Prof. Dr. Torsten Beweries

Birthday and place of birth:	16 April 1982, Anklam
Address:	Leibniz Institute for Catalysis at the University of Rostock, Albert-Einstein-Str. 29a, 18059 Rostock, Germany
Position:	Head of research department “Modern concepts in molecular catalysis”
Research areas:	homogeneous catalysis, organometallic chemistry, reaction mechanisms, main group polymers

Education

10/2001-8/2006	Studies of chemistry at University of Rostock
10/2005-8/2006	Diploma thesis at Leibniz Institute for Catalysis at the University of Rostock with Prof. Uwe Rosenthal, “with distinction”
9/2006-8/2008	PhD studies at Leibniz Institute for Catalysis at the University of Rostock with Prof. Uwe Rosenthal, „summa cum laude“
9/2007-12/2007	Research stay at University of Chicago, USA with Prof. Richard F. Jordan

Scientific career

9/2008-2/2009	Research associate at Leibniz Institute for Catalysis at the University of Rostock
3/2009-12/2009	Postdoc at University of York, UK with Prof. Robin N. Perutz, FRS
2010-2016	Research associate, project leader and group leader at Leibniz Institute for Catalysis at the University of Rostock
2012-2016	Habilitation with Prof. Uwe Rosenthal at Leibniz Institute for Catalysis at the University of Rostock
since 1/2017	Head of research department “Modern concepts in molecular catalysis“ at Leibniz Institute for Catalysis at the University of Rostock
11/2022	Appointed as Professor at the University of Rostock

Awards and fellowships

9/2006-8/2008	Fellow of DFG research training group 1213 „Neue Methoden für Nachhaltigkeit in Katalyse und Technik”
2009	DFG research fellowship for postdoctoral studies
2013 and 2014	Sachkostenzuschuss, Fonds der Chemischen Industrie (FCI)
2015	Max-Buchner fellowship

Grants

Deutsche Forschungsgemeinschaft (DFG):

- BE4370/1-1: Quantification of the interactions of group 8 and group 10 metal fluorides with hydrogen and halogen donors in solution – contributions to a better understanding of the nature of the metal fluoride bond (2009, Research fellowship for postdoctoral stay with Prof. Robin N. Perutz, FRS, University of York, UK)
- BE4370/2-1: Übergangsmetallkatalysierte Dehydrierung von Amin-Boran-Addukten als Speichermedien für Wasserstoff (2011-2013, research grant, 112.400 €)
- BE4370/5-1: Supramolekulare und kovalente Metall-BODIPY-Hybride zur photokatalytischen H_2-Erzeugung (2017-2020, research grant, 195.700 €)
- BE4370/9-1: Katalytische Wege zu neuen anorganischen Polymeren: Entwicklung von Übergangsmetall-Katalysatoren für die hochselektive Dehydropolymerisation von primären Amin-Boran-Addukten (2019-2022, research grant, 368.700 €)
- BE4370/11-1: Metallacyclobuta-2,3-diene als metallorganische Analoga des kleinsten cyclischen Allens – Klassische Metallacylen oder ungewöhnliche Übergangsmetall-Biradikale (2021-2024, research grant, 218.350 €)
- BE4370/9-2: Development of cooperative late transition metal pincer complexes for manufacturing B-N based main group polymers on scale (2023-2026, research grant, 239.364 €)

Leibniz association:

- Senatsausschuss-Wettbewerb 2017: Iron based catalysts for sustainable valorisation of CO_2, CH_4 and N_2 (2017-2020, 123.900 €)
- Senatsausschuss-Wettbewerb 2019: Development of a predictive solid state tool for improved pharmaceuticals safety (project coordinator, 2019-2022, 909.334 € total, 157.311 € for Beweries group)

Fonds der Chemischen Industrie (FCI):

- Sachkostenzuschuss 2013 (10.000 €) und 2014 (10.000 €)

Max-Buchner-Forschungsstiftung:

- Max-Buchner fellowship 2015 (10.000 €)

Teaching activities

WS 2012/13	Lecture and seminar „Allgemeine Chemie im Nebenfach für Studierende der BSc.-Studiengänge Biologie und Physik und Studierende in Lehrämtern“ (6 SWS)
since SS 2015	Lecture and seminar „Katalyse III – Vertiefte Homogene Katalyse“ (4 SWS)

since SS 2021	Organisation of the PhD/Postdoc lecture series at LIKAT Rostock
since WS 2021/22	Lecture and seminar „Grundlagen der Chemie für Agrarwissenschaftler - Grundlagen der Chemie für Umweltingenieure“ (6 SWS)

Supervision of PhD students

Nr.	Name	Time	Title of dissertation
1	Dr. Sven Hansen[+]	2010-2012	Investigations on Photocatalytic Multicomponent Water Reduction and Molecular Properties of Selected Transition Metal Compounds
2	Dr. Monty Kessler[+]	2010-2012	Untersuchungen zu Elementarschritten der fotokatalytischen Wasserspaltung an Titanocen-Komplexen
3	Dr. Johannes Thomas[+,*]	2010-2013	Untersuchungen zur Speicherung von Wasserstoff in Amin-Boran-Addukten sowie zur katalytischen Selektivoxidation von Propan zu Acrolein
4	Dr. Christian Godemann[+]	2012-2015	Ansa-Titanocenkomplexe zur Untersuchung der fundamentalen Schritte in der lichtgetriebenen Wasserspaltung
5	Dr. Laura Dura[+]	2012-2016	Lichtgetriebene Protonenreduktion auf dem Weg zur Anwendbarkeit: Studien zur Substitution edelmetallhaltiger Komponenten
6	Dr. Markus Joksch	2014-2017	Darstellung von POCOP-Komplexen der Metalle der Gruppe 10 als Akzeptoren für Wasserstoff- und Halogenbrückenbindungen
7	Dr. Delong Han	2014-2018	Late transition metal complex catalysed dehydrogenation of hydrazine borane and other primary amine boranes
8	Dr. Felix Anke	2015-2018	Übergangsmetallkomplex-katalysierte Dehydropolymerisation von primären Amin-Boran-Addukten
9	Dr. Patrick Hasche	2017-2020	Schwefelhaltige Pincerkomplexe später Übergangsmetalle – Koordinationschemie und Anwendungen in der Katalyse
10	Dr. Julia Rothe*	2014-2022	The chemistry of unusual main group halides and biradicaloids
11	Dr. Priyanka Gupta[#]	2020-2023	Phosphinidenes as platforms for phosphaalkene pincer ligands
12	Dr. Nora Jannsen[§]	2020-2023	Mechanismen von Rhodium-katalysierten C-C-Bindungsknüpfungen
13	Dr. Kevin Lindenau	2019-2023	Group 4 complexes for dehydrogenative bond formation between main group elements
14	MSc David Decker	Since 10/2019	Late transition metal pincer complexes for the activation of amine boranes
15	MSc Alexander Linke	Since 10/2020	Group 9 pincer complexes for unusual bond activation reactions
16	MSc Sihan Li	Since 11/2020	New unusual metallacycles of group 4 metallocenes – synthesis, structure, reactivity, and catalytic potential
17	MSc Laura Tadiello	Since 04/2021	NMR and UV-vis spectroscopic studies on rhodium bis(phosphine) complexes
18	MSc Peter Fritz*	Since 06/2021	Early transition metal biradicaloids
19	MSc Mirko Rippke	Since 10/2022	Rhodium pincer complexes for the dehydropolymerisation of amine boranes
20	MSc Kushik[#]	Since 11/2022	Early transition metal phosphaalkene complexes for small molecule activation

[+] during habilitation, with Prof. Dr. Uwe Rosenthal (LIKAT Rostock)
* with Prof. Dr. Axel Schulz (IfCh, University of Rostock)
[§] with Prof. Dr. Detlef Heller (LIKAT Rostock)
[#] with Dr. Christian Hering-Junghans (LIKAT Rostock)

Selected independent publications

1. Metallacycles. Breaking the Rules. T. Beweries, U. Rosenthal, *Nature Chem.* **2013**, *5*, 649.

2. Highly selective visible light-induced Ti-O bond splitting in an *ansa*-titanocene dihydroxido complex. C. Godemann, L. Dura, D. Hollmann, K. Grabow, U. Bentrup, H. Jiao, A. Schulz, A. Brückner, T. Beweries, *Chem. Commun.* **2015**, *51*, 3065.

3. A Model of a Closed Cycle of Water Splitting using *ansa*-Titanocene(III/IV) Triflate Complexes. C. Godemann, D. Hollmann, M. Kessler, H. Jiao, A. Spannenberg, A. Brückner, T. Beweries, *J. Am. Chem. Soc.* **2015**, *137*, 16187.

4. Formation of high-molecular weight polyaminoborane by Fe hydride catalysed dehydrocoupling of methylamine borane. F. Anke, D. Han, M. Klahn, A. Spannenberg, T. Beweries, *Dalton Trans.* **2017**, 46, 6843.

5. Visiting the limits between a highly strained 1-zirconacyclobuta-2,3-diene and chemically robust dizirconacyclooctatetraene. F. Reiß, M. Reiß, A. Spannenberg, H. Jiao, W. Baumann, P. Arndt, U. Rosenthal, T. Beweries, *Chem. Eur. J.* **2018**, *24*, 5667.

6. Recent advances in transition metal catalysed dehydropolymerisation of amine boranes and phosphine boranes. D. Han, F. Anke, M. Trose, T. Beweries, *Coord. Chem. Rev.* **2019**, *380*, 260.

7. 1-Titanacyclobuta-2,3-diene – an Elusive Four-membered Cyclic Allene. F. Reiß, M. Reiß, J. Bresien, A. Spannenberg, H. Jiao, W. Baumann, P. Arndt, T. Beweries, *Chem. Sci.* **2019**, *10*, 5319-5325.

8. 1-Zirconacyclobuta-2,3-dienes: Synthesis of organometallic analogs of elusive 1,2-cyclobutadiene, unprecedented intramolecular C-H activation, and reactivity studies. X. Shi, S. Li, M. Reiß, T. Holtrichter-Rößmann, F. Reiß, T. Beweries, *Chem. Sci.* **2021**, *12*, 16074-16084.

9. Molecular Catalysts for Reductive Homocoupling of CO_2 towards C_{2+} Compounds. H.-Q. Liang, T. Beweries, R. Francke, M. Beller, *Angew. Chem. Int. Ed.* **2022**, *61*, e202200723.

10. Mechanochemical oxidative degradation of thienopyridine containing drugs: Toward a simple tool for the prediction of drug stability. E. F. Krake, L. Backer, B. Andres, W. Baumann, N. Handler, H. Buschmann, U. Holzgrabe, C. Bolm, T. Beweries, *ACS Cent. Sci.,* **2023**, *9*, 1150–1159.

Full list of publications (24/08/2023)

112 Publications, 2582 citations, H index 29 (Google Scholar)

Publications with peer-review

(114) Rhodium(I) PNN pincer complexes with proton-responsive ligands: synthesis, characterisation, and catalytic dehydrocoupling of amine boranes. M. Rippke, H.-J. Drexler, T. Beweries, in revision.

(113) Formation of a Rh(III) metallacycle by coupling of allenes: synthesis, characterisation, and its role in catalytic transformations of alkynes, allenes, and nucleophiles. N. Jannsen, H.-J. Drexler, F. Reiss, T. Beweries, D. Heller, in revision

(112) Early Transition Metals in Organometallic Chemistry. T. Beweries, T. K. Panda, C. C. Roberts, H. Tsurugi, *Organometallics* **2023**, *42*, 1039-1042.

(111) Selective 1,2-insertion of carbodiimides and substrate-divergent silyl group migration at 1-metallacyclobuta-2,3-dienes. X. Shi, S. Li, A. Spannenberg, F. Reiß, T. Beweries, *Inorg. Chem. Front.* **2023**, *10*, 3584-3594.

(110) Mechanochemical oxidative degradation of thienopyridine containing drugs: Toward a simple tool for the prediction of drug stability. E. F. Krake, L. Backer, B. Andres, W. Baumann, N. Handler, H. Buschmann, U. Holzgrabe, C. Bolm, T. Beweries, *ACS Cent. Sci.,* **2023**, *9*, 1150–1159.

(109) P,N-Type Phosphaalkene-based Ir(I) Complexes: Synthesis, Coordination Chemistry, and Catalytic Applications. P. Gupta, H.-J. Drexler, R. Wingad, D. Wass, T. Beweries, C. Hering-Junghans, *Inorg. Chem. Front.* **2023**, *10*, 2285-2293.

(108) Solution and solid-state studies of hydrogen and halogen bonding towards *N*-heterocyclic carbene supported nickel(II) fluoride complexes. V. G. Thangavadivale, L. Tendera, R. Bertermann, U. Radius, T. Beweries, R. N. Perutz, *Faraday Discuss.* **2023**, *244*, 62-76.

(107) Catalytic dehydrocoupling of methylamine borane using Yamashita's [Ir(PBP)] boryl complex - characterisation of a novel highly fluxional Ir tetrahydride, D. Decker, H.-J. Drexler, W. Baumann, F. Reiß, T. Beweries, *New J. Chem.* **2022**, *46*, 22314-22321

(106) How Solvents Affect the Stability of Cationic Rhodium(I) Diphosphine Complexes: A Case Study of Acetonitrile Coordination. N. Jannsen, C. Fischer, C. Selle, C. Pribbenow, H.-J. Drexler, F. Reiß, D. Heller, T. Beweries, *Dalton Trans.* **2022**, *51*, 18068-18076.

(105) Low-field flow ^{31}P NMR spectroscopy for organometallic chemistry: on-line analysis of rhodium diphosphine complexes. L. Tadiello, H.-J. Drexler, T. Beweries, *Organometallics*, **2022**, *41*, 2833-2343.

(104) Mono- and dinuclear zirconocene(IV) amide complexes for the catalytic dehydropolmyerisation of phenylsilane. K. Lindenau, A. Spannenberg, F. Reiß, T. Beweries, *RSC Advances* **2022**, *12*, 26277-26283.

(103) Synthesis, coordination chemistry and mechanistic study of PN type phosphaalkene based Rh(I) complexes. P. Gupta, T. Täufer, J.-E. Siewert, H.-J. Drexler, F. Reiß, J. Pospech, T. Beweries, C. Hering-Junghans, *Inorg. Chem.* **2022**, *61*, 11639-11650.

(102) A 2-Aza-3,4-Diphospha-1-Bora-Butadiene. J. Rothe, J. Bresien, F. Reiß, A. Villinger, T. Beweries, A. Schulz, *Z. Anorg. Allg. Chem.* **2022**, e202200174.

(101) Iridium(III) bis(thiophosphinite) pincer complexes: Synthesis, ligand activation and applications in catalysis. A. Linke, D. Decker, H.-J. Drexler, T. Beweries, *Dalton Trans.* **2022**, *51*, 10266-10271.

(100) Model-based signal tracking in the quantitative analysis of time series of NMR spectra. D. Meinhardt, H. Schröder, J. Hellwig, E. Steimers, A. Friebel, T. Beweries, M. Sawall, E. von Harbou, K. Neymeyr, *J. Magn. Res.* **2022**, *339*, 107212.

(99) Molecular Catalysts for Reductive Homocoupling of CO_2 towards C_{2+} Compounds. H.-Q. Liang, T. Beweries, R. Francke, M. Beller, *Angew. Chem. Int. Ed.* **2022**, *61*, e202200723.

(98) Catalytic and mechanistic studies of a highly active and *E*-selective Co(II) PNN^H pincer catalyst system for transfer-semihydrogenation of internal alkynes, D. Decker, Z. Wei, J. Rabeah, H.-J. Drexler, A. Brückner, H. Jiao, T. Beweries, *Inorg. Chem. Front.* **2022**, *9*, 761-770.

(97) 1-Zirconacyclobuta-2,3-dienes: Synthesis of organometallic analogs of elusive 1,2-cyclobutadiene, unprecedented intramolecular C-H activation, and reactivity studies. X. Shi, S. Li, M. Reiß, A. Spannenberg, T. Holtrichter-Rößmann, F. Reiß, T. Beweries, *Chem. Sci.* **2021**, *12*, 16074-16084.

(96) Development of a simple solid-state tool for forced oxidative degradation of clopidogrel hydrogensulfate – a new concept for predicting degradation profiles in active pharmaceutical ingredients, R. P. Kaiser, E. F. Krake, L. Backer, J. Urlaub, W. Baumann, N. Handler, H. Buschmann, T. Beweries, U. Holzgrabe, C. Bolm, *Chem. Commun.* **2021**, *57*, 11956-11959.

(95) Synthesis and characterization of dinuclear allenediide bridged hafnocene(IV) complexes. K. Lindenau, E. Zander, C. Schünemann, A. Spannenberg, V. V. Burlakov, F. Reiß, T. Beweries, *Organometallics* **2021**, *40*, 3177-3184.

(94) Mechanistic insights into dehydrocoupling of amine boranes using dinuclear zirconocene complexes. K. Lindenau, N. Jannsen, M. Rippke, H. Al Hamwi, C. Selle, H.-J. Drexler, A. Spannenberg, M. Sawall, K. Neymeyr, D. Heller, F. Reiß, T. Beweries, *Catal. Sci. Technol.* **2021**, *11*, 4034-4050.

(93) Dehydropolymerisation of methylamine borane using highly active rhodium(III) bis(thiophosphinite) pincer complexes: catalytic and mechanistic insights. P. Hasche, J. Haak, F. Anke, C. Kubis, W. Baumann, H.-J. Drexler, H. Jiao, T. Beweries, *Catal. Sci. Technol.* **2021**, *11*, 3514-3526.

(92) Reactivity of phospha–Wittig reagents towards NHCs and NHOs. P. Gupta, J.-E. Siewert, T. Wellnitz, M. Fischer, W. Baumann, T. Beweries, C. Hering-Junghans, *Dalton Trans.* **2021**, *50*, 1838-1844.

(91) Erbium-Catalyzed Regioselective Isomerization–Cobalt-Catalyzed Transfer Hydrogenation Sequence for the Synthesis of Anti-Markovnikov Alcohols from Epoxides under Mild Conditions. X. Liu, L. Longwitz, B. Spiegelberg, J. Tönjes, T. Beweries, T. Werner, *ACS Catalysis* **2020**, *10*, 13659-13667.

(90) Homogeneous catalytic transfer semihydrogenation of alkynes – an overview of hydrogen sources, catalysts and reaction mechanisms. D. Decker, H.-J. Drexler, D. Heller, T. Beweries, *Catal. Sci. Technol.* **2020**, *10*, 6449-6463.

(89) Dehydropolymerisation of methylamine borane and an *N*-substituted primary amine borane using a PNP Fe catalyst. F. Anke, S. Boye, A. Spannenberg, A. Lederer, D. Heller, T. Beweries, *Chem. Eur. J.* **2020**, *26*, 7889-7899.

(88) A comparative study on the thermodynamics of halogen bonding of group 10 pincer fluoride complexes. M. Joksch, H. Agarwala, M. Ferro, D. Michalik, A. Spannenberg, *Chem. Eur. J.* **2020**, 26, 3571-3577 (Hot Paper).

(87) A study of the reactivity of the [(PE^{1}CE^{2}P)Ni(II)] (E^1, E^2 = O, S) pincer system with acetonitrile and base: Formation of cyanomethyl and amidocrotononitrile complexes vs. ligand decomposition by P-S bond activation. P. Hasche, A. Spannenberg, T. Beweries, *Organometallics* **2019**, 38, 4508-4515.

(86) A general benzylic C-H activation and C-C coupling reaction at zirconocenes mediated by C-N bond cleavage in tert-butylisocyanide – unusual formation of iminoacyl complexes. P. Arndt, M. Reiß, A. Spannenberg, C. Schünemann, F. Reiß, T. Beweries, *Dalton Trans.* **2019**, *48*, 16525-16533.

(85) Nickel(II) PE^{1}CE^{2}P pincer complexes (E = O, S) for electrocatalytic proton reduction. S. Kaur-Ghumaan, P. Hasche, T. Beweries, *Dalton Trans.* **2019**, *48*, 16322-16329.

(84) Fe(II) Hydride Complexes for the Homogeneous Dehydrocoupling of Hydrazine Borane: Catalytic Mechanism via DFT Calculations and Detailed Spectroscopic Characterization. R. Knitsch, D. Han, F. Anke, L. Ibing, H. Jiao, M. R. Hansen, T. Beweries, *Organometallics* **2019**, *38*, 2714-2723.

(83) Intermolecular hydrogen bonding in isostructural pincer complexes [OH-($^{t\text{-Bu}}$POCOP$^{t\text{-Bu}}$)MCl] (M = Pd, Pt). M. Joksch, A. Spannenberg, T. Beweries, *Acta Cryst. E*, **2019**, Manuscript No. RZ5258.

(82) 1-Titanacyclobuta-2,3-diene – an Elusive Four-membered Cyclic Allene. F. Reiß, M. Reiß, J. Bresien, A. Spannenberg, H. Jiao, W. Baumann, P. Arndt, T. Beweries, *Chem. Sci.* **2019**, *10*, 5319-5325.

(81) Triazenido Complexes of Titanocene(III). T. Beweries, F. Reiß, J. Rothe, A. Schulz, A. Villinger, *Eur. J. Inorg. Chem.* **2019**, 1993-1998.

(80) Recent advances in transition metal catalysed dehydropolymerisation of amine boranes and phosphine boranes. D. Han, F. Anke, M. Trose, T. Beweries, *Coord. Chem. Rev.* **2019**, *380*, 260.

(79) Group 4 metallocene mediated homo- and heterocoupling of heteroaromatic nitriles. M. Reiß, F. Reiß, A. Spannenberg, P. Arndt, T. Beweries, *Organometallics* **2018**, *37*, 4415.

(78) Dehydropolymerisation of methylamine borane using a dinuclear 1,3-allenediyl bridged zirconocene complex. M. Trose, M. Reiß, F. Reiß, F. Anke, A. Spannenberg, S. Boye, A. Lederer, P. Arndt, T. Beweries, *Dalton Trans.* **2018**, *47*, 12858-12862.

(77) Halogen bonding in ring-substituted group 10 POCOP iodido complexes with iodine and its possible role in oxidative addition. M. Joksch, H. Agarwala, A. Spannenberg, T. Beweries, *Eur. J. Inorg. Chem.* **2018**, 3913.

(76) Synthesis of Rh(III) thiophosphinito pincer hydrido complexes by base-free C-H bond activation at room temperature. G. Vlahopoulou, S. Möller, J. Haak, P. Hasche, H.-J. Drexler, D. Heller, and T. Beweries, *Chem. Commun.* **2018**, *54*, 6292.

(75) Visiting the limits between a highly strained 1-zirconacyclobuta-2,3-diene and chemically robust dizirconacyclooctatetraene. F. Reiß, M.Reiß, A. Spannenberg, H. Jiao, W. Baumann, P. Arndt, U. Rosenthal, T. Beweries, *Chem. Eur. J.* **2018**, *24*, 5667.

(74) Synthesis and crystallographic characterization of bis(η5-pentamethylcyclopentadienyl)-1-zircona-4,5-bis(trimethyl)-furan- 3-one-triisobutylaluminium. V. V. Burlakov, V. S. Bogdanov, P. Arndt, A. Spannenberg, U. Rosenthal, T. Beweries, V. B. Shur, *Acta Cryst.* **2018**, E74, 566.

(73) Synthesis of symmetric and non-symmetric Ni(II) thiophosphinito PECSP (E = S, O) pincer complexes and applications in Kumada coupling under mild conditions. P. Hasche, M. Joksch, G. Vlachopoulou, H. Agarwala, A. Spannenberg, T. Beweries, *Eur. J. Inorg. Chem.* **2018**, 676.

(72) Synthesis and characterisation of ring-substituted POCOP halide complexes of group 10 metals. M. Joksch, H. Agarwala, J. Haak, A. Spannenberg, T. Beweries, *Polyhedron* **2018**, *143*, 118.

(71) Titanocene silylpropyne complexes – promising intermediates en route to a four-membered 1-metallacyclobuta-2,3-diene? F. Reiss, M. Reiss, A. Spannenberg, H. Jiao, D. Hollmann, P. Arndt, U. Rosenthal, T. Beweries, *Chem. Eur. J.* **2017**, 23, 14158.

(70) Synthesis and coordination chemistry of the PPN ligand 2-[bis(diisopropylphosphino)methyl]-6-methylpyridine. D. Han, B. Andres, A. Spannenberg, T. Beweries, *Acta Cryst.* **2017**, *C73*, 917.

(69) Synthesis, characterisation and hydrogen bonding of isostructural group 10 metal halide complexes bearing a POCOP ligand. M. Joksch, J. Haak, A. Spannenberg, T. Beweries, *Eur. J. Inorg. Chem.* **2017**, 3815-3822.

(68) Formation of high-molecular weight polyaminoborane by Fe hydride catalysed dehydrocoupling of methylamine borane. F. Anke, D. Han, M. Klahn, A. Spannenberg, T. Beweries, *Dalton Trans.* **2017**, *46*, 6843-6847.

(67) Redox-disproportionation of a decamethyltitanocene(III) isonitrile alkinyl complex. F. Reiss, K. Altenburger, D. Hollmann, A. Spannenberg, H. Jiao, P. Arndt, U. Rosenthal, T. Beweries, *Chem. Eur. J.* **2017**, *23*, 7891-7895.

(66) Photophysics of BODIPY dyes as readily designable photosensitisers in light-driven proton reduction. L. Dura, M. Wächtler, S. Kupfer, J. Kübel, J. Ahrens, S. Höfler, C. Cidarer, M. Bröring, B. Dietzek, T. Beweries, *Inorganics* **2017**, 21-38.

(65) Crystal structures of two ansa-titanocene trifluoromethanesulfonate complexes bearing the $Me_2Si(C_5Me_4)_2$ ligand. M. Kessler, C. Godemann, A. Spannenberg, T. Beweries, *Acta Cryst.* **2016**, *E72*, 1833.

(64) Iridium(III) hydrido complexes for the catalytic dehydrogenation of hydrazine borane. D. Han, M. Joksch, M. Klahn, A. Spannenberg, H.-J. Drexler, W. Baumann, H. Jiao, R. Knitsch, M. R. Hansen, H. Eckert, T. Beweries, *Dalton Trans.* **2016**, *45*, 17697.

(63) A Model of a Closed Cycle of Water Splitting using *ansa*-Titanocene(III/IV) Triflate Complexes. C. Godemann, D. Hollmann, M. Kessler, H. Jiao, A. Spannenberg, A. Brückner, T. Beweries, *J. Am. Chem. Soc.* **2015**, *137*, 16187.

(62) Crystal structure of 1-hydroxy-2,2,6,6-tetramethylpiperidin-1-ium trifluoromethanesulfonate. C. Godemann, A. Spannenberg, T. Beweries, *Acta Cryst.* **2015**, *E71*, o921.

(61) Crystal structure of 1,1,2,2-tetramethyl-1,2-bis(2,3,4,5-tetramethylcyclopenta-2,4-dien-1-yl)disilane. C. Godemann, A. Spannenberg, T. Beweries, *Acta Cryst.* **2015**, *E71*, o888.

(60) The Contrasting Character of Early and Late Transition Metal Fluorides as Hydrogen Bond Acceptors. D. Smith, T. Beweries, C. Blasius, N. Jasim, R. Nazir, S. Nazir, C. Robertson, A. Whitwood, C. Hunter, L. Brammer, R. N. Perutz, *J. Am. Chem. Soc.* **2015**, *137*, 11820.

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