

Karin Ruhlandt-Senge Publications

- 1) Ruhlandt-Senge, K., Müller, U. (1990):
Kristallstrukturen der Tetrachloronickelate $(\text{PPh}_4)_2[\text{NiCl}_4]$ und $[\text{Na-15-Krone-5}]_2[\text{NiCl}_4]$.
Z. Naturforsch. **45b**, 995.
- 2) Ruhlandt-Senge, K., Bacher, A.D., Müller, U. (1990):
Tetraethylammonium hexachlorozirkonat und -hexachlorohafnat.
Acta Cryst. **C46**, 1925.
- 3) Ruhlandt-Senge, K., Müller, U. (1990):
Chloroacetimin-tetraphenylphosphonium chlorid (1/1).
Acta Cryst. **C46**, 1968.
- 4) Ruhlandt-Senge, K., Müller, U. (1991):
Natrium-Bis-(15-Krone-5)-Tetrachlorooxonioobat-Acetonitril.
Acta Cryst. **C47**, 182.
- 5) Ruhlandt-Senge, K., Power, P.P. (1991):
Synthesis and Characterization of the Neutral Three-Coordinate Thiolate Complexes
 $\text{Al}[\text{S}(2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2)]_3$ and $\text{Ga}[\text{S}(2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2)]_3$.
Inorg. Chem. **30**, 2633.
- 6) Siewert, B., Koellner, G., Ruhlandt-Senge, K., Schmock, F., Müller, U. (1991):
Thiohalogeno-Verbindungen von Niob und Tantal: NbSCl_3 , TaSCl_3 , $[\text{NbSCl}_5]^{2-}$,
 $[\text{TaSCl}_5]^{2-}$, $[\text{NbSBr}_4]^-$. Die Kristallstrukturen von $(\text{PPh}_4)_2[\text{NbSCl}_5] \cdot 2\text{CH}_2\text{Cl}_2$ und
 $\text{NEt}_4[\text{NbCl}_6]$.
Z. Anorg. Allg. Chem. **593**, 160.
- 7) Ruhlandt-Senge, K., Power, P.P. (1991):
Synthesis and Structure of the Neutral Three-Coordinate Gallium Selenolate $\text{Ga}[\text{Se}(2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2)]_3$
and the Monomeric Lithium Selenolate $\text{Li}(\text{THF})_3\text{Se}(2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2)$.
Inorg. Chem. **30**, 3683.
- 8) Kim, H.R., Kim, H.J., Duffy, J.L., Olmstead, M.M., Ruhlandt-Senge, K., Kurth, M.J.
(1991):
Double Diastereoselectivity in the Intramolecular Nitrile Oxide-Olefin Cycloaddition
(INOC) Reaction.
Tetrahedron Lett. **32**, 4259.
- 9) Power, P.P., Ruhlandt-Senge, K., Shoner, S.C. (1991):
Synthesis and Characterization of the Isoelectronic d^{10} Species $[\text{Cu}\{\text{N}(\text{SiMePh}_2)_2\}_2]^-$ and
 $\text{Zn}\{\text{N}(\text{SiMePh}_2)_2\}_2$.
Inorg. Chem. **30**, 5013.
- 10) Ruhlandt-Senge, K., Sens, I., Müller, U. (1991):
Die Bildung von $[\text{Co}(\text{C}_5\text{H}_5)_2]\text{NO}_3$ und $[\text{Co}(\text{C}_5\text{H}_5)_2]_2[\text{Co}(\text{NCO})_4]$ aus Cobaltocen, Ozon
und Acetonitril sowie deren Kristallstrukturen.
Z. Naturforsch. **46b**, 1689.

- 11) Ruhlandt-Senge, K., Bacher, A.D., Müller, U. (1992):
Bildung eines Kupfer-Nitratokomplexes aus einem Azidokomplex und Ozon. Die Kristallstruktur von $(\text{PPh}_4)_2[\text{CuCl}(\text{NO}_3)_3] \cdot \text{CH}_2\text{Cl}_2$.
Z. Naturforsch. **47b**, 31.
- 12) Sens, I., Ruhlandt-Senge, K., Müller, U. (1992):
Cobaltocenium-hydrogendichlorid, $[\text{CoCp}_2]\text{HCl}_2$.
Acta Cryst. **C48**, 742.
- 13) Senge, M.O., Ruhlandt-Senge, K., Smith, K.M. (1992):
Structure and Conformation of Photosynthetic Pigments and Related Compounds. 4. Two Crystal Forms of a Chlorin - Rhodochlorin XV Dimethyl Ester.
Acta Cryst. **C48**, 1810.
- 14) Ruhlandt-Senge, K., Bacher, A.D., Koellner, G., Siewert, B., Müller, U. (1992):
Tetraphenylphosphonium-nonachlorodivanadat(III), $(\text{PPh}_4)_3[\text{V}_2\text{Cl}_9] \cdot 7\text{CH}_2\text{Cl}_2$.
Z. Naturforsch. **47b**, 814.
- 15) Petrie, M.A., Ruhlandt-Senge, K., Power, P.P. (1992):
Detection of a Rotation Barrier around a Bond between Heavier Main Group 3 and 5 Elements.
Inorg. Chem. **31**, 4038.
- 16) Bacher, A.D., Müller, U., Ruhlandt-Senge, K. (1992):
Synthese und Kristallstruktur von $[\text{Na}(15\text{-Krone-5})]_2\text{S}_6$.
Z. Naturforsch. **47b**, 1063.
- 17) Ruhlandt-Senge, K., Müller, U. (1992):
 $[\eta^6\text{-C}_6\text{Me}_6\text{Fe-}\eta^5\text{-C}_5\text{H}_5]_2\text{Fe}_2\text{Cl}_6 \cdot 2\text{CH}_2\text{Cl}_2$: Bildung und Kristallstruktur.
Z. Naturforsch. **47b**, 1075.
- 18) Bacher, A.D., Müller, U., Ruhlandt-Senge, K. (1992):
Synthese und Kristallstruktur von $[\text{K}(18\text{-Krone-6})]_2\text{S}_6 \cdot 2\text{CH}_3\text{CN}$.
Z. Naturforsch. **47b**, 1673.
- 19) Ruhlandt-Senge, K., Bacher, A.D., Müller, U. (1992):
Bildung von Arsensäure aus $[\text{As}_2\text{Cl}_8]^{2-}$ -Ionen und Ozon. Die Kristallstruktur von $\text{PPh}_4\text{Cl} \cdot \text{H}_3\text{AsO}_4$.
Z. Naturforsch. **47b**, 1677.
- 20) Ruhlandt-Senge, K., Power, P.P. (1992):
The Synthesis and Characterization of Metal Derivatives of the New, Conveniently Prepared, Bulky Thiolato Ligand $\text{HSC}_6\text{H}_2\text{-2,4,6-Ph}_3$.
Bull. Soc. Chim. France **129**, 594.
- 21) Ruhlandt-Senge, K., Power, P.P. (1993):
Synthesis and Characterization of $[\text{Li}(\text{OEt})_3][\text{Co}_2(\text{SC}_6\text{H}_2\text{Pr}^i\text{-2,4,6})_5]$: a Compound with a Face-sharing Ditetrahedral Structure.
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Synthesis and Characterization of Bulky Aryl Derivatives of the Heavier Main Group 3 Elements.
Organometallics **12**, 1086.
- 23) Petrie, M.A., Ruhlandt-Senge, K., Power, P.P. (1993):
Synthesis and Characterization of the Monomeric Aluminum Monoamides $(t\text{-Bu})_2\text{AlN}(\text{R})\text{R}'$ (R and R' = Bulky Aryl, Alkyl, or Silyl Groups).
Inorg. Chem. **32**, 1135.
- 24) Ruhlandt-Senge, K., Chen, H., Bartlett, R.A., Olmstead, M.M., Power, P.P. (1993):
Silylamines with Pyramidal Coordination at Nitrogen.
Angew. Chem. Int. Ed. Engl. **32**, 425; *Angew. Chem.* **105**, 459.
- 25) Ruhlandt-Senge, K., Bartlett, R.A., Olmstead, M.M., Power, P.P. (1993):
Synthesis and Structural Characterization of the Beryllium Compounds $[\text{Be}(2,4,6\text{-Me}_3\text{C}_6\text{H}_2)_2(\text{OEt}_2)]$, $[\text{Be}\{\text{O}(2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2)\}_2(\text{OEt}_2)]$, and $[\text{Be}\{\text{S}(2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2)\}_2(\text{THF})]\cdot\text{PhMe}$ and Determination of the Structure of $[\text{BeCl}_2(\text{OEt}_2)_2]$.
Inorg. Chem. **32**, 1724.
- 26) Waggoner, K.M., Ruhlandt-Senge, K., Wehmschulte, R.J., He, X., Olmstead, M.M., Power, P.P. (1993):
Synthesis and Characterization of the Monomeric Gallium Monoamides $t\text{-Bu}_2\text{GaN}(\text{R})\text{SiPh}_3$ (R = *t*-Bu, 1-Adamantyl), $\text{Trip}_2\text{MN}(\text{H})\text{Dipp}$ (M = Al, Ga; Trip = 2,4,6-*i*-Pr₃C₆H₂; Dipp = 2,6-*i*-Pr₂C₆H₃), and $\text{Trip}_2\text{GaNPh}_2$.
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- 27) He, X., Bartlett, R.A., Olmstead, M.M., Ruhlandt-Senge, K., Sturgeon, B. E., Power, P.P. (1993):
Reduction of a Tetraaryldigallane to Afford a Radical Anion with Ga-Ga Multiple Bonding Character.
Angew. Chem. Int. Ed. Engl. **32**, 717; *Angew. Chem.* **105**, 761.
- 28) Wehmschulte, R.J., Ruhlandt-Senge, K., Olmstead, M.M., Hope, H., Sturgeon, B. E., Power, P.P. (1993):
Reduction of a Tetraaryldialane to Generate Al-Al σ -Bonding.
Inorg. Chem. **32**, 2983.
- 29) Ruhlandt-Senge, K., Power, P.P. (1993):
Synthesis and Characterization of the Monomeric Three-Coordinate Indium Thiolate and Selenolate Complexes $\text{In}[\text{E}(2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2)]_3$ (E = S, Se).
Inorg. Chem. **32**, 3478.
- 30) Ruhlandt-Senge, K., Power, P.P. (1993):
Compounds with M_3Se_3 (M = Li, Zn) Rings: Synthesis and Characterization of $[\text{Zn}(\text{CH}_2\text{SiMe}_3)\text{Se}-2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2]_3\cdot 0.5\text{C}_6\text{H}_{14}$ and $[\text{Li}(\text{THF})\text{Se}-2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2]_3\cdot\text{PhMe}$.
Inorg. Chem. **32**, 4505.

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Isolation and Structural Characterization of Unsolvated Lithium Aryls.
J. Am. Chem. Soc. **115**, 11353.
- 32) Senge, M.O., Ruhlandt-Senge, K., Regli, K.J., Smith, K.M. (1993):
Synthesis and Characterization of Halogeno- and Pseudohalogeno-thallium(III) Porphyrin
Complexes. Variation of the Co-ordination Geometry as a Function of the Axial Ligand.
J. Chem. Soc., Dalton Trans. 3519.
- 33) Dias, H.V.R., Olmstead, M.M., Ruhlandt-Senge, K., Power, P.P. (1993):
The X-ray Crystal Structures of the Mononuclear Silyllithium Species $\text{Li}(\text{THF})_3\text{SiPh}_3$ and
 $\text{Li}(\text{THF})_3\text{Si}(\text{SiMe}_3)_3$.
J. Organomet. Chem. **462**, 1.
- 34) Petrie, M.A., Ruhlandt-Senge, K., Hope, H., Power, P.P. (1993):
Structural Studies of the Monomeric, low coordinate, Indium Amides $(t\text{-Bu})_2\text{InN}(2,6\text{-}i\text{-Pr}_2\text{C}_6\text{H}_3)\text{SiPh}_3$ and $\text{In}\{\text{N}(\text{SiMe}_3)_2\}_3$.
Bull. Soc. Chim. Fr. **130**, 851.
- 35) Hascall, T., Ruhlandt-Senge, K., Power, P.P. (1994):
Synthesis and Structure of the Magnesium Imide $[(\text{thf})\text{MgNPh}]_6$.
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Synthesis and Characterization of Thiolato Complexes with Two-Coordinate Iron(II).
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- 37) Brothers, P.J., Wehmschulte, R.J., Olmstead M.M., Ruhlandt-Senge, K., Parkin S. R.,
Power, P.P. (1994):
Synthesis, Structure, and Spectroscopic Characterization of Unassociated Mono-, Di-, and
Triamido Derivatives of Aluminum and Gallium.
Organometallics **13**, 2792.
- 38) Wehmschulte R.J., Ruhlandt-Senge, K., Power, P.P. (1994):
Synthesis and Characterization of Unassociated Aluminum Monophosphides.
Inorg. Chem. **33**, 3205.
- 39) He, X., Ruhlandt-Senge, K., Power P.P., Bertz, S.H. (1994):
Synthesis and Characterization of $[\text{Cu}_3\text{Ph}_2(\text{PMDTA})_2]^+$: A Cationic Organocopper(I)
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- 40) Wehmschulte, J. J., Ruhlandt-Senge, K., Olmstead, M. M., Petrie, M. A., Power, P.P.
(1994):
Evidence for Bonding in the Boron-Thiolate Compounds $(2,4,6\text{-Me}_3\text{C}_6\text{H}_2)_2\text{B}(\text{SPh})$ and
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New Base-Free Alanes and Gallanes: Synthesis and Characterization of Monomeric Mes^*_2GaH ($\text{Mes}^* = 2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2$), Dimeric $(\text{Trip}_2\text{MH})_2$ ($\text{Trip} = 2,4,6\text{-}i\text{-Pr}_3\text{C}_6\text{H}_2$; $\text{M} = \text{Al, Ga}$) and Related Sterically Crowded Arylaluminum Species.
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Synthesis and Characterization of the New Selenolate Ligand $\text{-SeC}_6\text{H}_3\text{-2,6-Mes}_2$ ($\text{Mes} = \text{C}_6\text{H}_2\text{-2,4,6-Me}_3$) and its Two Coordinate Zinc and Manganese Derivatives: Factors Affecting Bending in Two-Coordinate Metal Complexes with Aryl-Substituted Ligands.
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- 44) Mc Donell, F.M. Ruhlandt-Senge, K., Ellison, J.J., Holm, R. H., Power, P.P. (1995):
Sterically Encumbered Fe(II) Thiolate Complexes: Synthesis and Structure of Trigonal Planar $[\text{Fe}(\text{SR})_3]^-$ ($\text{R} = 2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2$) and Mössbauer Spectra of Two- and Three-Coordinate Complexes.
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Molecular Structure of an Iron(III) Chlorophyll Derivative -
Chloro(phytychlorinato methyl ester)iron(III).
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Synthesis and Characterization of the Strontium Thiolate $\text{Sr}(\text{SMes}^*)_2(\text{THF})_4 \cdot 2\text{THF}$ ($\text{Mes}^* = 2,4,6\text{-}t\text{-Bu}_3\text{C}_6\text{H}_2$) and Selenolate $\text{Sr}(\text{SeMes}^*)_2(\text{THF})_4 \cdot 2\text{THF}$. Structural Investigation of $\text{SrI}_2(\text{THF})_5$.
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Chem. Comm. 147.
- 53) Ruhlandt-Senge, K., Englich, U., Senge, M.O., Chadwick, S. (1996):
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