

**List of publications of Dr. Christian Temme**

Last update: 20.09.2008

Peer-reviewed literature:

Rau, S.; Ruben, M.; Buettner, T.; Temme, C.; Dautz, S.; Goerls, H.; Rudolph, M.; Walther, D.; Brodkorb, A.; Duati, M.; O'Connor, C.; Vos, J.G. „**Bis(R-bipyridyl)ruthenium bibenzimidazole complexes (R = H, Me or But)**: supramolecular arrangement via hydrogen bonds, photo- and electro-chemical properties and reactivity towards carbon dioxide“; *Dalton* **2000**, 20, 3649-3657.

Rau, S.; Buettner, T.; Temme, C.; Ruben, M.; Goerls, H.; Walther, D.; Duati, M.; Fanni, S.; Vos, J.G. „**A bibenzimidazole-containing Ruthenium(II) complex acting as a cation-driven molecular switch**“; *Inorganic Chemistry* **2000**, 39(7), 1621-1624.

Ebinghaus, R.; Kock, H.H.; Temme, C.; Einax, J.W.; Löwe, A.G.; Richter, A.; Burrows, J.P.; Schroeder, W.H. „**Antarctic springtime depletion of atmospheric mercury**“; *Environ. Sci. Technol.* **2002**, 36(6), 1238-1244.

Ebinghaus, R.; Kock, H.H.; Coggins, A.M.; Spain, T.G.; Jennings, S.G.; Temme, C. „**Long-term measurements of atmospheric mercury at Mace Head, Irish west coast, between 1995 and 2001**“; *Atmospheric Environment* **2002**, 36(34), 5267-5276.

Temme, C.; Einax, J.W.; Ebinghaus, R.; Schroeder, W.H. „**Measurements of atmospheric mercury species at a coastal site in the Antarctic and over the south Atlantic ocean during polar summer**“; *Environ. Sci. and Technol.* **2003**, 37, 22-31.

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Temme, C.; Ebinghaus, R.; Einax, J.W.; Schroeder, W.H. „**Response to comment on "measurements of atmospheric mercury species at a coastal site in the Antarctic and over the south Atlantic ocean during polar summer"**“; *Environ. Sci. and Technol.* **2003**, ASAP Web Release Date: 12-Jun-2003; (Correspondence/Rebuttal).

Temme, C.; Ebinghaus, R.; Einax, J.W.; Steffen, S.; Schroeder, W.H. „**Application of time series analysis on long-time data sets of atmospheric mercury concentrations at two different sites**“; *Analytical and Bioanalytical Chemistry* **2004**, 380, 493-501.

Aspmo, K.; Gauchard, P.-A.; Steffen, A.; Temme, C.; Berg, T.; Bahlman, E.; Banic, C.; Dommergue, A.; Ebinghaus, R.; Ferrari, C.; Pirrone, N.; Sprovieri, F.; Wibetoe, G. „**Measurements of atmospheric mercury species during an international study of**



mercury depletion events at Ny-Ålesund, Svalbard, 2003. How reproducible are our present methods?”; *Atmospheric Environment* 2005, 39, 7607-7619.

Gauchard, P.-A.; Aspö, K.; Temme, C.; Steffen, A.; Ferrari, C.; Berg, T.; Ström, J.; Dommergue, A.; Bahlmann, E.; Magand, O.; Planchon, F.; Ebinghaus, R.; Banic, C.; Nagorski, S.; Baussand, P.; Boutron, C. **“Study of the origin of Atmospheric Mercury Depletion Events recorded in Ny-Ålesund, Svalbard, spring 2003”;** *Atmospheric Environment* 2005, 39, 7620 – 7632.

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Xie, Z.; Ebinghaus, R.; Temme, C.; Caba, A.; Ruck, W. **“Atmospheric concentrations and air-sea exchange of phthalates in the North Sea (German Bight)”;** *Atmospheric Environment* 2005, 39, 3209 – 3219.

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Jahnke, A.; Ahrens, L.; Ebinghaus, R.; Berger, U.; Barber, J.; Temme, C. **„An improved method for the analysis of volatile polyfluorinated alkyl substances in environmental air samples”;** *Analytical and Bioanalytical Chemistry* 2007, 387 (3), 965-975.

Jahnke, A.; Ahrens, L.; Ebinghaus, R.; Temme, C. **„Urban versus Remote Air Concentrations of Fluorotelomer Alcohols and Other Polyfluorinated Alkyl Substances in Germany“;** *Environ. Sci. and Technol.* 2007, 41 (3), 745-752.

Jahnke, A.; Berger, U.; Ebinghaus, R.; Temme, C. **„Latitudinal gradient of airborne polyfluorinated alkyl substances in the marine atmosphere between Germany and South Africa (53°N-33°S)“;** *Environ. Sci. and Technol.* 2007, 41 (9), 3055-3061.

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Jonathan L. Barber; Berger, U.; Chaemfa, C.; Huber, S.; Jahnke, A.; Temme, C.; Jones, K.C. **"Analysis of per- and polyfluorinated alkyl substances in air samples from Northwest Europe"**; *Journal of Environmental Monitoring* **2007**, 9, 530-541.

Xie, Z; Ebinghaus, R.; Temme, C.; Caba, A. **"Concentrations and air-sea exchange fluxes of synthetic polycyclic musks in the North Sea and the Arctic"**; *Env. Science & Technol.* **2007**, 41 (16), 5654-5659.

Dreyer, A.; Temme, C.; Sturm, R.; Ebinghaus, R. **"Optimized Method avoiding solvent-induced Response Enhancement in the Analysis of volatile and semi-volatile polyfluorinated alkylated Compounds using GC-MS"**; *Journal of Chromatography A* **2008**, 1178, 199-205.

Jahnke, A.; Huber, S.; Temme, C.; Kylin, H.; Berger, U. **"Development and application of a simplified sampling method for volatile polyfluorinated alkyl substances (PFAS) in indoor and environmental air"**; *Journal of Chromatography A*, **2007**, 1164, 1-9.

Steffen, A.; Douglas, T.; Amyot, M.; Ariya, P.; Aspmo, K.; Berg, T.; Bottenheim, J.; Brooks, S.; Cobbett, F.; Dastoor, A.; Dommergue, A.; Ebinghaus, R.; Ferrari, C.; Gardfeldt, K.; Goodsite, M.E.; Lean, D.; Poulain, A.J.; Scherz, T.; Skov, H.; Sommar, J.; Temme, C. **"A synthesis of atmospheric mercury depletion event chemistry in the atmosphere and snow"**; *Atmos. Chem. Phys.*, **2008**, 8, 1445-1482.

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Jahnke, A.; Barber, J.L.; Jones, K.C.; Temme, C. **"Quantitative trace analysis of polyfluorinated alkyl substances (PFAS) in ambient air samples from Mace Head (Ireland): A method intercomparison"**; *Atmospheric Environment*, 2008, submitted.

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Ebinghaus, R.; Temme, C.; Kock, H.H.; Loewe, A.; Schroeder, W.H. **"Atmospheric cycling of mercury in polar regions"**; *RMZ - Materials and Geoenvironment* **2001**, 48(1), 32-36.

Ebinghaus, R.; Kock, H.H.; Temme, C. **"Einsatz von automatisierten Quecksilber-Luftanalysatoren in Umweltforschung und -monitoring"**; *VDI-Berichte* **2002**, 1656, 211-224, ISBN 3-18-091656-7.

Temme, C. **"Reaktionen des Quecksilbers und seiner Spezies in bodennahen Luftschichten der Antarktis"**; Dissertation, Universität Jena, Chemisch-Geowissenschaftliche Fakultät, Mai **2003**.

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Ebinghaus, R.; Temme, C.; Lindberg, S.E.; Scott, K. **“Springtime Accumulation of Atmospheric Mercury”**; In: Polar Ecosystems, *Journal de Physique* **2004**, 121, 195-208.

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Ebinghaus, R.; Temme, C. **„Ausbreitung von Schadstoffen in die Polarregionen“**; In: *Warnsignale aus den Polarregionen: Ein Überblick*, Hrsg.: Lozan, J.L.; Grassl, H.; Hupfer, P.; Piepenburg D., Universität Hamburg, 264-269, **2006**.

Presentations:

Temme, C.; Ebinghaus, R.; Lu, J.Y.; Schroeder, W.H. **„Sampling and analysis of total particulate mercury in ambient air“**; *Second EUROTRAC-2 MEPOP Workshop*, Geesthacht, Deutschland, 8-10 Februar **1999**.

Temme, C.; Ebinghaus, R. **“Measurements of atmospheric mercury in the Antarctic with special emphasis on springtime depletions and speciation during polar summer at a coastal site and over the south Atlantic ocean“**; *Arctic Atmospheric Mercury Research Workshop*, Toronto, Canada, 26-28 August **2002**.

Temme, C.; Ebinghaus, R. **„Measurements of atmospheric mercury species during Arctic springtime“**; *Koldewey-Seminar*, AWI-Potsdam, Deutschland, 28. November **2002**.

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Temme, C., Ebinghaus, R. **„Repeatability and reproducibility of data from different groups and locations in Ny-Alesund during the Hg-campaign 2003“**; *Workshop on Springtime Mercury Measurements in the Arctic at Ny-Alesund Site in 2003*, Rome, Italy, 20-21 November **2003**.



Temme, C. „**Spurenanalytik in Polargebieten – Als Chemiker den Schadstoffen auf der Spur**“; *GDCh-Kolloquium anlässlich der Verleihung des Procter & Gamble Preises*, Westfälische Wilhelms-Universität Münster, Deutschland, 31. Januar **2005**.

Temme, C.; Baukau, J.; Schneider, B.; Aspmo, K.; Fain, X.; Ferrari, C.; Gauchard, P.-A. „**Air/water exchange of mercury in the North Atlantic Ocean during Arctic summer**“; *Interdisciplinary Workshop for Research on Mercury in Polar Regions*, Toronto, Canada, August 29-31, **2005**.

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Temme, C.; Berger, K.; Bieber, E.; Eggert, A. „**Bestimmung persistenter organischer Luftverunreinigungen im Messnetz des Umweltbundesamtes**“; *VdI-Wissensforum Kolloquium „Neue Entwicklungen bei der Messung und Beurteilung der Luftqualität“*, Nürnberg, Deutschland, 24.-25. Juni, **2008**.

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Ebinghaus, R.; Kock, H.H.; Loewe, A.; Schmolke, S.R.; Temme, C. „**Determination of surface level concentrations of atmospheric mercury in Antarctica**“; *International Conference on Heavy Metals in the Environment*, Ann Arbor, Michigan, USA, 6-10 August **2000**.

Ebinghaus, R.; Kock, H.H.; Loewe, A.; Slemr, F.; Temme, C. „**Determination of surface level concentrations of atmospheric mercury in Antarctica**“; *EUROANALYSIS XI*, Lisbon, 3-9 September **2000**.

Ebinghaus, R.; Kock, H.H.; Temme, C. „**Entwicklung eines miniaturisierten Verfahrens zur Bestimmung von partikulär gebundenem Quecksilber in Umgebungsluft**“; *ANAKON*, Konstanz, Deutschland, 4-7 April **2001**.

Ebinghaus, R.; Kock, H.H.; Temme, C.; Löwe, A.G.; Schroeder W.H. „**Springtime depletion of atmospheric mercury in Antarctica**“; *MEPOP/AMAP/NMR Workshop*, Roskilde, Denmark, 10-12 September **2001**.



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Ebinghaus, R.; Temme, C.; Kock, H.H.; Loewe, A.; Richter, A.; Schroeder W.H.; Einax J.W. „**First annual time-series of atmospheric mercury concentration measurements at Neumayer Station, Antarctica**“; *EUROTRAC-2 Symposium 2002*, Garmisch-Partenkirchen, Deutschland, 11-15 März **2002**.

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Ebinghaus, R.; Temme, C. „**Seasonal behaviour of atmospheric mercury species in polar regions**“, *Seventh international conference on mercury as a global pollutant*, Ljubljana, Slovenia, 27.06. – 02.07. 2004.

Temme, C.; Ebinghaus, R. „**Aircraft measurements of atmospheric mercury over the Antarctic shelf ice and the Atka Bay**“, *Seventh international conference on mercury as a global pollutant*, Ljubljana, Slovenia, 27.06. – 02.07. 2004.



Jahnke, A.; Temme, C.; Ebinghaus, R.; Ruck, W. „**Perfluorinated organic compounds in the atmospheric environment**“, *GDCh-JCF Frühjahrssymposium 2004*, Heidelberg, Deutschland, 31.03. – 03.04. 2004.

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Berger, U.; Barber, J. L.; Jahnke, A.; Temme, C.; Jones, K. „**Analysis of fluorinated alkyl compounds in air samples from England**“, *International Symposium on Fluorinated Alkyl Organics in the Environment*, Toronto, Canada, August 18-20, 2005.

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Temme, C.; Ebinghaus, R.; Schwerin, A.; Bieber, E. „**Field Intercomparison of Mercury Measurements in Ambient Air and Precipitation within EMEP**“, *8th International Conference on Mercury as a Global Pollutant*, Madison, Wisconsin, USA, August 6-11, 2006.

Jahnke, A.; Berger, U.; Huber, S.; Kylin, H.; Temme, C. „**Using solid-phase extraction catridges for sampling of volatile polyfluorinated alkyl substances (PFAS) in indoor air**“, *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*, August 21-25, 2006.

Temme, C.; Jahnke, A.; Dreyer, A.; Ahrens, L.; Ebinghaus, R. „**Spurenanalytik von poly- und perfluorierten organischen Verbindungen in Luft und Wasser**“, *ANAKON*, Jena, Deutschland, 27-30 April, 2007.

Miscellaneous :

Reviewer for Environmental Science and Technology

Reviewer for Atmospheric Environment

Reviewer for Analytical and Bioanalytical Chemistry

Reviewer for Journal of Geophysical Research

Reviewer for Environmental Pollution

Reviewer for Science in the Total Environment

Reviewer for NSERC (the Natural Sciences and Engineering Research Council of Canada)