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Date of birth: November 02, 1961



UNIVERSITY EDUCATION

1988-1990 Dr. rer. nat., RWTH Aachen with Prof. Dr. P. Paetzold
Reaktionen von Iminoboranen mit Carbenkomplexen des Tantal
1983-1988 Undergraduate Studies in Chemistry, RWTH Aachen

EMPLOYMENT

2010 Chair offered at the University of Erlangen (declined)
2009-current Professor (chair, W3), Inorganic Chemistry, Univ. Würzburg
2005-2009 Dean/Vice Dean of the Faculty for Chemistry and Pharmacy
2002-2009 Professor (chair, C4) of Inorganic Chemistry Univ. Würzburg
2002 Appointed Reader at Imperial College, London
2000 Appointed Senior Lecturer at Imperial College, London
1998 Appointed Privatdozent at the RWTH Aachen
1997 Habilitation, RWTH Aachen with Prof. Dr. P. Paetzold
1991-1992 Postdoc with Prof. M. F. Lappert, University of Sussex, UK

MAJOR FELLOWSHIPS, HONORS, AWARDS AND DISTINCTIONS

Academy since 2015 North Rhine-Westphalian Acad. of Sciences, Humanities and the Arts
Memberships: since 2011 Leopoldina - German National Academy of Science
since 2009 Bavarian Academy of Science
since 2002 Fellow of the Royal Society of Chemistry

Board 2014-current Member of Advisory Board, Leibniz Institute for Catalysis, Rostock
Memberships: 2012-current Member of Advisory Board, *Dalton Transactions*
2008-current Member of DFG panel for Inorganic Molecular Chemistry
2007-2010 Member of the *Wöhler Vereinigung für Anorganische Chemie*
2006-2009 Member of Advisory Board, *Organometallics*
2005-current Member of Advisory Board, IMEBORON conferences
2004-current Member of Advisory Board, EUROBORON conferences

Awards: 2015 *ERC Advanced Grant MULTIBB (2.5M€)*
2014 *RSC Main Group Award*, Royal Society of Chemistry
2014 *ScotChem Lectureship* of the five Scottish universities
2014 *Brucker Lectureship*, University of Toronto
2012 *Steinhofer Lectureship*, Universität Freiburg
2011 *ERC Advanced Grant BORYLENEFUN (2.5M€)*
2009 *Gottfried Wilhelm Leibniz Prize* of the DFG (2.5M€)
2009 *Arduengo Lectureship*, University of Alabama

PUBLICATIONS SUMMARY

Publications: over 400. Over 120 papers in journals with impact factors >10. Over 200 in first ranking journals including *Science* (2), *Nature* (1), *Nature Chemistry* (3), *Nature Communications* (1), *Angewandte Chemie* (91), *J. Am. Chem. Soc.* (25). Patents: 4. Book chapters: 3. H-index: 52. Accumulated impact (number of papers in each journal multiplied by journal impact factor): >2600. Citations >9200

FUNDING HISTORY - Major Grants Only (>50,000 €)

1. Other major grants

DFG Leibniz Prize (2009-2015)
ERC Advanced Grant (2011-2016)
ERC Advanced Grant (2016-2021)

2. Equipment Grants awarded by the Deutsche Forschungsgemeinschaft (DFG)

DFG HBF 133-595 (2004) *NMR Spectrometer*
DFG HBF 133-596 (2004) *NMR Spectrometer*
DFG HBF 133-597 (2004) *NMR Spectrometer*
DFG HBF 133-594 (2004) *X-ray Diffractometer*
DFG INST 93/752-1 (2012) *X-ray Diffractometer*
DFG INST 93/750-1 (2012) *EPR Spectrometer*
DFG INST 93/808-1 (2013) *N₂-Cryo-Platform Prodigy*
DFG INST 93/770-1 (2012) *WAP-Cluster*

3. Self-responsive Mode Grants awarded by the Deutsche Forschungsgemeinschaft (DFG)

DFG BR1149/3-1,2 (1996-1999) *Boryl complexes*
DFG BR1149/5-1,2 (2004-2010) *Synthesis, structure and reactivity of borylene complexes*
DFG BR1149/7-1,2 (2005-2011) *Synthesis, structure and reactivity of boron-bridged metallocenophanes and related compounds*
DFG BR1149/8-1,2,3 (2006-2013) *Boryl- and borylene complexes of palladium and platinum*
DFG BR1149/11-1 (2010-2013) *Reactivity of non-coordinated boroles*
DFG BR1149/12-1 (2011-2014) *Dative interactions between main group and transition metal elements*
DFG BR1149/13-1 (2013-2016) *Reduction of monoboranes and diboranes(4)*
DFG BR1149/14-1 (2013-2016) *Metal-mediated cyclisation of iminoboranes: a route to borazarenes and BN-isostere materials*
DFG BR1149/15-1 (2013-2016) *Transition-metal-catalysed dehydrocoupling of boranes*

4. Grants awarded by the Engineering and Physical Science Research Council (EPSRC, UK)

EPSRC GR/R36794 (2001-2004) *[1]Borametalocenophanes of Ti, Zr and Hf*
EPSRC GR/R39832 (2001-2004) *Transition metal borylene complexes*
EPSRC GR/R80438 (2002-2006) *Strained [1]borametalocenophanes and related compounds; synthesis, reactivity and polymerisation*
EPSRC GR/R91977 (2002-2005) *Boron-bridged constrained geometry complexes of group III and IV metals*

5. Grants awarded by the DFG within collaborative projects

DFG SPP (Priority Program) BR1149/6-1, -2 and -3 (2005-2011) *Experimental charge density as the key to understand chemical interactions*
DFG GRK (Research Graduate School) 1221 *Tuning the electronic properties of aggregates build from π -conjugated systems* (2006-2015); herein:
– (2006-2010) *Main group element mediated electronic interactions in transition metal π -complexes Phase 1*
DFG GRK (Research Graduate School) 2112 *Molecular Biradicals* (2015-2019); herein:
– (2015-2019) *Electronic Structure and Reactivity of Diborenes and Diborenedications*

6. Research grants from industry sources

BASF AG (2007-2008) *Borate-based ionic liquids*
Novaled

7. Material costs supplements from fellowships and scholarships

Alexander von Humboldt Foundation (materials costs from 11 fellowships)

TEN REPRESENTATIVE RECENT PUBLICATIONS

1. H. Braunschweig, R. D. Dewhurst, F. Hupp, M. Nutz, K. Radacki, C. W. Tate, A. Vargas, Q. Ye, Multiple Complexation of CO and Related Ligands to a Main Group Element, *Nature* **2015**, 522, 327–330.
(Highlighted in: *Nature, Chemistry and Engineering News*)
2. H. Braunschweig, R. D. Dewhurst, K. Hammond, J. Mies, K. Radacki, A. Vargas, Ambient-Temperature Isolation of a Compound with a Boron-Boron Triple Bond, *Science* **2012**, 336, 1420
<http://dx.doi.org/10.1126/science.1221138>
(Highlighted in: *The Times of London, New Scientist, Science, Nature, Chemistry World, Spektrum*)
3. H. Braunschweig, K. Radacki, A. Schneider, Oxoboryl Complexes: Boron–Oxygen Triple Bonds stabilized in the Coordination Sphere of Platinum, *Science* **2010**, 328, 345 <http://dx.doi.org/10.1126/science.1186028>
(Highlighted in: *Chemical and Engineering News, Angewandte Chemie*)
4. H. Braunschweig, T. Dellermann, R. D. Dewhurst, W. C. Ewing, K. Hammond, J. O. C. Jimenez-Halla, T. Kramer, I. Krummenacher, J. Mies, A. K. Phukan, A. Vargas, Metal-Free Coupling of Carbon Monoxide at a Boron-Boron Triple Bond, *Nature Chemistry* **2013**, 5, 1025 <http://dx.doi.org/10.1038/NCHEM.1778>
(Highlighted in: *Nature*)
5. H. Braunschweig, A. Damme, R. D. Dewhurst, A. Vargas, Bond-strengthening π backdonation in a transition-metal π -diborene complex, *Nature Chemistry* **2013**, 5, 115
<http://dx.doi.org/10.1038/NCHEM.1520>
(Highlighted in: *Nature Chemistry*)
6. H. Braunschweig, Q. Ye, A. Vargas, R. D. Dewhurst, K. Radacki, A. Damme, Controlled Homocatenation of Boron on a Transition Metal, *Nature Chemistry* **2012**, 4, 563 <http://dx.doi.org/10.1038/NCHEM.1379>
(Highlighted in: *Nature Chemistry*)
7. H. Braunschweig, P. Brenner, R. D. Dewhurst, I. Krummenacher, B. Pfaffinger, A. Vargas, Unsupported Boron-Carbon σ -Coordination to Platinum - An Isolable Snapshot of σ -Bond Activation, *Nature Communications* **2012**, 3, 872
8. H. Braunschweig, R. D. Dewhurst, K. Kraft, S. Östreicher, K. Radacki, Planar Four-Coordinate Boron: A Single, Flat Boron Atom as a Ligand for Four Metals, *Angew. Chem. Int. Ed.* **2012**, 51, 2183
(Highlighted in: *Nature Chemistry*)
9. H. Braunschweig, R. D. Dewhurst, C. Hörl, A. K. Phukan, F. Pinzner, S. Ullrich, Direct Hydroboration of B=B Double Bonds: a Mild and Diastereoselective Strategy for the Proliferation of B–B Single Bonds, *Angew. Chem. Int. Ed.* **2014**, 53, 3241
(Designated Hot Paper by *Angewandte Chemie*)
10. H. Braunschweig, C.-W. Chiu, K. Radacki, T. Kupfer, Synthesis and Structure of a Carbene-Stabilized π -Boryl Anion, *Angew. Chem. Int. Ed.* **2010**, 49, 2041
(VIP; Highlighted in: *Nature, Angewandte Chemie*)

GRANTED PATENTS

1. H. Braunschweig, F. Güthlein, *Transition-metal catalyzed synthesis of diboranes(4)*, EP2554547 (A1), 2013.
2. H. Braunschweig, C. von Koblinski, M. O. Kristen, *Metallocene Complexes*, EP1140955 (A1), 2001.

SELECTED NOTABLE INVITED PRESENTATIONS

2016	<i>Frontiers Lecture Series</i> , Texas A&M, 2015/6 <i>Boron in the Americas XV</i> , Kingston, Canada <i>Inorganic Lecture Series MIT and Harvard</i> , Boston, USA <i>Computational Chemistry (CC) Symposium</i> , Athens, Greece	Lecture Series Keynote Lecture Lecture Series Invited Lecture
2015	<i>Inorganic Lecture Series UBC and UVic</i> , Vancouver/Victoria <i>6th Global Congress of Catalysis</i> , Xi'an, China <i>14th Inorganic Ring Systems (IRIS) Conference</i> , Regensburg <i>RSC Main Group Award lecture tour</i> (five UK universities) <i>Plenary talk at SFB symposium</i> , Universität Münster <i>Mike Lappert Memorial Symposium</i> , London	Lecture Series Keynote Lecture Keynote Lecture Award Lecture Tour Plenary Lecture Keynote Lecture
2014	<i>Braker Lectureship</i> , University of Toronto, Canada <i>ScotChem Lecture Tour</i> , (lectures at the five Scottish universities) <i>Pre-ICOMC Symposium</i> , Kyoto University, Japan <i>XXVII ICOMC</i> , Sapporo, Japan <i>ICCC 41</i> , Singapore <i>IMEBoron XV</i> , Prague, Czech Republic <i>ATC-Diskussionstagung of DECHEMA</i> , Frankfurt, Germany <i>Symposium in Honor of Guy Bertrand</i> , ACS Meeting, Dallas <i>5th Global Congress of Catalysis</i> , Qingdao, China	Award Lecture Award Lecture Tour Invited Lecture Plenary Lecture Keynote Lecture Invited Lecture Keynote Lecture Invited Lecture Invited Lecture
2013	<i>ChemComm/Dalton Symposium</i> , Regensburg, Germany <i>ACS Meeting</i> , New Orleans, United States <i>96th Canadian Society for Chemistry Conference</i> , Quebec <i>INEOS RAS</i> , A. N. Nesmeyanov Institute, Moscow, Russia	Plenary Lecture Invited Lecture Keynote Lecture Plenary Lecture
2012	<i>Organometallic Summer School</i> , Jaca, Spain <i>Steinhofer Lectureship</i> , Uni. Freiburg <i>13th Inorganic Ring Systems (IRIS) Conference</i> , Victoria, Canada <i>16. Mesilla Chemistry Workshop</i> , New Mexico, United States	Keynote Lecture Award Lecture Plenary Lecture Invited Lecture
2011	<i>XIX European Conference on Organomet. Chem.</i> , Toulouse <i>ACS Meeting</i> , Denver, United States <i>IMEBoron XIV</i> , Niagara Falls, Canada	Plenary Lecture Invited Lecture Plenary Lecture
2010	<i>Main Group Interest Group</i> , Oxford, U.K. <i>Pacificchem</i> , Honolulu, United States (1 of 2) <i>Pacificchem</i> , Honolulu, United States (2 of 2) <i>25th OKV</i> , Tromsø, Norway	Plenary Lecture Invited Lecture Invited Lecture Keynote Lecture
2009	<i>92nd Canadian Society for Chemistry Conference</i> , Hamilton, Canada <i>Zing Organometallics Conference</i> , Antigua <i>Arduengo Lectureship</i> , University of Alabama	Keynote Lecture Keynote Lecture Award Lecture
2008	<i>IMEBoron XIII</i> , Barcelona, Spain <i>Anglo-German Inorganic Chemistry Conference VII</i> , Cardiff	Keynote Lecture Keynote Lecture
2007	<i>EUROBORON IV</i> , Bremen, Germany	Keynote Lecture
2006	<i>ACS Meeting</i> , San Francisco, United States <i>Minerva Meeting</i> , Rehovot, Israel	Invited Lecture Keynote Lecture
2005	<i>IMEBoron XII</i> , Sendai, Japan	Keynote Lecture

ORGANISATION OF INTERNATIONAL CONFERENCES

2014	<i>IMEBORON XV</i> , Prague, Czech Republic (steering committee)
2013	<i>EUROBORON VI</i> , Radziejowice, Poland (steering committee)
2011	<i>IMEBORON XIV</i> , Niagara Falls, Canada (steering committee)
2010	<i>EUROBORON V</i> , Edinburgh, UK (steering committee)
2008	<i>IMEBORON XIII</i> , Barcelona, Spain (steering committee)
2008	<i>AGICHEM VII</i> , Cardiff, UK (steering committee)
2007	<i>EUROBORON IV</i> , Bremen, Germany (steering committee)
2004	2 nd International Ferrocene Symposium, Würzburg, Germany (symposium chairman)

MAJOR CONTRIBUTIONS TO THE EARLY CAREERS OF RESEARCHERS

1. Habilitation host (2004-2008) to Prof. Dr. David Scheschkewitz, now Krupp Professor (W3) at Universität des Saarlandes, Germany.
2. Habilitation host (2011-2014) to Dr. Viktoria Däschlein-Gessner, currently Emmy Noether Fellow of the Deutsche Forschungsgemeinschaft, Universität Würzburg, Germany.
3. Postdoctoral host (2008-2010) to Prof. Ching-Wen Chiu, now Assistant Professor at the National Taiwan University.
4. Postdoctoral host (2011-2013) to Dr. Alfredo Vargas, now Senior Lecturer at the University of Sussex, UK.
5. Postdoctoral host (2011-2012) to Asst. Prof. J. Oscar C. Jimenez-Halla, now Assistant Professor at the University of Guanajuato, Mexico.
6. Postdoctoral host (2011-2013) to Dr. Sakya S. Sen, now Research Group Leader at the National Chemical Laboratory in Pune, India.
7. Postdoctoral host (2011-2015) to Dr. Rong Shang, now Assistant Professor at Hiroshima University, Japan

FELLOWSHIPS AND SCHOLARSHIPS AWARDED FOR WORK IN THE GROUP

Alexander von Humboldt Fellowships for Senior Researchers:

Prof. Sundargopal Ghosh (2008, 2010, 2014)

Prof. Krishna Kumar Pandey (2010)

Alexander von Humboldt Postdoctoral and Return Fellowships:

Dr. Daniela Rais (2004-2005)

Dr. Rian Dewhurst (2007-2008)

Dr. Ching-Wen Chiu (2009-2010)

Dr. Marta Lopez de Rego Lage (2011-2012)

Dr. Viktoria Däschlein-Gessner (2010)

Dr. Sakya S. Sen (2011-2013)

Dr. Kalimuthu Geetharani (2012-2014)

Dr. Silvia Mozo de la Vieja (2013-2015)

Dr. Xiaoyu Yan (2014-2016)

Dr. Merle Arrowsmith (2014-2016)

Dr. Rixin Wang (2015-2017)

Dr. Chang-Jiang Yao (2015-2017)

Dr. Crispin Lichtenberg (2015-2016)

Fonds der Chemischen Industrie Ph.D. scholarships:

Dr. Frank Breitling (2002-2004)

Dr. Thomas Kupfer (2005-2007)

Dr. Achim Schneider (2007-2009)

Dr. Jürgen Bauer (2010-2012)

Dr. Johannes Wahler (2011-2013)

Dr. Johannes Brand (2012-2014)

Lisa Mailänder (2013-2015)