

## Published Papers and Talks

S. H. Korzeniowski

1. Armitage, J., Cousins, I.T., Buck, R.C., Prevedouros, K., Russell, M.H., MacLeod, M., Korzeniowski, S.H., 2006. Modeling Global-Scale Fate and Transport of Perfluorooctanoate Emitted from Direct Sources. *Environmental Science & Technology* 40, 6969-6975.
2. Beadle, J.R., Korzeniowski, S.H., Rosenberg, D.E., Garcia-Slanga, B.J., Gokel, G.W., 1984. Phase-transfer-catalyzed Gomberg-Bachmann synthesis of unsymmetrical biarenes: A survey of catalysts and substrates. *Journal of Organic Chemistry* 49, 1594-1603.
3. Buck, R.C., Korzeniowski, S.H., Russell, M.H., Berti, W.R., Wang, N., Szostek, B., Powley, C.R., 2006. Perfluorocarboxylates in the environment: Can we explain where they come from? American Chemical Society, pp. ENVR-114.
4. Conder, J.M., Wenning, R.J., Buck, R.C., Korzeniowski, S.H., Hoke, R.H., Powley, C., Russell, M.H., Gentry, R., Washburn, S.T., 2006. Model for predicting perfluorinated carboxylates in an arctic food chain. *Organohalogen Compd.* 68, 57-60.
5. Cortina, T., Korzeniowski, S., 2008a. AFFF Positioned to Exceed Environmental Goals. *Asia-Pacific Fire Magazine* June, 18-22.
6. Cortina, T., Korzeniowski, S., 2008b. Firefighting Foams - Reebok Redux. *Industrial Fire Journal* April, 18-20.
7. Cousins, I.T., Armitage, J., Buck, R.C., Prevedouros, K., Russell, M.H., MacLeod, M., Korzeniowski, S.H., 2006. Investigation of the environmental distribution and Arctic transport of perfluorooctanoate through the application of a global mass balance model. *Organohalogen Compd.* 68, 679-682.
8. Fasano, W.J., Carpenter, S.C., Gannon, S.A., Snow, T.A., Stadler, J.C., Kennedy, G.L., Buck, R.C., Korzeniowski, S.H., Hinderliter, P.M., Kemper, R.A., 2006. Absorption, Distribution, Metabolism, and Elimination of 8-2 Fluorotelomer Alcohol in the Rat. *Tox. Sci.* 91, 341-355.
9. Fasano, W.J., Carpenter, S.C., Gannon, S.A., Snow, T.A., Stadler, J.C., Kennedy, G.L., Buck, R.C., Korzeniowski, S.H., Hinderliter, P.M., Kemper, R.A., 2008a. Absorption, distribution, metabolism, and elimination of 8-2 fluorotelomer alcohol in the rat. [Erratum to document cited in CA145:308307]. *Toxicol. Sci.* 102, 455.
10. Fasano, W.J., Carpenter, S.C., Gannon, S.A., Snow, T.A., Stadler, J.C., Kennedy, G.L., Buck, R.C., Korzeniowski, S.H., Hinderliter, P.M., Kemper, R.A., 2008b. Absorption, distribution, metabolism, and elimination of 8-2 fluorotelomer alcohol in the rat. [Erratum to document cited in CA145:308307]. *Toxicological Sciences* 102, 455.
11. Fasano, W.J., Carpenter, S.C., Gannon, S.A., Snow, T.A., Stadler, J.C., Kennedy, G.L., Buck, R.C., Korzeniowski, S.H., Hinderliter, P.M., Kemper, R.A., 2008c. Absorption, distribution, metabolism, and elimination of 8-2 fluorotelomer alcohol in the rat. [Erratum to document cited in CA145:308307]. *Toxicol. Sci.* 102, 455.
12. Fasano, W.J., Carpenter, S.C., Gannon, S.A., Snow, T.A., Stadler, J.C., Kennedy, G.L., Buck, R.C., Korzeniowski, S.H., Hinderliter, P.M., Kemper, R.A., 2008d. Erratum: Absorption, distribution, metabolism, and elimination of 8-2 fluorotelomer alcohol in the rat (*Toxicological Sciences* (2006) vol. 91 (341-355 10.1093/toxsci/kfj160)). *Toxicological Sciences* 102, 455.
13. Gokel, G.W., Ahern, M.F., Beadle, J.R., Blum, L., Korzeniowski, S.H., Leopold, A., Rosenberg, D.E., 1985. Applications of phase transfer catalysis to arenediazonium cation chemistry. *Isr. J. Chem.* 26, 270-276.
14. Gokel, G.W., Korzeniowski, S.H., Blum, L., 1977. Crown-cation complex effects. IV. Crown ether and quaternary ion mediated displacements in aryldiazonium compounds. *Tetrahedron Letters* 18, 1633-1635.
15. Hendry, L.B., Korzeniowski, S.H., Hindenlang, D.M., Kosarych, Z., Mumma, R.O., Jugovich, J., 1975a. An economical synthesis of the major sex attractant of the oak leaf roller-cis-10-tetradecenyl acetate. *Journal of Chemical Ecology* 1, 317-322.

16. Hendry, L.B., Korzeniowski, S.H., Hindenlang, D.M., Kosarych, Z., Mumman, R.O., Jugovich, J., 1975b. Economical synthesis of the major sex attractant of the oak leaf roller, cis-10-tetradecenyl acetate. *J. Chem. Ecol.* 1, 317-322.
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18. Hendry, L.B., Wichmann, J.K., Hindenlang, D.M., Weaver, K.M., Korzeniowski, S.H., 1976b. Plants - the origin of kairomones utilized by parasitoids of phytophagous insects? *J. Chem. Ecol.* 2, 271-283.
19. Hendry, L.B., Wichmann, J.K., Hindenlang, D.M., Weaver, K.M., Korzeniowski, S.H., 1976c. Plants - the origin of kairomones utilized by parasitoids of phytophagous insects? *Journal of Chemical Ecology* 2, 271-283.
20. Himmelstein, M., Slezak, B., Buck, R., Korzeniowski, S., Decker, E., 2008. Sodium perfluorohexanoate pharmacokinetics in rats during and after 90-day gavage administration. *The Toxicologist— An official Journal of the Society of Toxicology* 102, 196.
21. Hoke, R.A., Ferrell, B.D., Ryan, T., Sloman, T.L., Green, J.W., Nabb, D.L., Mingoia, R., Buck, R.C., Korzeniowski, S.H., 2015. Aquatic hazard, bioaccumulation and screening risk assessment for 6:2 fluorotelomer sulfonate. *Chemosphere* 128, 258-265.
22. Hudrlik, P.F., Rudnick, L.R., Korzeniowski, S.H., 1973. Synthesis of  $\alpha$ -methylene- $\gamma$ -butyrolactones by rearrangements of functionally substituted cyclopropanes. *J. Amer. Chem. Soc.* 95, 6848-6850.
23. Korzeniowski, S., 2013. Biodegradation, toxicology and biomonitoring of AFFF short-chain chemistry. *Industrial Fire Journal* 93, 41-42.
24. Korzeniowski, S.H., 1978. Reactivity and reactions of aryldiazonium ions in nonpolar media. p. 172 pp.
25. Korzeniowski, S.H., 1984. Fluorine-containing copolymers. du Pont de Nemours, E. I., and Co., USA . p. 22 pp.
26. Korzeniowski, S.H., 2002a. Overview of the descriptive biology and environmental aspects of fluorotelomer-based polymers and surfactants. *Proc. Annu. Meet. Tech. Program FSCT 80th*, 568-572.
27. Korzeniowski, S.H., 2002b. Overview of the descriptive biology and environmental aspects of fluorotelomer-based polymers and surfactants. *Proc. Annu. Meet. Tech. Program FSCT 80th*, 568-572.
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29. Korzeniowski, S.H., Blum, L., Gokel, G.W., 1977a. Crown-cation complex effects. VI. A phase transfer catalytic synthesis of unsymmetrical biaryls. *Tetrahedron Letters* 18, 2918.
30. Korzeniowski, S.H., Blum, L., Gokel, G.W., 1977b. Crown-cation complex effects. VI. a phase transfer catalytic synthesis of unsymmetrical biaryls. *Tetrahedron Letters* 18, 1871-1874.
31. Korzeniowski, S.H., Blum, L., Gokel, G.W., 1977c. Reduction of aryldiazonium compounds in nonpolar media. *Journal of Organic Chemistry* 42, 1469-1470.
32. Korzeniowski, S.H., Gokel, G.W., 1977a. Crown-cation complex effects. IX. A phase transfer catalytic synthesis of bromo- and iodoarenes. *Tetrahedron Letters* 18, 3519-3522.
33. Korzeniowski, S.H., Gokel, G.W., 1977b. Crown-cation complex effects. V. Reactions of aryldiazonium ions in nonpolar media. *Tetrahedron Letters* 18, 1637-1640.
34. Korzeniowski, S.H., Leopold, A., Beadle, J.R., Ahern, M.F., Sheppard, W.A., Khanna, R.K., Gokel, G.W., 1981. Crown cation complex effects. 12. Dissolution and complexation of arenediazonium

- cations in nonpolar media. An assessment of solvent effects and reactivity by infrared and nuclear magnetic resonance spectroscopy. *Journal of Organic Chemistry* 46, 2153-2159.
35. Korzeniowski, S.H., Petcavich, R.J., Coleman, M.M., Gokel, G.W., 1977d. Crown-cation complex effects. VII. Spectral studies of aryldiazonium ions in nonpolar solutions. *Tetrahedron Letters* 18, 2647-2650.
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37. Larsen, B.S., Stchur, P., Szostek, B., Bachmura, S.F., Rowand, R.C., Prickett, K.B., Korzeniowski, S.H., Buck, R.C., 2006. Method development for the determination of residual fluorotelomer raw materials and perfluorooctanoate in fluorotelomer-based products by gas chromatography and liquid chromatography mass spectrometry. *J.Chrom. A* 1110, 117-124.
38. Loveless, S.E., Slezak, B., Serex, T., Lewis, J., Mukerji, P., O'Connor, J.C., Donner, E.M., Frame, S.R., Korzeniowski, S.H., Buck, R.C., 2009. Toxicological evaluation of sodium perfluorohexanoate. *Toxicology* 264, 32-44.
39. Prevedouros, K., Cousins, I.T., Buck, R.C., Korzeniowski, S.H., 2006. Sources, fate and transport of perfluorocarboxylates. *Environmental Science and Technology* 40, 32-44.
40. Rosenberg, D.E., Beadle, J.R., Korzeniowski, S.H., Gokel, G.W., 1980a. Conversion of arenediazonium tetrafluoroborates into unsymmetrical biaryls using catalysts other than polyethers. *Tetrahedron Letters* 21, 4141-4144.
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42. Serex, T.L., Himmelstein, M., Carpenter, C., Buck, R.C., Korzeniowski, S.H., 2008. Evaluation of biopersistence potential among classes of polyfluorinated chemicals using a mammalian screening method. Poster #958. *The Toxicologist— An official Journal of the Society of Toxicology* 102, 199 (Abstract # 958).
43. Slezak, B.P., Serex, T.L., Loveless, S.E., Buck, R.C., Korzeniowski, S.H., 2009. Sodium perfluorohexanoate: Oral repeated dose subchronic, one-generation reproduction, genotoxicity and developmental toxicology. *Reproductive Toxicology* 27, 424.
44. Wang, N., Liu, J., Buck, R.C., Korzeniowski, S.H., Wolstenholme, B.W., Folsom, P.W., Sulecki, L.M., 2011. 6:2 Fluorotelomer sulfonate aerobic biotransformation in activated sludge of waste water treatment plants. *Chemosphere* 82, 853-858.
45. Yarwood, G., Kembal-Cook, S., Keinath, M., Waterland, R.L., Korzeniowski, S.H., Buck, R.C., Russell, M.H., Washburn, S.T., 2007. High-Resolution Atmospheric Modeling of Fluorotelomer Alcohols and Perfluorocarboxylic Acids in the North American Troposphere. *Environ. Sci. Technol.* 41, 5756-5762.

#### Recent Posters, Platform Talks and Publications

46. Schubert, K-V., Buck, R.C., Korzeniowski, S.H., Russell, M.H., Buxton, W., 2015. Myths and Facts about Per- and Polyfluoroalkyl Substances (PFASs). Poster T-602 at Fluoros 2015, 12-14 July
47. Lynch, A.M., Bonnet, A., Kahn, A., Sin-ya, S., Korzeniowski, S., Nakamura, T., Malvasi, M., Mislin, C., Maier, M., Machado, R., 2015. Analytical Methods Used to Detect PFOA and Related Substances in Various Matrices: Is there a standard analytical method? Poster at Fluoros 2015, 12-14 July
48. Laganis, E., Cardona, M., Korzeniowski, S., Bowman, J., 2015. Societal Benefits of FluoroTechnology. Poster at Fluoros 2015, 12-14 July

## Published Papers and Talks

S. H. Korzeniowski

49. Schubert, K-V., Korzeniowski, S., Shin-ya, S., Nakamura, T., Cheek, M. 2015. Best Environmental Practices (BEP) Guidance for the Textile Industry. Poster at Fluoros 2015, 12-14 July
50. Bock, R., Korzeniowski, S., Lehrenbaum, W., Malvasi, M. 2017. Effectiveness of Voluntary Programs at Controlling Emissions of Perfluoroalkyl Substances. Poster MO177 at SETAC Europe, 07-11 May
51. Korzeniowski, S., Cortina, T., Schubert, K-V., Adamsky, F. 2017. Best Environmental Practices (BEP) Guidance for the AFFF, Textile and Related Fluorotechnology Industries. Poster MOPC12 at SETAC Europe, 07-11 May
52. Korzeniowski, S. 2017. PFAS Use in Fire Fighting Foams: Evolution of Fire Fighting Agents and Critical Decision Criteria. Poster F1 – 110 at Fourth International Symposium on Bioremediation and Sustainable Environmental Technologies, 22-25 May
53. Korzeniowski, S., Bowman, J. 2017. Development, Alternatives Assessment and Value-in-Use of Short-Chain Fluorotelomer-based Products for Textiles, AFFF and Other End-Uses. Oral Poster P54-R at Dioxin 2017 Vancouver, BC, 20-25 August
54. Korzeniowski, S., Bowman, J. 2017. Development, Alternatives Assessment and Value-in-Use of Short-Chain Fluorotelomer-based Products for Textiles, AFFF and Other End-Uses. Platform Presentation 87 at SETAC NA 2017, Minneapolis, MN, 13-16 November
55. Huggett, D., Harvey, S., Korzeniowski, S., Borghoff, S.J. 2017. The potential for 6:2 FTOH to modulate the endocrine system in wildlife: A hypothesis driven weight-of-evidence analysis across endocrine pathways. Poster RP020 at SETAC NA 2017, Minneapolis, MN, 13-16 November
56. Borghoff, S.J., Harvey, S., Korzeniowski, S., Huggett, D. 2017. The potential for PFHxA to modulate the endocrine system in wildlife: A hypothesis-driven weight-of-evidence analysis across endocrine pathways. Poster RP021 at SETAC NA 2017, Minneapolis, MN, 13-16 November
57. Korzeniowski, S. 2018. Per- and Poly-Fluorinated Products, Structure, Classification, Properties and Analytical Challenges. Platform Talk at The Toxicology Forum, Washington, DC, 29-31 January
58. Korzeniowski, S., Bowman, J. 2018. Recent Advances in Toxicology, Alternatives Assessment, Value-in-Use and Best Practice Guidance of Short-Chain Fluorotelomer-based Products for AFFF, Textiles and Other End-Uses. Poster Presentation WE074 at SETAC EU 2018, Rome, Italy, 13-17 May
59. Korzeniowski, S.H., Buck, R.C., Kempisty, D, Pabon, M. August 2018. Book Chapter 01, pp. 3-34. "Fluorosurfactants in Fire Fighting Foams – Past and Present" in *Perfluoroalkylsubstances in the Environment: Theory, Practice, and Innovation*. Taylor & Francis Publisher. Oxford, EN
60. Korzeniowski, S.H., Cockshott, K, Bowman, J. 2018. Recent Advances in Toxicology, Biodegradation, Water Remediation, Assessment of Alternatives, Value-in-Use and Best Practice Guidance of Short-Chain Fluorotelomer-based Products for Various Well-Known End-Uses. Platform Talk at Dioxin 2018, Krakow, Poland, 26-31 August
61. Korzeniowski, S.H., Bowman, J. 2018. Short-Chain Fluorotelomer-based PFAS: Recent Advances in Toxicology, Biodegradation, Water Remediation, Assessment of Alternatives and Value-in-Use. Poster Presentation (MP-203) at SETAC NA, Sacramento, CA, 4-8 November

## Published Papers and Talks

S. H. Korzeniowski

62. A. Luz, J. Anderson, P. Goodrum, D. Farrar, S. Korzeniowski. 2018. PFHxA Human Health Risks, Margins of Safety, and Comparison with PFOA. Platform Talk (#78) at SETAC, NA, Sacramento, CA, 4-8 November
63. Korzeniowski, S.H., Cockshott K., Bowman, J. 2019. Short-Chain Fluorotelomer-based PFAS: Recent Advances in Toxicology, Biodegradation, Water Remediation, Assessment of Alternatives Assessment. Platform Presentation (ID-540) at SETAC EU, Helsinki, Finland, 26-20 May
64. Laganis, E., Korzeniowski, S., Bowman, J. 2019. Societal Benefits of Fluoropolymers. Poster Presentation (MP 048) at SETAC Focused Topic Meeting: Environmental Assessment of Per- and Polyfluoroalkyl Substances (PFAS), Durham, NC, 12-15 August
65. Guelfo, J., Korzeniowski, S., Mills, M. 2019. Co-chairs of Session: Environmental Sources, Chemistry, Fate and Transport at SETAC Focused Topic Meeting: Environmental Assessment of Per- and Polyfluoroalkyl Substances (PFAS), Durham, NC, 12-15 August
66. Korzeniowski, S., 2019. Invited Panelist for Understanding, Controlling, and Preventing Exposure to PFAS, National Academies of Science, Washington, DC, 26-27 September
67. Korzeniowski, S., 2019. Polymeric PFAS: Advances in Classification, Grouping Criteria, Functional Uses & Benefits and Fate Assessment. Poster presentation (TP285) at SETAC, NA, Toronto, ON, 3-7 November
68. Korzeniowski, S., Mill, M, Guelfo, J., 2020. SETAC FTM Summary of Workgroup on Environmental Sources, Fate and Transport. Poster and Poster Spotlight Presentation (ID 6.04p.1) at SETAC Dublin SciCon. Dublin, Ireland. Virtual presentations on 7 May
69. Korzeniowski, S, 2020. Invited Panelist to EEB Webinar: Europe's PFAS Problem: Situation Briefing; Virtual Webinar on Essential Uses; 17 September
70. Korzeniowski, S., 2020. SETAC NA Invited Keynote Speaker, PFAS Chemistry in the Environment, Virtual Talk and Panel Discussion on 16 November; originally in Fort Worth, TX.
71. Buck, R., Korzeniowski, S., Laganis, E., Adamsky, F. 2021, **Identification and classification of commercially relevant per- and poly-fluoroalkyl substances (PFAS).** *Integrated Environmental Assessment and Management* **2021**, 17(5):1045-1055. <https://doi.org/10.1002/ieam.4450>
72. Korzeniowski, S., 2021. SOT Annual Meeting & ToxExpo (Virtual), Invited Special Session Speaker, PFAS Chemistry in the Environment, Virtual Talk and Panel Discussion on 23 March.
73. Guelfo, J; Korzeniowski, S; Mills, M; Anderson, J; Anderson, R H.; Arblaster, J; Conder, J; Cousins, I T.; Dasu, K; Henry, B; Lee, L ; Liu, J; McKenzie, E; Willey, J., 2021. Environmental sources, chemistry, fate and transport of per- and polyfluoroalkyl substances: state of the science, key knowledge gaps, and recommendations presented at the August 2019 SETAC focus topic meeting. Published in ET&C, 29July 2021 <https://setac.onlinelibrary.wiley.com/doi/abs/10.1002/etc.5182>