

**COMPLETE LIST OF PUBLICATIONS** (in chronological order, a star marks corresponding author and joint corresponding author papers)

[42] D. Scott, J. Cammarata, F. Westermair, **P. Coburger**, D. Duvinage, M. Janssen, M. Uttendorfer, J. Beckmann, R. Gschwind, R. Wolf, Unravelling White Phosphorus: Experimental and Computational Studies Reveal the Mechanisms of P<sub>4</sub> Hydrostannylation, *Angew. Chem. Int. Ed.* **2023**, e202408423.

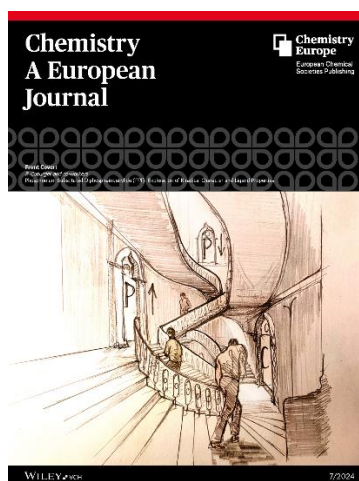
[41] A. Straube, **P. Coburger**, E. Hey-Hawkins, Homotrinnuclear ruthenium (ii) and rhodium (i) complexes of redox-active tris (ferrocenyl) arene-based tris-phosphanes, *Adv. Sci.* **2024**, *14*, 24652-24660.

[40] C. Schweinzer, **P. Coburger**, H. Grützmacher, Structural Changes in the Carbon Sphere of a Dirhodium Complex Induced by Redox or Deprotonation Reactions, *Adv. Sci.* **2024**, 2400072.

[39] **P. Coburger**, A. Buzanich, F. Emmerling, J. Abbenseth, Combining Geometric Constraint and Redox Non-Innocence within an Ambiphilic PBiP Pincer Ligand, *Chem. Sci.* **2024**, DOI: 10.1039/D4SC00197D.

[38] G. Hierlmeier, R. Kutta, **P. Coburger**, H.-G. Stammer, J. Schwabedissen, N. Mitzel, M. Dimitrova, R. Berger, P. Nuernberger, R. Wolf, Structure and photochemistry of di-tertbutyldiphosphatetrahedrane, *Chem. Sci* **2024**, DOI: 10.1039/d4sc00936c.

[37] **P. Coburger**,\* D. Zuber, C. Schweinzer, M. Scharnhölz, Phosponium-substituted Diphosphaindenylide (PPI): Exploration of Biradical Character and Ligand Properties, *Chem. Eur. J.* **2023**, e202302970 (part of the collection "Chemistry of the p-Block Elements", front cover and cover feature).



[36] **P. Coburger**,\* Redox-chemistry of Pyramidanes: A DFT Study, *Eur. J. Inorg. Chem.* **2023**, e202300596 (part of the collection “Inorganic Reaction Mechanisms”).

[35] N. Willeit, W. Klein, **P. Coburger**, D. E. Fritz-Langhals, Th. Fässler, Functionalised [Ge<sub>9</sub>Ni] Clusters as Homogeneous Single-Site Catalysts for Olefin Isomerisation Reactions, *ChemCatChem* **2023**, e202301200.

[34] **P. Coburger**,\* C. Schweinzer, Z. Li, H. Grützmacher,\* Reversible Single Electron Redox Steps Convert Polycycles with a C<sub>3</sub>P<sub>3</sub> Core to a Planar Triphosphinine, *Angew. Chem. Int. Ed.* **2023**, 62, e2022145148 (Hot Paper “Redox Chemistry”, shared corresponding author with H. Grützmacher).

[33] T. Görlich, **P. Coburger**, E. Yang, J. Goicoechea, H. Grützmacher, C. Müller, The Chemistry of the Cyaphide Ion, *Angew. Chem. Int. Ed.* **2023**, 62, e202217749.

[32] M. Scharnhölz, **P. Coburger**,\* H. Beer, J. Bresien, A. Schulz and H. Grützmacher, A comparative study of biradicaloids as ligands in iron tetracarbonyl complexes, *Arkivoc* **2022**, part iii, 327 – 338.

[31] **P. Coburger**,\* F. Masero, J. Bösken, V. Mougel,\* H. Grützmacher,\* A Germapyramidane Switches Between 3D Cluster and 2D Cyclic Structures in Single-Electron Steps, *Angew. Chem. Int. Ed.* **2022**, 61, e202211749. (Hot Paper “Main-group chemistry”, joint corresponding author with V. Mougel and H. Grützmacher).

[30] M. T. Scharnhölz, **P. Coburger**,\* L. Gravogl, D. Klose, J. J. Gamboa-Carballo, G. Le Corre, J. Bösken, C. Schweinzer, D. Thöny, K. Meyer, Z. Li, H. Grützmacher,\* Bis(imidazolium)-1,3-diphosphete-diide: A Building Block for FeC<sub>2</sub>P<sub>2</sub> Complexes and Clusters, *Angew. Chem. Int. Ed.* **2022**, 61, e202205371. (frontispiece, joint corresponding author with H. Grützmacher).



[29] H. Jayaprakash, **P. Coburger**, M. Wörle, A. Togni, H. Grützmacher, Recyclable Mn(I) Catalysts for Base-Free Asymmetric Hydrogenation: Mechanistic, DFT and Catalytic Studies, *Chem. Eur. J.* **2022**, *28*, e202201522.

[28] J. Oswald, M. T. Scharnhölz, **P. Coburger**, H. Beer, J. Bresien, A. Schulz, H. Grützmacher, Insertion of Ruthenium into an inorganic, cyclic biradicaloid, *Z. Anorg. Allg. Chem.* **2022**, *648*, e202200093 (joint corresponding author with H. Grützmacher).

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[26] G. Hierlmeier, **P. Coburger**, D. J. Scott, T. M. Maier, S. Pelties, R. Wolf, D. M. Pividori, K. Meyer, N. P. van Leest, B. de Bruin, Di-*tert*-butyldiphosphatetrahedrane as a Source of 1,2-Diphosphacyclobutadiene Ligands, *Chem. Eur. J.* **2021**, *27*, 14936-14946.

[25] M. Margeson, F. Seeberger, J. Kelly, J. Leitl, **P. Coburger**, R. Szlosek, C. Müller, R. Wolf, Expedient Hydrofunctionalisation of Carbonyls and Imines Initiated by Phosphacyclohexadienyl Anions, *ChemCatChem.* **2021**, *13*, 3761-3764.

[24] **P. Coburger**, J. Leitl, D. Scott, G. Hierlmeier, I. Shenderovich, E. Hey-Hawkins, R. Wolf, Synthesis of a Carborane-substituted Bis(phosphanido) Cobaltate(I), Ligand Substitution, and Unusual P<sub>4</sub> Fragmentation, *Chem. Sci.* **2021**, *12*, 11225-11235.

[23] **P. Coburger**,\* R. Wolf,\* H. Grützmacher,\* Isomerism and Biradical Character of Tetrapnictide Dianions: A Computational Study, *Eur. J. Inorg. Chem.* **2020**, *37*, 3580-3586 (joint corresponding author with H. Grützmacher).

[22] T. Maier, M. Gawron, **P. Coburger**, M. Bodensteiner, N. van Leest, B. de Bruin, S. Demeshko, F. Meyer, R. Wolf, Low-Valence Anionic  $\alpha$ -Diimine Iron Complexes: Synthesis, Characterization, and Catalytic Hydroboration Studies, *Inorg. Chem.* **2020**, *59*, 16035-16052.

[21] J. Leitl, **P. Coburger**, D. Scott, C. Ziegler, G. Hierlmeier, N. van Leest, B. de Bruin, G. Hörner, C. Müller, R. Wolf, Phosphorus Analogues of [Ni(bpy)<sub>2</sub>]: Synthesis and Application in Carbon–Halogen Bond Activation, *Inorg. Chem.* **2020**, *59*, 9951-9961.

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[17] A. Straube, **P. Coburger**, M. Michak, M. Ringenberg, E. Hey-Hawkins, The core of the matter–arene substitution determines the coordination and catalytic behaviour of tris (1-phosphanyl-1'-ferrocenylene) arene gold (i) complexes, *Dalton Trans.* **2020**, *49*, 1667-16682.

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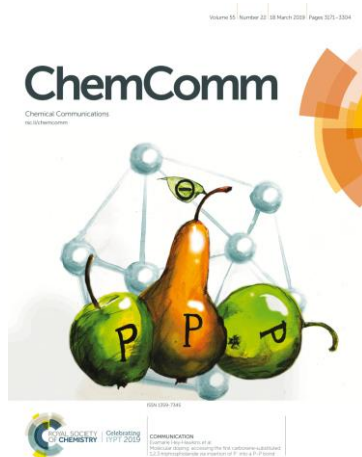
[12] M. Gozzi, B. Schwarze, **P. Coburger**, E. Hey-Hawkins, On the Aqueous Solution Behavior of C-Substituted Ruthenacarboranes, *Inorganics* **2019**, *7*, 91-105.

[11] **P. Coburger**, P. Bielytskyi, D. Williamson, E. Rys, A. Kreienbrink, P. Lönnecke, J. Matysik, E. Hey-Hawkins, Accessing the First *nido*-Carborane-substituted Diphosphetane: A Ligand and Synthon for *nido*-Carboranylphosphanes, *Chem. Eur. J.* **2019**, *25*, 11456-11465. (Cover Feature).



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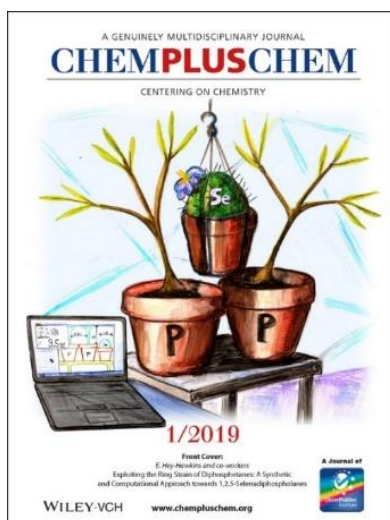
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- [4] **P. Coburger**, S. Demeshko, C. Rödl, E. Hey-Hawkins, R. Wolf, Oxidative P–P Bond Addition to Cobalt(–I): Formation of a Low-Spin Cobalt(III) Phosphanido Complex, *Angew. Chem. Int. Ed.* **2017**, *56*, 15871–15875; *Angew. Chem.* **2017**, *129*, 16087–16091.
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- [1] T. Möller, P. Wonneberger, M. B. Sárosi, **P. Coburger**, E. Hey-Hawkins, P-chiral 1-phosphanorbornenes: from asymmetric phospho-Diels–Alder reactions towards ligand design and functionalisation, *Dalton Trans.* **2016**, *45*, 1904–1917.