

**Prof. Dr. Jörg Sundermeyer**

born 26.05.1959 in Leverkusen, Germany  
married, one daughter, two sons (\*91, \*94, \*97)



Address: Philipps-Universität Marburg  
Department of Chemistry, Organometallic Chemistry  
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Position: University Professor

Expertise: Inorganic molecular chemistry, coordination and organometallic chemistry,  
homogeneous and biphasic catalysis, functional molecules for materials chemistry

**University Education**

- 1989-95 Habilitation (Dr. rer. nat. habil.) in Inorganic Chemistry, Bayerische Julius-Maximilians-Universität Würzburg, c/o Chair Prof. H. Werner, „Organometallic transformations of *N*-organoimido complexes of group 5. - 7. metals“
- 1988 Doctoral degree in Chemistry (Dr. rer. nat.), Georg-August-Universität Göttingen, Dissertation on “Hydrogen cyanide, dicyanogen, and hexafluoropropene: Their use in the synthesis of trifluormethyl and halogen substituted heterocyclic compounds via catalytic processes”, Thesis advisor: Prof. H. Roesky (summa cum laude)
- 1984-85 Postgraduate studies in the group of Prof. R. J. Haines, University of Natal, Pietermaritzburg, South Africa, Topic: Dinuclear ruthenium "A-frame" complexes
- 1984 Diploma degree in Chemistry (Dipl. Chem.), Georg-August-Universität Göttingen, “Nitrogen multiple bonds to elements of group 6 and 16”, Thesis supervisor: Prof. H. Roesky (with distinction)
- 1978-84 Studies in Chemistry, Georg-August-Universität Göttingen

**Professional Experience**

- 1996- Professor for Organometallic Chemistry, Philipps-Universität Marburg
- 1995-96 Lecturer (C1), Chemistry Department, Bayerische Julius-Maximilians-Universität Würzburg
- 1986-88 Research Assistant, Chemistry Department (Prof. H.W. Roesky), Georg-August-Universität Göttingen
- 1984-85 Research Assistant at the Council of Scientific and Industrial Research South Africa, C.S.I.R. Unit of Metal Cluster Chemistry, Pietermaritzburg

**Honours, Awards and other Proofs of Qualification**

- 2012 Faculty Teaching award of the students (GdCh JungChemikerForum JCF)
- 2007 Guest Professor at the University of British Columbia, Vancouver, CA

2005-07	Dean of Student Affairs, Chemistry Department, Philipps-Universität Marburg
2004	Offered Chair Position C4 at the University of Rostock
1999	Guest Professor, International Center for Advanced Studies (INCAS), Russian Academy of Sciences, Moscow and Nizhny Novgorod
1996	Heisenberg-Fellow of the DFG
1995	Lecturers Fellowship (Dozentenstipendium) of the Fund of Chemical Industries
1994	Heinz-Maier-Leibnitz-Award of the Federal Minister for Education and Science
1994	Award of the Dr. Otto Röhm Memorial Trust
1993	ADUC-Award of the German Chemical Society
1991-93	Habilitanden-Stipend of the DFG
1989-91	Liebig-Stipend of the Fund of Chemical Industries

**Ca. 270 Publications: H-Index 33** (without citations from 53+ patent families and 7 book chapters)

Some representative peer-reviewed publications:

- 1) *Direct Metal-Metal Bonds Between High and Low Valent Complex Fragments: Reactions of Metal Bases with Metal Acids  $[Re(NR)_3]^+$  und  $[Mo(NR)_2]^{2+}$ .*  
J. Sundermeyer, D. Runge, J.S. Field, *Angew. Chem., Int. Ed. Engl.* **1994**, 33, 678-681.
- 2) Simple Synthesis of an Allenylidene Heptavalent Rhenium(d0) Complex.  
X. Li, M. Schopf, J. Stephan, J. Kipke, K. Harms, J. Sundermeyer, *J. Am. Chem. Soc.* **2004**, 126, 8660-8661.
- 3) Aerobic Oxidation of 2,3,6-Trimethylphenol to Trimethyl-1,4-benzoquinone with Copper(II) Chloride as Catalyst in Ionic Liquid and Structure of the Active Species. H. Sun, K. Harms, J. Sundermeyer, *J. Am. Chem. Soc.* **2004**, 126, 9550-9551.
- 4) *Crystallographic Characterization of a Synthetic 1:1 End-On Copper Dioxygen Adduct Complex.*  
Ch. Würtele, E. Gaoutchenova, K. Harms, M. C. Holthausen, J. Sundermeyer, S. Schindler, *Angew. Chem. Int. Ed.* **2006**, 45, 3867-3869.
- 5) A New Synthetic Pathway to the Second and Third Generation of Superbasic Bisphosphazene Proton Sponges – The Run for the Best Chelating Ligand for a Proton.  
J.F. Kögel, B. Oelkers, B. Kovačević, J. Sundermeyer, *J. Am. Chem. Soc.* **2013**, 135, 17768-17774.
- 6) A Phosphorus Bisylide: Exploring a New Class of Superbases with Two Interacting Carbon Atoms as Basicity Centers.  
J.F. Kögel, D. Margetic, X. Xie, L.H. Finger, J. Sundermeyer, *Angew. Chem. Int. Ed.* **2017**, 56, 3090-3093.
- 7) The Lewis superacid  $Al[N(C_6F_5)_2]_3$  and its higher homolog  $Ga[N(C_6F_5)_2]_3$  – structural features, theoretical investigation and reactions of a metal amide with higher fluoride ion affinity than  $SbF_5$ .  
J. F. Kögel, D. A. Sorokin, A. Khvorost, M. Scott, K. Harms, D. Himmel, I. Krossing, J. Sundermeyer, *Chemical Science* **2018**, 9, 245 – 253.

- 8) Phosphazanyl phosphines PAP: The most electron rich uncharged phosphorus Brønsted and Lewis bases.  
S. Ullrich, B. Kovačević, X. Xie, J. Sundermeyer, *Angew. Chem. Int. Ed.* **2019**, *58*, 10335-10339.
- 9) Template-Controlled On-Surface Synthesis of a Lanthanide Supernaphthalocyanine and its Open-Chain Polycyanine Counterpart.  
Q. Fan, J.-N. Luy, M. Liebold, K. Greulich, M. Zugermeier, J. Sundermeyer, R. Tonner, J. M. Gottfried, *Nature Commun.* **2019**, *10*, 5049.
- 10) On-Surface Synthesis and Characterization of a Cycloarene: C108 Graphene Ring.  
Q. Fan, D. Martin-Jimenez, S. Werner, D. Ebeling, T. Koehler, T. Vollgraff, J. Sundermeyer, W. Hieringer, A. Schirmeisen, J.M. Gottfried, *J. Am. Chem. Soc.* **2020**, *142*, 894-899.

## Selection of Memberships and Activities

- German Chemical Society GDCh,
- German Society of Catalysis,
- Division of Sustainable Chemistry of GDCh,
- ProcessNet platform of reaction technique and process engineering,
- Wöhler Association of Inorganic Chemists,
- Member of the Board of Directors, Materials Science Center Marburg,
- Regular Referee Assignments for Humboldt Foundation, Deutsche Forschungsgemeinschaft DFG, German Academic Exchange Service DAAD, Federal Ministry of Education and Research BMBF, Czech Science Foundation and a number of student funding agencies.
- Referee for more than 20 journals including JACS, Inorg. Chem., Organometallics, Chem. Rev., Angew. Chem. Int. Ed., Chem. Eur. J., Chem. Asian J., Dalton Trans., Green Chem., J. Catal., Adv. Materials, Adv. Synth. & Catal., Eur. J. Inorg. Chem., J. Organomet. Chem., J. Mol. Catal., and others,
- Coordinator of an INTAS co-operation network with NIS funded within the EU Research Framework Program FP5,
- Research and Development Projects with 9 chemical companies so far,
- Academic Research Networking in 3 Collaborative Research Centers (SFB), 5 Priority Research Programs (SPP), 3 Graduate Schools (GRK), 2 Excellence Clusters (LOEWE).

## Academic Lecturing

### Bachelor Students of Chemistry:

- General Chemistry (60 h per semester, including experiments)
- Chemistry of the Elements (60 h per semester, including experiments)
- Organometallic Chemistry (30 h per semester + exercises)
- Coordination Chemistry incl. Bioinorganic Aspects (30 h per semester + exercises)
- Spectroscopic Methods of Inorganic Chemistry (2 weeks block seminar)

### Master Students of Chemistry:

- Technical Homogeneous Catalysis (30 h per semester + exercises)
- Multiphase Catalysis (1 week block seminar)
- Materials Chemistry (ring lecture with colleagues, own contributions: Task Specific Ionic Liquids, OLED Materials, Dye-sensitized Solar Cell Materials, MOCVD / MOVPE / ALD Precursor Chemistry, Inorganic Printed Electronics).

### Ph.D. Students of Chemistry and Physics (Marburg Graduate School "Functionalization of Semiconductors" and Hessen Graduate School on "Fundamentals of Electromobility"):

- Energy Materials (4 weeks block seminar) – From Inorganic Molecules to Electroactive and Optoelectronic Materials: Redox Mediators in Batteries and DSSCs, Lithium Electrolytes, Porphyrinoid Metal Complexes, Inorganic-Organic Semiconductor Heterojunctions, New Approaches in Inorganic Printed Electronics - Semiconductors and high-k-Materials.

### Medical Students:

- General, Inorganic and Organic Chemistry for Medical Students (some 20 years ago).

## Average Group Size

0-2	Postdocs
10-15	Ph.D. students (3 years periods),
1-3	Master students (6 months periods)
2-5	Bachelor research students (6 weeks periods).

## PUBLICATIONS

Jörg Sundermeyer

### A Books (ed.) and Book Chapters

07. Carbonylation of nitroarenes and aromatic amines.  
Marcus Harrer, J. Sundermeyer; 23 pages review, in *Applied Homogeneous Catalysis with Organometallic Compounds: A Comprehensive Handbook in Four Volumes, 3rd Edition*. Ed. B. Cornils, W.A. Herrmann, M. Beller, R. Paciello, WILEY-VCH, Weinheim **2017**.
06. The Chemistry of Superbasic Guanidines.  
J. Sundermeyer, V. Raab, E. Gaoutchenova, U. Garrelts, N. Abacilar, K. Harms, Chapt. 2, pages 17-37; in *Activating Unreactive Substrates: The Role of Secondary Interactions*. Ed. C. Bolm, F. E. Hahn, WILEY-VCH, Weinheim **2009**.
05. Peroxo Complexes of Molybdenum, Tungsten and Rhenium with Phase Transfer Active Ligands: Catalysts for the Oxidation of Olefins and Aromatics by Hydrogen Peroxide and Bistrimethylsilyl Peroxide.  
J. Sundermeyer, G. Wahl, D. Kleinhenz, C. Jost, in *Peroxide Chemistry - Mechanistic and Preparative Aspects of Oxygen Transfer*, Ed. W. Adam, Wiley-VCH **2000**, 341-364.
04. Iodotrimethylsilyl methylene triphenylphosphorane - a Molecule of Theoretical and Synthetic Interest.  
K. Korth, A. Schorm, J. Sundermeyer, H. Hermann, G. Boche, in: *Organosilicon Chemistry IV*; Eds. N. Auner, J. Weis, 238-244, Wiley-VCH, Weinheim **2000**.
03. Catalytic Activation of Hydrogen Peroxide and Bis(trimethylsilyl) Peroxide for the Oxidation of Olefins and Aromatic Hydrocarbons.  
D. Kleinhenz, C. Jost, G. Wahl, J. Sundermeyer, in: *Stereoselective Reactions of Metal Activated Molecules*, Eds. H. Werner, P. Schreier, Vieweg Verlag, Braunschweig, **1998**, 57-60.
02. The Metal-mediated Oxidation of Organic Substrates via Organometallic Intermediates: Recent Developments and Questions of Dispute.  
J. Sundermeyer, *Organic Synthesis Highlights III*, Hrsg.: J. Mulzer, H. Waldmann, VCH Weinheim, **1998**, 133-139.
01. Synthesis and Reactivity of Transition Metal Tuned Phosphorus Ylides.  
K. Weber, S. Schmidt, M. Schopf, J. Sundermeyer in "*Stereoselective Reactions of Metal Activated Molecules*", H. Werner, J. Sundermeyer (ed.), Vieweg Verlag, Braunschweig **1995**.

### B Issued Patent Families and Published Patent Applications

(nach Publikationsdatum geordnet)

53. Verfahren zur Herstellung von Bis(tert-butylimido)-bis(dialkylamido)-Wolfram-Verbindungen und ihre Verwendung, S. Pulz, J. Sundermeyer (UMICORE), EP000003666783(A1).
52. Lithium alkyl aluminates as alkyl transfer reagents, S. Pulz, J. Sundermeyer (UMICORE), EP3666782(A1), WO2020120148(A1).
51. Flüchtige metallorganische Guanidinato- und Amidinato-Ruthenium(II)-Verbindungen vom Typ Aren-Ru(GUA)X und Aren-Ru(AMI)X, J. Sundermeyer, N. Rau, A. Rivas-Nass, A. Frey, E. Woerner, A. Doppiu, R. Karch (UMICORE), EP3599240(A1), WO02020144155(A1).

50. Organometallic Ruthenium(0) Compounds Aren-Ru(DAD) for the Manufacture of a Semiconductor Element or Electronic Memory, J. Sundermeyer, M. Rau, H. Schumann, A. Frey, A. Rivas-Nass, W. Schorn, A. Doppiu, E. Woerner, R. Karch (UMICORE), EP3599241 (A1), WO2020021083(A1).
49. Method for the Preparation of Dialkylamido-Element Compounds, S. Pulz, J. Sundermeyer (UMICORE) EP3620432(A1), WO2020049072(A1).
48. Organometallic Ruthenium(II) Compounds of the Type  $(C_5R_5)Ru(DAD)R'$  for Chemical Vapour Deposition, N. Rau, J. Sundermeyer, H. Schumann, A. Rivas-Nass, A. Frey, W. Schorn, E. Woerner, A. Doppiu, R. Karch (UMICORE), EP3599241 (A1), WO2020021078(A1).
47. Multi-functionalized [CD,LM]-annellated perylenes and their homologues, J. Sundermeyer, Eduard Baal, Simon Werner (Universität Marburg), WO2019/229134 A1.
46. Metal complexes having triazenido ligands and uses thereof for depositing metals from the gas phase, J. Sundermeyer, S. Pulz, F. Schröder (UMICORE), EP3498721 (A1), WO2019115646 (A1).
45. Method for the Reduction of Metal Halides. J. Sundermeyer, L. Hamel, R. Ramon Müller, A. Rivas-Nass, A. Doppiu, E. Woerner, R. Karch (UMICORE), WO2018138150 (A1), US2020031684 (A1), EP3573929(A1).
44. New Metal N-Aminoguanidinate Complexes for Use in Thin Film Fabrication and Catalysis. K. Schlechter, J. Sundermeyer (UMICORE), WO2016083471 (A1), US2017260213 (A1), CN107001393 (A), EP3026055 (A1), EP3224262 (A1), JP2018500296 (A), KR20170090457 (A); US10093687 (B2).
43. Electrolyte System for Use in Electrochemical Components. T. Bergholz, J. Sundermeyer, C. Korte (Forschungszentrum Jülich GmbH), DE102014010526 (A1), EP2975684 (A1).
42. Metallkomplexverbindungen mit Tripod-Liganden für verbessertes Singulett-Harvesting durch kombinierte Singulett-Triplett-Emission für OLEDs und andere optoelektronische Vorrichtungen. T. Gneuß, J. Sundermeyer, M. Leitl, H. Yersin, DE102014116314 (A1).
41. Ionic liquids based on oxalic acid mono amides. K. Massonne, K. Geyer, K. Schierle-Arndt, E. Seikel, F. Seeler, J. Sundermeyer, A. Braam (BASF), EP2940010 (A1).
40. Ionic liquids comprising a chalcogenide anion. L.H. Finger, J. Sundermeyer (Univ. Marburg), WO2015078774 (A1); EP2876081 (A1).
39. Process for preparing alkylindium compounds. J. Sundermeyer, A. Frey, W. Schorn, D. Grosse-Hagenbrock, R. Karch, A. Rivas-Nass, E. Woerner, A. Doppiu (UMICORE), WO2015024893 (A1), CN105473599 (A), EP3036242 (A1), JP2016532699 (A), KR20160045787 (A), TW201507996 (A), US9540401 (B2).
38. Method of producing trialkylgallium compounds and use thereof. W. Schorn, J. Sundermeyer, A. Frey, R. Karch, A. Rivas-Nass, E. Woerner, A. Doppiu (UMICORE), WO2015136049 (A1), EP3116883 (A1), JP2017512827 (A), KR20160135244 (A), TW201542572 (A), US2017081344 (A1), CN106103454 (A).

37. Process for preparing alkylindium compounds and use thereof.  
J. Sundermeyer, A. Frey, W. Schorn, R. Karch, A. Rivas-Nass, E. Woerner, A. Doppiu (UMICORE), US9540401 (B2), WO2015024894 (A1), CN105473599 (A), EP3036242 (A1), JP2016532699 (A), KR20160045787 (A), TW201507996 (A), WO2015024893 (A1), US9617284 (B2), WO2015024894 (A1).
36. Ionic Liquids Based on Oxalic Acid Mono Esters.  
J. Sundermeyer, A. Braam, K. Massonne (BASF), US2014099249 (A1), WO2014056844 (A1).
35. Method for Producing Linear and/or Cyclic Carbonate Esters.  
Th.E. Müller, Ch. Gürtler, S. Elmas, B. Köhler, W. Leitner, M. Harrer, J. Sundermeyer (Bayer MaterialScience), US2015203467 (A1), EP2700633 (A1), WO2014029713 (A1), EP2888235 (A1), CN104540805 (A), KR20150044896 (A), SG11201500287P (A).
34.  $\eta^5:\eta^1$ - Cyclopentadienyliidene-phosphorane constrained geometry complexes of rare earth metals.  
J. Sundermeyer, N. Hillesheim (Rockwood Lithium GmbH), WO2013017280 (A1), US9200092 (B2), CN104203966 (B), DE102012213694 (A1), EP2739632 (A1), EP2739632 (B1), JP2014521670 (A), JP6092207 (B2), KR20140077883 (A), US2014163187 (A1).
33. Homoleptic rare earth triaryl complexes as catalysts.  
J. Sundermeyer, O. Thomas (Rockwood Lithium GmbH), WO2013017281 (A1), US9187505 (B2), JP6000351 (B2), CN103889992 (B), CN103889992 (A), EP2739631 (A1), JP2014524412 (A), US2014155562 (A1), WO2013017281 (A1), KR20140067022 (A), DE102012213695 (A1).
32. Metal complexes with N-aminoamidinate ligands as precursors for chemical vapor deposition processes.  
J. Sundermeyer, W. Schorn, R. Karch (UMICORE), WO2012113761 (A1), DE102011012515 (A1), US2014051878 (A1), TW201247687 (A), RU2013143202 (A), JP2014511380 (A), EP2681229 (A1), CN103380139 (A), US9353139 (B2).
31. Producing a dialkyl carbonate by oxidative carbonylation in the presence of a supported on a solid phase substrate copper-containing catalyst.  
J. Sundermeyer, M. Stricker, P. Wasserscheid, B. Melcher (Univ. Marburg), WO2012013606 (A1), DE102010036631 (A1).
30. Detergents or cleaning agents containing a bleach-enhancing transition metal complex.  
Haetzelt, A. Nordskog, S. Erpenbach, J. Sundermeyer, F. Gärtner (Henkel), US8481475 (B2), DE102009047038 (A1), WO2011064159 (A1), EP2504418 (A1).
29. Detergents or cleaning agents containing a bleach-enhancing transition metal complex which is optionally produced in situ.  
Haetzelt, A. Nordskog, S. Erpenbach, J. Sundermeyer, F. Gärtner (Henkel), US8513177 (B2), DE102009047037 (A1), WO2011064158 (A1), EP2504419 (A1).
28. Biheteroaryl metal complexes as bleach catalysts.  
A. Haetzelt, A. Nordskog, S. Leopold, P. Schmiedel, W. von Rybinski, J. Sundermeyer, J. Döring (Henkel), US2010029540 (A1), DE102007017656 (A1), WO2008125590 (A1), EP2171028 (A1), US8318651 (B2), EP2171028 (B1).
27. Bis(hydroxyquinoline) metal complexes as bleach catalysts.  
A. Haetzelt, A. Nordskog, S. Leopold, P. Schmiedel, W. von Rybinski, J. Sundermeyer, J. Döring (Henkel), DE102007017654 (A1), US8318650 (B2), WO2008135337 (A1), EP2144880 (A1), EP2144880 (B1).

26. Tris(heterocyclic) metal complexes, washing and cleaning agents containing the same, and use as bleach catalysts.  
A. Haetzelt, A. Nordskog, S. Leopold, P. Schmiedel, W. von Rybinski, J. Sundermeyer, J. Döring (Henkel), US2010024133 (A1), DE102007017657 (A1), WO2008125589 (A2); WO2008125589 (A3), EP2144882 (A2), US8361951 (B2).
25. Method for producing urethanes.  
F. Gärtner, A. Jacob, J. Sundermeyer, S. Klein, S. Wershofen (Bayer MaterialScience), WO2012020028 (A1), US2013303740 (A1), EP2603319 (A1), CN103201035 (A), EP2603319 (B1), US9199924 (B2).
24. Hexaorganoguanidinium-organocarbonate, ihre Herstellung und ihre Verwendung.  
J. Sundermeyer, B. Oelkers (Univ. Marburg), WO2011095428 (A1), EP2354121 (A1), EP2354121 (B1).
23. Lithium salts of pentafluorophenylamide anions, preparation thereof and use thereof.  
J. Sundermeyer, B. Roling, T. Linder, T. Frömling, B. Huber (Univ. Marburg), WO2011048152 (A1), EP2314572 (A1), EP2491013 (B1).
22. Ortho-Metalated, Chelate-Stabilized Benzylamines of the Rare Earth Elements.  
J. Sundermeyer, A. Petrov, O. Thomas (Univ. Marburg), DE102007057586 (A1), US2011034713 (A1), EP2227477 (A1), EP2227477 (B1), WO2009067999 (A1), EP2227477 (B1).
21. Cyclopentadienylphosphazene Complexes (CpPN Complexes) of Metals of the Third and Fourth Group and the Lanthanoides.  
J. Sundermeyer, K. Rufanov, A. Petrov, M. Elfferding, M. Winkenstette (Univ. Marburg), EP2227479 (A2), DE102007057854 (A1), US2011034715 (A1), WO2009068000 (A2), WO2009068000 (A3), EP 2227479 (B1).
20. Verfahren zur Herstellung von Urethanen.  
A. Jacob, S. Wershofen, S. Klein, F. Mei, J. Sundermeyer (Bayer MaterialScience), DE112009000076 (A5), DE102008006881 (A1), US2009275771 (A1), WO2009095164 (A1), CN101932555 (A), CN101932555 (B), US9284267 (B2), US9475762 (B2).
19. Hydrophobic Ionic Liquids.  
Th. Linder, J. Sundermeyer (Univ. Marburg), EP2094667 (A2), WO2007131498 (A2), WO2007131498 (A3), US2009298189 (A1), JP2009537463 (A), DE102006023649 (A1), US8669114 (B2), EP2094667 (B1), JP5409351 (B2).
18. Amido complexes of vanadium as catalysts for olefin polymerization.  
M. Arndt-Rosenau, J. Sundermeyer, M. Lemke (Lanxess), EP1607397 (A1), US2005282982 (A1), JP2006001934 (A), DE102004029273 (A1), CN1709920 (A).
17. Novel tantalum and niobium hydrazido compounds for chemical vapour deposition (CVD) of electroceramic barrier layers.  
K. Reuter, D. Gaess, J. Sundermeyer (H.C. Starck), EP2048146 (A2), EP2048146 (A3), EP2048146 (B1), US2009099361 (A1), US7667038 (B2), KR20090037368 (A), DE102007049015 (A1), TW200934786 (A).
16. Tantalum and niobium compounds and their use for chemical vapour deposition (CVD).  
K. Reuter, S. Kirchmeyer, D. Gaess, M. Pokoj, J. Sundermeyer, W. Stolz, Th. Ochs, K. Volz (H.C. Starck), EP1894937 (A1), EP1894937 (B1), US2008038466 (A1), KR20080014951 (A), JP2008088160 (A), DE102006037955 (A1), TW200833704 (A).



15. Tungsten and molybdenum compounds and their use for chemical vapour deposition (CVD) of electroceramic barrier layers.  
J. Sundermeyer, A. Merkoulov, W. Stolz, M. Pokoj, K. Volz, Th. Ochs, K. Reuter (H.C. Starck), US7754908 (B2), EP1806352 (A1), EP1806352 (B1), KR20070073636 (A), JP2007182443 (A), DE102006000823 (A1), US2007160761 (A1).
14. Tantalum and niobium compounds and their use for chemical vapour deposition (CVD) of electroceramic barrier layers.  
J. Sundermeyer, A. Merkoulov, W. Stolz, M. Pokoj, K. Volz, Th. Ochs, K. Reuter (H.C. Starck), DE102005033102 (A1), US2007042213 (A1), US7442407 (B2), EP1757612 (A2), EP1757612 (A3), EP1757612 (B1), CN1896079 (A), JP2007031431 (A).
13. Production of N-aryl carbamates and N-aryl isocyanates via catalytic carbonylation of nitroaromatics.  
J. Sundermeyer, F. Mei (Univ. Marburg), WO2006131381 (A1), US2010217029 (A1), US8076500 (B2), EP1893563 (A1), EP1893563 (B1), DE102005026500 (A1), DE102005026500 (B4), US8076500 (B1).
12. Imidochromium compounds in catalyst systems for olefin polymerization.  
M. Schopf, J. Sundermeyer, J. Kipke, K. Rufanov, U. Peuker, W. Heitz (Basell Polyolefins GmbH), US2004214970 (A1), US7045644 (B2).
11. New 1,8-bis-imido-naphthalene proton sponges, useful as basic catalysts for chemical reactions.  
V. Raab, J. Sundermeyer (BASF), DE10143566 (A1).
10. Vanadium imido phosphoraninato complexes for olefin polymerization.  
J. Sundermeyer, J. Kipke, M. Lemke, M. Arndt-Rosenau, M. Hoch (Bayer), EP1284270 (A1), EP1284270 (B1), EP1284270 (B8), US2003114675 (A1), US6846769 (B2), TWI229684 (B), JP2003160588 (A), DE10140202 (A1), CA2397902 (A1).
09. Catalysts for Olefin Polymerization.  
J. Sundermeyer, J. Kipke, M. Arndt-Rosenau, M. Hoch (Bayer), JP2003146958 (A), EP1284271 (A1), US2003064883 (A1), US2003060357 (A1), DE10140203 (A1), CA2398249 (A1).
08. Vanadium arylimido complexes for olefin polymerization.  
J. Sundermeyer, J. Kipke, X. Li, M. Arndt-Rosenau, M. Hoch (Bayer), EP1284269 (A2), EP1284269 (A3), US2003130451 (A1), TW593378 (B), DE10140135 (A1), CA2398244 (A1), JP2003137849 (A).
07. Method for the Production of Double Metal Cyanide Complex Catalysts.  
E. Bohres, M. Stoesser, L. Voelkel, R. Ruppel, E. Baum, N. Wagner, J. Sundermeyer, U. Garrelts, M. Zirstein (BASF), US2008292526 (A1), DE102005020347 (A1), JP2008540080 (A), WO2006117364 (A2), WO2006117364 (A3), EP1937408 (A2), CN101213017 (A).
06. Adsorptionssäulenapparatur zur Reinigung von Lösemitteln in selbsttragender, freistehender, Mehrwegesystem-fähiger Konstruktion.  
J. Sundermeyer, DE20107489 (U1).
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