

## Prof. Dr. Dr. h.c mult. Wolfgang A. Herrmann

Lehrstuhl für Anorganische Chemie  
Technische Universität München  
Lichtenbergstr. 4  
85748 Garching

### Curriculum Vitae

Born April 18, 1948 in the city of Kelheim (Bavaria) as son of the teacher Ferdinand Herrmann and his wife Maria Herrmann  
Married with Freya Herrmann.  
Five children (Florian, Isabel, Maria, Ursula, Katharina)



- 1958 - 1967** Visit of high-school (mathematics major), final examination in 1967 ("excellent")  
Work in chemical industry (ARAL petro-refinery) for 10 months
- 1967 - 1970** Study of chemistry at the Technische Universität München, Fellow of the German Episcopate, final examination after 6 semesters ("excellent")
- 1970 - 1971** Diploma thesis under the direction of Prof. Dr. E. O. Fischer at the Technische Universität München on  $\text{PH}_3$ -complexes of transition metals
- 1973** PhD. ("excellent") at the Universität Regensburg (07/26/1973) under the direction of Prof. Dr. H. Brunner on "Optically Active Transition Metal Complexes of Square-Pyramidal Geometry")
- 1975 - 1976** Research Fellow of Deutsche Forschungsgemeinschaft in the laboratory of Professor P. S. Skell (Pennsylvania State University/USA)
- 1978** "Habilitation" on "Organometallic Syntheses with Diazoalkanes" at the Universität Regensburg
- 1979** Offer from Pennsylvania State University/USA (not accepted)
- 1979** Professor at the Universität Regensburg, Institute of Inorganic Chemistry (05/15/1979)
- 1982** Chair Professor of Inorganic Chemistry at the Universität Frankfurt/Main (01/01/1982)
- 1985** Chair Professor at the Technische Universität München in succession of Prof. Dr. mult. h.c. E.O. Fischer (04/01/1985)
- 1988 + 1993** Offer for chair positions at ETH Zürich, Switzerland (not accepted)
- 1993** Offer for Chief of Central Research HOECHST AG (not accepted)

**1995** President of the Technische Universität München  
(10/01/1995) – Re-Elected 1999, 2005, 2007, 2013

## Honors

- 1979** Chemistry Award of the Academy of Sciences at Göttingen
- 1979** Karl Winnacker-Fellowship of HOECHST AG (1979-1983)
- 1982** Otto Klung-Award, Berlin
- 1985** Arthur D. Little-Lectureship, Massachusetts Institute of Technology, USA
- 1987** Leibniz-Research Award of the Deutsche Forschungsgemeinschaft
- 1987** Visiting Professorships at the Universities of Bordeaux and Toulouse, France
- 1987/88** Karl-Ziegler-Visiting Professorship at the Max Planck-Institut für Kohlenforschung (Mülheim/Ruhr)
- 1988** Visiting Professorship at the University of Strasbourg
- 1989** Visiting Professorship at the University of Rennes
- 1989** Alexander von Humboldt-Award of the french department for science for the german-french cooperation
- 1990** Election to Member of Academy of Sciences and Literature at Mainz
- 1990** Otto Bayer-Award of BAYER AG, Leverkusen (jointly with K. P. C. Vollhardt, Berkeley, USA)
- 1990** *Doctor honoris causa*, Université Claude Bernard , Lyon, France
- 1991** Frontiers in Chemistry Distinguished Lectureship, Texas A & M University, College Station, Texas, USA
- 1991** Max Planck-Research-Award (jointly with J.-M. Basset, Lyon, France)
- 1992** Fellow der Japanese Society of Promotion of Science (JSPS), March 1992
- 1992** Sammet-Visiting Professorship of HOECHST AG at the Universität Frankfurt/Main
- 1993** Inauguration of the Van der Kerk-Lectureship, Rijksuniversiteit Utrecht, Netherlands
- 1993** Seaborg Lectureship der University of California at Berkeley, USA
- 1994** Pino-Medal of the Società Chimica Italiana, Italy
- 1994** Iberdrola-Visiting Professor of Università Alcalá de Henares Madrid, Spain
- 1995** Member of the Deutsche Akademie der Naturforscher Leopoldina, Halle
- 1995** Wilhelm Klemm-Award of the Gesellschaft Deutscher Chemiker

- 1995** *Doctor honoris causa*, University of Veszprém, Hungary (04/25/1995)
- 1997** Federal Cross Of Merit of the Federal Republic of Germany
- 1999** *Doctor honoris causa*, University of South Carolina, Columbia, SC/USA
- 1999** Dr. Arthur Sease Williams-Lectureship in Inorganic Chemistry, University of South Carolina, USA
- 2000** Luigi-Sacconi-Medaille der Italienischen Chemischen Gesellschaft
- 2000** Werner Heisenberg-Medal of the Alexander von Humboldt-Foundation
- 2000** Officier de l'Ordre national de l'Honneur of the French Republic
- 2002** *Doctor honoris causa*, Universidade Nova de Lisboa/Portugal
- 2002** "Großer Ehrenteller" of the Peutinger-Collegium, Munich
- 2003** *Doctor honoris causa*, Nanjing University of Science and Technology (China)
- 2003** *Doctor honoris causa*, University of Rennes (France)
- 2004** ACS Award in Organometallic Chemistry (American Chemical Society)
- 2004** "Initiativpreis 2004" from Stiftung Industrieforschung, Cologne (Germany)
- 2005** Doctor honoris causa Technical University Timisoara (Romania)
- 2005** William Knight Lectureship, University of Ohio (USA)
- 2005** State Constitution Silver Medal of the State of Bavaria, Munich
- 2006** Doctor honoris causa, Texas A&M University, College Station, Texas (USA)
- 2006** Doctor honoris causa, Johann Wolfgang von Goethe Universitaet, Frankfurt / Main (Germany)
- 2007** Bavaria State Medal, Munich (Germany)
- 2008** Doctor honoris causa, Bauman Moscow State Technical University (Russia)
- 2009** Doctor honoris causa, Tiflis State University (Georgia)
- 2009** University Manager of the Year
- 2010** "Goldene Bürgermedaille" of Freising (Golden outstanding citizen award medal)
- 2011** Member of the Royal Swedish Academy of Engineering Sciences
- 2012** President of the year
- 2012** Bavarian Maximilian Order for Science and Art
- 2013** Doctor honoris causa, Nanyang Technological University (NTU, Singapore)
- 2014** Gold Medal of Honor of the Administrative District of Berchtesgadener Land

<b>2015</b>	Doctor honoris causa, Polytechnical University Bucharest (Romania)
<b>2015</b>	Gold medal for services to the town of Garching (near Munich)
<b>2016</b>	Honorary Citizenship of the town of Burghausen
<b>2017</b>	Medal for the Protection of Historical Monuments, State Office for the Preservation of Historical Monuments
<b>2017</b>	Member of the Senate of the Max Planck Society
<b>2018</b>	Golden Ring of Honor from the county of Altötting
<b>2019</b>	Georg Mauerer Medal in Gold of the Klinikum rechts der Isar, TUM university hospital

## Main Research Areas

- Organometallic Chemistry and Catalysis oxides
- Catalytic processes for industrial applications, e. g. Fischer-Tropsch reaction, olefin-metathesis, olefin oxidation, methan-refining, hydroformylation under two-phase conditions, isotactic polypropylene
- Multiple bonds between transition metals
- Multiple bonds between transition metals and substituent-free main group elements
- Organolanthanoid-complexes
- Water-soluble catalysts, e. g. for hydroformylation
- Inorganic and organic materials (material research: hardened ceramic materials, corrosion-resistant layers, polymers)
- Effect of metals in biological systems (aluminum, bismuth, antimony)

## Publications / Lectures

- approx. 820 original papers in refereed journals (h-index: 94)
- approx. 60 review articles
- approx. 50 patents
- 40 contributions for books
- Book: "Applied Homogeneous Catalysis with Organometallic Complexes – A Comprehensive Handbook", 2nd edition (B. Cornils/W.A. Herrmann, publisher), VCH-Wiley, vol .1&2, Weinheim, **2002**.
- Book: "Aqueous-Phase Organometallic Chemistry " (B.Cornils/W.A. Herrmann, publisher), VCH-Wiley, Weinheim, **1998**.
- Ten volume series of monographs: "Synthetic Methods of Organometallic and Inorganic Chemistry", Vol. 1-10, Thieme-Verlag, Stuttgart, **1996-2000**.
- approx. 450 scientific lectures in and outside of Germany (mainly USA, UK, France, Switzerland, Australia)

## Honory Board Memberships

Editorial Advisory Board:

- Journal of Organometallic Chemistry (since 1985)
- Polyhedron (1985-1994)
- Organometallics (1985-1990)
- Journal of Cluster Science (1988 - 1994)
- Journal of Molecular Catalysis (1994 - 2000)
- Bulletin de la Société Chimique de France (1991-1995)

- Nachrichten aus Chemie, Technik und Laboratorium, Weinheim/Germany (1986-1993)
- Catalysis Letters (since 1999)
- Angewandte Chemie (since 1999)

Editor:

- Journal of Organometallic Chemistry

Vice President of the German Chemical Society (1997-1999)

Board of directors of the Deutsches Museum München (since 1991, Chairman 1996-1998)

Chairman of the Advisory Board of the Deutsches Museum, Munich (1998-2014)

Member of the Selection Committee of the Alexander von Humboldt Foundation (1984 - 2000)

Chairman of the German Chemical Society, Munich (1986-1988)

Member of "Kuratorium der Nachrichten aus Chemie, Technik und Laboratorium" (1986-1993)

Member of the Selection Committee of the German-Israeli MINERVA-Foundation (1987-1992)

Member of the Academic Senate of the Technische Universität München (1986-1990)

Dean of the Fakultät für Chemie, Biologie und Geowissenschaften of the Technische Universität München (1988-90)

Board member of the Bund der Freunde der Technischen Universität München e.V. (since 1989)

Board member of the Hans-Fischer-Gesellschaft e.V., München (since 1989)

Chairman of the Scientific Advisory Board VIAG AG, Bonn/Berlin (1991-1996)

Member of "DECHEMA-Fachausschuß Chemische Reaktionstechnik" (1993-2003)

Member of the executive board of the DECHEMA Society for Chemical Engineering and Biotechnology, Frankfurt (since 2004)

Board member of the Karl-Winnacker-Stiftung of HOECHST AG / Aventis (since 1994)

Member of "Präsidium des Wirtschaftsbeirats der Union e.V." (since 1996) and chairman of "Ausschuss Bildung und Wissenschaft" (since 1996)

Member of the Scientific Advisory Board "Katholische Akademie in Bayern" (1997-2005)

Member of "Kuratorium des Freundeskreises der Bayerischen Staatsbibliothek" (since 1998)

Member of the Board of the Friedrich-Schiedel-Stiftung (since 1999)

Chairman of the State Research Council of Baden-Württemberg (1999-2003)

Board Member of the Konrad-Adenauer Foundation

Member of "Engeres Kuratorium des Fonds der Chemischen Industrie" (since 2001)

Lecturer at the German Institute of Science and Technology (founded 2002) in Singapore (GIST Singapore), Master course "Industrial Chemistry"

Member of the Curatorship of the Heinz-Naumann-Stiftung

Member of the Curatorship of the ifo institute (since 2003)

Chairman of the Bavarian Rectors' Conference (2002-2004)

Founder and first Chairman of the "Universität Bayern e.V.(2004-2005)

Mitglied des Kuratoriums des Max-Planck-Instituts für Physik (Werner-Heisenberg-Institut) (seit 2005)

Member of the International Advisory Council of the King Abdullah University of Science and Engineering (KAUST), Saudi-Arabia (since 2007)

Member of the Governing Board of the European Institute of Innovation and Technology (EIT) (2008 - 2014)

Member of the International Advisory Council of the King Fahd University of Petroleum and Minerals (KFUPM), Saudi-Arabia (2009-2012)

Member of the "Zukunftsrat" (Council for Future Development) of the Bavarian Government (2010-2012)

Chairman of the "Zukunftsrats" (Council for Future Development) of the Association of the Bavarian Economy e.V. (vbw; since 2014)

Member of the Board of Trustees of the TÜV-Süd Foundation (since 2014)

Member of the Royal Swedish Academy of Engineering Sciences (since 2011)

Member of the Advisory Board of the University of Music and Performing Arts Munich (2011)

Member of the Board of Trustees of the American Academy in Berlin (2013-2018)

Member of the International Academic Advisory Panel (IAAP), Ministry of Education, Singapore (since 2014)

Member of the Board of the Catholic University Eichstatt-Ingolstadt (since October 2015)