

Bernhard Rappenglück
Professor - Atmospheric Science

Department of Earth and Atmospheric Sciences (EAS), University of Houston
(713) 743-2469; brappenglueck@uh.edu

Professional Preparation

Munich University of Technology (TUM)	Atmos. Environ. Chem.	Habilitation	2003
University of Munich (LMU)	Physics	Ph.D.	1996
University of Munich (LMU)	Meteorology	M.S.	1991
Munich University of Technology (TUM)	Technical Physics	B.S.	1985

Appointments

Director	Inst. Climate & Atmos Sci, Dpt. of EAS	since Feb 2020
Full Professor	University of Houston, Dpt. of EAS	since Sep. 2016
Associate Professor	University of Houston, Dpt. of EAS	Sept 2004 – Aug 2016
Sen. Res. Scientist	Res. Cent. Karlsruhe IMK-IFU	Apr 2001 – Aug 2004
Research Scientist	LMU/TUM, Munich Bioclim&AirPollRes	Jan 1991 – Mar 2001

Research Interests

- 1) Biosphere-atmosphere exchange, boundary layer processes and mesoscale meteorology.
- 2) Quantification of trace gas budgets (e.g. carbon monoxide [CO], volatile organic compounds [VOC], peroxides [RO₂], nitrogen oxides [NO_x], peroxyacyl nitrates [PANs], ozone [O₃], sulfur dioxide [SO₂]) in unpolluted and polluted areas (e.g. Munich, Berlin, Athens, Santiago de Chile, Mexico City, Los Angeles, Houston, Dallas).
- 3) Atmospheric radical chemistry involving formaldehyde [HCHO], hydrogen peroxide [H₂O₂] and nitrous acid [HONO],
- 4) Source apportionment for primary pollutants.
- 5) Application and development of chemistry-transport modeling.

Professional Experience

University of Houston

Within the Department of Earth and Atmospheric Sciences teaching addresses areas of atmospheric chemistry and meteorology. Lead in the implementation of the Master and PhD degree program in Atmospheric Science (MS approved in 2007; PhD approved in 2010). Currently, implementation of BS degree program in Atmospheric Science.

Research foci address the determination of anthropogenic and biogenic contributions to the formation of secondary compounds in the atmosphere, more precisely the impact of volatile organic compounds (VOC) on the formation of peroxyacyl nitrates (PANs) and the role of formaldehyde and H₂O₂ in photochemical processes. Implementation of the necessary laboratory infrastructure for measurements of O₃, NO, NO₂, NO_x, CO, HCHO, H₂O₂, speciated PANs, speciated VOCs (online/offline) and meteorological parameters, including the preparation and use of different measurement platforms, e.g. ground-based and rooftop measurement sites, micrometeorological towers, airborne sondes, and aircraft. Participation in the NCAR PAN intercomparison experiment *PIE*. In collaboration with UNAM/Mexico City, performance of PAN and PPN measurements at the Paso de Cortes (4.000 m a.s.l) in the outflow of Mexico City – first continuous day- and nighttime PAN and PPN measurements at this altitude in this area. Airborne measurements along the US-Mexican border to study the impact of biomass burning plumes.

Coordination of the ground-based supersite of the TexAQS-II campaign on the campus of the University of Houston (about 50 scientists and 20 measurement groups). Lead of the “TexAQS-II Radical Measurement Project” (*TRAMP*). In addition, responsible for atmospheric sounding activities using radiosondes, ozone-sondes, a tether sonde system and aircraft missions for the determination of the spatial and temporal distribution of photochemically relevant trace gases during TexAQS-II. These studies addressed possible impacts of large scale transports and investigated boundary layer processes which are typically influenced by regional

land sea breeze circulation and convective processes in the Houston-Galveston area. Member of various TexAQS-II Rapid Science Synthesis Working Groups.

Co-PI on the project “Study of Houston Atmospheric Radical Precursors (SHARP)” which investigates primary emissions of radical precursors HCHO and HONO. This includes potentially aerosol induced HONO emission by traffic sources as well as HONO emissions induced on different urban surfaces. Coordination of airborne measurements to investigate radical sources in the Houston area. In collaboration with Chalmers University/Göteborg, Sweden the project *SOF* applies solar occultation flux methods to investigate emissions of highly reactive hydrocarbons from industrial sources.

Supported by the US EPA implementation of a research grade ambient air measurement network in Houston consisting of 5 monitoring sites (*H-NET*).

Experimental research focus on HONO addresses traffic emissions in Houston and Santiago de Chile (the latter in collaboration with Universidad de Chile and Universität Wuppertal), and ozone related chemistry during wintertime in the upper Green River Basin, Wyoming. Participation in the project FIONA “Formal Intercomparison of Observations of Nitrous Acid” in the EUPHORE smog chamber in Valencia/Spain.

Research also includes application and validation of meteorological and air quality modeling using WRF-CMAQ. Studies for population exposures to 1,3-Butadiene in the Houston Metropolitan area using CMAQ. Initiated implementation of CMAQ 4.7, including enhanced HONO chemistry modules. Analysis of boundary layer and micrometeorological processes in WRF.

Currently implementation of a GCxGC/MS Facility for Multidisciplinary Applications at EAS.

Founding member of Research Consortium (Atmospheric Chemistry of Siberia) together with Boris D. Belan (V.E. Zuev Institute of Atmospheric Optics, SB RAS, Tomsk, Russia) and Anatoly K. Golovko (Institute of Petroleum Chemistry SB RAS, Tomsk, Russia).

In 2013 I served as a Principle Investigator for the Qatar Environment and Energy Research Institute (QEERI) in Doha/Qatar and guided on the strategies in Air Quality research and on the implementation of Air Quality infrastructure completely funded by Qatar Foundation. First air quality analysis in the Middle East using ozonesondes including first WRF modeling.

Project funds come from a variety of sources, among them:

- Houston Advanced Research Center (HARC)
- Environmental Institute of Houston (EIH)
- Texas Air Research Center (TARC)
- Texas Commission on Environmental Quality (TCEQ)
- U.S. EPA
- Meteorological Solutions Inc. (MSI)
- Environ International
- NuHorizon
- National Center for Atmospheric Science (NCAR)
- European Union (EU)
- German Academic Exchange Service (DAAD)
- German Aerospace Center (DLR)
- various universities: Baylor University (BU),
Valparaiso University (Valpo),
Universidad Nacional Autónoma de México (UNAM),
Pontificia Universidad Católica de Chile (PUC)
Universidad de Santiago de Chile (USACH)

During the time frame 2005-2021 Rappenglueck served as a PI on grants which totaled \$3.3 million. He was co-PI on additional grants of \$4.4 million. Sabbatical Leave 2013, Qatar Environment and Energy Research Institute (QEERI) in Doha/Qatar.

Institute for Meteorology and Climate Research, Atmospheric Environmental Research Section (IMK-IFU), Research Center Karlsruhe GmbH (FZK), Garmisch-Partenkirchen:

Focus of scientific work lies in the quantification of trace gas budgets and their dynamics in the atmosphere. These activities include the characterization of anthropogenic and biogenic sources, the determination of trace gas exchange processes, air quality studies in megacities and studies of trace gas distribution and long-range transport processes in the troposphere. Contributed to microscale studies of diffuse emissions sources at the airport of Zurich as well as to airborne measurements aimed at intercontinental transport studies during the CONTRACE and ICARTT-ITOP projects. Conducted air quality studies in Santiago de Chile. Responsible for micrometeorological studies related to biosphere-atmosphere exchanges in remote forest areas with a focus on relaxed-eddy-accumulation (REA) methods coupled to GC and PTR-MS for determining turbulent fluxes of biogenic VOC (*BEWA2000*). Another *BEWA2000* project focused on the design of a sampling device for carboxylic acids, degradation products of biogenic hydrocarbons.

Since 2004: Head of the Air Quality QA/QC-Group at the IMK-IFU for inorganic gas-phase compounds.

Since 2002: Head of the World Calibration Center for VOC (WCC-VOC) within the WMO-GAW program. Carried out worldwide VOC-intercomparison studies and first GAW station audits (*WCC-VOC*). Held courses and compiled course materials for personnel from worldwide Global Atmosphere Watch (GAW) stations at the, International GAW Training & Education Center (GAWTEC) of the WMO, Environmental Research Station Schneefernerhaus – UFS (lectures: “Chemistry and Emissions of VOCs”, “Sampling and Measurement Techniques of VOCs”, and “Quality Assurance of VOC measurements”). Since 2003 member of the Science Advisory Group for Reactive Gases (SAG-RG) of GAW

Chair of Bioclimatology and Air Pollution Research, Ludwig-Maximilians-Universität [LMU] (since 1999 Technische Universität München [TUM]), München

Since 1992: Establishment of VOC facilities / Head of VOC-Laboratory

Conducted extensive experimental research in the field of photochemical and meteorological processes in the troposphere. These investigations aimed at a better understanding of the impact of human activities upon atmospheric chemistry. A variety of studies focused on urban air quality issues (e.g. MEDPHOTRAC, MEDCAPHOT, CHILE-I, BERLIOZ) and were often related to human health aspects (e.g. KOVOX). The study of background ozone and its dependence on the chemical environment and radiation properties in remote areas was focus of the projects PAUR-I and PAUR-II. Also, biosphere-atmosphere interactions were studied, e.g. through contributions to the interdisciplinary project SFB607 and within the project ETWA focusing on forest trees that are exposed to stress ambient O₃ levels.

Apart from measurement techniques for ozone, nitrogen oxides, carbon monoxide and total VOC, measurement devices included different systems for PAN (GC/ECD, GC/Luminox) and up to 3 on-line VOC-GCs. Corresponding new laboratory facilities were implemented.

Field measurement campaigns were carried out within the framework of national and international projects, both in urban areas, e.g. Munich and Berlin/Germany, Athens/Greece and Santiago/Chile, and in rural areas, e.g. Alpine locations, mountainous regions in central Greece or on islands in the Greek Aegean Sea region (Aghios Efstratios, Crete). Within the campaigns usually a variety of scientific platforms were used, among them micrometeorological towers (SFB 607, ETWA), radio towers (Frohnau Tower, 324 m; BERLIOZ), cruising vessels (PAUR-II), cable-ways (OPAP) and a manned H₂ free balloon (BERLIOZ).

Teaching Experience

University of Houston (*in brackets number of students*)

Fall 2006 - Fall 2011: Atmospheric Science Graduate Advisor	
<i>Spring 2022:</i>	<i>Fall 2022 (scheduled):</i>
GEOL 6326 "Remote Sensing for Atmospheric Science" ³⁾ (5) GEOL 6326 "Remote Sensing for Atmospheric Science -Lab" ³⁾ (5) GEOL 4348 "Remote Sensing for Atmospheric Science" ³⁾ (9) GEOL 4348 "Remote Sensing for Atmospheric Science Lab" ³⁾ (9)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (N/A) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (N/A)
<i>Spring 2021:</i>	<i>Fall 2021:</i>
GEOL 3342 "Principles of Air Pollution" (25)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (136) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (41) GEOL 3382 "Atmospheric Chemistry" (16) GEOL 3382 "Atmospheric Chemistry-Lab" ³⁾ (16) GEOL 6334 "Atmospheric Chemistry" (9) GEOL 6396 Seminar "Atmospheric Sciences (8)"
<i>Spring 2020:</i>	<i>Fall 2020:</i>
GEOL 6336 "Boundary Layers and Turbulence" (4) GEOL 3381 "Micrometeorology" (9)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (223) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (46) GEOL 4346 "Air Pollution Meteorology w/Lab" (24) GEOL 6332 "Air Pollution Meteorology" (12)
<i>Spring 2019:</i>	<i>Fall 2019:</i>
GEOL 3342 "Principles of Air Pollution" (27)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (191) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (46) GEOL 6396 Seminar "Atmospheric Sciences" (11)
<i>Spring 2018:</i>	<i>Fall 2018:</i>
GEOL 6332 "Air Pollution Meteorology" ²⁾ (2) GEOL 4346 "Air Pollution Meteorology" ²⁾ (12)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (172) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (47) GEOL 6326 "Remote Sensing for Atmospheric Science" ³⁾ (5) GEOL 6326 "Remote Sensing for Atmospheric Science -Lab" ³⁾ (5) GEOL 4348 "Remote Sensing for Atmospheric Science" ³⁾ (2) GEOL 4348 "Remote Sensing for Atmospheric Science Lab" ³⁾ (2)
<i>Spring 2017:</i>	<i>Fall 2017:</i>
GEOL 3342 "Principles of Air Pollution" (25) GEOL 3178 "Weather Information" (3)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (217) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (59) GEOL 3178 "Weather Information" (5) GEOL 6396 Seminar "Atmospheric Sciences" (6)
<i>Spring 2016:</i>	<i>Fall 2016:</i>
GEOL 6332 "Air Pollution Meteorology" ²⁾ (1) GEOL 4346 "Air Pollution Meteorology" ²⁾ (17) GEOL 3178 "Weather Information" (5)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (273) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (58) GEOL 6397 "Remote Sensing for Atmospheric Science" ³⁾ (5) GEOL 4397 "Remote Sensing for Atmospheric Science" ³⁾ (2) GEOL 3178 "Weather Information" (3)
<i>Spring 2015:</i>	<i>Fall 2015:</i>
GEOL 3342 "Principles of Air Pollution" (49) GEOL 6396 Seminar "Atmospheric Sciences" (8) GEOL 3178 "Weather Information" (7)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (175) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (45) GEOL 3178 "Weather Information" (3)
<i>Spring 2014:</i>	<i>Fall 2014:</i>
GEOL 6336 "Boundary Layers and Turbulence" (4) GEOL 3381 "Micrometeorology" (9)	GEOL 6332 "Air Pollution Meteorology" ²⁾ (6) GEOL 4397 "Air Pollution Meteorology" ²⁾ (13) GEOL 1350 "Introduction to Meteorology" ¹⁾ (165) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (46) GEOL 3178 "Weather Information" (10)

<i>Spring - Fall 2013:</i> Sabbatical Leave, Qatar Environment and Energy Research Institute, Doha/Qatar	
<i>Spring 2012:</i>	<i>Fall 2012:</i>
GEOL 6336 "Boundary Layers and Turbulence" (4) GEOL 3381 "Micrometeorology" (3) GEOL 3178 "Weather Information" (10)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (107) GEOL 1150 "Introduction to Meteorology Lab" ³⁾ (11) GEOL 3178 "Weather Information" (8)
<i>Spring 2011:</i>	<i>Fall 2011:</i>
GEOL 6332 "Air Pollution Meteorology" ²⁾ (3) GEOL 4397 "Air Quality Forecasting" ²⁾ (11) GEOL 3342 "Introduction to Air Pollution" (19) GEOL 3178 "Weather Information" (5)	GEOL 1350 "Introduction to Meteorology" ¹⁾ (129) GEOL 3178 "Weather Information" (8)
<i>Spring 2010:</i>	<i>Fall 2010:</i>
GEOL 6334 "Atmospheric Chemistry" (3) GEOL 6396 Seminar "Atmospheric Sciences" (5) GEOL 3382 "Atmospheric Chemistry" (7) GEOL 3178 "Weather Information" (5)	GEOL 6336 "Boundary Layers and Turbulence" ²⁾ (3) GEOL 3381 "Micrometeorology" ²⁾ (6) GEOL 1350 "Introduction to Meteorology" ¹⁾ (147) GEOL 3178 "Weather Information" (9)
<i>Spring 2009:</i>	<i>Fall 2009:</i>
GEOL 3342 "Introduction to Air Pollution" (13) GEOL 1350 "Introduction to Meteorology" ¹⁾ (150) GEOL 3178 "Weather Information" (7)	GEOL 3378 "Principles of Atmospheric Science" (36) GEOL 3178 "Weather Information" (8)
<i>Spring 2008:</i>	<i>Fall 2008:</i>
GEOL 3342 "Introduction to Air Pollution" (4) (co-taught with Dr. Byun) GEOL 1350 "Introduction to Meteorology" ¹⁾ (190) GEOL 3178 "Weather Information" (7)	GEOL 6397 "Atmospheric Chemistry" (6) GEOL 3382 "Atmospheric Chemistry" (5) GEOL 1350 "Introduction to Meteorology" (150) GEOL 3178 "Weather Information" (8)
<i>Spring 2007:</i>	<i>Fall 2007:</i>
GEOL 6334 "Air Pollution Chemistry & Physics" ²⁾ (4) GEOL 3382 "Atmospheric Chemistry" ²⁾ (4) GEOL 1350 "Introduction to Meteorology" (57) GEOL 3178 "Weather Information" (9)	GEOL 6379 "Integrated Biogeochemistry Studies" ³⁾ (4) GEOL 1350 "Introduction to Meteorology" ¹⁾ (109) GEOL 3178 "Weather Information" (10)
<i>Spring 2006:</i>	<i>Fall 2006:</i>
GEOL 3378 "Introduction to Atmos. Sciences" (34)	GEOL 3342 "Introduction to Air Pollution" (9) GEOL 1350 "Introduction to Meteorology" ¹⁾ (50) GEOL 3178 "Weather Information" (11)
<i>Summer 2006</i> GEOL 4398 "Data Analysis in Environmental Science" (4) (co-taught with Dr. Byun)	
<i>Spring 2005:</i>	<i>Fall 2005:</i>
GEOL 3342 "Introduction to Air Pollution" (8)	GEOL 3342 "Introduction to Air Pollution" (7) GEOL 6379 "Integrated Biogeochemistry Studies" ³⁾ (3)

¹⁾ Core Course since Fall 2006, ²⁾ Course in Graduate or Undergraduate Course Catalog, but taught first time, ³⁾ Entirely new courses.

Institute for Meteorology and Climate Research, Atmospheric Environmental Research Section (IMK-IFU), Research Center Karlsruhe GmbH (FZK), Garmisch-Partenkirchen:

2002 – 2003, courses for Global Atmosphere Watch (GAW): "Chemistry and Emissions of VOCs", "Sampling and Measurement Techniques of VOCs", and "Quality Assurance of VOC measurements", International GAW Training & Education Center (GAWTEC) of the WMO

Munich University of Technology (TU Munich)

Winter Semester 1999/2000 and Winter Semester 2000/2001: Atmospheric Environmental Chemistry

Mentoring – Research Supervision / Group Members:

Undergraduates:

José Mojica (2006)	SURF ¹⁾ , Summer 2006
Paulina Guerrero (2006)	
Leonardo Pedemonte (2006-2008)	
Rennee Boudreaux (2006-2007)	
Aaron Chow (2007)	
John Massingdale (2007-2008; 2010-2012)	
Mitul Patel (2007)	
Giovanna Croxatto (2008-2009)	PURS ²⁾ , Spring 2009
Luis Ackermann Nucete (2009-2011)	
Peter Nguyen (2010)	
Adam Spitzmueller (2010-2012)	
John Martinez (2012)	Alliance/Merck Science Hispanic Scholars Program
Daniel Knez (2016)	Senior Project Summer and Fall 2016
Marco Esteban Avendano (2015-2016)	SURF ¹⁾ , Summer 2016
Mina Song (2016-2017)	PURS ²⁾ , Fall Semester 2016
Mina Song (2016-2017)	Senior Project Summer and Fall 2017
Linh Do (2016-2017)	
Anthony Der Tatevasion (2017)	
Juliana Tortato de Oliveira (2017)	
Alyssa Holler (2017-2019)	Senior Project Fall 2018 and Spring 2019
John King (2019)	
Chika Okoro (Spring 2019 - Fall 2019)	

¹⁾ SURF: Provost's Undergraduate Research Scholarship during Summer

²⁾ PURS: Provost's Undergraduate Research Scholarship during Academic year

Teaching Assistants:

Ryan Perna (2006-2007)	MS 2007
Monica Patel (2007-2008)	MS 2008
Marc Taylor (2008-2010)	MS 2010
Cari-Sue Wilmot (2010-2011)	MS 2013
Teresa Spohn (2012-2013)	MS 2013
Jaymason Shelton (2014-2016)	MS student
Vanessa Caicedo (2015-2017)	PhD student
Olabosipo Osibanjo (2016-2021)	PhD student
Morshad Ahmed (since 2019)	PhD student
Madeline Statkewicz (since 2019)	PhD student
Tanzina Akther (since 2020)	PhD student
Jahirul Alam (since 2021)	PhD student

Research Assistants:

Richard Fuller (2005-2008; 2009-2011)	transferred to UH Dept. of Curriculum and Instruction
Bridget McEvoy-Day (2006-2008)	MS 2008
Cari-Sue Wilmot (2011)	MS 2013
Chika Okoro (Fall 2019-Spring 2020)	

Technicians:

Leonardo Pedemonte (2008-2011)	BS University of Houston
Giovanna Croxatto*) (2009-2011)	BS University of Houston

*) obtained MS degree in the European Master Program in Environmental Science at the University of Copenhagen/Denmark (2013)

Researcher:

Luis Ackermann^{*)} (2012-2013)

^{*)} now Research Associate with the Qatar Environment and Energy Research Institute (QEERI), Doha/Qatar

Primary Advisor MS Students:

Ryan Perna ¹⁾	MS 2007
Bridget McEvoy-Day ²⁾	MS 2008
Marc Taylor ³⁾	MS 2010
Cari-Sue Wilmot ⁴⁾	MS 2013
Teresa Spohn ⁵⁾	MS 2013
Michele Kocen ⁶⁾	MS 2013
Patrick Blood ⁷⁾	MS 2014
Luis Ackermann ⁸⁾	MS 2016
Jarrett Davidson	MS 2018

¹⁾ now with TCEQ, Houston/TX, ²⁾ now with Det Norske Veritas (DNV), Houston/TX, ³⁾ with TRC Solutions, Houston/TX, ⁴⁾ now with TechnoCycle, Houston/TX, ⁵⁾ now PhD student at National University of Ireland, Galway, ⁶⁾ now with ARES Corp., Houston/TX, TX, ⁷⁾ Meteorologist with NOAA, Houston, TX, ⁸⁾ now PhD Student Monash U, Melbourne, Australia

Primary Advisor PhD Students:

Kelly Soich ¹⁾ (completed Fall 2012) ^{*)}	<i>Forecast Vertical Velocity and Temperature, Horizontal Wind Direction and Wind Velocity Error Coupling within Upper Troposphere MM5 and WRF Forecasting</i>
Gustavo Cuchiara ²⁾ (completed Fall 2015)	<i>Simulating the evening transition in the PBL and evaluating its contribution to the next day prediction ozone peak concentration</i>
Vanessa Caicedo ³⁾ (completed Spring 2017)	<i>Investigating the temporal, seasonal, and spatial evolution of the atmospheric boundary layer using aerosol backscatter retrieval methods</i>
Olabosipo Osibanjo ⁴⁾ (completed Spring 2021)	<i>Boundary Layer Properties and Implications on Air Quality in Mexico City</i>
Madeline Statkewicz (planned 2023)	<i>The Impact of Changing Precipitation Patterns on Flooding Occurrences in a Rapidly Growing Urban Area</i>
Morshad Ahmed (planned 2023)	<i>Sources and Photochemical Behavior of Atmospheric Pollutants (Nitrophenols, Mercury, and Non-Methane Hydrocarbons) in the Houston, Texas, Area</i>
Mateen Ahmad (planned 2023)	<i>Machine Learning Approaches for Ozone Forecast, Planetary Boundary Layer Height Retrieval and WRF model Bias-Correction</i>
Tanzina Akther (planned 2024)	<i>Reactive organic carbon (ROC) fingerprints in ambient air</i>
Irfan Karym (planned 2024)	TBD
Jahirul Alam (planned 2025)	TBD

¹⁾ Director of Programs, Chief Payload Specialist, Waypoint 2 Space, NASA Johnson Space Center, Houston/TX, ²⁾ now Research Scientist, CIRA, Colorado State U., Fort Collins ³⁾ now PostDoc at Joint Center for Earth Systems Technology, University of Maryland, Baltimore, MD ⁴⁾ now PostDoc at FM Global Insurance, Boston, MA

Primary Supervisor PostDocs:

Dr. Michael Leuchner ¹⁾ (2006-2008)	DAAD Fellow, PhD TU München, Germany
Dr. Violeta Coarfa ²⁾ (2007-2008)	PhD University of Houston
Dr. Julia Golovko ³⁾ (2008-2013)	PhD Tomsk State University, Tomsk, Russia
Dr. Beata Czader ⁴⁾ (2009-2013)	PhD University of Houston
Dr. Fong Ngan ⁵⁾ (2009)	PhD University of Houston
Dr. Gustavo Cuchiara ⁶⁾ (2016-2017)	PhD University of Houston

¹⁾ now Faculty, RWTH Aachen, Germany, ²⁾ now Teaching Faculty, Lone Star College and Houston Community College, Houston/TX, ³⁾ now DESC Engineer, Schlumberger, Houston/TX, ⁴⁾ now Natural Resources Specialist V, TCEQ, Austin, ⁵⁾ now Research Scientist, NOAA-ARL, College Park/MD, ⁶⁾ now Research Scientist, CIRA, Colorado State U., Fort Collins

Visiting Research Scholar:

Dr. In-Yong Eom^{*)} (2009) PhD Texas Tech, Lubbock

^{*)} now Faculty at Catholic University of Daegu, Dept. of Chemistry, Gyeongsan, South Korea

Research Faculty:

Dr. Peter Percell^{*)} (2009-2010) PhD University of California at Berkeley
Dr. Xiangshang Li (2009-2021) PhD Tulane University

^{*)} retired

Awards:

José Mojica (2006)	Provost's Undergraduate Research Scholarship (SURF), Summer 2006
Bridget McEvoy-Day (2008)	Best Student Oral Presentation Award, 10 th Conf on Atmospheric Chemistry, Annual Meeting of the American Meteorological Society, New Orleans/LA, 20 - 24.01.2008
Giovanna Croxatto (2009)	Provost's Undergraduate Research Scholarship (PURS), Spring semester 2009
Giovanna Croxatto (2009)	Halliburton Excellence Award, May 2009
Cari-Sue Wilmot (2010)	Rice-Houston Alliance for Graduate Education and the Professoriate (AGEP), Summer Research Stipend, Summer 2010
Michael Leuchner, Bernhard Rappenglück (2010)	Paper "VOC Source-Receptor Relationships in Houston during TexAQS-II, <i>Atmos. Environ.</i> , 44, 4056-4067, doi:10.1016/j.atmosenv.2009.02.029" among the most cited articles published in Atmospheric Environment in the time frame 2010-2011.
John Martinez (2012)	Alliance/Merck Science Hispanic Scholars Program
Gustavo Cuchiara (2012-2015)	PhD Scholarship from Brazilian national agency "Coordenação de Aperfeiçoamento de Pessoal de Nível Superior" ("Coordination of Improvement of Higher Education Personnel"; CAPES)
Cari-Sue Wilmot (2012)	Best oral presentation on Research Day of Department of Earth and Atmospheric Science
Gustavo Cuchiara (2012)	NSF support for participation in "Air Quality at the Interface: Mega Cities and Adjacent Agroecosystems", La Plata/Argentina August 8-16, 2012

Teresa Spohn (2013)	"Ozonesonde/radiosonde launches in summer 2013", Summer Research 2013 in Qatar, supported by the Qatar Environment and Energy Research Institute
Jaymason Shelton (2015)	Best poster (beginning graduate students) on Research Day of Department of Earth and Atmospheric Science
Jaymason Shelton (2015)	University of Houston NSM Alumni Association Award
Jaymason Shelton (2016)	Outstanding Graduate Teaching Assistant Award / Dept. of Earth and Atmospheric Science
Vanessa Caicedo (2016)	Best oral presentation on Research Day of Department of Earth and Atmospheric Science - Atmospheric Scientist Students
Marco Esteban Avendaño (2016)	UH Summer Undergrad. Research Fellowship 2016
Mina Song (2016)	Provost's Undergraduate Research Scholarship (PURS), Fall 2016
Olabosipo Osibanjo (2016-17)	UH Presidential Fellowship
Olabosipo Osibanjo (2017)	EAS Student Travel Award for Annual Meeting of the American Meteorological Society 2018
Olabosipo Osibanjo (2018)	EAS Student Travel Award for Annual Meeting of the American Meteorological Society 2019
Mateen Ahmad (2019-2024)	PhD Scholarship under the US-Pakistan Knowledge Corridor
Irfan Karim (2021-2026)	PhD Scholarship under the US-Pakistan Knowledge Corridor
Morshad Ahmed (2020)	Outstanding Academic Achievement Scholarship in Atmospheric Science
Madeline Statkewicz (2021)	William M. Lapenta NOAA Student Internship Program.
Madeline Statkewicz (2021)	Outstanding Undergraduate Teaching Assistant Award / Dept. of Earth and Atmospheric Science
Madeline Statkewicz (2021)	Sheriff-Lecture Best Presentation Award - Advanced PhD student
Morshad Ahmed (2021)	EAS Student Travel Award for AGU Fall Meeting 2021
Tanzina Akther (2021)	EAS Student Travel Award for AGU Fall Meeting 2021

Member on other MS Committees:

Monica Patel (2008)	Dpt. of Geosciences	<i>A Case Study on the Local Wind Circulation and Its Role on Ozone Concentrations in the Houston-Galveston Area</i>
James Flynn (2009)	Dpt. of Earth and Atmospheric Sciences	<i>Impacts of clouds and aerosols on ozone photochemistry in southeast Texas</i>
Natalie Martin (2012)	Dpt. of Mechanical Engineering	<i>Accurate Modeling of the Neutral and Unstable Atmospheric Boundary Layer at Horns Rev using the k-ϵ Method in FLUENT 6.3</i>

Member on other PhD Committees:

Oscar Correa (2006)	Dpt. of Civil and Environmental Engineering	<i>Atmospheric Concentrations, Deposition and Modeling of Polychlorinated Dibenzo-p-Dioxins and Dibenzofurans</i>
Craig Clements [†] (2007)	Dpt. of Geosciences	<i>Experimental Studies of Fire-Atmosphere Interactions During Grass Fires</i>
Violeta Coarfa (2007)	Dpt. of Geosciences	<i>Air Quality Modeling of Aromatic Hydrocarbons in the Houston-Galveston Urban and Industrial Airshed</i>
Beata Czader (2007)	Dpt. of Geosciences	<i>Study of the Impact of VOCs on Ozone Formation under Houston-Galveston Atmospheric Conditions</i>
Fantine Ngan (2008)	Dpt. of Geosciences	<i>Classification of Weather Patterns and Improvement of Meteorological Inputs For Texas-II Air Quality Simulations</i>
Karl Pepple (2009)	Dpt. of Earth and Atmospheric Sciences	<i>Analysis of Mobile Emissions attributable to the University of Houston – For the Development of Strategic Sustainability Goals</i>
Dae-Gyun Lee (2009)	Dpt. of Earth and Atmospheric Sciences	<i>Retrospective Simulations of Ozone and Aerosols Utilizing the Improved Model Inputs from Global Model in-situ and Satellite Measurements</i>
Christine Haman (2011)	Dpt. of Earth and Atmospheric Sciences	<i>Impact of Synoptic Controls and Boundary Layer Processes on Ground-Level Ozone Evolution at an Urban Site</i>
Jingqian Wang (2012)	Dpt. of Earth and Atmospheric Sciences	<i>Investigation of the Tracer Gas Variability from Observations and Models</i>
Ankita Silva (2017)	Dept. of Pharmacological & Pharmaceutical Sciences	<i>Role of oxidative stress in simulated vehicle exhaust-induced behavioral & cognitive deficits in rats</i>
Shuai Pan (2017)	Dpt. of Earth and Atmospheric Sciences	<i>Impact of simulated ozone by improved meteorological factors such as Sea Surface Temperature, Cloud Fraction and sub-grid clouds</i>
Alex Kotsakis (2017)	Dpt. of Earth and Atmospheric Sciences	<i>Investigating the Impact of Meteorology on Ozone Variability in Houston, Texas</i>
Amir Sourì (2018)	Dpt. of Earth and Atmospheric Sciences	<i>Data assimilation for tropospheric chemistry modeling using airborne and geo-stationary remote sensing sensors</i>
Muqing Jin (2019)	Dpt. of Physics	<i>Anisotropic flow fluctuations in very central Pb-Pb $\sqrt{s_{NN}} = 2.76$ TeV collisions</i>

Sayed Mekhaimr (2019)	Astronomy and Meteorology Department, Faculty of Science / Cairo University, Egypt	<i>Atmospheric Dispersion Modeling by using Ensemble Methods: Application to CTBT's Radionuclide Verification System</i>
Camila Kochi (2020)	Dept. of Pharmacological & Pharmaceutical Sciences	<i>Stress susceptibility and vehicle exhaust pollution</i>
Alqamah Sayeed (2022)	Dpt. of Earth and Atmospheric Sciences	<i>Integrating Deep Neural Network with Numerical Models to Have Better Weather and Air Quality Forecast Both Spatially and Temporally</i>
Bavand Sadhegi (2022)	Dpt. of Earth and Atmospheric Sciences	<i>TBD</i>
Arman Pouyaei (2022)	Dpt. of Earth and Atmospheric Sciences	<i>Development and Implementation of Numerical Models for Quantitative PM study, Hemispheric Transport of Air Pollutants and AI-based Data Assimilation</i>
Masoud Ghahremanloo (2023)	Dpt. of Earth and Atmospheric Sciences	<i>Machine Learning Estimation of Daily Surface Concentrations of PM_{2.5}, NO₂, and MD_{A8} Ozone at High Spatiotemporal Resolutions</i>

†) since Fall 2007 Faculty at San José State University, Meteorology Department, San José/CA

Service and Affiliations

Member in Professional Organizations:

Deutsche Meteorologische Gesellschaft (DMG; 1992) - German Meteorological Society
American Meteorological Society (AMS; 1994)
Deutsche Physikalische Gesellschaft (DPG; 1996) - German Physical Society
American Chemical Society (ACS; 1999)
American Geophysical Union (AGU; 2001)

Manuscript Reviews (339)

Aerosol and Air Quality Research	Environmental Pollution
AIMS Environmental Science	Environment, Science & Pollution Research
Ain Shams Engineering Journal	Environmental Science & Technology
Air Quality, Atmosphere and Health	Fuel
Analytical Chemistry	Geophysical Research Letters
Annales Geophysicae	Geoscientific Model Development
Applied Sciences	International Journal of Atmospheric Sciences
Arabian Journal of Geosciences	International Journal of Environmental Analytical Chemistry
Asia-Pacific Journal of Atmospheric Science	International Scholarly Research Notices
Atmósfera	ISRN Atmospheric Sciences
Atmosphere	Journal of Arid Land
Atmospheric Environment	Journal of Applied Meteorology
Atmospheric Chemistry and Physics	Journal of Atmospheric and Solar-Terrestrial Physics
Atmospheric Measurement Techniques	Journal of Atmospheric Chemistry
Atmospheric Pollution Research	Journal of Environmental Management
Atmospheric Research	Journal of Environmental Science
Boreal Environment Research	Journal of Geophysical Research
British Journal of App. Sci. & Techn.	Journal of Hazardous Materials
Chemosphere	Journal of King Saud University - Science
Critical Reviews in Environ Sci & Technol.	Journal of the Air & Waste Management Association
Elementa	Meteorologische Zeitschrift
Energy	Physical Geography
Environmental Chemistry	PLOS One
Environmental Health Insights	Proceedings of the National Academy of Sciences (PNAS)
Environmental Modeling and Assessment	Remote Sensing
Environmental Monitoring and Assessment	Science of the Total Environment

Book Review

Hakim G., and Patoux J. (2016): Weather: A Concise Introduction

Book Proposal review:

Holloway T., and Levy II, Hiram (2018): Understanding Air Quality: Science and Policy
Dulac F. and Suavage S. (2020): Atmospheric Chemistry and its Impacts in the Mediterranean Region

Proposal Reviews

National Science Foundation (NSF); US Environmental Protection Agency (US EPA); NOAA - Atmospheric Chemistry, Carbon Cycle, & Climate (AC4); Natural Environment Research Council (NERC) UK; L'Agence Nationale de la Recherche (ANR) - French National Research Agency; European Science Foundation (ESF); Chilean National Fund for Scientific and Technological Development (FONDECYT); Research Grants Council (RGC) of Hong Kong; Der Wissenschaftsfond (FWF) - Austrian Science Fund, Deutsche Forschungsgemeinschaft (DFG) - German Research Foundation

Other Reviews

Health Effects Institute (HEI); John Simon Guggenheim Memorial Foundation; NASA Postdoctoral Program (NPP) and Ralph E. Powe Junior Faculty Awards on behalf of Oak Ridge Associated Universities (ORAU); Technology Foundation STW, Netherlands; Irish Research Council, Ireland

Member

Science Advisory Group for Reactive Gases of the World Meteorological Organization (WMO).

Houston Advanced Research Center (HARC)-Science Advisory Committee (SAC) on Emergency Response and Preparedness (since 2021)

Peer Reviewed Publications

(h-index: 46; i10-index: 89; citation: 5216; RG score: 39.58)

- 1) Akther T, **Rappenglück B.**, S. Osibanjo O., Retama A., Rivera-Hernández O. (2022) Ozone precursors And Boundary Layer Meteorology Before and During a Severe Ozone Episode in Mexico City. *Science of the Total Environment*, submitted
- 2) Ahmad M., **Rappenglück B.**, Osibanjo O.O., Retama A. (2022): A Machine Learning Approach to investigate the Build-up of Surface Ozone during the March 2016 Severe Ozone Smog Episode in Mexico-City, *Journal of Cleaner Production*, submitted
- 3) Sadeghi B., Pouyaei A., Choi Y., **Rappenglueck B.** (2022): Influence of seasonal variability on source characteristics of VOCs at Houston industrial area, *Atmos. Env.*, 277, DOI: 10.1016/j.atmosenv.2022.119077
- 4) Osibanjo O.O., **Rappenglück B.**, Ahmad M., Jaimes-Palomera M., Rivera-Hernández O., Prieto-González R., Retama A. (2022): Intercomparison of Planetary Boundary Layer Height in Mexico City as retrieved by Microwave Radiometer, Micro-Pulse LIDAR and Radiosondes, *Atmospheric Research*, DOI: 10.1016/j.atmosres.2022.106088, available online 17 February 2022
- 5) Ahmed M., **Rappenglück B.**, Das S., Chellam S. (2021): Source Apportionment of Volatile Organic Compounds, CO, SO₂ and Trace Metals in a Complex Urban Atmosphere, *Environ. Adv.*, 6, DOI: 10.1016/j.envadv.2021.100127
- 6) Statkewicz M.D., Talbot R., **Rappenglueck B.** (2021): Changes in Precipitation Patterns in Houston, Texas, *Environ. Adv.*, 5, DOI: 10.1016/j.envadv.2021.100073
- 7) Hansen R.F., Griffith S.M., Dusanter S., Gilman J.B., Graus M., Kuster W.C., Veres P., de Gouw J.A., Warneke C., Washenfelder R.A., Young C.J., Brown S.S., Alvarez S.L., Flynn J.H., Grossberg N.E., Lefer B., **Rappenglueck B.**, Stevens P.S. (2021): Measurements of Total OH Reactivity during CalNex-LA, *J. Geophys. Res.*, 126, DOI: 10.1029/2020JD032988
- 8) Velasco E., Retama A., Zavala M., Guevara M., **Rappenglück B.**, Molina L.T. (2021): Intensive field campaigns as a means for improving scientific knowledge to address urban air pollution, *Atmos. Environ.*, 246, DOI: 10.1016/j.atmosenv.2020.118094
- 9) Osibanjo O.O., **Rappenglück B.**, Retama A. (2021): Anatomy of the March 2016 Severe Ozone Smog Episode in Mexico-City, *Atmos. Env.*, 244, DOI: 10.1016/j.atmosenv.2020.117945
- 10) Nault B. A., Jo D.S., McDonald B.C., Campuzano-Jost P., Day D.A., Hu W., Schroder J.C., Allan J., Blake D.R., Canagaratna M.R., Coe H., Coggon M.M., DeCarlo P.F., Diskin G.S., Flocke F., Fried A., Gilman J.B., Gkatzelis G., Hamilton J.F., Hanisco T.F., Hayes P.L., Henze D.K., Hodzic A., Hopkins J., Hu M., Huey L.G., Jobson B.T., Kuster W.C., Lewis A., Li M., Liao J., Omar Nawaz M., Pollack I.B., Peischl J., **Rappenglück B.**, Reeves C.E., Richter D., Roberts J.M., Ryerson T.B., Shao M., Sommers J.M., Walega J., Warneke C., Weibring P., Wolfe G.M., Young D.E., Yuan B., Zhang Q., de Gouw J.A., Jimenez J.L. (2021): Anthropogenic Secondary Organic Aerosols Contribute Substantially to Air Pollution Mortality, *Atmos. Chem. Phys.*, 21, 11201–11224, 2021, DOI: 10.5194/acp-21-11201-2021
- 11) Heald C.L., de Gouw J., Goldstein A.H., Guenther A.B., Hayes P.L., Hu W., Isaacman-Wertz G., Jimenez J.L., Keutsch F.N., Koss A.R., Misztal P.K., **Rappenglück B.**, Roberts J.M., Stevens P.S., Washenfelder R.A., Warneke C., Young C.J. (2020): Contrasting Reactive Organic Carbon Observations in the Southeast United States (SOAS) and Southern California (CalNex), *Environ. Sci. Technol.*, 54, 23, 14923-14935, DOI: 10.1021/acs.est.0c05027
- 12) Reyes F., Vazques Y., Gramsch E., Oyola P., **Rappenglück B.**, Rubio M.A. (2019): Photooxidation of emissions from firewood and pellet combustion using a photochemical chamber, *Atmosphere*, 10, 575; doi:10.3390/atmos10100575
- 13) Caicedo V., **Rappenglueck B.**, Cuchiara G., Flynn J., Ferrare R., Scarino A.J., Berkoff T., Senff C., Langford A., Lefer B. (2019): Bay and sea-breeze circulations impacts on the planetary boundary layer and air quality from an observed and modeled DISCOVER-AQ Texas case study, *J. Geophys. Res.*, 124, DOI: 10.1029/2019JD030523
- 14) Cai C., Avise J., Kaduwela A., DaMassa J., Warneke C., Gilman J., Kuster B., de Gouw J., Volkamer R., Stevens P., Lefer B., Holloway J.S., Pollack I., Ryerson T., Atlas E., Blake D., **Rappenglueck B.**, Brown S.S., Dube W.P. (2019): Simulating the weekly cycle of NO_x-VOC-HO_x-O₃ photochemical system in the South Coast of California during CalNex-2010 Campaign, *J. Geophys. Res.*, 124, DOI: 10.1029/2018JD029859
- 15) Cuchiara G.C., **Rappenglück B.** (2019): Simulating the influence of convective decay parameterization for a case study in Houston, TX, *Atmos. Env.*, 204, 68-77, <https://doi.org/10.1016/j.atmosenv.2019.02.016>
- 16) Li X., **Rappenglück B.** (2018): A Study of Model Nighttime Ozone Bias in Air Quality Modeling, *Atmos. Env.*, 195, 210-228, doi: 10.1016/j.atmosenv.2018.09.046
- 17) Cuchiara G.C., **Rappenglück B.** (2018): Performance analysis of WRF and LES in describing the evolution and structure of the Planetary Boundary Layer, *Environ. Fluid. Mech.*, 18, 1257-1273, <https://doi.org/10.1007/s10652-018-9597-5>
- 18) De Gouw J.A., Gilman J.B., Kim S.-W., Alvarez S.L., Dusanter S., Graus M., Griffith S.M., Isaacman-Van Wertz G., Kuster W.C., Lefer B.L., Lerner B.M., McDonald B.C., **Rappenglueck B.**, Roberts J.M., Stevens P.S., Stutz J., Veres P.R., Volkamer R., Warneke C., Washenfelder R.A. (2018): Chemistry of Volatile Organic Compounds in the Los Angeles Basin: Formation of Oxygenated Compounds and Determination of Emission Ratios, *J. Geophys. Res.*, 123, DOI: 10.1002/2017JD027976
- 19) Cuchiara G.C., **Rappenglück B.**, Rubio A.M., Lissi E., Gramsch E., Garreaud R.D. (2017): Modeling Study of Biomass Burning Plumes and their Impact on Urban Air Quality; A Case Study of Santiago de Chile, *Atmos. Env.*, 166, 79-19, doi: 10.1016/j.atmosenv.2017.07.002
- 20) Zhu L., Jacob D.J., Keutsch F.N., Mickley L.J., Scheffe R., Strum M., González Abad G., Chance K., Yang K., **Rappenglück B.**, Millet D.B., Baasandorj M., Jaeglé L., Shah V. (2017): Formaldehyde (HCHO) as a Hazardous Air Pollutant: Mapping surface air concentrations from satellite and inferring cancer risks in the United States, *Environ. Sci. Technol.*, 51, 5650-5657, doi: 10.1021/acs.est.7b01356
- 21) Cuchiara G.C., **Rappenglück B.** (2017): Single-Column Model and Large Eddy Simulation of the Evening Transition in the Planetary Boundary Layer, *Environ. Fluid. Mech.*, 17, 777-798, doi:10.1007/s10652-017-9518-z

- 22) Caicedo V., **Rappenglueck B.**, Lefer B., Morris G., Toledo D., Delgado R. (2017): Comparison of aerosol LIDAR retrieval methods for boundary layer height detection using ceilometer backscatter data, *Atmos. Meas. Tech.*, doi:10.5194/amt-10-1609-2017
- 23) Griffith S.M., Hansen R.F., Dusanter S., Michoud V., Gilman J.B., Kuster W.C., Veres P.R., Graus M., de Gouw J.A., Roberts J., Young C., Washenfelder R., Brown S.S., Thalman R., Waxman E., Volkamer R., Tsai C., Stutz J.S., Flynn J.H., Grossberg N., Lefer B., Alvarez S.L., **Rappenglueck B.**, Mielke L.H., Osthoff H.D., Stevens P.S. (2016): Measurements of Hydroxyl and Hydroperoxy Radicals during CalNex-LA: Model Comparisons and Radical Budgets, *J. Geophys. Res.*, 121, doi:10.1002/2015JD024358
- 24) Huntrieser H., Lichtenstern M., Scheibe M., Aufmhoff H., Schlager H., Pucik T., Minikin A., Weinzierl B., Heimerl K., Fütterer D., **Rappenglück B.**, Ackermann L., Pickering K.E., Cummings K.A., Biggerstaff M., Betten D.P., Honomichl S., Barth M.C. (2016): On the origin of pronounced O₃ gradients in the thunderstorm outflow region during DC3, *J. Geophys. Res.*, 121, doi:10.1002/2015JD024279
- 25) **Rappenglück B. (*)**, Lubertino G. (2015) Letter to the Editor on Wormhoudt, J.; Wood, E.; Knighton, W.; Kolb, C.; Herndon, S.; Olaguer, E. 2015. Vehicle emissions of radical precursors and related species observed in the 2009 SHARP campaign; *J. Air Waste Manage. Assoc.* 65: 699–706, *J. Air Waste Man. Assoc.*, 65:7, 767-770, DOI: 10.1080/10962247.2015.1053358
***) corresponding author**
- 26) Hayes P.L., Carlton A.G., Baker K.R., Ahmadov R., Washenfelder R.A., Alvarez S., **Rappenglück B.**, Gilman J.B., Kuster W.C., de Gouw J.A., Zotter P., Prévôt A.S.H., Szidat S., Kleindienst T.E., Offenberg J.H., Ma P.K., Jimenez J.L. (2015): Modeling the formation and aging of secondary organic aerosols during CalNex 2010, *Atmos. Chem. Phys.*, 15, 5773–5801, doi:10.5194/acp-15-5773-2015
- 27) Shalaby A., **Rappenglueck B.**, Eltahir E.A.B. (2015): The Climatology of Dust Aerosol over the Arabian Peninsula, *Atmos. Chem. Phys. Discuss.*, 15, 1523-1571, doi:10.5194/acpd-15-1523-2015
- 28) Spohn T.K., **Rappenglück B. (*)** (2015): Tracking potential sources of peak ozone concentrations in the upper troposphere over the Arabian Gulf region, *Atmos. Env.*, 101, 257-269, <http://dx.doi.org/10.1016/j.atmosenv.2014.11.026>
***) corresponding author**
- 29) Czader B., **Rappenglück B.** (2015): Modeling of 1,3-butadiene in urban and industrial areas, *Atmos. Env.*, 102, 30-42, <http://dx.doi.org/10.1016/j.atmosenv.2014.11.039>
- 30) Yuan B., Veres P.R., Warneke C., Roberts J.M., Gilman J.B., Koss A., Edwards P.M., Graus M., Kuster W.C., Li S.-M., Wild R.J., Brown S.S., Dubé W.P., Lerner B.M., Williams E.J., Johnson J., Quinn P.K., Bates T.S., Lefer B., Hayes P., Jimenez J.L., Weber R.J., Zamora R., Ervens B., Millet D., **Rappenglück B.**, de Gouw J.A. (2015): Investigation of secondary formation of formic acid: urban environment vs. oil and gas producing region, *Atmos. Chem. Phys.*, 15, 1975-1993, doi:10.5194/acp-15-1975-2015
- 31) Wilmot C.-S. M., **Rappenglück B. (*)**, Li X., Cuchiara G. (2014): MM5 v3.6.1 and WRF v3.5.1 model comparison of standard and surface energy variables in the development of the planetary boundary layer, *Geosci. Model Dev.*, 7, 2693-2707, doi:10.5194/gmd-7-2693-2014
***) corresponding author**
- 32) Li X., **Rappenglück B. (*)** (2014): A WRF-CMAQ Study on Spring Time Vertical Ozone Structure in Southeast Texas, *Atmos. Env.*, 97, 363-385, <http://dx.doi.org/10.1016/j.atmosenv.2014.08.036>
***) corresponding author**
- 33) Cuchiara G.C., Li X., Carvalho J., **Rappenglück B.** (2014): Intercomparison of planetary boundary layer parameterization and its impacts on surface ozone formation in the WRF/Chem model for a case study in Houston/Texas, *Atmos. Env.*, 96, 175-185, <http://dx.doi.org/10.1016/j.atmosenv.2014.07.013>
- 34) Johansson J., Mellqvist J., Samuelsson J., Offerle B., Lefer B., **Rappenglück B.**, Flynn J., Yarwood G. (2014): Emission Measurements of Alkenes, Alkanes, SO₂ and NO₂ from Stationary Sources in Southeast Texas over a 5-year-period Using SOF and Mobile DOAS, *J. Geophys. Res.*, 119, doi: 10.1002/2013JD020485,
- 35) Pinto J., Dibb J., Lee B., **Rappenglück B.**, Wood E., Zhang R., Lefer B., Ren X., Stutz J., Ackermann L., Golovko J., Herndon S., Levi M., Meng Q., Munger J., Zhaniser M., Zheng J. (2014): Intercomparison of Field Measurements of Nitrous Acid (HONO) during the SHARP Campaign, *J. Geophys. Res.*, 119, 5583-5601, doi: 10.1002/2013JD020287
- 36) Olaguer E.P., Kolb C.E., Lefer B., **Rappenglück B.**, Zhang R., Pinto J.P. (2014): Overview of the SHARP campaign: motivation, design, and major outcomes, *J. Geophys. Res.*, 119, 2597–2610, doi:10.1002/2013JD019730.
- 37) Johansson J., Mellqvist J., Samuelsson J., Offerle B., Moldanova J., **Rappenglück B.**, Lefer B., Flynn J. (2014): Quantitative Measurements and Modeling of Industrial Formaldehyde Emissions in the Greater Houston Area during Campaigns in 2009 and 2011, *J. Geophys. Res.*, 119, 4303-4322, doi: 10.1002/2013JD020159,
- 38) **Rappenglück B. (*)**, Ackermann L., Alvarez S., Golovko J., Buhr M., Field R.A., Soltis J., Montague D.C., Hauze B., Adamson S., Risch D., Wilkerson G., Bush D., Stoeckenius T., Keslar C. (2014): Strong Wintertime Ozone Events in the Upper Green River Basin, Wyoming, *Atmos. Chem. Phys.*, 14, 4909-4934, doi:10.5194/acp-14-4909-2014
***) corresponding author**
- 39) Czader B.H., Li X., **Rappenglück B.** (2013): CMAQ modeling and analysis of radicals, radical precursors and chemical transformations, *J. Geophys. Res.*, 118, 11,376-11,387, doi: 10.1002/jgrd.50807
- 40) **Rappenglück B. (*)**, Lubertino G., Alvarez S., Golovko J., Czader B., Ackermann L. (2013): Radical Precursors and Related Species from Traffic as Observed and Modeled at an Urban Highway Junction, *J. Air Waste Man. Assoc.*, 63:11, 1270-1286, doi: 10.1080/10962247.2013.822438
***) corresponding author**

- 41) Warneke C., de Gouw J.A., Holloway J.S., Gilman J.B., Kuster W.C., Graus M., Atlas E., Blake D., Gentner D.R., Goldstein A.H., Harley R.A., Alvarez S., **Rappenglück B.**, Trainer M., Parrish D.D. (2013): Photochemical Aging of Volatile Organic Compounds in the Los Angeles Basin: Weekend Effect, *J. Geophys. Res.*, **118**, 5018-5028, doi:10.1002/jgrd.50423
- 42) Chen D., Li Q., Stutz J., Mao Y., Zhang L., Pikelnaya O., Tsai J.Y., Haman C., Lefer B., **Rappenglück B.**, Alvarez S., Neuman A., Flynn J., Roberts J., Nowak J.B., de Gouw J., Holloway J., Wagner N.L., Veres P., Brown S.S., Ryerson T., Warneke C., Pollack I.B. (2013): WRF-Chem simulation of NO_x and O₃ in the L.A. basin during CalNex-2010, *Atmos. Env.*, **81**, 421-432, doi: 10.1016/j.atmosenv.2013.08.064
- 43) Ren X., van Duin D., Cazorla M., Chen S., Mao J., Brune W.H., Flynn J.H., Grossberg N., Lefer B.L., **Rappenglück B.**, Wong K.W., Tsai C., Stutz J., Dibb J.E., Jobson B.T., Luke W.T., Kelley P., (2013): Atmospheric Oxidation Chemistry and Ozone Production: Results from SHARP 2009 in Houston, Texas, *J. Geophys. Res.*, **118**, 5770-5780, doi:10.1002/jgrd.50342
- 44) Hayes P.L., Ortega A.M., Cubison M.J., Froyd K.D., Zhao Y., Cliff S.S., Hu W.W., Toohey D.W., Flynn J.H., Lefer B.L., Grossberg N., Alvarez S., **Rappenglück B.**, Taylor J.W., Allan J.D., Holloway J.S., Gilman J.B., Kuster W.C., de Gouw J.A., Massoli P., Zhang X., Liu J., Weber R.J., Corrigan A.L., Russell L.M., Isaacman G., Worton D.R., Kreisberg N.M., Hering S.V., Goldstein A.H., Thalman R., Waxman E.M., Volkamer R., Lin Y.H., Surratt J.D., Kleindienst T.E., Offenberg J.H., Dusanter S., Griffith S., Stevens P.S., Brioude J., Angevine W.M., Jimenez J.L. (2013): Organic Aerosol Composition and Sources in Pasadena, California during the 2010 CalNex Campaign, *J. Geophys. Res.*, **118**, 9233-9257, doi: 10.1002/jgrd.50530
- 45) Kelly S., **Rappenglück B.** (2013): Upper Tropospheric MM5 and WRF Temperature Error and Vertical Velocity Coupling, *J. Appl. Meteorol. Clim.*, **52**, 1237-1252
- 46) Newman S., Jeong S., Fischer M., Xu X., Haman C., Lefer B., Alvarez S., **Rappenglueck B.**, Kort E.A., Andrews A.E., Peischl J., Gurney K., Miller C.E., Yung Y.L. (2013): Diurnal tracking of anthropogenic CO₂ emissions in the Los Angeles basin mega-city during spring, 2010, *Atmos. Chem. Phys.*, **13**, 4359-4372, doi:10.5194/acp-13-4359-2013.
- 47) Ochoa C., Baumgardner D., Grutter M., Allan J., Fast J., **Rappenglueck B.** (2012): Physical and chemical properties of the regional mixed layer of Mexico's Megapolis Part 2: Evaluation of Measured and Modeled Trace Gases and Particle Size Distributions, *Atmos. Chem. Phys.*, **12**, 10161-10179, doi:10.5194/acp-12-10161-2012
- 48) Cleveland M.J., Ziemba L.D., Griffin R.J., Dibb J.E., Anderson C.H., Lefer B., **Rappenglueck B.** (2012): Characterization of Urban Aerosol Using Aerosol Mass Spectrometry and Proton Nuclear Magnetic Resonance Spectroscopy, *Atmos. Environ.*, **54**, 511-518, doi: 10.1016/j.atmosenv.2012.02.074
- 49) Czader B.H., **Rappenglück B.**, Percell P., Byun D., Ngan F., Kim S. (2012): Modeling nitrous acid and its impact on ozone and hydroxyl radical during the Texas Air Quality Study 2006, *Atmos. Chem. Phys.*, **12**, 6939-6951, doi:10.5194/acp-12-6939-2012
- 50) Ngan F., Byun D., Kim H., Lee D., **Rappenglueck B.**, Pour-Biazar A. (2012): Performance Assessment of Retrospective Meteorological inputs for Use in Air Quality Modeling during TexAQs 2006, *Atmos. Environ.*, **54**, 86-96, doi: 10.1016/j.atmosenv.2012.01.035
- 51) Warneke C., Veres P., Holloway J., Stutz J., Tsai C., Alvarez S., **Rappenglueck B.**, Fehsenfeld F.C., Graus M.G., Gilman J.B., de Gouw J.A. (2011): Airborne Formaldehyde Measurements using PTR-MS: Calibration, Humidity Dependence, Inter-comparison and Initial Results, *Atmos. Meas. Tech.*, **4**, 2345-2358, doi:10.5194/amt-4-2345-2011
- 52) Villena G., Kleffman J., Kurtenbach R., Wiesen P., Lissi E., Rubio M.A., Croxatto G., **Rappenglück B.** (2011): Vertical Gradients of HONO, NO_x and O₃ in Santiago de Chile, *Atmos. Environ.*, **45**, 3867-3873, doi:10.1016/j.atmosenv.2011.01.073
- 53) Wong K.W., Oh H.-J., Lefer B., **Rappenglück B.**, Stutz J. (2011): Vertical profiles of nitrous acid in the nocturnal urban atmosphere of Houston, TX, *Atmos. Chem. Phys.*, **11**, 3595-3609
- 54) Boeke N.L., Marshall J.D., Alvarez S., Chance K.V., Fried A., Kurosu P., **Rappenglück B.**, Richter D., Walega J., Weibring P., and D.B. Millet (2011): Formaldehyde columns from the Ozone Monitoring Instrument: Urban versus background levels and evaluation with aircraft data and a global model, *J. Geophys. Res.*, **116**, D05303, doi:10.1029/2010JD014870
- 55) Ganranoo L., Mishra S.K., Azad A.K., Shigihara A., Dasgupta P.K., Breitbach Z., Armstrong D.W., Grudpan K., **Rappenglueck B.** (2010): Measurement of Nitrophenols in Rain and Air by Two-dimensional Liquid Chromatography – Chemically Active Liquid Core Waveguide Spectrometry, *Anal. Chem.*, **82**, 5838-5843
- 56) **Rappenglück B. (*)**, Dasgupta P.K., Leuchner M., Li Q., Luke W. (2010): Formaldehyde and its relation to CO, PAN, and SO₂ in the Houston-Galveston airshed, *Atmos. Chem. Phys.*, **10**, 2413-2424
***) corresponding author**
- 57) McMillan W.W., Pierce R., Sparling L., Osterman G., McCann K., Fischer M., **Rappenglück B.**, Newsom R., Turner D., Kittaka C., Evans K., Biraud S., Lefer B., Andrews A., Oltmans S. (2010): An Observational and modelling strategy to investigate the impact of remote sources on local air quality: A Houston, Texas case study from TEXAQs II, *J. Geophys. Res.*, **115**, D01301, doi:10.1029/2009JD011973
- 58) Lefer B., **Rappenglück B. (*)** (2010): The TexAQs-II radical and aerosol measurement project (TRAMP), *Atmos. Environ.*, **44**, 3997-4004, doi:10.1016/j.atmosenv.2010.05.053
***) corresponding author**
- 59) Lefer B., **Rappenglück B.**, Flynn J., Haman C. (2010): Photochemical and meteorological relationships during the Texas-II Radical and Aerosol Measurement Project (TRAMP), *Atmos. Environ.*, **44**, 4005-4013, doi:10.1016/j.atmosenv.2010.03.011
- 60) Stutz J., Wong K.W., Lawrence L., Ziemba L., Flynn J., **Rappenglück B.**, Lefer B. (2010): Nocturnal NO₃ radical chemistry in Houston, TX, *Atmos. Environ.*, **44**, 4099-4106, doi:10.1016/j.atmosenv.2009.03.004
- 61) Chen S., Ren X., Mao J., Chen Z., Brune W.H., Lefer B., **Rappenglück B.**, Flynn J., Olson J., Crawford J.H. (2010): A comparison of chemical mechanisms based on TRAMP-2006 field data, *Atmos. Environ.*, **44**, 4116-4125, doi:10.1016/j.atmosenv.2009.05.027

- 62) Day B.M., **Rappenglück B. (*)**, Clements C.B., Tucker S.C., Brewer W.A. (2010): Nocturnal boundary layer characteristics and land breeze development in Houston, Texas, during TexAQS-II, *Atmos. Environ.*, **44**, 4014-4023, doi:10.1016/j.atmosenv.2009.01.031
***) corresponding author**
- 63) Morris G.A., Ford B., **Rappenglück B.**, Thompson A.M., Mefferd A., Ngan F., Lefer B. (2010): An evaluation of the influence of the morning residual layer on afternoon ozone concentrations in Houston using ozonesonde data, *Atmos. Environ.*, **44**, 4024-4034, doi:10.1016/j.atmosenv.2009.06.057
- 64) Flynn J., Lefer B., **Rappenglück B.**, Leuchner M., Perna R., Dibb J., Ziemba L., Anderson C., Stutz J., Brune W., Ren X., Mao J., Luke W., Olson J., Chen G., Crawford J. (2010): Impact of clouds and aerosol on ozone production in southeast Texas, *Atmos. Environ.*, **44**, 4126-4133, doi:10.1016/j.atmosenv.2009.09.005
- 65) Wright M.E., Atkinson D.B., Ziemba L., Griffin R., Hiranuma N., Brooks S., Lefer B., Flynn J., Perna R., **Rappenglück B.**, Luke W., Kelley P. (2010): Extensive Aerosol Optical Properties and Aerosol-mass Related Measurements during TRAMP/TexAQS 2006 – Implications for PM Compliance and Planning, *Atmos. Environ.*, **44**, 4035-4044, doi:10.1016/j.atmosenv.2008.12.055
- 66) Stutz J., Oh H.-J., Whitlow S.I., Anderson C.H., Dibb J.E., Flynn J., **Rappenglück B.**, Lefer B. (2010): Simultaneous DOAS and Mist-Chamber IC measurements of HONO in Houston, TX, *Atmos. Environ.*, **44**, 4090-4098, doi:10.1016/j.atmosenv.2009.02.003
- 67) Ziemba L.D., Dibb J.E., Griffin R.J., Anderson C.H., Whitlow S.I., Lefer B.L., **Rappenglück B.**, Flynn J. (2010): Heterogeneous conversion of nitric acid to nitrous acid on the surface of primary organic aerosol in an urban atmosphere, *Atmos. Environ.*, **44**, 4081-4089, doi:10.1016/j.atmosenv.2008.12.024
- 68) Luke W.T., Kelley P., Lefer B.L., Flynn J., **Rappenglück B.**, Leuchner M., Dibb J.E., Ziemba L.D., Anderson C.H., Buhr M. (2010): Measurements of Primary Trace Gases and NO_y Composition in Houston, Texas, *Atmos. Environ.*, **44**, 4068-4080, doi:10.1016/j.atmosenv.2009.08.014
- 69) Brooks S., Luke W., Cohen M., Kelly P., Lefer B., **Rappenglück B.** (2010): Mercury species measured atop the Moody Tower TRAMP site, Houston, Texas, *Atmos. Environ.*, **44**, 4045-4055, doi:10.1016/j.atmosenv.2009.02.009
- 70) Leuchner M., **Rappenglück B. (*)** (2010): VOC Source-Receptor Relationships in Houston during TexAQS-II, *Atmos. Environ.*, **44**, 4056-4067, doi:10.1016/j.atmosenv.2009.02.029
***) corresponding author; among the top-50 most cited articles" published in Atmospheric Environment (2010-2011)**
- 71) Mao J., Ren X., Chen S., Brune W.H., Chen Z., Martinez M., Harder H., Lefer B., **Rappenglück B.**, Flynn J., Leuchner M. (2010): Atmospheric Oxidation Capacity in the Summer of Houston 2006: Comparison with Summer Measurements in other Metropolitan Studies, *Atmos. Environ.*, **44**, 4107-4115, doi:10.1016/j.atmosenv.2009.01.013
- 72) Olaguer E.P., **Rappenglück B.**, Lefer B., Stutz J., Dibb J., Griffin R., Brune B., Shauck M., Buhr M., Jeffries H., Vizuete W., Pinto J. (2009): Deciphering the Role of Radical Sources during the Second Texas Air Quality Study, *J. Air Waste Man. Assoc.*, **59**, 1258-1277
- 73) Schade G, **Rappenglück B.** (2009): Unique Meteorological Data during Hurricane Ike's Passage over Houston, *Eos*, **90**, 215
- 74) Baumgardner D., Grutter M., Allen J., Ochoa C., **Rappenglueck B.**, Russell L., Arnott P. (2009): Physical and Chemical Properties of the Regional Mixed Layer of Mexico's Megapolis, *Atmos. Chem. Phys.*, **9**, 5711-5727
- 75) Thompson A.M., Yorks J.E., Miller S.K., Witte J.C., Dougherty K.M., Morris G.A., Baumgardner D., Ladino L., **Rappenglueck B.** (2008): Tropospheric ozone sources and wave activity over Mexico City and Houston during MILAGRO/Intercontinental Transport Experiment (INTEX-B) Ozonesonde Network Study, 2006 (IONS-06), *Atmos. Chem. Phys.*, **8**, 5113-5125
- 76) **Rappenglück B. (*)**, Perna R., Zhong S., Morris G.A. (2008): An Analysis of the Vertical Structure of the Atmosphere and the Upper-Level Meteorology and their Impact on Surface Ozone Levels in Houston, Texas, *J. Geophys. Res.*, **113**, D17315, doi:10.1029/2007JD009745
***) corresponding author**
- 77) Cooper O.R., Trainer M., Thompson A.M., Oltmans S.J., Tarasick D.W., Witte J.C., Stohl A., Eckhardt S., Merrill J.T., Newchurch M.J., Johnson B.J., Kalnajs L., Dubey M.K., Leblanc T., McDermid I.S., Forbes G., Wolfe D., Lelieveld J., Carey-Smith T., Morris G.A., Lefer B., **Rappenglück B.**, Joseph E., Schmidlin F., Ravishankara A., Meagher J., Fehsenfeld F.C., Keating T.J., Van Curen R.A. (2007): Conclusive in situ evidence that the eastern North America upper tropospheric ozone maximum is a recurring summertime feature, *J. Geophys. Res.*, **112**, D10S40, D23304, doi:10.1029/2007JD008710
- 78) Arnold S.R., Methven J., Evans M.J., Chipperfield M.P., Lewis A.C., Hopkins J., McQuaid J.B., Watson N., Purvis R.M., Lee J.D., Atlas E.L., Blake D.R., **Rappenglück B.** (2007): Quantification of mean OH concentrations and air mass dilution rates from successive observations of non-methane hydrocarbons in single air masses, *J. Geophys. Res.*, **112**, D10S40, doi:10.1029/2006JD007594
- 79) Schürmann G., Schäfer K., Jahn C., Hoffmann H., Bauerfeind M., Fleuti E., **Rappenglück B.** (2007): The Impact of NO_x, CO and VOC Emissions on the Air Quality of the Airport Zurich, *Atmos. Environ.*, **41**, 103-118, doi:10.1016/j.atmosenv.2006.07.030
- 80) Methven J., Arnold S.R., Stohl A., Evans M.J., Avery M., Law K., Lewis A.C., Monks P.S., Parrish D., Reeves C., Schlager H., Atlas E., Blake D., Coe H., Cohen R.C., Crosier J., Flocke F., Holloway J.S., Hopkins J.R., Hübler G., Lee J.D., Purvis R., **Rappenglück B.**, Ryerson T.B., Sachse G.W., Singh H., Watson N., Whalley L., Williams P. (2006): Establishing Lagrangian connections between observations within air masses crossing the Atlantic during the International Consortium for Atmospheric Research on Transport and Transformation experiment, *J. Geophys. Res.*, **111**, D23S62, doi:10.1029/2006JD007540
- 81) **Rappenglück B. (*)**, Apel E., Bauerfeind M., Bottenheim J., Brickell P., Čavolka P., Cech J., Gatti L., Hakola H., Honzak J., Junek R., Martin D., Noone C., Plass-Dülmer Ch., Travers D., Wang T. (2006): The first VOC intercalibration exercise within the Global Atmosphere Watch (GAW), *Atmos. Environ.*, **40**, 7508-7527, doi:10.1016/j.atmosenv.2006.07.016

- *) corresponding author**
- 82) Valverde-Canossa J., Ganzeveld L., **Rappenglück B.**, Steinbrecher R., Klemm O., Schuster G., Moortgat G. (2006): First measurements of H₂O₂ and organic peroxides surface fluxes by the relaxed eddy accumulation technique, *Atmos. Environ.*, **40**, S55-67, doi:10.1016/j.atmosenv.2006.03.038
- 83) Klemm O., Held A., Forkel R., Gasche R., Kanther H.-J., **Rappenglück B.**, Müller K., Plewka A., Cojocariu C., Kreuzwieser J., Valverde-Canossa J., Schuster G., Moortgat G.K., Graus M., Hansel A., Steinbrecher R. (2006): Experiments on forest/atmosphere exchange: Climatology and fluxes during two summer campaigns in NE Bavaria, *Atmos. Environ.*, **40**, S3-S20, doi:10.1016/j.atmosenv.2006.01.060
- 84) Graus M., Hansel A., Wisthaler A., Lindinger Ch., Forkel R., Hauff K., Klauer M., Pfichner A., **Rappenglück B. (*)**, Steigner D., Steinbrecher R. (2006): A Relaxed-Eddy-Accumulation (REA) Method using an Online Gas-Chromatographic Technique and PTR-MS for the Measurement of Isoprenoid Canopy-Fluxes, *Atmos. Environ.*, **40**, S43-S54, doi:10.1016/j.atmosenv.2005.09.094
- *) corresponding author**
- 85) Ganzeveld L., Klemm O., **Rappenglück B.**, Valverde-Canossa J. (2006): Evaluation of micrometeorological parameters over coniferous forest in a single-column chemistry-climate model, *Atmos. Environ.*, **40**, S21-S27, doi:10.1016/j.atmosenv.2006.01.061
- 86) Forkel R., Klemm O., Graus M., **Rappenglück B.**, Stockwell W.R., Grabmer W., Held A., Hansel A., Steinbrecher R. (2006): Trace gas exchange and gas phase chemistry in a Norway spruce forest: A study with a coupled 1-dimensional canopy atmospheric chemistry emission model, *Atmos. Environ.*, **40**, S28-S42, doi:10.1016/j.atmosenv.2005.11.070
- 87) **Rappenglück B. (*)**, Schmitz R., Bauerfeind M., Cereceda-Balic F., v. Baer D., Jorquera H., Silva Y., Oyola P. (2005): An urban photochemistry study in Santiago de Chile, *Atmos. Environ.*, **39**, 2913-2931, doi:10.1016/j.atmosenv.2004.12.049
- *) corresponding author**
- 88) Grabmer W., Graus M., Lindinger C., Wisthaler A., **Rappenglück B.**, Steinbrecher R., Hansel A. (2004): Disjunct Eddy Covariance Measurements of Monoterpene Fluxes from a Norway Spruce Forest using PTR-MS, *Int. J. Mass Spec.*, **239**, 111-115
- 89) **Rappenglück B. (*)**, Forster C., Jakobi G., Pesch M. (2004): Unusually high levels of PAN and ozone over Berlin, Germany, during nighttime on August 7, 1998, *Atmos. Environ.*, **38**, 6125-6134, doi:10.1016/j.atmosenv.2004.08.009
- *) corresponding author**
- 90) Jorquera H., **Rappenglück B.** (2004): Receptor modeling of ambient VOC at Santiago, Chile, *Atmos. Environ.*, **38**, 4243-4263, doi:10.1016/j.atmosenv.2004.04.030
- 91) **Rappenglück B. (*)**, Melas D., Fabian P. (2003): Evidence of the impact of urban plumes on remote sites in the Eastern Mediterranean, *Atmos. Environ.*, **37**, 1853-1864
- *) corresponding author**
- 92) Zanis P., Kourtidis K., **Rappenglück B.**, Zerefos C., Melas D., Balis D., Schmitt R., Rapsomanikis S., Doukelis Y., Fabian P., Isaksen I. (2002): Induced changes on surface ozone production rates from total ozone variability at Crete during PAUR II, *J. Geophys. Res.*, **107**, 8136, 10.1029/2000JD000137
- 93) Winkler J., Blank P., Glaser K., Habram M., Jambert C., Jaeschke W., Konrad S., Kurtenbach R., Lenschow P., Perros P., Pesch M., Prümke H.-J., **Rappenglück B.**, Schmitz T., Slemr F., Volz-Thomas A. and Wickert B. (2002): Ground-based and airborne measurements of nonmethane hydrocarbons in BERLIOX: Analysis and selected results, *J. Atmos. Chem.*, **42**, 465-492
- 94) Kouvarakis G., Vrekoussis M., Mihalopoulos N., Kourtidis K., **Rappenglück B.**, Gerasopoulos E., and Zerefos C. (2002): Spatial and temporal variability of tropospheric ozone (O₃) in the boundary layer above the Aegean Sea (Eastern Mediterranean), *J. Geophys. Res.*, **107**, 8173, 10.1029/2000JD000081
- 95) Corsmeier U., Kalthoff N., Kottmeier Ch., Vogel B., Hammer M., Volz-Thomas A., Konrad S., Glaser K., Neining B., Lehning M., Jaeschke W., Memmesheimer M, **Rappenglück B.**, Jakobi G. (2002): Ozone budget and PAN formation inside and outside of the Berlin plume - Process analysis and numerical process simulation, *J. Atmos. Chem.*, **42**, 289-321
- 96) Fabian P., Winterhalter M., **Rappenglück B.**, Reitmayer H., Stohl A., Schlager H. Koepke P., Foken Th., Berresheim H., Häberle K.-H., Matyssek R., Kartschall T. (2001): The BAYSOFI Campaign – Measurements carried out during the total solar eclipse of August 11, 1999, *Meteorol. Zeitschrift*, **10**, 165-170
- 97) Fabian P., **Rappenglück B.**, Stohl A., Werner H., Winterhalter M., Schlager H. Stock P., Berresheim H., Kaminski U., Koepke P., Reuder J., Birmili W. (2001): Boundary layer photochemistry during total solar eclipse, *Meteorol. Zeitschrift*, **10**, 187-192
- 98) **Rappenglück B. (*)**, Reitmayer H., Fabian P. (2000): On the use of manned hydrogen gas ballooning in boundary layer studies, *Environ. Sci. & Pollut. Res.*, **7**, 211-218
- *) corresponding author ; article featured on cover**
- 99) **Rappenglück B. (*)**, Oyola P., Olaeta I., Fabian P. (2000): The evolution of photochemical smog in the Metropolitan Area of Santiago de Chile, *J. Appl. Meteor.*, **39**, 275-290
- *) corresponding author**
- 100) **Rappenglück B. (*)**, Kourtidis K., Melas D., Fabian P. (1999): Observations of biogenic and anthropogenic NMHC in Athens during the PAUR campaign, *Phys. Chem. Earth (B)*, **24**, 717-724
- *) corresponding author**
- 101) **Rappenglück B. (*)** and Fabian P. (1999): An Analysis of simultaneous GC-Measurements of BTEX-aromatics at three selected sites in the Greater Munich area, *J. Appl. Meteor.*, **38**, 1448-1462
- *) corresponding author**
- 102) **Rappenglück B. (*)**, Fabian P. (1999): Non Methane Hydrocarbons (NMHC) in the Greater Munich Area/Germany, *Atmos. Environ.*, **33**, 3843-3857
- *) corresponding author**

- 103) Kourtidis K.A., Ziomas I.C., **Rappenglück B.**, Proyou A., Balis B. (1999): Evaporative traffic hydrocarbon emissions, traffic CO and speciated HC traffic emissions from the city of Athens, *Atmos. Environ.*, **33**, 3831-3842
- 104) **Rappenglück B. (*)** and Fabian P. (1998): A study of BTEX-ratios in the urban area of Munich/Germany using rapid gas chromatography, *Environ. Sci. & Pollut. Res.*, **5**, 65-70
***) corresponding author**
- 105) **Rappenglück B. (*)**, Fabian P., Kalabokas P., Viras L. G., Ziomas I. C. (1998): Quasi-continuous measurements of Non Methane Hydrocarbons (NMHC) in the Greater Athens Area during MEDCAPHOT-TRACE, *Atmos. Environ.*, **32**, 2103-2121
***) corresponding author**
- 106) Ziomas I. C., Suppan P., **Rappenglück B.**, Balis D., Tzoumaka P., Melas D., Papayannis A., Fabian P., Zerefos C. S. (1995): A contribution to the study of photochemical smog in the greater Athens area, *Contrib. Phys. Atmosph.*, **68**, 191-203
- 107) **Rappenglück B. (*)** (1995): Measurement of aromatic compounds in the urban area of Munich and in the Ebersberger Forest - a comparison (in German), *Wetter und Leben*, **47**, 179-188
***) corresponding author**
- 108) **Rappenglück B. (*)** (1994): Quasi-continuous measurements of hydrocarbon immissions, *Meteorol. Zeitschrift*, **3**, 149-154
***) corresponding author**
- 109) Fabian P., Hausteine C., Jakobi G., **Rappenglück B.**, Suppan P., Steil P. (1994): Photochemical Smog in the Munich Metropolitan Area, *Contrib. Phys. Atmosph.*, **67**, 39-56
- 110) **Rappenglück B. (*)**, Kourtidis K., Fabian P. (1993): Measurements of ozone and peroxyacetyl nitrate (PAN) in Munich, *Atmos. Environ.*, **27**, 293-305
***) corresponding author**
- 111) Kourtidis K. A., Fabian P., Zerefos C., **Rappenglück B.** (1993): Peroxyacetyl nitrate (PAN), peroxypropionyl nitrate (PPN) and PAN/ozone ratio measurements at three sites in Germany, *Tellus*, **45**, 442-457

Contributions to Books

- 1) Sarwar G., Chen S., Henderson B., Fahey K., Gilliam R., Pouliot G., Czader B., **Rappenglueck B.** (2014), Simulation of Atmospheric Oxidation Capacity in Houston, Texas, in: Air Pollution Modeling and its Application XXII, Steyn D.G., Builtjes P.J.H. and Timmermans R.M.A. Eds., NATO Science for Peace and Security Series C: Environmental Security 2014, ISBN: 978-94-007-5576-5 (Print) 978-94-007-5577-2 (Online), pp 481-486
- 2) Byun D. W., Lee D.-G., Kim H.-C., Kim S., Ngan F., Czader, B., **Rappenglueck B.**, Kondragunta S., Pierce B. (2012), Efficacy of Incremental Reduction of Input Uncertainties to Improve Air Quality Prediction, in: Air Pollution Modelling and its Applications XXI, Steyn D.G and Trini Castelli S. Eds, NATO Science for Peace and Security Series C: Environmental Security 4, Part 3, Springer Science+Business Media B.V., DOI 10.1007/978-94-007-1359-8_58, 341-346
- 3) Steinbrecher R., Graus M., Grabmer W., Hansel A., Wisthaler A., Lindinger L., Klemm O., Forkel R., Hauff K., Klauer M., Pfichner A., **Rappenglück B.**, Smiatek G., Steigner D. (2006): Isoprenoid Fluxes of Norway Spruce Forests in Europe: Results from Field and Modelling Studies in Germany and Finland. In: *The Changing Chemical Climate of the Atmosphere, First AC-CENT Symposium*, Urbino/Italy, 12.-16.09.2005, Sandro Fuzzi, Michela Maione (eds), ARCNE editrice, Rome ISBN 88-548-0851-2, p 82-89.
- 4) Steinbrecher R., **Rappenglück B.**, Hansel A., Graus M., Klemm O., Held A., Wiedensohler A., Nowak A. (2004): The emissions of biogenic volatile organic compounds (BVOC) and their relevance to atmospheric particle dynamics, in: Matzner E. (Ed.) Biogeochemistry of forested catchments in a changing environment: a case study in NE-Bavaria, Germany. Springer Verlag, ISBN: 3-540-20973-5, *Ecological Studies* **172**, 215-232

Conference Presentations

- 1) Osibanjo O.O., **Rappenglueck B.**, Velasco E., Retama A. (2022): Climatology of the Planetary Boundary Layer Height Variation and its Relation to Ozone Exceedances, *102th Annual Meeting of the American Meteorological Society*, 23.-27.01.2022, Houston TX/USA
- 2) Statkewicz M.D., Talbot R., **Rappenglueck B.** (2022): Changes in Precipitation Patterns in Houston, Texas, *102th Annual Meeting of the American Meteorological Society*, 23.-27.01.2022, Houston TX/USA
- 3) Ahmad M., **Rappenglück B.**, Osibanjo O.O., Retama A. (2022): Analysis of Surface Ozone Build-Up in Mexico-City during the March 2016 Severe Ozone Smog Episode using Machine Learning, *102th Annual Meeting of the American Meteorological Society*, 23.-27.01.2022, Houston TX/USA
- 4) Ahmed M., **Rappenglück B.**, Das S., Chellam S. (2022): Source Apportionment of gasphase compounds (Volatile Organic Compounds, CO, SO₂) and Trace Metals in a Complex Atmospheric Environment in Houston, Texas, *102th Annual Meeting of the American Meteorological Society*, 23.-27.01.2022, Houston TX/USA
- 5) Karim I., **Rappenglück B.** (2022): Case study analyses of PM_{2.5} in Lahore, Pakistan, using in-situ air quality and remote sensing data, *102th Annual Meeting of the American Meteorological Society*, 23.-27.01.2022, Houston TX/USA
- 6) Statkewicz M.D., Talbot R., **Rappenglueck B.** (2021): Changes in Precipitation Patterns in Houston, Texas, *American Geophysical Union, Fall Meeting*, New Orleans LA/USA, 13.-17.12.2021
- 7) Akther T., **Rappenglück B.**, Osibanjo O., Retama A., Rivera-Hernández O. (2021): Volatile Organic Compounds (VOCs) in Mexico City During the Severe Ozone Episode in March 2016, *American Geophysical Union, Fall Meeting*, New Orleans LA/USA, 13.-17.12.2021

- 8) Ahmed M., **Rappenglück B.**, Das S., Chellam S. (2021): Source Apportionment of Hazardous Air Pollutants in a Complex Atmospheric Environment in Houston, Texas, *American Geophysical Union, Fall Meeting*, New Orleans LA/USA, 13.-17.12.2021
- 9) Sadeghi B., Pouyaei A., Choi Y., **Rappenglück B.** (2021): Summertime and wintertime VOCs in Houston: Source apportionment and spatial distribution of source origins., *American Geophysical Union, Fall Meeting*, New Orleans LA/USA, 13.-17.12.2021
- 10) Statkewicz M.D., Talbot R., **Rappenglueck B.** (2021): Changes in Precipitation Patterns in Houston, Texas, *5th annual Midwest Student Conference on Atmospheric Research (MSCAR)*, 25.-26.09.2021, virtual
- 11) Ahmed M., **Rappenglück B.**, Das S., Chellam S. (2021): Source Apportionment of Volatile Organic Compounds (VOCs) and Trace Metals in Houston, *16th IGAC Science Conference*, 12.-18.09.2021, virtual
- 12) Nault B. A., Jo D.S., McDonald B.C., Campuzano-Jost P., Day D.A., Hu W., Schroder J.C., Allan J., Blake D.R., Canagaratna M.R., Coe H., Coggon M.M., DeCarlo P.F., Diskin G.S., Flocke F., Fried A., Gilman J.B., Gkatzelis G., Hamilton J.F., Hanisco T.F., Hayes P.L., Henze D.K., Hodzic A., Hopkins J., Hu M., Huey L.G., Jobson B.T., Kuster W.C., Lewis A., Li M., Liao J., Omar Nawaz M., Pollack I.B., Peischl J., **Rappenglück B.**, Reeves C.E., Richter D., Roberts J.M., Ryerson T.B., Shao M., Sommers J.M., Walega J., Warneke C., Weibring P., Wolfe G.M., Young D.E., Yuan B., Zhang Q., de Gouw J.A., Jimenez J.L. (2020): Anthropogenic Secondary Organic Aerosols Contribute Substantially to Air Pollution Mortality, *American Geophysical Union, Fall Meeting*, Washington DC/USA, 7.-11.12.2020
- 13) **Rappenglück B.**, Retama A., Osibanjo O., Jaimes-Palomera M. (2020): Urban Air Quality: Revisiting the Case of Mexico-City, *100th Annual Meeting of the American Meteorological Society*, 12.-16.01.2020, Boston MA/USA
- 14) **Rappenglück B.**, Holler A. (2020): Do Atmospheric Non-Methane Hydrocarbons Concentrations Show Long-term Trends? Results from a 15-Year Auto-GC Time Series, *100th Annual Meeting of the American Meteorological Society*, 12.-16.01.2020, Boston MA/USA
- 15) Cai C., Avise J., Kaduwela A.P., DaMassa J., Warneke C., Gilman J., Kuster W., de Gouw J.A., Volkamer R.M., Stevens P.S., Lefer B.L., Holloway J.S., Pollack I.B., Ryerson T.B., Atlas E.L., Blake D.R., **Rappenglueck B.**, Brown S.S., Dube W.P. (2019): Simulating the weekly cycle of NO_x-VOC-HO_x-O₃ photochemical system in the South coast of California during CalNex-2010 Campaign, *American Geophysical Union, Fall Meeting*, Washington DC/USA, 7.-11.12.2020
- 16) **Rappenglück B.**, Osibanjo O., Retama A., Jaimes-Palomera M. (2019): Anatomy of a Severe Ozone Smog Episode in Mexico-City, *15th International Conference on Atmospheric Sciences and Application to Air Quality*, Kuala Lumpur/Malaysia, 28.-30.10.2019.
- 17) **Rappenglück B.**, Holler A. (2019): Analysis of a 15-Year Time Series of C₂-C₁₁ Non-Methane Hydrocarbons in a Subtropical Area: Interannual Variability and Trends, *15th International Conference on Atmospheric Sciences and Application to Air Quality*, Kuala Lumpur/Malaysia, 28.-30.10.2019.
- 18) Nault B.A., Jo D.S., Campuzano-Jost P., Day D.A., Hu W., Schroder J.C., Allan J., Bandy B., Blake D.R., Canagaratna M.R., Coe H., DeCarlo P.F., Diskin G.S., Flocke F., Fried A., Gilman J.B., Hanisco T.F., Hayes P.L., Henze D., Hopkins J., Huey L.G., Jobson B.T., Kuster W.C., Lee J., Liao J., Mills G., Montzka D.D., Pollack I.B., Peischl J., **Rappenglück B.**, Roberts J.M., Ryerson T.B., Stutz J., Weibring P., Weinheimer A.J., Williams E.J., Wood E.C., Young D.E., Yuan B., de Gouw J.A., and Jimenez J.L. (2019): Variable Urban SOA Production Explained by Emissions and Photochemistry to Quantify of its Impact on Mortality, *Gordon Research Conference for Atmospheric Chemistry*, 07.28.-08.02.2019, Newry ME/USA
- 19) Osibanjo O.O., **Rappenglück B.**, Retama A., Jaimes-Palomera M. (2019): Implication of Planetary Boundary Layer Variation and Meteorology on Air Quality in Mexico City during the Dry Season, *99th Annual Meeting of the American Meteorological Society*, 06.-10.01.2019, Phoenix AZ/USA
- 20) Nault B.A., Jo D., Campuzano-Jost P., Day D.A., Hu W.W., Schroder J.C., Bandy B., Blake D.R., Canagaratna M.R., Coe H., Flocke F., Fried A., Gilman J., Hanisco T.F., Hopkins J., Huey L.G., Jobson B.T., Kuster W., Lefer B., Liao J., Montzka D.D., Oram D., Pollack I.B., Peischl J., **Rappenglueck B.**, Roberts J.M., Ryerson T.B., Stutz J., Weibring P., Weinheimer A.J., Wood E.C., Young D., Yuan B., de Gouw J.A., Jimenez J.L. (2018): Secondary Organic Aerosol Production across World-wide Megacities and Its Impact on Mortality, *American Geophysical Union, Fall Meeting*, Washington DC/USA, 10.-14.12.2018
- 21) Nault B.A., Campuzano-Jost P., Day D.A., Schroder J.C., Blake D.R., Canagaratna M.R., de Gouw J.A., Flocke F., Fried A., Gilman J., Hanisco T.F., Huey L.G., Jobson B.T., Kuster W., Lefer B., Liao J., Montzka D.D., Pollack I.B., Peischl J., **Rappenglueck B.**, Roberts J.M., Ryerson T.B., Stutz J., Weibring P., Weinheimer A.J., Wood E.C., Jimenez J.L. (2018): Quantification of the Rapid Photochemical Secondary Organic Aerosol Production Observed across Megacities around the World, *10th International Aerosol Conference (IAC 2018)*, 02.-07.09.2018, St. Louis MO/USA.
- 22) **Rappenglück B.**, Osibanjo O., Retama A., Jaimes-Palomera M. (2018): The severe ozone smog episode in Mexico-City in March 2016, *EGU Joint Assembly*, Vienna/Austria, 08.-13.04.2018.
- 23) Davidson J., **Rappenglück B.**, Wood L. (2018): Hurricane Harvey and its associated intense rainfall in the Houston area, *EGU Joint Assembly*, Vienna/Austria, 08.-13.04.2018.
- 24) Li X., **Rappenglück B.** (2018): Nighttime Ozone Bias and Vertical Diffusion in Air Quality Modeling: Example Southeast Texas, *EGU Joint Assembly*, Vienna/Austria, 08.-13.04.2018.
- 25) Osibanjo O.O., **Rappenglück B.**, Retama A., Jaimes-Palomera M. (2018): Investigation of the Influence of Planetary Boundary Layer Evolution and Meteorology on Air Quality in Mexico City., *1st National Workshop on Air Quality - National Space Research and Development Agency - Federal Ministry of Science and Technology*, 13.-16.03.2018, Anyigba/Nigeria
- 26) Osibanjo O.O., **Rappenglück B.**, Retama A., Jaimes-Palomera M. (2018): Investigation of the Influence of Planetary Boundary Layer Evolution and Meteorology on Air Quality in Mexico City, *98th Annual Meeting of the American Meteorological Society*, 07.-11.01.2018, Austin TX/USA
- 27) Caicedo V., **Rappenglück B.**, Delgado R., Morris G.A., Toledo D., Santanello J.A., Demoz B., Lefer B.L. (2017): Boundary layer height determination and evolution using aerosol backscatter retrieval methods, *American Geophysical Union, Fall Meeting*, New Orleans LA/USA, 11.-15.12.2017

- 28) **Rappenglück B.**, Osibanjo O., Retama A., Jaimes-Palomera M. (2017): Meteorological conditions leading to the severe ozone smog episode in Mexico-City in March 2016, *14th International Conference on Atmospheric Sciences and Application to Air Quality*, Strasbourg/France, 29.-31.05.2017.
- 29) Ackermann L., **Rappenglück B.**, Ayoub M. (2017): Sources of Nitrous Acid, Formaldehyde, and Hydroxyl Radical in Doha, Qatar, *EGU Joint Assembly*, Vienna/Austria, 23.-28.04.2017.
- 30) Cuchiara G.C., **Rappenglück B.**, Rubio A.M., Lissi E., Gramsch E., Garreaud R.D. (2017): Modeling study of biomass burning plumes and their impact on urban air quality; a case study of Santiago de Chile, *EGU Joint Assembly*, Vienna/Austria, 23.-28.04.2017.
- 31) Wu Y., **Rappenglück B.**, Pour-Biazar A., Field R.A., Soltis J. (2017): Modeling winter ozone episodes near oil and natural gas fields in Wyoming, *EGU Joint Assembly*, Vienna/Austria, 23.-28.04.2017.
- 32) Huntrieser H., Lichtenstern M., Scheibe M., Aufmhoff H., Schlager H., Heimerl K., Pucik T., Minikin A., Weinzierl B., Fütterer D., Pollack I.B., Peischl J., Ryerson T.B., Weinheimer A.J., Honomichl S., Ridley B.A., Hair J.W., Butler C.F., Schwartz M.J., **Rappenglück B.**, Ackermann L., Pickering K.E., Cummings K.A., Biggerstaff M.I., Betten D.P., Barth M.C. (2016): The interaction between very deep convection and biomass burning plumes during DC3 and the impact on the UTLS region over the North Atlantic, *American Geophysical Union*, Fall Meeting, San Francisco CA/USA, 12.-16.12.2016
- 33) Wu Y., Pour Biazar A., **Rappenglück B.** (2016): Exploring Conditions Leading to Wintertime Ozone Episodes in Natural Gas Fields in Mountain Valleys, *15th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 24-26.10.2016
- 34) **Rappenglück B.** (2016): Interannual Variability and Trends of C₂-C₁₁ Non-Methane Hydrocarbons in a Subtropical Area close to the Gulf of Mexico, *EGU Joint Assembly*, Vienna/Austria, 17.-22.04.2016.
- 35) **Rappenglück B.**, Lubertino G. (2016): Traffic Emissions of Radical Precursors and Related Species as Observed and Modeled at an Urban Highway Junction in Houston/Texas, *EGU Joint Assembly*, Vienna/Austria, 17.-22.04.2016.
- 36) Cuchiara G.C., **Rappenglück B.** (2016): Single-column model and large eddy simulation of the evening transition in the planetary boundary layer, *EGU Joint Assembly*, Vienna/Austria, 17.-22.04.2016.
- 37) Huntrieser H., Lichtenstern M., Scheibe M., Aufmhoff H., Schlager H., Pucik T., Minikin A., Weinzierl B., Heimerl K., Fütterer D., Pollack I.B., Peischl J., Ryerson T.B., Weinheimer A.J., Honomichl S., Ridley B.A., Hair J.W., Butler C.F., Schwartz M.J., **Rappenglück B.**, Ackermann L., Pickering K.E., Cummings K.A., Biggerstaff M.I., Betten D.P., Barth M.C. (2015): Injection of lightning-produced NO_x, water vapour, wildfire emissions, and stratospheric air to the UT/LS as observed from DC3 measurements, *American Geophysical Union*, Fall Meeting, San Francisco CA/USA, 14.-18.12.2015
- 38) Hayes P.L., Ma P.K., Jimenez J.L., Carlton A.G., Baker K.R., Ahmadov R., Washenfelder R.A., Alvarez S., **Rappenglück B.**, Gilman J.B., Kuster W.C., de Gouw J.A., Zotter P., H. Prévôt A.S., Szidat S., Kleindienst T.E., Offenberg J.H., Zhao Y., Robinson A.L. (2015): Modeling the formation and aging of secondary organic aerosols in the Los Angeles metropolitan region during the CalNex 2010 field campaign, *American Geophysical Union*, Fall Meeting, San Francisco CA/USA, 14.-18.12.2015
- 39) Blood P.G., **Rappenglück B.**, Wood L. (2015): The Optimization of the Weather Research and Forecast - Environmental Modeling System for a Southeast Texas Extreme Rainfall Event, *National Weather Association National Conference*, Oklahoma City, OK. 19.-22.10.2015
- 40) **Rappenglück B.** (2015): Analysis of 10 Years online C₂-C₁₁ NMHC Measurements close to the Gulf of Mexico, *EGU Joint Assembly*, Vienna/Austria, 12.-17.04.2015.
- 41) **Rappenglück B.**, Czader B.H., Li X. (2015): Analysis of radicals, radical precursors and chemical transformations for Houston/Texas, *EGU Joint Assembly*, Vienna/Austria, 12.-17.04.2015.
- 42) Czader B., **Rappenglück B.** (2015): 1,3-butadiene in urban and industrial areas and its role in photochemical processes, *EGU Joint Assembly*, Vienna/Austria, 12.-17.04.2015.
- 43) Cuchiara G.C., Li X., Carvalho J., **Rappenglück B.** (2015): Intercomparison of planetary boundary layer parameterization and its impacts on surface ozone formation in the WRF/Chem model for a case study in Houston/Texas, *EGU Joint Assembly*, Vienna/Austria, 12.-17.04.2015.
- 44) Spohn T.K., **Rappenglück B.** (2015): Tracking potential sources of peak ozone concentrations in the upper troposphere over the Arabian Gulf region,, *EGU Joint Assembly*, Vienna/Austria, 12.-17.04.2015.
- 45) **Rappenglück B.**, Ackermann L., Alvarez S., Golovko J., Buhr M., Hauze B., Scott A., Risch D., Wilkerson G., Bush D., Stoeckenius T., Keslar C. (2015): Analysis of Strong Wintertime Ozone Events in an Area of Extensive Oil and Gas Extraction, *EGU Joint Assembly*, Vienna/Austria, 12.-17.04.2015.
- 46) Shelton J., **Rappenglück B.**, Blood P., Alvarez S., Shauck M. (2015): Transport of industrial plumes in the Greater Houston area on the morning of November 3rd, 2009, *Texas Air Quality Meeting*, University of Texas – Austin, 10.04.2015.
- 47) Cuchiara G.C., Li X., Carvalho J., **Rappenglück B.** (2015): Intercomparison of planetary boundary layer parameterization and its impacts on surface ozone formation in the WRF/Chem model for a case study in Houston/Texas, *Texas Air Quality Meeting*, University of Texas – Austin, 10.04.2015.
- 48) Czader B., **Rappenglück B.** (2014): Evaluation of emission inventory of 1,3-butadiene for urban, regional and industrial areas in south-east Texas, *13th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 27-29.10.2014
- 49) **Rappenglück B.**, Ackermann L., Alvarez S., Golovko J., Buhr M., Hauze B., Scott A., Risch D., Wilkerson G., Bush D., Stoeckenius T., Keslar C. (2014): Strong Wintertime Ozone Events in the Upper Green River Basin, Wyoming, *13th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 27-29.10.2014
- 50) **Rappenglück B.**, Lubertino G., Alvarez S., Golovko J., Czader B.H., Ackermann L. (2014): Radical Precursors and Related Species from Traffic as Observed and Modeled at an Urban Highway Junction, *13th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 27-29.10.2014

- 51) Hayes P.L., Jimenez J.L., Ahmadov R., McKeen S.A., Washenfelder R.A., Alvarez S., **Rappenglück B.**, Holloway J.S., Gilman J.B., Kuster W.C., de Gouw J.A., Zotter P., Prévôt A.S.H., Kleindienst T.E., Offenberg J.H., Hennigan C.J., Robinson A.L., Carlton A.G. (2014): Modeling the formation and aging of secondary organic aerosols in the Los Angeles Metropolitan Region, *97th Canadian Chemistry Conference and Exhibition*, 01-05.06.2014, Vancouver/B.C., Canada.
- 52) Shalaby A., **Rappenglueck B.**, Solmon F., Eltahir E.A.B. (2014): Severe Dust Storms Over the Arabian Peninsula: Observations and Modeling, *EGU Joint Assembly*, Vienna/Austria, 27.04.-02.05.2014.
- 53) **Rappenglück B.**, Ackermann L., Alvarez S., Golovko J., Buhr M., Hauze B., Scott A., Risch D., Wilkerson G., Bush D., Stoeckenius T., Keslar C. (2014): Analysis of High Wintertime Ozone Events in the Upper Green River Basin, Wyoming, *94th Annual Meeting of the American Meteorological Society*, 02.-06.02.2014, Atlanta GA/USA
- 54) Huntrieser H., Barth M., Pickering K.E., Lichtenstern M., Weinzierl B., Puco D.J., Scheibe M., Aufmhoff H., **Rappenglück B.**, Ackermann L., Schlager H., Heimerl K., Fütterer D. (2013): Elevated O₃ in fresh and aged lightning-NO_x plumes interacting with biomass burning plumes over Central U.S. during DC3, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 09.-13.12.2013, [invited]
- 55) Ortega A.M., Palm B.P., Hayes P.L., Day D.A., Cubison M.J., Brune W.H., Hu W.W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglück B.**, Bon D., Graus M., Warneke C., Gilman J., Kuster W., de Gouw J., Jimenez J.L. (2013): Real-Time Observations of Secondary Aerosol Formation and Aging from Different Emission Sources and Environments, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 09.-13.12.2013
- 56) Pinto J.P., Dibb J.E.; Stutz J.; Tsai J.Y., Ren X., Wood E.C., Zhang R., Lee B.H.K.; Levy M.E.; **Rappenglueck B.**, Lefer B.L., Oakes M.M., Olaguer E. (2013): Nitrous Acid: Intercomparison of techniques and Implications of measurements for photochemistry, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 09.-13.12.2013
- 57) Tonnesen G., Baker K., Sarwar G., **Rappenglück B.** (2013): Winter Ozone Formation Sensitivity to Surface Albedo, Heterogeneous Chemistry and Precursor Emissions, *12th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 28-30.10.2013
- 58) **Rappenglück B.**, Ackermann L., Alvarez S., Golovko J., Buhr M., Hauze B., Scott A., Risch D., Wilkerson G., Bush D., Stoeckenius T., Keslar C. (2013): Strong Wintertime Ozone Events in the Upper Green River Basin, Wyoming, *12th International Conference on Atmospheric Sciences and Applications to Air Quality*, Seoul/Korea, 03.-05.06.2013.
- 59) Czader B., Li X., **Rappenglück B.** (2013): Air Quality Modeling Study of Ozone Radical Precursors in Houston, *American Geophysical Union, Spring Meeting*, Cancun/Mexico, 14.-17.05.2013.
- 60) Cuchiara G., **Rappenglück B.** (2013): Intercomparison of planetary boundary layer parameterizations in the WRF Model for a case study in Houston/Texas, *American Geophysical Union, Spring Meeting*, Cancun/Mexico, 14.-17.05.2013.
- 61) **Rappenglück B.**, Ackermann L., Alvarez S., Golovko J., Buhr M., Hauze B., Scott A., Risch D., Wilkerson G., Bush D., Stoeckenius T., Keslar C. (2013): Strong Wintertime Ozone Events in the Upper Green River Basin, Wyoming, *EGU Joint Assembly*, Vienna/Austria, 08.-12.04.2013.
- 62) Huntrieser H., Lichtenstern M., Minikin A., Pucik T., Scheibe M., Aufmhoff H., Roiger A., **Rappenglück B.**, Ackermann L., and H. Schlager (2013): DC3 Highlights from the Perspective of the German Falcon aircraft, *93th Annual Meeting of the American Meteorological Society*, 06 - 10.01.2013, Austin TX/USA
- 63) Spychala M.D., Morris G.A., Lefer B., **Rappenglueck B.**, Cohan D.S., Zhou W.. (2012): Using Tropospheric Ozone Profiles and Surface Data (2004 - 2012) to Determine Background Ozone Levels in Houston, Texas, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 03.-07.12.2012
- 64) Hayes P.L., Ortega A.M., Ahmadov R., McKeen S.A., Washenfelder R.A., Alvarez S., **Rappenglück B.**, Holloway J.S., Gilman J.B., Kuster W.C., de Gouw J.A., Zotter P., Prévôt A.S.H., Jimenez J.L. (2012): Modeling the Formation and Aging of Secondary Organic Aerosols during CalNex 2010, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 03.-07.12.2012
- 65) **Rappenglueck B.**, Ackermann L., Alvarez S., Golovko J., Buhr M., Hauze B., Scott A., Risch D., Wilkerson G., Bush D., Stoeckenius T., Keslar C. (2012): Strong Wintertime Ozone Events in the Upper Green River Basin, Wyoming, *Quadrennial Ozone Symposium*, Toronto/Canada, 27. - 31.08.2012
- 66) **Rappenglueck B.**, Alvarez S., Golovko J., Lubertino G., Czader B.H., Ackermann L. (2012): Emissions of Radical Precursors and Related Species from Traffic in Houston, Texas - Implications for Air Quality Modeling, *20th U.S. EPA International Emission Inventory Conference*, 13 - 16.08.2012, Tampa FL/USA
- 67) Golam S., Chen S., Henderson B., Fahey K., Gilliam R. Pouliot G., Czader B., **Rappenglueck B.** (2012): Simulation of atmospheric oxidation capacity in Houston, Texas, *32nd NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application*, 7- 11.05.2013, Utrecht/The Netherlands
- 68) **Rappenglueck B.**, Alvarez S., Golovko J., Lubertino G., Czader B.H., Ackermann L. (2012): Emissions of Radical Precursors and Related Species from Traffic in Houston, Texas - Implications for Air Quality Modeling, *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA
- 69) Golovko J., **Rappenglueck B.**, Jobson T. (2012): Volatile hydrocarbon compounds in Houston air during SHARP 2009 campaign, *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA
- 70) Czader B., Li X., **Rappenglueck B.** (2012): SHARP 2009: CMAQ modeling and analysis of chemical transformation, *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA
- 71) Alvarez S.L., **Rappenglueck B.**, Golovko J. (2012): Estimating primary and secondary production of Formaldehyde in Houston based on aircraft and ground-based measurements during SHARP, *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA
- 72) Ngan F., Cheng F.-Y., Kim H.C., **Rappenglueck B.**, Byun D. (2012): The Use of high resolution satellite-based land surface input data in regional meteorological modeling over Southeastern Texas, *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA

- 73) Kim H.C., Ngan F., **Rappenglueck B.**, Lee P., Saylor R., Byun D.W. (2012): Impact of Meteorological Variability on Regional Air Quality, Using 5-Year UH-AQF (2006-2010), *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA
- 74) Lefer B.L., Stutz J., Dibb J., Brune W., Ren X., Haman C., **Rappenglueck B.**, Flynn J.H. (2012): Role of HONO in Houston Air Quality, *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA
- 75) Lefer B.L., Stutz J., Dibb J., Brune W., Ren X., Haman C., **Rappenglueck B.**, Flynn J.H. (2012): Advances in Understanding Texas Air Quality, *92th Annual Meeting of the American Meteorological Society*, 22 - 26.01.2012, New Orleans LA/USA
- 76) Cai C., Kelly J.T., Kaduwela A., Avise J., Jackson B., Yin D., Gurer K., Baker K.R., Oetjen H., Baidar S., Volkamer R., Ryerson T., Pollack I., Holloway J., Gilman J., Kuster B., Warneke C., de Gouw J., Lefer B., Alvarez S., **Rappenglueck B.**, Markovic M.Z., VandenBoer T.C., Murphy J.G., Weber R., Guha A., Gentner D., Goldstein A., McCauley E., Parrish D. (2011): Photochemical Air-Quality Simulations over California for the CalNex 2010 Field Study Period, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2011
- 77) Hansen R.F., Griffith S., Dusanter S., Stevens P.S., Gilman J.B., Graus M., Kuster W., Veres P., de Gouw J.A., Warneke C., Alvarez S.L., Flynn J.H., Grossberg N., Lefer B., **Rappenglueck B.** (2011): Measurements of Total Hydroxyl Radical Reactivity during the CalNex-LA 2010 Field Campaign, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2011
- 78) Griffith S., Hansen R., Dusanter S., Stevens P.S., Gilman J.B., Kuster W., Veres P., Graus M., Young C., Washenfelder R., Brown S.S., Flynn J.H., Alvarez S.L., Grossberg N., Lefer B., **Rappenglueck B.**, Mielke L., Osthoff H., Warneke, de Gouw J.A. (2011): Hydroxyl and Hydroperoxy Chemistry at the CalNex-LA-2010 Site: Measurements and Modeling, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2011
- 79) Hayes P.L., Ortega A.M., Cubison M.J., Hu W., Toohey D.W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglueck B.**, Allan J.D., Taylor J., Holloway J.S., Gilman J.B., Kuster W.C., de Gouw J.A., Massoli P., Zhang X., Weber R.J., Zhao Y., Cliff S.S., Wexler A.S., Isaacman G., Worton D.R., Kreisberg N.M., Hering S.V., Goldstein A.H., Jimenez J.L. (2011): Aerosol Composition in the Los Angeles Basin Studied by High Resolution Aerosol Mass Spectrometry, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2011
- 80) Newman S., Jeong S., Fisher M.L., Xu X., Guernsey K.R., Alvarez S., **Rappenglueck B.**, Haman C., Lefer B., Miller C.E., Yung Y.L. (2011): CO₂ emissions from the Los Angeles basin during spring of 2010 – measurements vs. model, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2011
- 81) Gillman J.B., Kuster W.C., Bon D., Warneke C., Lerner B.M., Williams E.J., Holloway J.S., Pollack I.B., Ryerson T.B., Atlas E.L., Blake D.R., Herndon S.C., Zahniser M.S., Vlasenko A., Li S.M., Alvarez S., **Rappenglueck B.**, Flynn J., Grossberg N., Lefer B., de Gouw J.A. (2011): Characterizing the chemical evolution of air masses via multi-platform measurements of volatile organic compounds (VOCs) during CalNEX: Composition, OH reactivity, and potential SOA formation, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2011
- 82) Ngan F., Kim H.C., Byun D., Lee P., Kim S., Cheng F.-Y., Lee D., **Rappenglueck B.** (2011): Performance Assessment of Five-year East Texas Air Quality Forecasting System (ETAQ), *10th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 24-26.10.2011
- 83) Czader B.H., Li X., **Rappenglueck B.** (2011): CMAQ modeling of Houston airshed and comparison with the Moody Tower super site measured data for SHARP 2009 episodes, *10th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 24-26.10.2011
- 84) Ródenas M., Muñoz A., Alacreu F., Dorn H-P., Brauers T., Kleffmann J., Mikuška P., Večeřa Z., Häselser R., Ye C., Ruth A., Dixneuf S., Venables D., Darby S., Chen J., Ashu-ayem E., Elshorbany Y., Voigt C., Jessberger P., Kaufmann S., Schauble D., Mel-louki A., Cazaunau M., Grosselin B., Colomb A., Michoud V., Miet K., Ball S., Daniels M., Goodall I., Tan D., Stichel R., Case A., **Rappenglueck B.**, Croxatto G., Percival C., Bacak A., Mcguillen M., Dibb J., Scheuer E., Zhou X., Ferm M., Varma R., Pilling M., Clemente E., Porras R., Vera T., Vázquez M., Borrás E., Valero J., Bloss W. (2010), Formal Intercomparisons of Observations of Nitrous Acid (FIONA), *NATO-Advanced Research Workshop (ARW)*, Gdansk/Poland, 09-13.10.2011
- 85) Hayes P.L., Ortega A.M., Cubison M.J., Hu W., Toohey D.W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglueck B.**, Allan J.D., Holloway J.S., Massoli P., Froyd K.D., Murphy S.M., Liu J., Weber R.J., Corrigan A., Russell L.M., Jimenez J.L. (2011): Aerosol composition in Los Angeles during the 2010 CalNex campaign studied by high resolution aerosol mass spectrometry, *American Association for Aerosol Research 30th Annual Meeting*, Orlando/FL, USA, 3.-7.10.2011
- 86) Hayes P.L., Ortega A.M., Cubison M.J., Hu W., Toohey D.W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglueck B.**, Allan J.D., Holloway J.S., Massoli P., Froyd K.D., Murphy S.M., Liu J., Weber R.J., Jimenez J.L. (2011): Aerosol composition in Los Angeles during the 2010 CalNex campaign studied by high resolution aerosol mass spectrometry, *American Chemical Society, Fall Meeting*, Denver CO/USA, 28.08.-01.09.2011
- 87) Ortega A.M., Cubison M.J., Hayes P.L., Brune W.H., Hu W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglueck B.**, Welsh-Bon D., Graus M., Warneke C., Gilman J., Kuster B., de Gouw J., Sullivan A.P., Jimenez J.L. (2011): Real-time measurements from a photooxidation flow reactor using high-resolution aerosol mass spectrometry from FLAME-3 and CalNex-LA, *American Chemical Society, Fall Meeting*, Denver CO/USA, 28.08.-01.09.2011
- 88) Young C.J., Washenfelder R.A., Brown S.S., Gilman J.B., Kuster W.C., Veres P., Roberts J.M., Flynn J., Grossberg N., Lefer B., Alvarez S., **Rappenglueck B.**, Griffith S., Dusanter S., Stevens P., Mielke L.H., Osthoff H.D., Cochran A.K., Pikelnaya O., Tsai C., Stutz J., Afif C., Michoud V., Doussin J.F., Borbon A. (2011): Importance of nitrous acid to the urban Los Angeles radical budget, *American Chemical Society, Fall Meeting*, Denver CO/USA, 28.08.-01.09.2011
- 89) Hayes P.L., Ortega A.M., Cubison M.J., Hu W., Toohey D.W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglueck B.**, Allan J.D., Taylor J., Holloway J.S., Gilman J.B., Kuster W.C., de Gouw J.A., Massoli P., Jimenez J.L. (2011): Aerosol composition in the Los Angeles Basin studied by high resolution aerosol mass spectrometry, *Gordon Research Conference - Atmospheric Chemistry*, West Dover/VT, USA, 24-29.07.2011

- 90) Hayes P.L., Ortega A.M., Cubison M.J., Hu W., Toohey D.W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglueck B.**, Allan J.D., Taylor J., Holloway J.S., Gilman J.B., Kuster W.C., de Gouw J.A., Massoli P., Jimenez J.L. (2011): Aerosol composition in the Los Angeles Basin studied by high resolution aerosol mass spectrometry, *Atmospheric Chemistry Colloquium for Emerging Senior Scientists (ACCESS)*, Brookhaven National Laboratory, Upton/NY, USA, 21-24.07.2011
- 91) Czader B., Li X., **Rappenglueck B.**, Byun D.W. (2011), Air Quality Modeling Study of Ozone Radical Precursors in Houston, *EGU Joint Assembly*, Vienna/Austria, 03.-09.04.2011
- 92) **Rappenglueck B.**, Alvarez S., Golovko J., Lubertino G., Czader B.H., Ackermann L., Fuller R., Pedemonte P. (2011), Emissions of Radical Precursors and Related Species from Urban Highway Traffic in Houston, Texas - Implications for Air Quality Modeling, *EGU Joint Assembly*, Vienna/Austria, 03.-09.04.2011
- 93) Morris G., Lefer B., **Rappenglueck B.**, Haman C., Boxe C., Hersey S., Byun D., Thouret V., Cammas J.P., Johnson B., Oltmans S. (2011), Ozone profile observations in Houston, Texas (1994 - 2010) from aircraft, balloons, and satellites, *EGU Joint Assembly*, Vienna/Austria, 03.-09.04.2011
- 94) Ródenas M., Muñoz A., Alacreu F., Dorn H-P., Brauers T., Kleffmann J., Mikuška P., Večeřa Z., Häseleer R., Ye C., Ruth A., Dixneuf S., Venables D., Darby S., Chen J., Ashu-ayem E., Elshorbany Y., Voigt C., Jessberger P., Kaufmann S., Schäuble D., Mel-louki A., Cazaunau M., Grosselin B., Colomb A., Michoud V., Miet K., Ball S., Daniels M., Goodall L., Tan D., Stichel R., Case A., **Rappenglueck B.**, Croxatto G., Percival C., Bacak A., Mcguillen M., Dibb J., Scheuer E., Zhou X., Ferm M., Varma R., Pilling M., Clemente E., Porras R., Vera T., Vázquez M., Borrás E., Valero J., Bloss W. (2011), The FIONA campaign (EUPHORE): Formal Intercomparison of Observations of Nitrous Acid, *EGU Joint Assembly*, Vienna/Austria, 03.-09.04.2011
- 95) **Rappenglueck B.**, Alvarez S.L., Golovko J., Lubertino G., Eom I.Y., Ackermann L., Shnitzler A., Fuller R., Pedemonte L. (2011): Emissions of radical precursors and related species from urban highway traffic, *13th Conference on Atmospheric Chemistry, 91th Annual Meeting of the American Meteorological Society*, 24 - 27.01.2011, Seattle WA/USA
- 96) Czader B., **Rappenglueck B.**, Isukapalli S.S., Tang X., Georgopoulos P.G. (2011): CMAQ and dispersion modeling of 1,3-butadiene for the Houston-Galveston Area, *13th Conference on Atmospheric Chemistry, 91th Annual Meeting of the American Meteorological Society*, 24 - 27.01.2011, Seattle WA/USA
- 97) Czader B., Li X., **Rappenglueck B.**, Byun D.W. (2011): CMAQ Modeling of SHARP 2009 Episodes, *13th Conference on Atmospheric Chemistry, 91th Annual Meeting of the American Meteorological Society*, 24 - 27.01.2011, Seattle WA/USA
- 98) Golovko J., **Rappenglueck B.** (2011): Measurements of radical precursors at the western edge of the Houston Ship Channel during SHARP 2009, *13th Conference on Atmospheric Chemistry, 91th Annual Meeting of the American Meteorological Society*, 24 - 27.01.2011, Seattle WA/USA
- 99) Wilmot C.-S., Li X., **Rappenglueck B.** (2011): Evaluating WRF model atmospheric boundary layer simulations for a coastal region in Southeast Texas, *13th Conference on Atmospheric Chemistry, 91th Annual Meeting of the American Meteorological Society*, 24 - 27.01.2011, Seattle WA/USA
- 100) Ren X., van Duin D., Cazorla M., Chen S., Brune W.H., Flynn J., Lefer B., **Rappenglueck B.**, Dibb J., Wong C., Tsai C. Stutz J., Jobson T. (2010): Radical budget and ozone production in Houston, TX during SHARP 2009, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 101) Boeke N., Marshall J., Alvarez S., Chance K., Fried A., Kurosu T.P., **Rappenglueck B.**, Richter D., Walega J., Weibring P., Millet D.B. (2010): Formaldehyde columns from the Ozone Monitoring Instrument: Urban versus background levels and evaluation using aircraft data and a global model, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 102) Pinto J.P., Meng Q., Dibb J.E., Lefer B.L., **Rappenglueck B.**, Ren X., Stutz J., Zhang R. (2010): Intercomparison of Nitrous Acid (HONO) Measurement Techniques during SHARP, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 103) **Rappenglueck B.** (2010): Seasonal and Interannual Trends of Volatile Organic Compounds in a Subtropical Area close to the Gulf of Mexico in the Time Frame 2003-2010, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 104) Lefer B.L., Brune W.H., Collins D.R., Dibb J.E., Griffin R.J., Herndon S.C., Huey L.G., Jobson B.T., Luke W.T., Mellqvist J., Morris G.A., Mount G.H., North S.W., Olague E.P., **Rappenglueck B.**, Ren X., Stutz J., Yu X., Zhang R. (2010): Overview and Major Findings of the Study of Houston Atmospheric Radical Precursors (SHARP) Campaign, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 105) Morris G.A., Lefer B.L., **Rappenglueck B.**, Haman C.L., Taylor M., Schoeberl M.R. (2010): Source Attribution of Ozone in Southeast Texas Before and After the Deepwater Horizon Accident Using Satellite, Sonde, Surface Monitor, and Air Mass Trajectory Data, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 106) Taylor M.E., **Rappenglueck B.**, Thompson A.M., Morris G.A., Lefer B.L., Haman C., Flynn J.H., Klich C. (2010): Stratosphere-Troposphere Exchange Over Houston, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 107) Flynn J.H., Lefer B.L., **Rappenglueck B.**, Luke W.T., Huey L.G., Dibb J.E., Jobson B.T. (2010): Cloud Impacts on Photolysis and Ozone Production Rates in Urban Southeast Texas, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 108) Golovko J., **Rappenglueck B.**, Jobson B.T. (2010): Hydrogen peroxide and methylhydroperoxide variations in Houston urban air during May 2009, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 109) Mellqvist J., Johansson J., Samuelsson J., Offerle B., **Rappenglueck B.** (2010): Investigation of VOC radical sources in the Houston Area by the Solar Occultation Flux (SOF) method and Mobile DOAS, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 110) Newman S., Alvarez S., **Rappenglueck B.**, Miller C.E., Yung Y.L. (2010): CO and CO₂ Diurnal Cycles during CalNex-LA, 15 May -16 June, 2010, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010

- 111) Hayes P.L., Ortega A.M., Cubison M., Hu W., Toohey D.W., Flynn J.H., Grossberg N., Lefer B.L., Alvarez S., **Rappenglueck B.**, Allan J.D., McKeen S.A., Holloway J.S., Gilman J.B., Kuster W.C., Graus M., Warneke C., De Gouw J.A., Richter R., Hofer J., Prevot A.S., Jimenez J.L. (2010): Aerosol Composition in Los Angeles During the 2010 CalNex Campaign Studied by High Resolution Aerosol Mass Spectrometry, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2010
- 112) Ródenas M., Muñoz A., Alacreu F., Dorn H-P., Brauers T., Kleffmann J., Mikuška P., Večeřa Z., Häsel R., Ye C., Ruth A., Dixneuf S., Venables D., Darby S., Chen J., Ashu-ayem E., Elshorbany Y., Voigt C., Jessberger P., Kaufmann S., Schäuble D., Mel-louki A., Cazaunau M., Grosselin B., Colomb A., Michoud V., Miet K., Ball S., Daniels M., Goodall I., Tan D., Stickle R., Case A., **Rappenglück B.**, Croxatto G., Percival C., Bacak A., Mcguillen M., Dibb J., Scheuer E., Zhou X., Ferm M., Varma R., Pilling M., Clemente E., Porras R., Vera T., Vázquez M., Borrás E., Valero J., Bloss W. (2010), Formal Intercomparisons of Observations of Nitrous Acid (FIONA), *Atmospheric Chemical Mechanisms Conference*, University of California Davis, 6-10.12.2010
- 113) Czader B.H., **Rappenglück B.**, Byun D.W., Ngan F., Kim S. (2010): Simulations of nitrous acid for the Houston metropolitan area and comparison with data from the Texas Air Quality Study 2006, *Atmospheric Chemical Mechanisms Conference*, University of California Davis, 6-10.12.2010
- 114) Young C.J., Washenfelder R.A., Brown S.S., Gilman J.B., Kuster W.C., Flynn J., Grossberg N., Lefer B., Alvarez S., **Rappenglueck B.**, Griffith S., Dusante S., Stevens P. (2010): Contribution of nitrous acid to the radical budget in urban Los Angeles, *Atmospheric Chemical Mechanisms Conference*, University of California Davis, 6-10.12.2010
- 115) **Rappenglueck B.**, Alvarez S., Golovko J., Ackermann L., Fuller R. (2010): Traffic related emissions of HONO, *Atmospheric Chemical Mechanisms Conference*, University of California Davis, 6-10.12.2010
- 116) Czader B.H., **Rappenglueck B.**, Kim S., Byun D. (2010): Modeling the impact of ozone-alkene reactions on formaldehyde concentrations during the Texas Air Quality Study 2006, *9th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 11-13.10.2010, abstract available at [http://www.cmascenter.org/conference/2010/agenda.cfm]
- 117) Byun D.W., Ngan F., Kim H.-C., Lee D., Pierce B., Kondragunta S., **Rappenglueck B.**, Czader B., Lee P., Saylor R., McQueen J., Mathur R., Stajner I., Davidson P. (2010): Effects of Incremental Reduction of Input Uncertainties to improve Air Quality Forecasting, *31st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application*, 27.9.- 01.10.2010, Torino/Italy
- 118) Boeke N., **Rappenglueck B.**, Fried A., Marshall J., Millet D.B. (2010): Satellite-derived NO₂ and HCHO: Comparison to In Situ Measurement and Application to Air Quality Management, *Joint Conference of International-Society-of-Exposure-Science/International-Society-for-Environmental-Epidemiology*, Seoul/South Korea, 28.8.-01.09.2010, abstract available in: *Epidemiology*, 22 (1), Supplement: S, S263-S263, DOI: 10.1097/01.ede.0000392503.45570.34, Published: JAN 2011
- 119) Taylor M.E., Morris G., Lefer B.L., **Rappenglueck B.**, Haman C., Flynn J.H. (2010): SHARP climatology and its impact on ozone profiles, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 120) Salimol T., **Rappenglueck B.**, Stutz J., Ren X., Lee B., Zheng J., Dibb J. (2010): Comparison of Nitrous Acid Measurement Methods during the SHARP Campaign in Houston, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 121) Ren X., Rajendran A., **Rappenglueck B.**, Lefer B., Golovko J., Flynn J. (2010): Measurement of HONO Flux using Relaxed Eddy Accumulation during SHARP, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 122) **Rappenglück B.**, Alvarez S., Golovko J., Eom I.-Y., Ackermann L., Shnitzler A., Fuller R., Pedemonte L. (2010): Traffic related emissions of HONO and HCHO in Houston, TX, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 123) **Rappenglück B.**, Alvarez S., Czader B.H., Buhr M., Estes M., Schauck M.E. (2010): Analysis of an Industrial Plume in Texas City, TX, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 124) Olaguer E.P., Lefer B., **Rappenglueck B.**, Pinto J.P. (2010): Scientific and Policy Motivations behind the Study of Houston Atmospheric Radical Precursors (SHARP) Field Experiment, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 125) Ngan F., Byun D., **Rappenglück B.**, Biazar A. (2010): Improved air quality simulations through the use of GOES-derived cloud data for the TexAQS-II intensive study period, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 126) Mellqvist J.M., Johansson J. Samuelsson J. Offerle B., **Rappenglueck B.**, Fuller R., Wilmot C.-S. (2010): SOF and mobile DOAS measurements during TEXAQS 2009, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 127) Lefer B.L., **Rappenglueck B.**, Olaguer E.P., Brune W., Stutz J., Dibb J.E., Ren X., Herndon S.C., Jobson T.B., Mount G., Yu X.Y., Griffin R., Thomas S., Shauck M., Huey L.G., Zhang R., Jimenez J.L. (2010): First Results of the Study of Houston Atmospheric Radical Precursors (SHARP), *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 128) Haman C., Lefer B.L., Taylor M.E., Morris G., **Rappenglueck B.** (2010): Comparison of Mixing Heights using Radiosondes and the Vaisala CL31 Mixing Height Algorithm, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society* 17 - 21.01.2010, Atlanta GA/USA

- 129) Haman C., Lefer B., Taylor M.E., Morris G., Flynn J.H., **Rappenglueck B.** (2010): Overview of the Meteorological Conditions on High Ozone Days during SHARP, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 130) Golovko J., and **Rappenglück B.** (2010): Analysis of ambient measurements of Formaldehyde, PANs, and CO at the eastern part of Houston during TexAQS SHARP 2009, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 131) Czader B.H, **Rappenglück B.**, Kim S., Byun D.W. (2010): Modeling Formaldehyde Sources in the Houston-Galveston Area During the Texas Air Quality Study 2006, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society* 17 - 21.01.2010, Atlanta GA/USA
- 132) Czader B.H, and **Rappenglück B.** (2010): Simulations of Nitrous Acid for the Houston metropolitan area and comparison with data from the Texas Air Quality Study 2006, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 133) Brooks S., Luke W., Cohen M., Kelly P., **Rappenglueck B.**, Lefer B., Golovko J. (2010): Airborne Mercury Speciation at the Western Edge of the Houston Ship Channel, TEXAQS 2009 SHARP study, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 134) Alvarez S., **Rappenglück B.**, Buhr M., Shauck M.E. (2010): Overview of aircraft-based measurements in support of SHARP, FLAIR, and TRENF campaigns, *12th Conference on Atmospheric Chemistry, 90th Annual Meeting of the American Meteorological Society*, 17 - 21.01.2010, Atlanta GA/USA
- 135) Olaguer E.P., Lefer B., **Rappenglück B.**, Pinto J.P. (2009): Observations of Radical Precursors during TexAQS II: Findings and Implications, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 14.-18.12.2009
- 136) Baumgardner D., Grutter M., Allan J., Ochoa C., **Rappenglueck B.**, Russell L.M. (2009): Evolution of Anthropogenic Pollution at the Top of the Regional Mixed Layer of the Central Mexico Plateau, *Joint Assembly MOC-A-09*, 19 - 29.07.2009, Montréal/Canada
- 137) Leuchner M., **Rappenglück B.** (2009): VOC Source – Receptor Relationships in Houston during TexAQS-II, *EGU Joint Assembly*, Vienna/Austria, 19. - 24.04.2009
- 138) Baumgardner D., Grutter M., Allan J., Ochoa C., **Rappenglueck B.**, Russell L.M. (2009): Evolution of Anthropogenic Pollution at the Top of the Regional Mixed Layer of the Central Mexico Plateau, *EGU Joint Assembly*, Vienna/Austria, 19. - 24.04.2009
- 139) **Rappenglück B.** (2009): Analysis of urban online VOC Data in Houston, Texas, *11th Conference on Atmospheric Chemistry, 89th Annual Meeting of the American Meteorological Society*, 11 - 15.01.2009, Phoenix AZ/USA
- 140) Thompson A.M., Luzik A.M., Miller S.K., Witter J.C., Morris G.A., Oltmans S.J., Tarasick D., **Rappenglueck B.** (2009): Urban ozone over North American from soundings: Mixed influences from pollution, stratosphere, lightning and convection, *11th Conference on Atmospheric Chemistry, 89th Annual Meeting of the American Meteorological Society*, 11 - 15.01.2009, Phoenix AZ/USA
- 141) Chen S., Ren X., Mao J., Chen Z., Brune W.H., Lefer B., **Rappenglueck B.**, Flynn J., Olson J. Crawford J.H. (2008): A Comparison of Chemical Mechanisms Based on TRAMP-2006 Field Data, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 15.-19.12.2008
- 142) Thompson A.M., Miller S.K. , Yorks J.E., Dougherty K.M., Joseph E., **Rappenglueck B.**, Morris G.A. (2008): Insights into Urban Ozone Pollution from Ozone Soundings: Beltsville (MD), Houston and IONS (INTEX Ozonesonde Network Study, 2004 & 2006), *7th Annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 06-08.10.2008
- 143) **Rappenglueck B.**, Lefer B., Byun D., Atkinson D., Brooks S., Brune W., Dibb J., Griffin R., Luke W., Stutz J. (2008): The TexAQS II Radical and Aerosol Measurement Project (TRAMP), presented at *EGU Joint Assembly*, Vienna/Austria, 13. - 18.04.2008
- 144) Thompson A.M., Yorks J.E., Miller S.K., Witte J.C., Dougherty K.M., Morris G.A., Baumgardner D., Ladino L., **Rappenglueck B.** (2008): Ozone profiles over Mexico City and Houston during MILAGRO/Intercontinental Transport Experiment (INTEX-B) Ozonesonde Network Study, 2006 (IONS-06): Stratospheric, lightning and pollution signals in the troposphere, presented at *EGU Joint Assembly*, Vienna/Austria, 13. - 18.04.2008
- 145) Ziemba L.D., Griffin R.J., Dibb J.E., Anderson C.H., Whitlow S.I., Lefer B., Flynn J., **Rappenglück B.** (2008): Interaction of Gas-Phase Nitric Acid and Primary Organic Aerosol in the Atmosphere of Houston, TX, presented at the *Invited Expert Workshop "Nitrous acid: Tropospheric Chemistry, Measurement Methods and Future Directions"*, Bergische Universität Wuppertal (BUW), Wuppertal/Germany, 03. - 05.03., 2008
- 146) Stutz J., Oh H.-J., Pikel'naya O., Lefer B., Flynn J., **Rappenglück B.** (2008): Influence of vertical mixing on the distribution of trace gases during the 2006 TRAMP experiment in Houston, TX, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 147) **Rappenglück B.**, Steinbrecher R., Forkel R., Allan J., Russell L., Grutter M., Baumgardner D. (2008): Analysis of the Mexico City Urban Plume at Altzomoni Site at 4.000 m a.s.l., presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 148) **Rappenglück B.**, Byun D., Czader B., Kim S., Leuchner M., Schmitt R. (2008): Comparative Analysis of PAN data at the Moody Tower and the Aldine site during TexAQS II, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 149) **Rappenglück B.**, Byun D., Alvarez S., Buhr M., Coarfa V., Czader B., Dasgupta P., Estes M., Kauffman L., Kim S., Leuchner M., Luke W., Shauck M., Zanin G. (2008): Analysis of Primary vs. Secondary Fraction of Formaldehyde in the Houston Area during TexAQS-II, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA

- 150) **Rappenglück B.**, Byun D., Alvarez S., Boudreaux R., Buhr M., Cheng F.Y., Clements C., Fuller R., Flynn J., Kauffman L., Lefer B., Leuchner M., Luke W., McEvoy-Day B., Morris G., Ngan F., Pedemonte L., Perna R., Shauck M., Zanin G. (2008): The Vertical Mixing Experiment during TexAQS II, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 151) Perna R., **Rappenglück B.**, Zhong S. (2008): An insight into the vertical structure of the atmosphere during TEXAQS-II: Understanding the effect of the upper-level meteorology on Houston's surface ozone levels, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 152) Leuchner M. and **Rappenglück B.** (2008): Relationships between specific VOC fingerprints and ratios of peroxyacetyl nitrate (PAN) compounds in Houston, TX during TexAQS II, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 153) Leuchner M. and **Rappenglück B.** (2008): Receptor Modeling of C2 - C10 VOCs in Houston, TX during TexAQS II, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 154) Lefer B., **Rappenglück B.**, Flynn J., Luke W., Clements C. (2008): Photochemical and meteorological conditions the 2006 TexAQS II Radical and Aerosol Measurement Project (TRAMP), presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 155) Ford B., Morris G., Li X., **Rappenglueck B.**, Byun D., Lefer B., Perna R., Boudreaux R., McEvoy-Day B., Pedemonte L., Thompson E. (2008): The impact of residual layer ozone on surface ozone levels in Houston, Texas during TexAQS II, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 156) Flynn J., Lefer B., **Rappenglueck B.**, Leuchner M., Olson J., Chen G., Brune W., Ren X., Mao J., Luke W., Dibb J., Stutz J. (2008): Impact of clouds and aerosols on photochemistry during the TexAQS II Radical and Aerosol Measurement Project (TRAMP), presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 157) Day B., Clements B., **Rappenglück B.** (2008): Nocturnal Boundary Layer Evolution in Houston during the TexAQS II Campaign, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 158) Clements C., **Rappenglück B.**, Perna R., Day B., Patel M., Lefer B., Morris G. (2008): Evolution and Structure of the Urban Boundary Layer in Houston during the TexAQS II Field Campaign, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 159) Brooks S., Luke W., Cohen M., Kelly P., **Rappenglueck B.**, Lefer B. (2008): Airborne Mercury Speciation at the on the Moody Tower, University of Houston 2006 TRAMP study, presented at the *10th Conference on Atmospheric Chemistry, 88th Annual Meeting of the American Meteorological Society*, 20 - 24.01.2008, New Orleans LA/USA
- 160) Ziemba L.D., Griffin R.J., Dibb J.E., Anderson C.H., Whitlow S.I., Lefer B., Flynn J., **Rappenglück B.** (2007): Interaction of Gas-Phase Nitric Acid and Primary Organic Aerosol in the Atmosphere of Houston, TX, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 161) Stutz J., Flynn C.J., Lefer B., **Rappenglück B.**, Brune B., Dibb J., Griffin R. (2007): Urban pollution in the nocturnal boundary layer: Chemical processing and vertical transport, invited talk, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 162) **Rappenglück B.**, Byun D., Alvarez S., Buhr M., Coarfa V., Czader B., Dasgupta P., Estes M., Kauffman L., Kim S., Leuchner M., Luke W., Shauck M., Zanin G. (2007): In-situ Ground-Based and Airborne Formaldehyde Measurements in the Houston Area During TexAQS-II, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 163) Pacsi S., **Rappenglück B.** (2007): Analysis of Nitrogen Dioxide and Sulphur Dioxide in Lima, Peru: Trends and Seasonal Variations, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 164) Morris G.A., Thompson A.M., Perna R., Yorks J., Osterman G., **Rappenglueck B.**, Lefer B., Boudreaux R., Chow A., Ford B., Thompson E., Hersey S. (2007): Construction and analysis of an ozone profile climatology over Houston, Texas, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 165) Mao J., Ren X., Chen S., Chen Z., Brune W., Leuchner M., Flynn J., **Rappenglück B.**, Lefer B. (2007): Measurement of OH, HO₂ and OH reactivity during Houston 2006, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 166) Leuchner M. and **Rappenglück B.** (2007): VOC Source Apportionment in Houston, TX, during TexAQS II, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 167) Lefer B., **Rappenglück B.**, Flynn J., Haman C., Luke W. (2007): Photochemical and meteorological conditions the 2006 TexAQS II Radical and Aerosol Measurement Project (TRAMP), *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 168) Ladino L., Baumgardner D., Hernandez A., Grutter M., Thompson A., Johnson J., Oltmans S., Morris G., Lefer B., **Rappenglueck B.** (2007): Tropospheric ozone production from lightning, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 169) Flynn J., Lefer B., **Rappenglueck B.**, Leuchner M., Olson J., Chen G. (2007): Impact of clouds and aerosols on photochemistry during the TexAQS II Radical and Aerosol Measurement Project (TRAMP), *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 170) Dougherty M., Thompson A.M., Witte J.C., Miller S.K., Oltmans S.J., Cooper O.R., Tarasick D.W., Chatfield R.B., Taubman B.F., Joseph E., Baumgardner D., Merrill J.T., Morris G.A., **Rappenglueck B.**, Lefer B., Forbes G., Newchurch M. J., Schmidlin F.J., Pierce R.B., Leblanc T., Dubey M., Minschwaner K. (2007): North American Tropospheric Ozone Profiles

- from IONS (INTEX Ozonesonde Network Study, 2004, 2006): Ozone Budgets, Pollution Statistics, Satellite Retrievals, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
- 171) Day B., Clements B., **Rappenglück B.** (2007): Observations of the Nocturnal Boundary Layer and Morning Transitional Periods in Houston, Texas during the TexAQS II Campaign, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
 - 172) Czader B., **Rappenglück B.**, Byun D., Kim S., Leuchner M., Schmitt R. (2007): CMAQ Analysis of PAN Data at the Moody Tower and the Aldine Site During TexAQS II, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
 - 173) Cooper O.R., Trainer M., Thompson A.M., Oltmans S.J., Tarasick D.W., Witte J.C., Stohl A., Eckhardt S., Merrill J.T., Newchurch M.J., Johnson B.J., Kalnajs L., Dubey M.K., Leblanc T., McDermid I.S., Forbes G., Wolfe D., Lelieveld J., Carey-Smith T., Morris G.A., Lefer B., **Rappenglück B.**, Joseph E., Schmidlin F., Ravishankara A., Meagher J., Fehsenfeld F.C., Keating T.J., Van Curen R.A. (2007): Conclusive in situ evidence that the east-ern North America upper tropospheric ozone maximum is a recurring summertime feature, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
 - 174) Coarfa V.F., **Rappenglück B.**, Leuchner M., Estes M., Byun D. (2007): A Study of the Source-Receptor Relationship Using the BTEX Ratios in the Houston Area, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
 - 175) Byun D., **Rappenglück B.**, Lefer B. (2007): Preliminary Evaluation of Air Quality Model Performance Utilizing Measurements at the University of Houston Moody Tower and others during the TexAQS-II, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 10.-14.12.2007
 - 176) Ziemba L.D., Griffin R.J., Anderson C.H., Dibb J.E., Whitlow S.I., Lefer B., Flynn J., **Rappenglück B.** (2007): Interaction of Gas-Phase Nitric Acid and Primary Organic Aerosol in the Atmosphere of Houston, TX, presented at the *American Association for Aerosol Research 26th Annual Meeting*, Reno/NV, USA, 24.-28.09.2007
 - 177) Day B., Clements B., **Rappenglück B.** (2007): Nocturnal Boundary Layer Evolution in Houston during the TexAQS II Campaign, presented at the *7th Conference on Coastal Atmospheric and Oceanic Prediction and Processes joint with the 7th Symposium on the Urban Environment*, San Diego CA/USA, 10-13.09.2007
 - 178) **Rappenglueck B.**, Steinbrecher R., Forkel R., Allan J., Russell J., Grutter M., Baumgardner D. (2007): Analysis of the Mexico City Urban Plume at Altzomoni Site at 4.000 m a.s.l., presented at the *American Geophysical Union, Spring Meeting*, Acapulco/Mexico, 22.-27.05.2007
 - 179) Thompson A.M., Witte J.C., Kucsera T.C., Yorks J.E., Millar S.K., Long R.B., Taubman B.F., Loucks A.L., Oltmans S.J., Cooper O.R., Lefer B.L., **Rappenglueck B.**, Morris G.A., Ladino L., Hernandez A., Baumgardner D.G., Grutter M., Joseph E., Merrill J.T., Newchurch M.J. (2007): Insights into Mega-City ozone pollution from the IONS (INTEX Ozonesondes Network Study, 2004 and 2006) Ozonesonde Network, presented at the *American Geophysical Union, Spring Meeting*, Acapulco/Mexico, 22.-27.05.2007
 - 180) Grutter M., Basaldud R., Hernandez A., Baumgardner D., Steinbrecher R., **Rappenglueck B.**, Retama A. (2007): Trace gas measurements at the Altzomoni site (4000 masl) near Mexico City, presented at the *American Geophysical Union, Spring Meeting*, Acapulco/Mexico, 22.-27.05.2007
 - 181) Grutter M., Baumgardner D., Allen J., Steinbrecher R., **Rappenglueck B.** (2007): Transporte de la contaminación atmosférica observado desde una estación de altura en Altzomoni, Parque Nacional Izta-Popo, presented at the *VI Simposio de Contaminación Atmosférica*, El Colegio Nacional, Mexico-City/Mexico, 18.04.2007
 - 182) Forkel R., Klemm O., Graus M., **Rappenglück B.**, Stockwell W.R., Grabmer W., Held A., Hansel A., Steinbrecher R. (2006): Modelling Studies With a Coupled Canopy Atmospheric Chemistry Emission Model on Trace Gas Exchange and Gas Phase Chemistry in a Norway Spruce Forest, *invited talk*, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 11.-15.12.2006
 - 183) Perna R., Zhong S., Morris G., **Rappenglueck B.**, Lefer B., Boudreaux R., Clements C., Day B., Fuller R., Hersey S., Morris B., Patel M., Pedemonte L., Leuchner M., Flynn J., Shaulis B., Guerrero P., Onakpoya B., Jang M., Lee D., Street S., Yao W. (2006): Insights into Houston air quality from rawinsonde and ozonesonde data, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 11.-15.12.2006
 - 184) **Rappenglück B.**, Steinbrecher R., Grutter M., Baumgardner D. (2006): Air masses from Mexico City as observed at Altzomoni Site at 4.000 m a.s.l., presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 11.-15.12.2006
 - 185) Leuchner M. and **Rappenglück B.** (2006): Analysis of VOC, PAN, and Formaldehyde Measurements at the Moody Tower Site during TexAQS II, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 11.-15.12.2006
 - 186) Baumgardner D., Raga G., Grutter M., Allan J., **Rappenglueck B.**, Steinbrecher R., Russell L. (2006): Evaluation of the Physical, Chemical and Optical Properties of Atmospheric Particles Transported through the Cortes Pass, *MILAGRO Workshop*, Boulder CO/USA, 23.-25.10.2006
 - 187) Czader B., Byun D.W., Kim S., Percell P., **Rappenglück B.**, Carter W.P.L. (2006): A Study of the Dependence of VOC Reactivity on Environmental Conditions in the Houston – Galveston Area, presented at the *5th annual Community Modeling & Analysis System (CMAS) Conference*, University at North Carolina at Chapel Hill NC/USA, 16-18.10.2006
 - 188) Helmig D., Barrie L., Bottenheim J., Brenninkmeijer C.A.M., Oram D., Plass-Duelmer C., Lewis A., Nickovic S., Penkett S., Pollmann J., **Rappenglueck B.**, Reiman S., Steinbrecher R., Tans P. (2006): The World Meteorological Organization Global Atmospheric Watch (WMO/GAW) Volatile Organic Compound (VOC) Network, *ESRL Global Monitoring Annual Review*, Boulder CO/USA, 26.-27.04.2006
 - 189) Tyndall G., Apel E., Williams E., Flocke F., Cohen R., Gilge S., Kim S., Mills G., O'Brien J., Perring A., **Rappenglueck B.**, Roberts J., Schmitt R., Swanson A., Tanimoto H., Woodridge P. (2005): PIE 2005: An intercomparison of measurement techniques for peroxyacyl nitrates (PANs), *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2005

- 190) **Rappenglück B.**, Bauerfeind M., Huntrieser H., Lichtenstern M., Roiger A., Schlager H. (2005): Airborne Measurements of CO and Hydrocarbons over Western Europe During ICARTT-ITOP, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 05.-09.12.2005
- 191) Steinbrecher R., Graus M., Hansel A., Wisthaler A., Lindinger Ch., Forkel R., Hauff K., Klauer M., Pfichner A., **Rappenglück B.**, Steigner D. (2005): Isoprenoid Fluxes of Norway Spruce Forests in Europe: Results from Field and Modeling Studies in Germany and Finland, presented at the *ACCENT Symposium The Changing Chemical Climate of the Atmosphere*, Urbino/Italy, 12.-16.09.2005
- 192) Klemm O., Held A., Forkel R., Gasche R., Kanther H.-J., **Rappenglück B.**, Steinbrecher R., Müller K., Plewka A., Cojocariu C., Kreuzwieser J., Valverde-Canossa J., Moortgat G.K., Graus M., Hansel A. (2005): Experiments on forest/atmosphere exchange: Climatology and fluxes during two summer campaigns in North-East Bavaria, presented at the *ACCENT Symposium The Changing Chemical Climate of the Atmosphere*, Urbino/Italy, 12.-16.09.2005
- 193) **Rappenglück B.**, Bauerfeind M., Huntrieser H., Lichtenstern M., Roiger A., Schlager H. (2005): Preliminary Results from CO and Hydrocarbon Canister Samplings Aboard the DLR Falcon During ICARTT-ITOP, presented at the *EGU Joint Assembly*, Vienna/Austria, 24. - 29.04.2005
- 194) Wisthaler A., Grabmer W., Graus M., Lindinger C., **Rappenglück B.**, Steinbrecher R., Hansel A. (2004): Disjunct Eddy Covariance Measurements of Monoterpene Fluxes From a Norway Spruce Forest Using Proton-Transfer-Reaction Mass Spectrometry, *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 13.-17.12.2004
- 195) Steinbrecher R., **Rappenglück B.**, Habram M., Mohnen V. (2004): VOC in the GAW-Network, *TFMM-Workshop on the Implementation of the EMEP Monitoring Strategy*, Oslo/Norway, 22 -24.11.2004
- 196) Plass-Dülmer Ch., Rappenglück B., Steinbrecher R., Solberg S., Schmidbauer N. (2004): VOC Measurements in GAW and EMEP, *WMO/GAW Expert Workshop on the Quality and Applications of European GAW Measurements*, Tutzing/Germany, 02. - 05.11.2004
- 197) **Rappenglück B.**, Apel E., Bauerfeind M., Bottenheim J., Brickell P., Cavolka P., Cech J., Gatti L., Hakola H., Honzak J., Junek R., Noone C., Martin D., Plass-Dülmer Ch., Travers D., Wang T. (2004): The first VOC Intercomparison Exercise within the Global Atmosphere Watch (GAW), *WMO/GAW Expert Workshop on the Quality and Applications of European GAW Measurements*, Tutzing/Germany, 02. - 05.11.2004
- 198) Steinbrecher R., **Rappenglück B.**, Grote R., Forkel R., Smiatek G., Steigner D., Zimmer I., Mayrhofer S., Staudt M., Noe S., Giersch Ch., Graus M., Lindinger Ch., Grabmer W., Wisthaler A., Hansel A. (2004): Emissions of selected VOC from forests: Improvement and validation of emission models, *Deutsch - Österreichisch - Schweizerische - Meteorologen - Tagung (Meeting of the German, Austrian and Swiss Meteorologists)*, Karlsruhe, Germany, 07.-10.09.2004
- 199) **Rappenglück B.**, Apel E., Bauerfeind M., Bottenheim J., Brickell P., Cavolka P., Cech J., Gatti L., Hakola H., Honzak J., Junek R., Noone C., Martin D., Plass-Dülmer Ch., Travers D., Wang T. (2004): The first VOC Intercalibration Exercise within the Global Atmosphere Watch (GAW), presented at the *8th IGAC Conference*, Christchurch/New Zealand, 04. - 09.09.2004
- 200) **Rappenglück B.**, Schmitz R., Bauerfeind M., Cereceda-Balic F., v. Baer D., Silva Y., Oyola P. (2004): The contribution of VOCs to the formation of ozone and secondary organic aerosols in the urban plume of Santiago de Chile, presented at the *Quadrennial Ozone Symposium*, Kos/Greece, 01. - 08.06.2004
- 201) Mannschreck K., Rudolf W., Enders G., **Rappenglück B.**, Scheel H.E., Wiedensohler A. (2004): Quality Assurance/Science Activity Centre Germany as part of WMO/GAW: Overview on Structure and Responsibilities, *CMDL Annual Meeting*, Boulder CO/USA, 16.-17.05.2004
- 202) Grabmer W., Graus M., Wisthaler A., Hansel A., **Rappenglück B.**, Steigner D., Zuurbier R., Steinbrecher R. (2004): Disjunct Eddy Covariant flux measurements with PTR-MS during the BEWA field campaign, *Gordon Conference Biogenic Hydrocarbons & The Atmosphere*, Il Ciocco, Barga/Italy, 02 - 07.05.2004
- 203) Valverde-Canossa J., Ganzeveld L., Klemm O., Moortgat G.K., Steinbrecher R., **Rappenglück B.**, Schuster G. (2004): First Measurements of H₂O₂ and Organic Peroxide Surface Fluxes by the Relaxed Eddy Accumulation Technique, presented at the *AFO2000-Statusseminar*, Bad Tölz/Germany, 22.-24.03.2004
- 204) Steinbrecher R., **Rappenglück B.**, Gasche R., Steigner D., Forkel R., Smiatek G., Graus M., Lindinger Ch., Grabmer W., Wisthaler A., Hansel A. (2004): Emissions from selected VOC from forests: Improvement and validation of emission models, presented at the *AFO2000-Statusseminar*, Bad Tölz/Germany, 22.-24.03.2004
- 205) Smiatek G., Forkel R., **Rappenglück B.**, Steinbrecher R., Held A., Hansel A., Graus M. (2004): Determination of the Regional BVOC Emissions, presented at the *AFO2000-Statusseminar*, Bad Tölz/Germany, 22.-24.03.2004
- 206) Forkel R., **Rappenglück B.**, Steinbrecher R., Klemm O., Hansel A., Graus M. (2004): A Model to Describe Chemical Transformations of Biogenic VOC and Canopy Fluxes: A Contribution to Improve the Quantification of Biogenic VOC Emissions, presented at the *AFO2000-Statusseminar*, Bad Tölz/Germany, 22.-24.03.2004
- 207) **Rappenglück B.**, Steinbrecher R., Plewka A., Böge O., Herrmann H. (2004): Investigations on the atmospheric degradation of biogenic VOCs: Determination of typical oxidation products in forest ecosystems, presented at the *AFO2000-Statusseminar*, Bad Tölz/Germany, 22.-24.03.2004
- 208) Grabmer W., Graus M., Lindinger Ch., Wisthaler A., Hansel A., **Rappenglück B.**, Steigner D., Zuurbier R., Steinbrecher R. (2004): Disjunct Eddy Covariant flux measurements with PTR-MS during BEWA 2002, presented at the *68th Meeting of Physicists of the German Physical Society (DPG)*, Munich, Germany, 22.-26.03.2004
- 209) Forkel R., Smiatek G., Hernandez F., Iniesta R., **Rappenglück B.**, Steinbrecher R. (2004): Numerical Simulations of Ozone Level Scenarios for Mexico City, presented at the *6th Conference on Atmospheric Chemistry: Air Quality in Megacities, 84th Annual Meeting of the American Meteorological Society*, Seattle WA/USA, 11 - 15.01.2004

- 210) **Rappenglück B.**, Schmitz R., Bauerfeind M., Cereceda-Balic F., von Baer D., Silva Y., Rubio M.A., Lissi E., Oyola P. (2004): An Urban Photochemistry Study in the Metropolitan Region of Santiago de Chile, presented at the *6th Conference on Atmospheric Chemistry: Air Quality in Megacities, 84th Annual Meeting of the American Meteorological Society*, Seattle WA/USA, 11 - 15.01.2004
- 211) Steinbrecher R., **Rappenglück B.**, Steigner D., Hansel A., Graus M., Lindinger Ch. (2003): Fluxes of Primary and Secondary Biogenic Volatile Organic Compounds (BVOC) During the BEWA Field Experiments, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 8.-12.12.2003
- 212) Forkel R., **Rappenglück B.**, Steinbrecher R. (2003): Simulation of BVOC Fluxes and Chemical Transformations with a One-dimensional Canopy Chemistry Model for the BEWA Campaigns, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 8.-12.12.2003
- 213) **Rappenglück B.** (2003): VOC Measurements: Quality Control, *invited lecture* at the *5th GAWTEC Course organized by the Global Atmosphere Watch – Training and Education Center of the WMO*, Umweltforschungsstation Schneefernerhaus – Zugspitze, Germany, 03.07.2003
- 214) **Rappenglück B.** (2003): VOC Measurements: Sampling, *invited lecture* at the *5th GAWTEC Course organized by the Global Atmosphere Watch – Training and Education Center of the WMO*, Umweltforschungsstation Schneefernerhaus – Zugspitze, Germany, 03.07.2003
- 215) Steigner D., Steinbrecher R., **Rappenglück B.**, Gasche R., Hansel A., Graus M., Lindinger Ch. (2003): Emissions of selected VOC from forests: first results on measurements needed for improvement and validation of emission models, presented at the *EGS-AGU-EUG Joint Assembly*, Nizza/Frankreich, 06. - 11.04.2003
- 216) **Rappenglück B.** and the BEWA2000 Team (BEWA2000 Team: Steinbrecher R., Barnes I., Forkel R., Giersch Ch., Hampp R., Herrmann H., Klemm O., Kreuzwieser J., Mohnen V., Moortgat G., Müller K., Rappenglück B., Rennenberg H., Schnitzler J.-P., Smiatek G., Weitz A., Zimmer W.) (2003): Regional biogenic emissions of reactive volatile organic compounds (BVOC) from forests: first results on process studies, modelling and validation experiments (BEWA2000), presented at the *EGS-AGU-EUG Joint Assembly*, Nizza/Frankreich, 06. - 11.04.2003
- 217) Steinbrecher R., Junkermann W., Zuurbier R., Steigner D., **Rappenglück B.**, Burger J., Schaab G. (2003): Biodiversity of the Kakamega Forest in Kenya and the impact of increasing pressure through population: A new technique for assessing area averaged change in trace gas exchange between ecosystems and the atmosphere, presented at the *16th Annual Meeting of the Society for Ecology of the Tropics (GTÖ)*, Rostock/Germany, 19.-22.02.2003
- 218) **Rappenglück B.** (2002): World Calibration Center for VOC (WCC-VOC), a new Facility for the GAW-Programme, presented at the *American Geophysical Union, Fall Meeting*, San Francisco CA/USA, 5.-10.12.2002
- 219) Forster C., Stohl A., Huntrieser H., Cooper O., Eckhardt S., James P., Heland J., Mannstein H., Schlager H., **Rappenglück B.**, Junkermann W., Arnold F., Aufmhoff H., Wilhelm S., Spichtinger N., Wernli H. (2002): A chemical characterization of North American pollutant plumes over Europe and a 15-year climatology of warm conveyor belt transport, *EMEP/German/US EPA Workshop I, Hemispheric Air Pollution*, Bad Breisig/Germany, 07.-09.10.2002
- 220) Steigner D., Steinbrecher R., **Rappenglück B.**, Gasche R., Hansel A., Graus M., Lindinger Ch. (2002): Emissions of selected VOC from forests: First results on measurements needed for improvement and validation of emission models, presented at the *AFO2000-Statusseminar*, Schliersee/Germany, 07.-09.10.2002
- 221) **Rappenglück B.**, Hofmann D., Steigner D., Plewka A., Steinbrecher R., Herrmann H. (2002): Investigations on the Atmospheric Degradation of Biogenic VOCs: Determination of Typical Oxidation Products in Forest Ecosystems, presented at the *AFO2000-Statusseminar*, Schliersee/Germany, 7.-9.10.2002
- 222) Stohl A., Huntrieser H., Cooper O., Eckhardt S., Forster C., James P., Heland J., Mannstein H., Schlager H., Junkermann W., **Rappenglück B.**, Arnold F., Aufmhoff H., Wilhelm S. (2002): A chemical characterisation of North American pollutant plumes over Europe and a 15-year climatology of global warm conveyor belt transport, presented at the *10th Scientific Conference of the International Association of Meteorology and Atmospheric Sciences (LAMAS), Commission for Atmospheric Chemistry and Global Pollution (CACGP), 7th Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC)*, Hersonissos-Heraklion/Greece, 18.-25.09.2002
- 223) **Rappenglück B.**, Kourtidis K., Mihalopoulos N., Melas D., Schmitt R., Rapsomanikis S., Fabian P., Zerefos C. (2002): Observations of photochemically relevant species on the island of Crete, Greece, presented at the *10th Scientific Conference of the International Association of Meteorology and Atmospheric Sciences (LAMAS), Commission for Atmospheric Chemistry and Global Pollution (CACGP), 7th Scientific Conference of the International Global Atmospheric Chemistry Project (IGAC)*, Hersonissos-Heraklion/Greece, 18.-25.09.2002
- 224) Steinbrecher R., Barnes I., Forkel R., Giersch Ch., Hansel A., Hampp R., Herrmann H., Klemm O., Kreuzwieser J., Mohnen V., Moortgat G., Rennenberg H., **Rappenglück B.**, Rennenberg H., Schnitzler J.-P., Smiatek G., Weitz A., Zimmer W. (2002): Regional biogenic emissions of reactive volatile organic compounds from forests (BEWA2000): First results from model, process, and validation studies based on laboratory and field conditions (in German), presented at the *BMBF-Tagung "Bedeutung der Wechselwirkungen Biosphäre/Atmosphäre für die Nachhaltige Nutzung der Biosphäre und den Klimaschutz"*, Bonn/Germany, 16.09.-17.09.2002
- 225) Steinbrecher R., Barnes I., Forkel R., Giersch Ch., Hampp R., Herrmann H., Klemm O., Kreuzwieser J., Mohnen V., Moortgat G., Müller K., **Rappenglück B.**, Rennenberg H., Schnitzler J.-P., Smiatek G., Weitz A., Zimmer W. (2002): Regional biogenic emissions of reactive volatile organic compounds (BVOC) from forests: Process studies, modeling and validation experiments (BEWA2000), presented at the *Gordon Research Conferences "Biogenic Hydrocarbons and the Atmosphere"*, Oxford/UK, 01.-06.09.2002
- 226) **Rappenglück B.** (2002): World Calibration Center for VOC (WCC-VOC), *invited lecture* at the *3th GAWTEC Course organized by the Global Atmosphere Watch – Training and Education Center of the WMO*, Umweltforschungsstation Schneefernerhaus – Zugspitze, Germany, 24.06.2002

- 227) **Rappenglück B.** (2002): VOC: Quality assurance, *invited lecture at the 3th GAWTEC Course organized by the Global Atmosphere Watch – Training and Education Center of the WMO*, Umweltforschungsstation Schneefernerhaus – Zugspitze, Germany, 19.06.2002
- 228) **Rappenglück B.** (2002): Flask sampling, *invited lecture at the 3th GAWTEC Course organized by the Global Atmosphere Watch – Training and Education Center of the WMO*, Umweltforschungsstation Schneefernerhaus – Zugspitze, Germany, 19.06.2002
- 229) **Rappenglück B., Gilles U.** (2002): VOC: Sampling and measurement techniques, *invited lecture at the 3th GAWTEC Course organized by the Global Atmosphere Watch – Training and Education Center of the WMO*, Umweltforschungsstation Schneefernerhaus – Zugspitze, Germany, 19.06.2002
- 230) **Rappenglück B.** (2002): VOC: Chemistry and emissions, *invited lecture at the 3th GAWTEC Course organized by the Global Atmosphere Watch – Training and Education Center of the WMO*, Umweltforschungsstation Schneefernerhaus – Zugspitze, Germany, 19.06.2002
- 231) **Rappenglück B.** (2002): World Calibration Center for VOC (WCC-VOC), presented at *RIGA 2002 - GAW Workshop for WMO RA VI (Europe) on Status and Trends of Global Atmosphere Watch*, Riga/Latvia, 27.-30.05.2002
- 232) **Rappenglück B., Klauer M., Hauff K., Pfichner A., Steinbrecher R.** (2002): A novel Relaxed-Eddy-Accumulation (REA) technique for the determination of BVOC-fluxes, presented at *the 25th Conference on Agricultural and Forest Meteorology, 12th Joint Conference on the Applications of Air Pollution Meteorology with A&WMA, 4th Symposium on the Urban Environment*, Norfolk VA/USA, 20.-24.05.2002
- 233) Steinbrecher R., Barnes I., Forkel R., Giersch Ch., Hampp R., Herrmann H., Klemm O., Kreuzwieser J., Mohnen V., Moortgat G., Müller K., **Rappenglück B.**, Rennenberg H., Schnitzler J.-P., Seiler W., Smiatek G., Weitz A., Zimmer W. (2002): Regional Biogenic Emissions of Reactive Volatile Organic Compounds (BVOC) from Forests: Process Studies, Modelling and Validation Experiments (BEWA2000), presented at *EUROTRAC Symp. '02*, Garmisch-Partenkirchen/Germany, 11.-15.03.2002
- 234) Steinbrecher R., Junkermann W., **Rappenglück B.**, Walsh M., Awiti A. (2001): Meteorology and surface fluxes of trace gases at the Kakamega Forest, Kenya: methods and first results, presented at the *BIOLOG Status Seminar*, Bonn/Germany, 6./7.12.2001
- 235) **Rappenglück B., Fabian P., Kourtidis K., Zerefos C., Mihalopoulos N., Melas D., Schmitt R., Rapsomanikis S.** (2001): Long range transport and photochemistry in the Eastern Mediterranean (in German), *Deutsch – Österreichisch – Schweizerische – Meteorologen - Tagung (Meeting of the German, Austrian and Swiss Meteorologists)*, Vienna/Austria, 18.-21.09.2001
- 236) **Rappenglück B., Forster C., Jakobi G., Pesch M.** (2001): Analysis of enhanced ozone and PAN concentrations in the nighttime boundary layer over the urban area of Berlin (in German), *Deutsch – Österreichisch – Schweizerische – Meteorologen - Tagung (Meeting of the German, Austrian and Swiss Meteorologists)*, Vienna/Austria, 18.-21.09.2001
- 237) Spanier U., **Rappenglück B., Werner H., Fabian P.** (2001): Investigations of ethylene emissions in a forest (in German), presented at the *Deutsch – Österreichisch – Schweizerische – Meteorologen - Tagung (Meeting of the German, Austrian and Swiss Meteorologists)*, Vienna/Austria, 18.-21.09.2001
- 238) **Rappenglück B., Jakobi G., Fabian P., Pesch M., Reimer E.** (2001): Enhanced levels of PAN and ozone in the nighttime boundary layer over Berlin, Germany, presented at the *Millennium Symposium on Atmospheric Chemistry, 81st Annual Meeting of the American Meteorological Society*, 14 - 19.01.2001, Albuquerque NM/USA
- 239) **Rappenglück B., Melas D., Fabian P.** (2001): Long range transport of trace gases observed on Crete, Greece, presented at the *Millennium Symposium on Atmospheric Chemistry, 81st Annual Meeting of the American Meteorological Society*, 14 - 19.01.2001, Albuquerque NM/USA
- 240) Fabian P., **Rappenglück B., Stohl A., Werner H., Schlager H., Stock P., Berresheim H., Elste T., Kaminski U., Koepke P., Reuder J.** (2000): Boundary layer photochemistry under total solar eclipse conditions, presented at the *Quadrennial Ozone Symposium*, Sapporo/Japan, 03. - 08.07.2000
- 241) **Rappenglück B., Oyola P., Olaeta I., Schmitt R., Fabian P.** (2000): Photochemical smog in Santiago de Chile, presented at the *Quadrennial Ozone Symposium*, Sapporo/Japan, 03. - 08.07.2000
- 242) **Rappenglück B., Jakobi G., Fabian P.** (2000): Photochemical processes in the urban plume of Berlin, Germany, presented at the *Quadrennial Ozone Symposium*, Sapporo/Japan, 03. - 08.07.2000
- 243) **Rappenglück B., Jakobi G., Pesch M.** (2000): Air Quality Studies in the Conurbation of Berlin, presented at the *TFS-Workshop*, Bonn/Germany, 28. - 29.06.2000
- 244) Konrad S., Pätz H.W., Hofzumahaus A., Holland F., Rohrer F., Bäumle M., Kurtenbach R., **Rappenglück B., Volz-Thomas A.** (2000): Comparison of OH Radical estimates from VOC decay in the Berlin Plume with direct measurements by LIF, presented at the *European Geophysical Society (EGS) XXV General Assembly*, Nice/France, 25. - 29.04.2000
- 245) **Rappenglück B., Fabian P.** (2000): Observations of Hydrocarbons in the Urban Plume of Munich, presented at the *European Geophysical Society (EGS) XXV General Assembly*, Nice/France, 25. - 29.04.2000
- 246) **Rappenglück B., Jakobi G., Fabian P.** (2000): Comparison of O₃ and PAN measurements during BERLIOZ, presented at the *European Geophysical Society (EGS) XXV General Assembly*, Nice/France, 25. - 29.04.2000
- 247) **Rappenglück B., Reitmayer H., Fabian P.** (2000): On the use of manned H₂ gas ballooning in boundary layer studies (in German), presented at *METTOOLS IV - Fourth Conference on Environmental Meteorology of the German Meteorological Society*, Universität-Stuttgart, 03-05.04.2000, 58-60
- 248) Wieprecht W., Möller D., Kalaß D., Acker K., Slemr F., Lörzer J., Kurtenbach R., **Rappenglück B., Lohrmann B., Dubois R., Lammel G.** (1999): NO_x - A problem for the BERLIOZ modelling? (Comparison of NO_x and NO_y measurements by photolytic gold and molybdenum converters), presented at the *PIPAPPO/BERLIOZ Workshop*, Varese/Italy, 13-16.12.1999
- 249) Konrad S., Hofzumahaus A., Holland F., Rohrer F., Schäfer J., Volz-Thomas A., Kurtenbach R., **Rappenglück B.** (1999): Comparison of OH Radical estimates from VOC decay in the Berlin Plume with direct measurements by LIF, presented at the *PIPAPPO/BERLIOZ Workshop*, Varese/Italy, 13-16.12.1999

- 250) **Rappenglück B.**, Jakobi G., Fabian P. (1999): Comparison of O₃ and PAN measurements during BERLIOZ, presented at the *PIP/APO/BERLIOZ Workshop*, Varese/Italy, 13-16.12.1999
- 251) **Rappenglück B.**, Euskirchen J., Fabian P. (1999): On-line in-situ measurements in the boundary layer - manned hydrogen balloons as Quasi Langrange platforms, *Atmosphärische Umweltforschung im Wandel*, Berlin, 15.-17.11.1999
- 252) Zerefos C., Kourtidis K., Balis D., Bais A., Blumthaler M., **Rappenglück B.**, Fabian P., Schmitt R., Gobbi G.P., Rapsomanikis S., Gillotay D., Isaksen I., Melas D., Fiocco G., Di Sarra A. Pommereau J.-P., Mihalopoulos N., Herman J., Labow G., Thompson A., Cornwall C., De Luisi J., Tzortziou M. (1999): Overview of the first results from the PAUR II experiment, presented at the 5th European workshop on stratospheric ozone, Saint-Jean-de-Luz/France, 27.09. - 01.10.1999
- 253) **Rappenglück B.**, Euskirchen J., Fabian P. (1999): On-line in-situ measurements in the boundary layer - manned hydrogen balloons as Quasi Langrange platforms, presented at the 4th *International Airborne Remote Sensing Conference and Exhibition*, Ottawa/Canada, 21 -24.06.1999
- 254) Konrad S., Fabian P., Gomez A., Großmann D., Houben N., Kurtenbach R., Lörzer J., Mihelcic D., Moortgat G., Müsgen P., Pätz H.W., **Rappenglück B.**, Schmitz T., Volz-Thomas A. (1999): Decay of nitrogen oxides and volatile organic compounds in the plume of Berlin, presented at the *European Geophysical Society (EGS) XXIV General Assembly*, Den Haag/Netherlands, 19.-23.04.1999
- 255) **Rappenglück B.**, Oyola P., Olaeta I., Jakobi G., Fabian P. (1999): The urban plumes of Santiago de Chile and Berlin, presented at the *European Geophysical Society (EGS) XXIV General Assembly*, Den Haag/Netherlands, 19 -23.04.1999
- 256) Zerefos, C.S., Fabian P., Isaksen I., Krueger B., Pommereau J.-P., Hofzumahaus A., Bais A.F., Balis D.S., Berntsen T., Blumthaler M., Goutail F., Kosmidis E., Kourtidis K., Kraus A., Kylling A., Marengo F., Meleti C., Nunes-Pinharanda M., Papayannis A., **Rappenglück B.**, Santasecaria V., Schmitt R., Suppan P., Tourpali K., Ziomias I.C. (1998): Overview of results from the PAUR campaign, *The European Conference on Atmospheric UV Radiation*, Helsinki/Finland, 29.06. – 02.07.1998
- 257) Kourtidis K., Zerefos C., Tsiouri I., Schmitt R., **Rappenglück B.**, Suppan P., Fabian P. (1998): Production and destruction rate of OH at an island and a suburban site in Greece during the 1996 PAUR campaign, *European Geophysical Society (EGS) XXIII General Assembly*, Nizza/Frankreich, 20. -24.04.1998
- 258) **Rappenglück B.**, Jakobi,G., Fabian P. (1998): Photochemical processes in the urban plume of Berlin in relationship to different VOC/NO_x ratios: In-situ measurements aboard a free manned gas balloon and at selected ground-based sites (in German), presented at the *TFS-Workshop*, Mainz/Germany, 02. - 04.12.1998
- 259) **Rappenglück B.**, Oyola P., Olaeta I., Fabian P. (1998): Photochemical processes in the Metropolitan Area of Santiago de Chile, presented at the *VIII National Meteorological Congress of the Mexican Meteorological Society*, Veracruz/Mexico, 28 -30.10.1998
- 260) **Rappenglück B.**, Oyola P., Olaeta I., Fabian P. (1998): Photochemical smog in Santiago de Chile - Relationships between the precursors NO_x, CO, NMHC and the secondary compounds ozone and PAN (in German), presented at the *Conference of the German Meteorological Society*, Leipzig/Germany, 14 -18.09.1998
- 261) **Rappenglück B.**, Fabian P. (1998): Photochemical processes in the Greater Munich Area (in German), presented at the *Conference of the German Meteorological Society*, Leipzig/Germany, 14 -18.09.1998
- 262) Zerefos, C.S., Fabian P., Isaksen I., Krueger B., Pommereau J.-P., Hofzumahaus A., Bais A.F., Balis D.S., Berntsen T., Blumthaler M., Goutail F., Kosmidis E., Kourtidis K., Kraus A., Kylling A., Marengo F., Meleti C., Nunes-Pinharanda M., Papayannis A., **Rappenglück B.**, Santasecaria V., Schmitt R., Suppan P., Tourpali K., Ziomias I.C. (1998): Overview of results from the PAUR campaign, presented at the *European Conference on Atmospheric UV Radiation*, Helsinki/Finland, 29.06. – 02.07.1998
- 263) Kourtidis K., Zerefos C., Tsiouri I., Schmitt R., **Rappenglück B.**, Suppan P., Fabian P. (1998): Production and destruction rate of OH at an island and a suburban site in Greece during the 1996 PAUR campaign, presented at the *European Geophysical Society (EGS) XXIII General Assembly*, Nice, 20 -24.04.1998
- 264) **Rappenglück B.**, Oyola P., Olaeta I., Fabian P. (1998): Photochemical smog in Santiago de Chile - Relationships between NO_x, CO, NMHC and secondary compounds ozone and PAN, presented at the *European Geophysical Society (EGS) XXIII General Assembly*, Nice/France, 20 -24.04.1998
- 265) **Rappenglück B.**, Fabian P. (1998): Observations of biogenic and anthropogenic NMHC in Athens during the PAUR campaign, presented at the *European Geophysical Society (EGS) XXIII General Assembly*, Nice/France, 20 -24.04.1998
- 266) **Rappenglück B.**, Fabian P., Oyola P. (1998): On-Line GC-Measurements of Non Methane Hydrocarbons (NMHC) in Santiago de Chile, presented at the *COLACRO VII (7th Latin-American Congress on Chromatography and Related Techniques*, Águas de São Pedro/Brazil, 25 - 27.03.1998
- 267) **Rappenglück B.**, Oyola P., Olaeta I., Schmitt R., Fabian P. (1998): The evolution of photochemical smog in the Metropolitan Area of Santiago de Chile, presented at the *10th Joint Conference on the Applications of Air Pollution Meteorology with the Air and Waste Manag. Assoc.*, Phoenix AZ/USA, 11 - 16.01.1998
- 268) Kourtidis K., Zerefos C., Balis D., Schmitt R., **Rappenglück B.**, Suppan P., Fabian P. (1997): Production rate of OH at an island and a suburban site in Greece during the 1996 PAUR campaign, presented at the *European Geophysical Society (EGS) XXII General Assembly*, Vienna/Austria, 21.-25.04.1997
- 269) **Rappenglück B.**, Fabian P., Kalabokas P., Vyras L., Ziomias I. (1996): Volatile Organic Compounds (VOC) and their contribution to the enhancement of photooxidants in the Greater Athens Area under Mediterranean climate conditions, presented at the *9th Joint Conference on the Applications of Air Pollution Meteorology with the Air and Waste Management Association*, Atlanta GA/USA, 28.01.-02.02.1996
- 270) Ziomias I., **Rappenglück B.**, Kourtidis K., Balis D., Tzoumaka P. (1996): An improved emission inventory for Athens tested with the Urban Airshed Model, *Symp. on phys.-chemical behaviour of atmospheric pollutants*, Ispra/Var./Italien, 02. - 04.10.1996
- 271) Fabian P., Suppan P., **Rappenglück B.**, Ziomias I., Klemm O. (1996): The effect of the transportation sector on photochemical smog in Athens, *International Mobile Sources/Clean Air Conference*, München, 19.03.1996

- 272) Fabian P., Suppan P., **Rappenglück B.**, Ziomas I., Klemm O. (1995): Photochemical smog in the Athens Metropolitan Area, *International Workshop on Pollution*, Santiago, Chile, 07.11.1995
- 273) **Rappenglück B.**, Jakobi G., Fabian P., Kalabokas P., Vyras L., Ziomas I. (1995): VOC-Measurements in the urban areas of Munich and Athens, presented at the *European Geophysical Society (EGS)- Conference*, Hamburg/Germany, 07.04.1995
- 274) **Rappenglück B.** (1993): New results of aromatic hydrocarbon measurements ("BTEX") in a forest area (in German), presented at the *Second Meeting of the Biometeorological Committee of the German Meteorological Society (BIOMET)*, Freising-Weihenstephan/Germany, 20.-22.10.1993
- 275) **Rappenglück B.** (1993): Quasi-continuous measurements of hydrocarbons (in German), presented at *METTOOLS II - Second International Conference on Environmental Meteorology of the German Meteorological Society*, Stuttgart-Hohenheim/Germany, 13.-17.09.1993
- 276) Suppan P., **Rappenglück B.**, Fabian P. (1992): Photooxidants in the urban area of Munich, *Int. Symp. on "Planning applications of urban and building climatology"*, Berlin, 14. - 15.10.1991
- 277) **Rappenglück B.**, Kourtidis K., Fabian P. (1991): Measurements of ozone and peroxyacetyl nitrate (PAN) in Munich, presented at the *EUROTRAC Workshop & European Geophysical Society (EGS) Conference*, Wiesbaden,/Germany 26.04.1991
- 278) Kourtidis, K. A., **Rappenglück B.**, Fabian P., Borchers R. (1990): Measurements of peroxyacetyl nitrate (PAN) and other photooxidants in the urban area of Munich: preliminary results. *10th Intern. Clean Air Conference*, The Clean Air Society of Australia and New Zealand, Auckland/New Zealand

Conference Convener

- AMS Annual Meeting 2012: Session "Urban Air Pollution under a Changing Climate and Changing Emission Profiles" (together with Eric Velasco)
- 15th ASAAQ (Int. Conf. on Atmospheric Science and Applications to Air Quality) 2019, Kuala Lumpur/Malaysia, Session "Monitoring, detection and spatial environment"
- 14th ASAAQ (Int. Conf. on Atmospheric Science and Applications to Air Quality) 2017, Strarbourg/France: Session "Observations"
- AMS Annual Meeting 2014: Session "Biomass Burning Impacts on Air Quality" (together with Timothy Vanreken)
- 12th ASAAQ (Int. Conf. on Atmospheric Science and Applications to Air Quality) 2013, Seoul/South Korea: Session "Atmospheric Chemistry & Physics"
- AMS Annual Meeting 2012: Session "Atmospheric Field Campaigns III" (together with Nicole Mölders)
- AMS Annual Meeting 2011: Session "Field and modeling studies from Recent Field Campaigns: SHARP 2009 and CalNex 2010" (together with Sylvain Ménard)
- AMS Annual Meeting 2010: Session "The Study of Houston Atmospheric Radical Precursors (SHARP) – II"" (together with Jochen Stutz)
- AMS Annual Meeting 2010: Session "The Study of Houston Atmospheric Radical Precursors (SHARP) - III" (together with Renyi Zhang)
- AMS Annual Meeting 2009: Session "Air quality and climate change, Part III" (together with Wallace McMillan)
- AGU Fall Meeting 2007: Session "Day and nighttime chemical processing in polluted atmospheres"; Focus: TexAQS-II und MLAGRO (together with Scott Herndon)

Editor

- Special Issue in Atmosphere (2018-19) titled "Trace Gas Budgets in Urban and Remote Areas"
- Special Issue in Atmosphere (2016-17) titled "Tropospheric Ozone and Its Precursors"
- Associate Editor, Air Quality, Atmosphere & Health (AQAH) (since 2016)
- Editorial board member for Advances in Environmental and Engineering Research (since 2021)
- Editorial board member for AIMS Environmental Science (since 2015)
- Editorial board member for Austin Journal of Earth Science (since 2014)
- Editorial board member for IJAS Atmospheric Sciences (2012-2017)
- Editorial board member for ISRN Atmospheric Sciences (2012-2014)
- Special Issue in Atmospheric Environment (2010) titled "The TexAQS II Radical and Aerosol Measurement Project (TRAMP)" (together with Barry Lefer)

Invited Talks

- 1) Rappenglück B. (2019): The Planetary Boundary Layer and Urban Air Quality, *University of Houston/ Center for Thermo-Fluid Mechanics – Houston/TX*, 22.03.2019.
- 2) Li X., Rappenglück B. (2018): Nighttime Ozone Bias and Vertical Diffusion in Air Quality Modeling in Southeast Texas, *Texas Air Quality Meeting, University of Texas – Austin/TX*, 06.04.2018.
- 3) Cuchiara G., Rappenglück B. (2017): Impact of PBL parameterization on predictions of ozone, *Tropospheric Chemistry meeting/ colloquium (ACOM/NCAR) – Boulder/CO*, 27.10.2017.
- 4) Li X., Rappenglück B. (2015): Improved Meteorological Modeling for Houston Air Quality Studies, *Texas Air Quality Meeting, University of Texas – Austin/TX*, 10.04.2015.
- 5) Rappenglück B. (2015): Air Pollution and its Impact on the Environment, *Texas Southern University, Houston/TX*, 22.04.2015

- 6) Rappenglück B. (2015): Modeling of 1,3-Butadiene in Urban and Industrial Areas, *Coordinating Research Council, Sacramento/CA*, 19.02.2015
- 7) Rappenglück B. (2015): Radical Precursors and Related Species from Traffic as Observed and Modeled at an Urban Highway Junction, *Mid-Atlantic Regional Air Management Assoc. (MARAMA)-webinar, Towson/MD*, 28.01.2015
- 8) Rappenglück B. (2014): Analysis of 10 Years online C₂-C₁₁ NMHC Measurements close to the Gulf of Mexico, *invited talk*, 5th WMO/GAW expert meeting on global observations of VOCs, *World Meteorological Organization, Daejeon/Korea*, 20.10.2014
- 9) Rappenglück B. (2014): Air Quality Aspects in the Arabian Gulf Area, *invited talk*, *Biological & Agricultural Engineering Department, Texas A&M, College Station/Texas*, 01.10.2014
- 10) Rappenglück B. (2014): Unos Aspectos de La Calidad del Aire, *invited talk*, *Universidad Nacional de San Antonio Abad del Cuzco, Cusco/Peru*, 09.07.2104
- 11) Rappenglück B. (2013): Air Quality Research in Qatar, *invited talk*, *Qatar University Life Science Symposium (QULSS 2013), Doha/Qatar*, 10.12.2013
- 12) Rappenglück B. (2013): Urban Climate and Air Quality, *invited talk*, *Faculty of Civil, Geo and Environmental Engineering, Munich University of Technology, Munich/Germany*, 17.04.2013
- 13) Rappenglück B. (2013): Strategies for Atmospheric Research in Qatar, *invited talk*, *Qatar Environment and Energy Research Institute (QEERI), Doha/Qatar*, 12.03.2013
- 14) Rappenglück B. (2012): Long-term online C₂-C₁₁ VOC Measurements in a Subtropical Area close to the Gulf of Mexico, *invited talk*, 4th WMO/GAW expert meeting on global observations of VOCs, *World Meteorological Organization, York/UK*, 11.09.2012
- 15) Rappenglück B. (2012): Air Quality in Urban Areas – What are the Important Challenges?, *invited talk*, *Qatar Clean Air Research Workshop, Doha/Qatar*, 23.04.2012
- 16) Rappenglück B. (2012): Air Quality Research in Houston, Texas - Results from Observations and Modeling Studies, *invited talk*, *Qatar Environment and Energy Research Institute (QEERI), Doha/Qatar*, 15.02.2012
- 17) Rappenglück B. (2010): Urban Climate and Air Pollution - Example Houston, Texas, *invited talk*, *Faculty of Civil Engineering and Geodesy, Munich University of Technology, Munich/Germany*, 20.07.2010
- 18) Rappenglück B. (2010): Analysis of in-situ VOC data in a subtropical area close to the Gulf of Mexico, *invited talk*, 3rd WMO/GAW expert meeting on global observations of VOCs, *World Meteorological Organization, Helsinki/Finland*, 29.06.2010
- 19) Rappenglück B. (2010): Overview of Meteorology and Chemistry Measurements during SHARP, *invited talk*, *Annenberg Presidential Center, Texas A&M University, College Station/Texas*, 23.04.2010
- 20) Rappenglück B. (2009): Formaldehyde (HCHO) and Nitrous Acid (HONO) in the Houston Atmosphere, *invited seminar lecture*, *Department of Civil and Environmental Engineering, University of Houston, Houston/Texas*, 22.09.2009
- 21) Rappenglück B. (2008): El Cambio Climático y América Latina, *invited talk*, *Gobierno Regional Cusco, Cusco/Perú*, 16.10.2008
- 22) Rappenglück B. (2008): The Application of an Urban online VOC Network for GAW Objectives, *invited talk*, *GAW-VOC/CCQM-GAWG Workshop, World Meteorological Organization, Dübendorf/Switzerland*, 08.07.2008
- 23) Rappenglück B. (2007): University of Houston Field Campaign Activities in Support of TexAQs-II in 2006, *invited seminar lecture*, *Harvard University, Cambridge MA/USA*, 09.02.2007
- 24) Rappenglück B. (2006): Organic Compounds and their role in Atmospheric Chemistry (in German), *invited seminar lecture*, *Johann Wolfgang Goethe University, Frankfurt am Main/Germany*, 15.12.2006
- 25) Rappenglück B. (2006): Peroxyacetylnitrates (PANs) in the Atmosphere (in Spanish), *invited seminar lecture*, *Centro de Ciencias de la Atmósfera - Universidad Nacional Autónoma de México (UNAM), Mexico City/Mexico*, 19.05.2006
- 26) Rappenglück B. (2006): The 1st GAW VOC Intercomparison, *invited talk*, *World Meteorological Organization, Geneva/Switzerland*, 30.01.2006
- 27) Rappenglück B. (2005): VOCs and their relation to Ozone, PAN, and Secondary Organic Aerosols in the Urban Plume of Santiago de Chile, *invited seminar lecture*, *Texas A & M University, College Station TX/USA*, 15.04.2005
- 28) Rappenglück B. (2004): Results from air quality studies in Santiago de Chile, *invited seminar lecture*, *Department of Geosciences – University of Houston, Houston TX/USA*, 29.04.2004
- 29) Rappenglück B. (2003): Biogenically emitted oxygenated compounds – do they indicate plant stress? (in German), *invited lecture*, *Science Center Weihenstephan, Technical University of Munich, Freising-Weihenstephan/ Germany*, 29.10.2003
- 30) Rappenglück B. (2002): Interactions Between Vegetation and Atmosphere – a Focus in Ecoclimatology (in German), *invited lecture*, *Department of Ecology, Technical University of Munich, Freising-Weihenstephan/ Germany*, 15.11.2002
- 31) Rappenglück B. (2002): Some Aspects of Urban Air Quality Studies (in Spanish), *invited lecture*, *CONAMA R.M./GTZ, Santiago de Chile*, 06.11.2002
- 32) Rappenglück B. (2000): Ambient Air Contamination (in Spanish), *invited lecture* at the Municipality of Cuzco, 31.10.2000, Cuzco, Perú
- 33) Rappenglück B. (2000): Photochemical Smog (in Spanish), *invited lecture* at the 5th Workshop of the Initiative of Clean Air for Latin American Cities organized by the Government of the Metropolitan Region of Santiago, the World Bank, and CONAMA R.M., 25.10.2000, Santiago de Chile
- 34) Rappenglück B. (1998): NMHC measurements in selected urban areas using on-line gas chromatography - Case studies: Munich/Germany, Athens/Greece and Santiago de Chile, *invited seminar lecture*, *National Oceanic and Atmospheric Administration (NOAA) - Environmental Research Laboratories - Aeronomy Laboratory, Boulder CO/USA*, 16.11.1998
- 35) Rappenglück B. (1994): Aromatic hydrocarbons - What is their contribution to the formation of ozone and PAN? (in German), *invited lecture* in the Course of the Leipzig Meteorological Colloquium, *Institute for Tropospheric Research (IFI), Leipzig/Germany*, 07.07.1994