

Curriculum Vitae Dr. Roland E. Weber

Family Name: Weber, Dr.
Given Names: Roland Erich
Profession: Chemist; Environmental consultant
Nationality: German
Date and place of birth: 5. January 1967 in Laupheim (Germany)
Marital Status: Married; two children
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Key expertise and interests

- Persistent Organic Pollutants (POPs) including newly listed POPs under the Stockholm Convention and related national implementation plans.
- Research and research strategies on chlorinated, brominated and fluorinated POPs/PTS
- Inventories and action plans for PCDD/PCDF (Dioxins) and other unintentionally produced POPs (Stockholm Convention implementation).
- Best Available Technologies (BAT) and Best Environmental Practice (BEP) for reduction of PCDD/PCDF and other unintentionally produced Persistent Organic Pollutants (UPOPs).
- Chemicals and Sustainable Production & Consumption. Substitution of critical chemicals.
- Destruction of POPs (combustion and non-combustion technologies) and formation of Dioxins (PCDD/PCDF) and other pollutants.
- POPs contaminated sites (Editor POPs contaminated site series in ESPR)

Education:

03/1994 - 03/1996 PhD, Thesis "Synthesis, Analysis, Toxicology and Occurrence of fluorinated and chlorinated-fluorinated Dioxins, Dibenzofurans and Biphenyls" (University Tübingen; Institute of Organic Chemistry, Supervisor Prof. Dr. H. Hagenmaier)
10/1993 - 05/1996 Study of "Public law for scientists and engineers" at the University of Hagen. (Equivalent to bachelor degree)
10/1988 - 01/1994 Master (diploma) in chemistry (University of Tübingen/Germany)

Employment career:

Since 01/2003 Independent international consultant (POPs Environmental Consulting)
Since 01/2010 Visiting Professor; Department of Environmental Engineering, POPs Center, Tsinghua University, China (Stockholm Convention Center)
Since 07/2006 Visiting Professor at the MTM Research Center, University Örebro/Sweden
05/97-12/2002 Employee in IHI Co. Ltd. (Yokohama, Japan, www.ihico.jp/index-e.html) (Management dioxin laboratory, R & D Dioxin reduction and POPs destruction)
03/96-04/1997 Post doc at the University Tübingen (Formation mechanisms of PCDD/PCDF)

Consultancies for governmental bodies and UN organisations:

Since 08/2013	Publication “Alternatives to POPs chemicals” (for SC Secretariat)
Since 03/2013	Member of the SwitchMed Expert Group for “Switching to more sustainable consumption and production in the Mediterranean” (for CP/RAC Spain)
Since 02/2013	IPOP Project Dioxin reduction from open burning in the Philippines (for World Bank; Subcontract to Witteveenbos)
Since 11/2012	Updating SC National Implementation Plans (Mongolia, Turkey, Philippines, Indonesia, Sudan, Tanzania) (for UNIDO)
Since 10/2012	R&D project “Environmental contamination of Dioxin and PCB and interlink to food contamination” (for German Environmental Ministry/ Agency)
Since 09/2011	Consultancy on international chemical management (for GIZ)
04/2012 – 04/2013	Monitoring of new listed POPs in articles and products. Support for the Basel and Stockholm Convention Centre China (for BRS Conv. Secretariat and GIZ)
12/2011 – 07/2012	Pilot country workshops for updating Stockholm Convention NIPs for newly listed POPs (Algeria, China, India, Nigeria, Serbia) (for SC Secretariat)
12/2011-12/2012	Consultancy for updating the SC Dioxin Toolkit (for SC Secretariat)
07/2011-08/2012	Lead author/co-author of Guidelines for supporting the implementation of newly listed POPs in the Stockholm Convention (for UNITAR & UNIDO)
07/2011-03/2012	Developing chemical criteria for Ecolabel and Green Public Procurement (For the European Commission Joint Research Center IPTS Seville)
07/2011-10/2011	FSP development for POPs management in Egypt (for WB; with Tauw)
05/2011-12/2011	1 st pilot project on inventory of newly listed POPs Nigeria (for SC Secretariat)
04/2011-01/2013	Dioxin/Furan inventory and NIP development Zimbabwe (for UNEP)
11/2010	Invited expert at POPs Reviewing Committee meeting (for SC Secretariat)
01/2010-10/2010	Technical paper on PBDEs newly listed in the Convention (for SC Secretariat with Alan Watson; UNEP/POPS/POPRC.6-2, UNEP/POPS/POPRC.6/INF/6)
09/2010	Summary report on the questionnaire survey on new POPs PBDE and PFOS from parties and observers (for Stockholm Convention Secretariat & POPRC)
03/2009-04/2011	Hazardous chemical/waste management Egypt (EU Twinning project, for GIZ)
03/2009 – 06/2011	Dioxin/Furan inventory and NIP development Suriname (for UNDP)
10/2009-12/2009	Integrating Pollution Prev. and Control and Stockholm Convention (UNIDO)
02/2009	Refining of National Implementation Plan for UPOPs Serbia (for UNEP)
09/2008 – 03/2009	EU Life project on hazardous waste management Turkey (for GTZ)
10/2008	Refining of National Implementation Plan for UPOPs Montenegro (for UNEP)
2007/2008	Dioxin/Furan Inventory Turkey; support finalising the NIP (for UNIDO)
2007/2008	Dioxin/Furan Inventory Vietnam; BAT/BEP project development for UPOPs reduction Vietnam (MSP for UNIDO)
08/2005 - 02/2006	Stockholm Convention BAT/BEP and NIP consultancy Sudan (for UNDP)
Since 2004	Dioxin/Furan Inventories and NIP support for Montenegro, Serbia, Sudan, Suriname, Turkey, Uganda, Vietnam & Zimbabwe (Stockholm Convention consultancy UNDP, UNEP, UNIDO for respective environmental ministries).
2003	Minimisation strategies for PCDD/PCDF emission from waste incineration. Chemical Risk Assessment (Risk Management Handbook, AIST, Japan)
2002	Regulations and status of hospital waste management in Germany (For Japan Waste Management Experts; Co-operation with German Env. Agency (UBA))
1997-1998	Evaluation historical input of PCDD/F in Japan (Prof. Sakai, NIES, Japan)

Research and Research Cooperations:

- Since 2011 (ongoing) Formation of dioxin-like compounds from Chlorpyrifos (Osaka University).
- Since 2009 (ongoing) PBDE, other BFRs and PBDD/F in E-waste (cooperation Basel Convention Center Nigeria; Fraunhofer Institute Germany; Umea University/Sweden).
- Since 2005 (ongoing) Research/documentation of global POPs contaminated sites (selected partners)
- 2000-2012 Historical PCDD/F inputs and their source implication in Queensland, Australia (National Centre for Environmental Toxicology, Queensland, Australia).
- 2008/2009 Assessment of chlorinated and brominated Dioxin pollution of an e-waste village in Guiyu/China (with Prof. Ming Wong, Baptist University, Honkong).
- 2007/2008 Assessment of PFOS/PFOA sources for contamination of a German river system and drinking water reservoir (BUND, Germany).
- 2004-2007 Research on PCDD/PCDF formation in thermal processes in dependence on inorganic matrices (Czech Academy of Science, Prague, Czech Republic).
- 2002 – 2003 Forest fires as a potential PCDD/F source in Queensland, Australia (National Research Centre for Environmental Toxicology, Queensland, Australia).
- 1997-1999 Evaluation historical input of PCDD/F in Japan (Kyoto University; Japan).
- 1993-1996 Evaluation of the relevance of fluorinated and fluorinated-chlorinated dibenzodioxins and dibenzofurans in technical processes and assessment of their toxicity (with Institute of Toxicology, Univ. Tübingen; Prof. Schrenk).
- 1993-1994 Development of the trace analysis for fluorinated Dioxin and Furans.

Further Activities in the international community of POPs/PTS research

- Member of the UNEP PCDD/PCDF Toolkit group (since 2006) and now BAT/BEP (since 2012).
- Chair of the session “Remediation Methods and Control Techniques” DIOXIN 2004.
- Chair of session “Contaminated sites – cases, remediation, risk and policy” & related at DIOXIN Conference Series 2006 - 2013 (26th to 33th International Symposium on Halogenated POPs).
- International advisory board ISWA final sink Conference (2013); ISWA World 2016
- Editor Board Environmental Science Pollution Research (ESPR)
- Member of the ISO Group analysis brominated flame retardants (ISO/TC 146/SC 6/WG 22)
- Member VDI (Community of German Engineers) development analytical standard for POPs.
- Reviewer for scientific journals: ES&T, ESPR, Chemosphere, Environmental Pollution, Environmental International, Hazardous Materials, Waste Management and others.

Experience in industry and co-operation with industry (including R&D):

- Since 2004 Consulting on long term monitoring of PCDD/PCDF and other UPOPs with AMESA System (Environnement SA, Germany)
- 2004/2005 Consulting on destruction of POPs (Prantner GmbH Verfahrenstechnik, Reutlingen, Germany) <http://www.prantner.de/index.html>
- 1997-2006 BAT/BEP strategies for municipal waste incinerators and hazardous waste incinerators in respect to PCDD/PCDF and other UPOPs emission reduction (IHI Co., Ltd. Yokohama and Tokyo, Japan) <http://www.ihico.jp/en/index.html>
- 1999-2003 Research & development work on formation and destruction of POPs (PCB, PCDD/F, PCP, PCBz) in technical processes (IHI Co., Ltd. Yokohama, Japan).

1998-2002	Development and improvement of catalytic filters (REMEDIA) for PCDD/PCDF destruction (W.L. Gore & Associates, Inc., Elkton, USA)
2001-2003	Formation of brominated and brominated-chlorinated PXDD/PXDF in thermal processes. (IHI Co., Ltd. Yokohama, Japan)
1999-2002	Research and development of catalytic destruction of PCDD/PCDF and PCB on fly ashes (Hitachi Zoosen, Osaka & IHI Co. Ltd. Tokyo Japan,).
1997-2005	BAT implementation in approx. 20 municipal waste incinerators and hazardous waste incinerators reduction of PCDD/PCDF emission (IHI Co., Ltd. Yokohama and Tokyo, Japan).
1999 - 2003	Research and development on reduction and destruction of POPs in technical processes (IHI Co., Ltd. Yokohama, Japan).
1997-2003	Establishment/management of a dioxin research laboratory (IHI Co., Ltd.)
1996-1999	Formation mechanisms of PCDD/PCDF in thermal and industrial processes (IHI Co., Ltd. Yokohama/Japan, University Tübingen/Germany).
1995-1996	Evaluation of potential release of fluorinated and chlorinated-fluorinated PXDD/PXDF from Aluminium industry (facilities in Germany and Norway).

Civil society activities

Ambassador of the International HCH & Pesticides Association (IHPA) (www.ihpa.info).

Member of the International Panel on Chemical Pollution (IPCP) (<http://www.ipcp.ch>)

Board member of the NGO “SOL” (People for Solidarity, Ecology & Lifestyles)

(www.nachhaltig.at/) member of the Norther Alliance .

Board member of the NGOs Aufbruch (Germany) for “sustainable lifestyle” (www.anders-besser-leben.de), awarded UNESCO project UN Decade for “Education for Sustainable Development”.

Guidelines/Guidances and reports for UN agencies and POP Reviewing Committee

1. Stockholm Convention (2013) Guidance on Sampling, Screening and Analysis of Persistent Organic Pollutants in Products and Articles; Draft; (Lead Author)
2. Stockholm Convention (2012) Guidelines on Best Available Techniques and Best Environmental Practice for the Recycling and Disposal of Articles containing Polybrominated Diphenyl Ethers (PBDEs) under the Stockholm Convention on POPs (Lead author)
3. Stockholm Convention (2012) Guidance for strengthening regulatory framework/voluntary agreements for monitoring of products/articles that may contain new POPs (Lead author).
4. Stockholm Convention (2012) Guidance for the Inventory of commercial Pentabromodiphenyl ether (c-PentaBDE), commercial Octabromodiphenyl ether (c-OctaBDE) and Hexabromobiphenyls (HBB) under the Stockholm Convention on Persistent Organic Pollutants (co-author)
5. UNEP (2010) Technical review of the implications of recycling commercial penta and octabromodiphenyl ethers. Stockholm Convention document for 6th POP Reviewing Committee meeting (UNEP/POPS/POPRC.6/2) Geneva 11-15. October 2010.
6. UNEP (2010) Supporting Document for Technical review of the implications of recycling commercial penta and octabromodiphenyl ethers. Stockholm Convention document 6th POP Reviewing Committee meeting (UNEP/POPS/POPRC.6/INF/6) Geneva 11-15. Oct. 2010.
7. UNEP (2010) Debromination of brominated flame retardants. Stockholm Convention document for 6th POP Reviewing Committee meeting (UNEP/POPS/POPRC.6/INF/20) Geneva 11-15. October 2010
8. UNEP (2010) Additional consideration of new persistent organic pollutants: pentachlorobenzene. Stockholm Convention document for 6th POP Reviewing Committee meeting (UNEP/POPS/POPRC.6/INF/21) Geneva 11-15. October 2010.

Selected Publications (from ca. 140 reviewed papers):

In Book

1. R. Weber. Minimisation strategies for PCDD/PCDF emission in waste incineration. Chemical Risk Assessment Handbook, Asakura publisher, 2003 (In Japanese).

Review Articles and editorials

2. Weber R, Aliyeva G, Vijgen J. (2013) The need for an integrated approach to the global challenge of POPs management. *Environ Sci Pollut Res Int*. DOI 10.1007/s11356-012-1247-8
<http://link.springer.com/article/10.1007%2Fs11356-012-1247-8?LI=true>
3. R. Weber, A. Watson, M. Forter, F. Oliaei. (2011) Persistent Organic Pollutants and Landfills - A Review of Past Experiences and Future Challenges. *Waste Management & Research* 29 (1) 107-121
4. J. Vijgen, P.C. Abhilash, Y-F Li, R. Lal, M. Forter, J. Torres, N. Singh, M. Yunus, C. Tian, A. Schäffer, R. Weber* (2011) HCH as new Stockholm Convention POPs – a global perspective on the management of Lindane and its waste isomers. *Env Sci Pollut Res*. DOI: 10.1007/s11356-010-0417-9.
5. Klánová J, Diamond M, Jones K, Lammel G, Lohmann R, Pirrone N, Scheringer M, Balducci C, Bidleman T, Bláha K, Bláha L, Booiij K, Bouwman H, Breivik K, Eckhardt S, Fiedler H, Garriques P, Harner T, Holoubek I, Hung H, MacLeod M, Magulova K, Mosca S, Pistocchi A, Simonich S, Smedes F, Stephanou E G, Sweetman A, Šebková K, Venier M, Vighi M, Vrana B, Wania F, Weber R, Weiss P (2011) Identifying the research and infrastructure needs for the global assessment of hazardous chemicals 10 years after establishing the Stockholm Convention. *Environ. Sci. Technol.* 45, 7617–7619.
6. S.D. Shaw, A. Blum, R. Weber, K. Kannan, D. Rich, D. Lucas, C. P. Koshland, D. Dobraca, S. Hanson, L. S. Birnbaum Halogenated Flame Retardants: Do the Fire Safety Benefits Justify the Risks? *Reviews on Environmental Health* (2010) 25(4) 261-305.
7. R. Weber, M. Tysklind, C. Gaus, P. Johnston, M. Forter, H. Hollert, H. Heinisch, I. Holoubek, M. Lloyd-Smith, S. Masunaga, P. Moccarelli, D. Santillo, N. Seike, R. Symons, J.P.M. Torres, M. Verta, G. Varbelow, J. Vijgen, A. Watson, P. Costner, J. Woelz, P. Wycisk, M. Zennegg. Dioxin- and POP-contaminated sites—contemporary and future relevance and challenges. *Env Sci Pollut Res* 15, 363-393 (2008).
8. R. Weber. Relevance of PCDD/PCDF Formation for the Evaluation of POPs Destruction Technologies – Review on Current Status and Assessment Gaps. *Chemosphere* 67, 109-117 (2007).
9. R. Weber and B. Kuch. Relevance of BFRs and thermal conditions on the formation pathways of brominated and brominated-chlorinated dibenzodioxins and dibenzofurans. *Environment International* 29, 699-710 (2003).

Other publications in Scientific Journals

10. Sindiku O, Orata F, Osibanjo O, Weber R (2013) Per- and Polyfluoroalkyl Substances in selected Sewage Sludge in Nigeria. *Chemosphere* 92, 329-335.
11. Wagner BO, Aziz ER, Schwetje A, Shouk FA, Koch-Jugl J, Braedt M, Choudhury K, Weber R* (2013) Recommendations on chemicals management policy and legislation in the framework of the Egyptian-German twinning project on hazardous substances and waste management. *Environ Sci Pollut Res Int*. DOI 10.1007/s11356-013-1523-2
12. Vijgen J, Aliyeva G, Weber R (2012) The Forum of the International HCH and Pesticides Association—a platform for international cooperation. *Env Sci Pollut Res*. DOI: 10.1007/s11356-012-1170-z
13. Weber R., Varbelow G (2012) The Dioxin/POPs legacy of pesticide production in Hamburg: Part 1 Securing of the production area. *Env Sci Pollut Res*. DOI: 10.1007/s11356-012-1011-0
14. Götz R, Sokollek V, Weber R* (2012). The Dioxin/POPs legacy of pesticide production in Hamburg: Part 2: Waste deposits and remediation of Georgswerder landfill. *Env Sci Pollut Res*. DOI: 10.1007/s11356-012-0986-x..
15. Holt E, Weber R, Stevenson G, Gaus C* (2012) Formation of dioxins during exposure of pesticide formulations to sunlight. *Chemosphere*, Epub ahead of print 17. Apr 2012.
16. Huang J, Matsumura T, Yu G, Deng S, Yamauchi M, Yamazaki N, Weber R (2011) Determination of PCBs, PCDDs and PCDFs in insulating oil samples from stored Chinese electrical capacitors. *Chemosphere* 85, 239-246.
17. Holt E, R Weber, G Stevenson, C Gaus. Polychlorinated Dibenzo-*p*-Dioxins and Dibenzofurans Impurities in Pesticides: A Neglected Source of Contemporary Relevance, *Environ. Sci. Technol* 44, 5409–5415 (2010).
18. S Jit, M Dadhwal, H, Kumari S Jindal, Kaur J, Lata P, Niharika N, Lal D, Garg N, Gupta SK, Sharma P, Bala K, Singh A, Vijgen J, Weber R, Lal R Evaluation of hexachlorocyclohexane contamination from the last Lindane production plant operating in India. *Env Sci Pollut Res* (2010) *Env Sci Pollut Res* 18(4), 586-597.
19. Reinmann J., Weber R., Haag R.. Long-term monitoring of PCDD/PCDF and other unintentionally produced POPs – Concepts and case studies from Europe. *Science in China -Chemistry* 53, 1017-1024 (2010).
20. R. Weber, A. Watson, T. Webster. PBDEs as “New POPs” – Challenges and knowledge gaps of controlling PBDEs under the Stockholm Convention. *Organohalogen Compd.* 72 1493-1496, 2010.
21. Adu-Kumi S, Malisch R, Alexander Kotz, Kypke K, Asante KA, Takahashi S, Tanabe S Takasuga T, Clarke E, Weber R Levels of POPs in human breast milk samples from Ghana. *Organohalogen Compounds* 72, 1046-1049 (2010)
22. R Weber, I Bantz, M Klumbies, I Valentin, P Fantke. PFOS/PFC pollution from use of fire fighting foam in a major fire in Düsseldorf/Germany – human exposure and regulatory actions. *Organohalogen Compd* 72, 1005-1008).
23. M. Zennegg, X. Yu, M. H. Wong, R. Weber. Fingerprints of chlorinated, brominated and mixed halogenated dioxins at two e-waste recycling sites in Guiyu/China. *Organohalogen Compounds* 71 2263-2267 (2009).

24. E. Holt, R. von der Recke, W. Vetter, D. Hawker, V. Alberts, B. Kuch, R. Weber, C. Gaus. Assessing dioxin precursors in pesticide formulations as a source of OCDD in soil. *Environ. Sci. Technol.* 42, 1472–1478 (2008).
25. Wölz J, Engwall M, Maletz S, Olsmann H, van Bavel B, Kammann U, Klempt, M, Weber R, Braunbeck T, Hollert H Changes in toxicity and dioxin-like activity of suspended particulate matter during flood events at the rivers Neckar and Rhine. *Environ Sci Pollut Res.* (2008), DOI 10.1007/s11356-008-0056-6
26. P. Kröfges, D. Skutlarek, H. Färber, C. Baitinger, I. Gödeke, R. Weber. PFOS/PFOA Contaminated Megasites in Germany Polluting the Drinkingwater Supply of Millions of People. *Organohalogen Compd.* 69, 877-880 (2007).
27. V. Pekárek, R. Weber, R. Grabic, O. Šolcová, E. Fišerová, M. Šyc, J. Karban, Matrix Effect on the De Novo Synthesis of Polychlorinated Dibenzo-p-dioxins, Dibenzofurans, Biphenyls and Benzenes. *Chemosphere* 68, 51-61 (2007).
28. R. Weber, 26th International Symposium on Halogenated Environmental Organic Pollutants and POPs (Dioxin 2006), *ESPR*, 14 (1), 72-73 (2007).
29. R. Weber, P. A. Behnisch, A. Brouwer, B. van Bavel, G. Lindstroem, M. Zennegg, B. Schillinge, O. Paepke, Contemporary relevance of dioxin and dioxin-like compound contaminations in residues from recycling of HCH waste. *Organohalogen Compd.*, 68, 905-910 (2006).
30. W. Otto, H. Schönberger, D. Burger, R. Weber. Case study on remediation of a German city contaminated by a chloralkali plant and PCP production. *Organohalogen Compd.*, 68, 880-885 (2006).
31. B. Kuch, C. Schneider, J. W. Metzger, R. Weber. Hexabromobenzene and Pentabromophenol in German Sewage Sludge – Indication of Significant Commercial Use. *Organohalogen Compd.*, 67, 434-437 (2005).
32. R. Weber. On-line PCDD/F and PCDD/F surrogate monitoring – basic difficulties due to formation characteristics, memory effects and removal efficiency of air pollution control devices. *Organohalogen Compd.*, 67, 321-325 (2005).
33. T. Sakurai, R. Weber, S. Ueno, J. Nishino, M. Tanaka. Relevance of Coplanar-PCBs for TEQ Emission of Fluidized Bed Incineration and Impact of Emission Control Devices. *Chemosphere*, 53, 619-625 (2003).
34. J. A. Prange, C. Gaus, R. Weber, O. Pöpke, J. F. Müller. Assessing forest fires as a potential PCDD/F source in Queensland, Australia. *Environ. Sci. Technol.*, 37, 4329-4329 (2003).
35. T. Nakano, C. Matsumura, R. Weber. Analysis of low brominated PBDD/F - Analysis of MBDD/MBDF to T3BDD/T3BDF on a SP2331 – column. *Organohalogen Compd.* 60, 379-382 (2003).
36. R. Weber, S. Yoshida, K. Miwa. PCB destruction in subcritical and supercritical water - evaluation of PCDF formation and initial steps of degradation mechanism. *Environ. Sci. Technol.* 36 (8), 1833-1838 (2002).
37. R. Weber, K. Nagai, J. Nishino, H. Shiraishi, M. Ishida, T. Takasuga, K. Kondo and M. Hiraoka. Effect of selected metal oxides on dechlorination and destruction of PCDD and PCDF. *Chemosphere*, 46, 1255-1262 (2002).
38. R. Weber, T. Sakurai, S. Ueno, J. Nishino. Correlation of PCDD/F and CO values in MSW Incinerator - indication of memory effects in the high temperature/cooling section. *Chemosphere* 49, 127-134 (2002).
39. C. Gaus, G.J. Brunskill, D. W. Connell, J. Prange, J. F. Mueller, O. Paepke and R. Weber. Transformation processes, pathways, and possible sources of distinctive polychlorinated dibenzo-p-dioxin signatures in sink environments. *Environ. Sci. Technol.* 36 3542-3549 (2002).
40. R. Weber, B. Kuch, T. Ohno, T. Sakurai. De novo synthesis of mixed brominated-chlorinated PXDD/PXDF. *Organohalogen Compd.* 56, 181-184 (2002).
41. R. Weber, T. Sakurai. Low temperature decomposition of PCBs by TiO₂-based V₂O₅-WO₃ catalyst. *Applied Catalysis* 34 (2), 113-127 (2001).
42. C. Gaus, G. J. Brunskill, R. Weber, O. Pöpke, J. F. Müller. Historical PCDD inputs and their source implication from dated sediment cores in Queensland (Australia). *Environ. Sci. Technol.* 35, 4597-4603 (2001).
43. R. Weber, M. Plinke, Z. Xu, M. Wilken. Destruction Efficiency of Catalytic Filters for Polychlorinated Dibenzo-p-dioxin and Dibenzofurans in Laboratory Test and Field Operation - Insight into Destruction and Adsorption Behavior of Semivolatile Compounds. *Applied Catalysis B: Environmental* 31 (3), 195-207 (2001).
44. R. Weber, T. Sakurai. PCDD/F formation characteristics during pyrolysis processes. *Chemosphere* 45, 1111-1117 (2001).
45. R. Weber, F. Iino, T. Imagawa, M. Takeuchi, T. Sakurai and M. Sadakata. Formation of PCDF, PCDD, PCB, and PCN in *de novo* synthesis from PAH: mechanisms & correlation to fluidized bed incinerators. *Chemosphere* 44, 1429-1438 (2001).
46. R. Weber, H. Hagenmaier. PCDD/PCDF Formation in Fluidized Bed Incineration. *Chemosphere* 38, 2643-2654 (1999).
47. R. Weber, S. Sakurai, and H. Hagenmaier. Low temperature decomposition of PCDD/PCDF, chlorobenzenes and PAHs by TiO₂-based V₂O₅-WO₃ catalysts. *Applied Catalysis B: Environmental* 20, 249-256 (1999).
48. K. Nakamura, H. Minami, R. Weber, T. Takasuga and S. Sakai. Destruction of Chlorofluorocarbons (CFCs) in municipal waste incineration plants and behavior of organohalogen compounds. *Organohalogen Compd.*, 40, 559-562 (1999).
49. R. Weber and H. Hagenmaier. Mechanism of the Formation of Polychlorinated Dibenzo-p-dioxins and Dibenzofurans from Chlorophenols in Gas Phase Reactions. *Chemosphere*, 38, 529-549 (1999).
50. R. Weber and H. Hagenmaier. Synthesis and Analysis of Mixed Chlorinated-Fluorinated Dibenzo-p-dioxins and Dibenzofurans and Assessment of Formation and Occurrence of the Fluorinated and Chlorinated-Fluorinated Dibenzo-p-dioxins and Dibenzofurans. *Chemosphere*, 34, 13-29 (1997).
51. R. Weber, H.-J. Schmitz, D. Schrenk and H. Hagenmaier. Metabolic Degradation, Inducing Potency, and Metabolites of Fluorinated and Chlorinated-Fluorinated Dibenzodioxins and Dibenzofurans. *Chemosphere*, 34, 29-41 (1997).