazil
Relations between directly emitted wood burning emissions and ambient particle concentration in the Melbourne region	Commonwealth Scientific and Industrial Research Organization (CSIRO), Melbourne, Australia
Secondary new particle formation in Europe	Universities Helsinki and Kuopio, Finland
Twinning Partnership with GAW-Stations	Korean Meteorological Service; Global Atmosphere Watch (GAW), Anmyeon, Republic of Korea; Malaysian Meteorological Service, Danum Valley, Malaysia; Bulgarian Academy of Sciences, BEO-Moussala, Bulgaria
<b>UFIPOLNET</b> <i>Ultrafine particle size distributions in air pollution monitoring networks</i>	Germany, Italy, Sweden, Czech Republic
<b>ZOTTO</b> <i>Zotino Tall Tower Facility (sources and budgets of tropospheric aerosols over Siberia)</i>	Max Planck Institute for Biogeochemistry, Jena, Germany; Max Planck Institute for Chemistry, Mainz, Germany; IFOR-RASS, Krasnojarsk, Russia

### National Cooperations

Research project	Cooperation partners
<b>AirShield (BMBF-Verbundprojekt)</b> <i>Airborne remote sensing for hazard inspection by network enabled lightweight drones</i>	8 Projektpartner
Anzahl ultrafeiner Partikel in der städtischen Außenluft (Vergleichsmessungen im Prüflabor)	Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie, Dresden; TOPAS GmbH
<b>BMU Feinstaub-II</b> <i>Wärme aus Holz-Feinstaubemissionen: Brennstoffeinfluss, Nutzer, Feuerungswettbewerb, Sekundärmaßnahmen, Charakterisierung, Toxizität</i>	Deutsches BiomasseForschungsZentrum, Leipzig; TU Hamburg-Harburg; Universität Konstanz; Technologie- und Förderzentrum im Kompetenzzentrum für Nachwachsende Rohstoffe, Straubing
<b>DFG-Forschergruppe SAMUM</b> <i>Saharan Mineral Dust Experiment</i>	9 Projektpartner
<b>DFG-SPP HALO</b> Mission: ML-CIRRUS Mission: ACRIDICON Mission: NARVAL Konzeption der HALO-Datenbank und eines HALO-Missionsplanungswerkeugs	12 Projektpartner 16 Projektpartner 11 Projektpartner World Data Center for Climate; Max-Planck-Institut für Meteorologie, Hamburg; Deutsches Zentrum für Luft- und Raumfahrt (DLR), Oberpfaffenhofen
<b>DFG-SPP MetStröm</b> <i>Skalenübergreifende Modellierung in der Strömungsmechanik und Meteorologie</i> Gebietszerlegungsverfahren für positiv definite Helmholtz-Gleichungen	Potsdam-Institut für Klimafolgenforschung, Potsdam; Max-Planck-Institut für Meteorologie, Hamburg; Universität Bonn; Technische Universität Dresden
<b>DFG-SPP Niederschlagsvorhersage</b> <i>Spektrale Mikrophysik in Vorhersagemodellen unter besonderer Berücksichtigung der Tropfennukleation</i>	21 Projektpartner
<b>DWD-Raman-Lidar</b>	Kayser-Threde GmbH, München; DWD Offenbach; Meteorologisches Observatorium, Lindenberg; inqbus it-consulting, Leipzig; Loritus GmbH, München
Entwicklung eines mobilen Aerosol-Standards	Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie, Dresden
Feinstaubbelastung in städtischen Ballungsgebieten am Beispiel von Dresden und Leipzig	Technische Universität Dresden (Verkehrswesen); TU Freiberg, Interdisziplinäres Ökologisches Zentrum; Umweltbundesamt Berlin

Research project	Cooperation partners
Hochauflösende Modellierung von Wolken und Schwerewellen: Skalenanalyse, Numerik, Validierung (Leibniz-Pakt-Verfahren)	Leibniz-Institut für Atmosphärenphysik, Rostock; Potsdam-Institut für Klimafolgenforschung, Potsdam
Influence of domestic wood stoves on particulate concentrations in rural areas of Saxony	Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie, Dresden
<b>MARGA</b> <i>Physikalisch-chemische Charakterisierung des dynamischen Verhaltens von Ammoniumsalzen im Feinstaub-Aerosol - Erprobung eines neuen zeitlich hochauflösenden Messverfahrens an der EMEP-Level 3-Station Melpitz</i>	Umweltbundesamt, Dessau-Roßlau
Non-volatile components of particulate air pollution in Augsburg	Technische Bergakademie Freiberg; GSF-Forschungszentrum für Umwelt und Gesundheit GmbH, Neuherberg
<b>OCEANET</b> <i>Autonome Messplattformen zur Bestimmung des Stoff- und Energieaustauschs zwischen Ozean und Atmosphäre</i>	Leibniz-Institut für Meereswissenschaften IFM-GEOMAR, Kiel; GKSS-Forschungszentrum, Geesthacht; Alfred-Wegener-Institut für Polar- und Meeresforschung AWI, Potsdam; Universität Bremen
Paralleles Kopplungs-Framework und moderne Zeitintegrationsverfahren für detaillierte Wolkenprozesse in atmosphärischen Modellen	Technische Universität Dresden, Zentrum für Informationsdienste und Hochleistungsrechnen; Martin-Luther-Universität Halle-Wittenberg
Physikalisch-chemische Charakterisierung des Aerosols an der Messstelle Melpitz als deutscher Beitrag zur EMEP-Intensivmessphase 2008	Umweltbundesamt, Berlin
Physikalische und chemische Charakterisierung von Fein- und Ultrafeinstaubpartikeln in der Außenluft	Umweltbundesamt, Dessau-Roßlau, Langen, Schneefernerhaus (Zugspitze), Schauinsland (Oberried/ Hofgrund); Deutscher Wetterdienst, Hohenpeißenberg; IUTA Duisburg e. V., Duisburg; Helmholtz-Zentrum, München; Universität Augsburg
Quality assurance and evaluation of particle size distribution measurements from the UBA network	Umweltbundesamt, Dessau-Roßlau
<b>REGKLAM (BMBF-Verbundprojekt)</b> <i>Entwicklung und Erprobung eines integrierten regionalen Klimaanpassungsprogramms für die Modellregion Dresden</i>	6 Projektpartner
Short-term Health Effects of Fine and Ultra-fine Particle Pollution in Beijing, China	Institut für Epidemiologie, GSF-Forschungszentrum für Umwelt und Gesundheit GmbH, Neuherberg; Helmholtz-Zentrum für Umweltforschung UFZ, Abteilung Expositionsforschung und Epidemiologie, Leipzig

## Appendices: Cooperations

Research project	Cooperation partners
<b>SOPRAN (BMBF)</b> <i>Surface Ocean Processes in the Anthropocene</i>	8 Projektpartner
Strahlungseigenschaften von stratiformen Wolken	Johannes-Gutenberg-Universität, Mainz
<b>TRACES (WGL-Pakt)</b> <i>Ocean-Atmosphere-Land Impacts on Tropical Atlantic Ecosystems</i> Unterprojekt: Transport- und Umwandlungsprozesse in der Atmosphäre des tropischen Atlantiks	Leibniz-Institut für Meereswissenschaften IFM-GEOMAR, Kiel; Leibniz-Institut für Ostseeforschung, Warnemünde; Potsdam Institut für Klimafolgenforschung
<b>TROPEIS</b> <i>Sammlung und physiko-chemische Charakterisierung troposphärischer Eiskeime in Zusammenarbeit mit dem DFG-Sonderforschungsbereich 641</i>	Max-Planck-Institut für Chemie, Mainz; Universität Mainz; Universität Frankfurt; Technische Universität Darmstadt
<b>UFOPLAN</b> Umweltforschungsplan	GSF-Forschungszentrum für Umwelt und Gesundheit GmbH, Neuherberg; Deutscher Wetterdienst Offenbach; Institut für Energie- und Umwelttechnik e. V., Duisburg
Vergleich von Mobilitätsspektrometern des Typs UFP	Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie, Dresden; TSI GmbH Aachen; Topas GmbH Dresden; Gewerbeaufsichtsamt Hildesheim; Helmholtz-Zentrum München
Vergleichsmessung von Mobilitätsspektrometern verschiedener Bauart	Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie, Dresden
Verkehrsinduzierte Partikel am Schlesischen Platz in Dresden	Sächsisches Landesamt für Umwelt, Landwirtschaft und Geologie, Dresden

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