

Complete List of Publications

1. S. Rozen, O. Lerman and M. Kol
Acetyl Hypofluorite - The First Member of a New Family of Organic Compounds
J. Chem. Soc. Chem. Commun. 443 – 444 (1981).
2. S. Rozen, O. Lerman, M. Kol and D. Hebel
Electrophilic Fluorination of Unsaturated Systems with the Recently Developed Acetyl Hypofluorite
J. Org. Chem. **50**, 4753 – 4758 (1985).
3. S. Rozen, M. Brand and M. Kol
Tertiary Hydroxylation Using Fluorine: Activation of the C-H Bond.
J. Am. Chem. Soc. **111**, 8325 – 8326 (1989).
4. S. Rozen and M. Kol
Olefin Epoxidation Using Elemental Fluorine
J. Org. Chem. **55**, 5155 – 5159 (1990).
5. M. Kol, S. Rozen and E. Appelman
The Isolation and Characterization of Methyl Hypofluorite, CH₃OF
J. Am. Chem. Soc. **113**, 2648 – 2651 (1991).
6. M. Kol and S. Rozen
Oxidizing Aromatic Amines to Nitroarenes with the HOF-CH₃CN System
J. Chem. Soc. Chem. Commun. 567 – 568 (1991).
7. E. H. Appelman, O. Dunkelberg and M. Kol
Hypofluorous Acid and Acetonitrile: The Taming of a Reagent
J. Fluorine Chem. **56**, 199 – 213 (1992).
8. S. Rozen, E. Mishani and M. Kol
A Novel Electrophilic Methoxylation (With a Little Help From F₂)
J. Am. Chem. Soc. **114**, 7643 – 7645 (1992).
9. S. Rozen and M. Kol
Oxidation of Aliphatic Amines by the HOF·CH₃CN Complex Made Directly from F₂ and Water
J. Org. Chem. **57**, 7342 – 7344 (1992).
10. M. Kol and S. Rozen
Functionalization of Aromatic Molecules Using HOF·CH₃CN and CH₃OF
J. Org. Chem. **58**, 1593 – 1595 (1993).
11. R. R. Schrock, T. E. Glassman, M. G. Vale and M. Kol
High Oxidation State Pentamethylcyclopentadienyl Tungsten Hydrazine and Hydrazido
Complexes and Cleavage of the N-N Bond
J. Am. Chem. Soc., **115**, 1760 – 1772 (1993).
12. S. Rozen, Y. Bareket and M. Kol
Solvent Dependence of the Synthesis and Reactions of Acetyl Hypofluorite
J. Fluorine Chem. **61**, 141 – 146 (1993).

13. S. Rozen, Y. Bareket and M. Kol
HOF·CH₃CN, Made Directly from F₂ and Water, as an Ecologically Friendly Oxidizer
Tetrahedron **49**, 8169 – 8178 (1993).
14. M. Kol, R. R. Schrock, R. Kempe and W. M. Davis
Synthesis of Molybdenum and Tungsten Complexes that Contain Triamido/Amine Ligands of the Type (C₆F₅NCH₂CH₂)₃N and Activation of Dinitrogen by Molybdenum
J. Am. Chem. Soc. **116**, 4382 – 4290 (1994).
15. S. Rozen, E. Mishani, M. Kol and I. Ben David
The Chemistry of Methyl Hypofluorite: Its Reactions with Various Unsaturated Centers
J. Org. Chem. **59**, 4281 – 4284 (1994).
16. R. R. Schrock, C. C. Cummins, T. Wilhelm, S. Lin, S. M. Reid, M. Kol and W. M. Davis
Synthesis of Titanium Complexes That Contain Triamido-Amine Ligands
Organometallics **15**, 1470 – 1476 (1996).
17. A. Rudi, Y. Kashman, D. Gut, F. Lellouche and M. Kol
Ruthenium Complexes of Eilatin: Face Selectivity in Octahedral Geometry; Synthesis of [Ru(bpy)₂(eilatin)]²⁺ and [Ru(phen)₂(eilatin)]²⁺
Chem. Commun. 17 – 18 (1997).
18. G. Bar-Haim, R. Shach and M. Kol
A Novel Diaminoborate Ligand System Derived from 1,8-Diaminonaphthalene and 9-BBN. Preparation of Titanium and Zirconium Complexes and Crystal Structure of the Titanium Complex
Chem. Commun. 229 – 230 (1997).
19. Z. Ziniuk, I. Goldberg and M. Kol
New Chelating Pyridyl-indenyl and Quinoly-indenyl Ligands Leading to C₁ Symmetrical Complexes of Zirconium via Amine Elimination.
X-ray Structure of [3-(2-Pyridylmethyl)(indenyl)]tris(dimethylamido)Zr(IV)
J. Organomet. Chem. **545-546**, 441 – 446 (1997)
20. G. Bar-Haim and M. Kol
Selective Syntheses of *N*-Monoalkyl and *N,N'*-Dialkyl Derivatives of 1,8-Diaminonaphthalene – 9-BBN as an Activating and Directing Group
J. Org. Chem. **62**, 6682 – 6683 (1997).
21. G. Bar-Haim and M. Kol
Regioselective *N*-Alkylation of 2-Aminobenzylamine *via* Chelation to 9-BBN
Tetrahedron Lett. **39**, 2643 – 2644 (1998).
22. E. Y. Tshuva, M. Versano, I. Goldberg, M. Kol, H. Weitman and Z. Goldschmidt
Titanium Complexes of Chelating Dianionic Amine Bis(phenolate) Ligands: an Extra Donor Makes a Big Difference
Inorg. Chem. Commun. **2**, 371 – 373 (1999).
23. S. Dayan, M. Kol and S. Rozen
Tertiary Amine Oxidation using HOF·CH₃CN: A novel synthesis of N-oxides
Synthesis 1427 – 1430 (1999)

24. Z. Ziniuk, I. Goldberg and M. Kol
Zirconium Complexes of Chelating Dianionic (Pentafluorophenyl)amido Ligands: Synthesis, Structure and Ethylene Polymerization Activity
Inorg. Chem. Commun. **2**, 549 – 551 (1999).
25. E. Y. Tshuva, I. Goldberg, M. Kol, H. Weitman and Z. Goldschmidt
Novel Zirconium Complexes of Amine Bis(phenolate) Ligands. Remarkable Reactivity in Polymerization of 1-Hexene due to an Extra Donor Arm
Chem. Commun. 379 – 380 (2000).
26. E. Y. Tshuva, I. Goldberg and M. Kol
Isospecific Living Polymerization of 1-Hexene by a Readily Available Non-metallocene C₂-Symmetrical Zirconium Catalyst.
J. Am. Chem. Soc. **122**, 10706 – 10707 (2000).
27. E. Y. Tshuva, I. Goldberg, M. Kol and Z. Goldschmidt
Living Polymerization of 1-Hexene Due to an Extra Donor Arm on a Novel Amine Bis(phenolate) Titanium Catalyst
Inorg. Chem. Commun. **3**, 611 – 614 (2000).
28. M. Kol, M. Shamis, I. Goldberg, Z. Goldschmidt, S. Alfi and E. Hayut-Salant
Titanium(IV) Complexes of Trianionic Amine Triphenolate Ligands
Inorg. Chem. Commun. **4**, 177 – 179 (2001).
29. E. Y. Tshuva, I. Goldberg, M. Kol and Z. Goldschmidt
Zirconium Complexes of Amine Bis(phenolate) Ligands as Catalysts for 1-Hexene Polymerization: Peripheral Structural Parameters Strongly Affect Reactivity
Organometallics **20**, 3017 – 3028 (2001).
30. E. Y. Tshuva, I. Goldberg, M. Kol and Z. Goldschmidt
Coordination Chemistry of Titanium Amine Bis(Phenolate) Complexes: Tuning Complex Type and Structure by Ligand Modification
Inorg. Chem. **40**, 4263 – 4270 (2001).
31. E. Y. Tshuva, N. Gendeziuk and M. Kol
One-Step Synthesis of Salans and Substituted Salans by Mannich Condensation
Tetrahedron Lett. **42**, 6405 – 6407 (2001).
32. E. Y. Tshuva, I. Goldberg, M. Kol and Z. Goldschmidt
Living Polymerization and Block Copolymerization of α - Olefins by an Amine Bis(phenolate) Titanium Catalyst
Chem. Commun. 2120 – 2121 (2001).
33. E. Y. Tshuva, S. Groysman, I. Goldberg, M. Kol and Z. Goldschmidt
[ONXO]-Type Amine Bis(phenolate) Zirconium and Hafnium Complexes as Extremely Reactive 1-Hexene Polymerization Catalysts: Unusual Metal Dependent Activity Pattern
Organometallics **21**, 662 – 670 (2002).
34. D. Gut, J. Kopilov, A. Rudi, I. Goldberg and M. Kol
Pairing of Propellers: Dimerization of Octahedral Ruthenium(II) and Osmium (II) Complexes of Eilatin via π - π Stacking Featuring Hetero-Chiral Recognition
J. Am. Chem. Soc. **124**, 5449 – 5456 (2002).

35. N. W. Luedtke, J. S. Hwang, E. C. Glazer, D. Gut, M. Kol and Y. Tor
Eilatin Ru(II) Complexes Display Anti-HIV Activity and Enantiomeric Diversity in Binding Nucleic Acids
Chem. Biochem. **3**, 766 – 771 (2002).
36. S. Groysman, S. Segal, M. Shamis, I. Goldberg, M. Kol, Z. Goldschmidt and E. Hayut-Salant
Tantalum(V) Complexes of an Amine Triphenolate Ligand: a Dramatic Difference in Reactivity Between Equatorial and Axial Positions
J. Chem. Soc. Dalton Trans 3425 – 3426 (2002).
37. S. D. Bergman, D. Reshef, S. Groysman, I. Goldberg and M. Kol
Dibenzoeilatin: A Novel Ligand Exhibiting Remarkable Complementary π - π Stacking Interactions
Chem. Commun. 2374 – 2375 (2002).
38. S. Groysman, E. Y. Tshuva, D. Reshef, S. Gendler, I. Goldberg, M. Kol, Z. Goldschmidt, M. Shuster and G. Lidor
High-Molecular Weight Atactic Polypropylene prepared by Zirconium Complexes of an Amine Bis(phenolate) Ligand
Isr. J. Chem. **42**, 373 – 381 (2002).
39. S. Groysman, I. Goldberg, M. Kol, E. Genizi and Z. Goldschmidt
Group IV complexes of an Amine Bis(phenolate) Ligand Featuring a THF Sidearm Donor: From Highly Active to Living Polymerization Catalysts of 1-Hexene
Inorg. Chim. Acta **345**, 137 – 144 (2003).
40. D. Gut, I. Goldberg, and M. Kol
Eilatin as a Bridging Ligand in Ruthenium(II) Complexes: Synthesis, Crystal Structures, Absorption Spectra and Electrochemical Properties
Inorg. Chem. **42**, 3483 – 3491 (2003).
41. S. Groysman, I. Goldberg, M. Kol, E. Genizi and Z. Goldschmidt
From THF to Furan: Sidearm Donor Exchange Causes a Major Difference in Activity of Group IV Amine Bis(phenolate) Polymerization Catalysts
Organometallics **22**, 3013 – 3015 (2003).
42. N. W. Luedtke, J. S. Hwang, E. Nava, D. Gut, M. Kol and Y. Tor
The DNA and RNA Specificity of Eilatin Ru(II) Complexes as Compared to Eilatin and Ethidium Bromide
Nucl. Acids Res. **31**, 5732 – 5740 (2003).
43. S. Groysman, I. Goldberg, M. Kol, and Z. Goldschmidt
Pentabenzyltantalum: Straightforward Synthesis, X-ray Structure, and Application in the Synthesis of [O₂N]TaBn₃-Type and [O₃N]TaBn₂-Type Complexes
Organometallics **22**, 3793 – 3795 (2003).
44. A. Yeori, S. Gendler, S. Groysman, I. Goldberg and M. Kol
Salalen: a Novel Hybrid Salan/Salen Tetradentate [ONNO]-Type Ligand and its Coordination Behaviour with Group IV Metals
Inorg. Chem. Commun. **7**, 280 – 282 (2004).

45. S. D. Bergman, I. Goldberg, A. Barbieri, F. Barigelletti, and M. Kol
Mononuclear and Dinuclear Complexes of Dibenzoeilatin: Synthesis, Structure, Electrochemical and Photophysical Properties
Inorg. Chem. **43**, 2355 – 2367 (2004).
46. S. Groysman, I. Goldberg, M. Kol, and Z. Goldschmidt
Tribenzyl Ta(V) Complexes of Amine Bis(phenolate) Ligands: Investigation of α -Abstraction vs. Ligand Backbone β -Abstraction Paths
Organometallics **23**, 1880 – 1890 (2004).
47. S. D. Bergman, D. Reshef, I. Goldberg, L. Frish, Y. Cohen and M. Kol
From Eilatin to Isoeilatin: A Skeletal Rearrangement Strongly Influences π -Stacking of Ru(II) Complex
Inorg. Chem. **43**, 3792 – 3794 (2004).
48. S. Groysman, S. Segal, I. Goldberg, M. Kol, and Z. Goldschmidt
Ta(V) Complexes of a Bulky Amine Tris(phenolate) Ligand: Steric Inhibition vs. Chelate Effect
Inorg. Chem. Commun. **7**, 938 – 941 (2004).
49. S. Groysman, E. Y. Tshuva, I. Goldberg, M. Kol, Z. Goldschmidt, and M. Shuster
Diverse Structure-Activity Trends in Amine Bis(phenolate) Titanium Polymerization Catalysts
Organometallics **23**, 5291 – 5299 (2004).
50. G. Bar-Haim and M. Kol
Selective Mono *N*-alkylation of 3-Aminoalcohols *via* Chelation to 9-BBN
Org. Lett. **6**, 3549 – 3551 (2004).
51. D. M. D'Alessandro, F. R. Keene, S. D. Bergman, and M. Kol
Intervalence Charge Transfer in the Stereoisomers of a Dinuclear Ruthenium Complex Containing the Bridging Ligand Dibenzoeilatin
Dalton Trans. 332 – 337 (2005).
52. S. Groysman, I. Goldberg, M. Kol, E. Genizi and Z. Goldschmidt
Exploring Routes to Ta(V) Alkylidene Complexes Supported by Amine Tris(phenolate) Ligands
Adv. Synth. Catal. **347**, 409 – 415 (2005).
53. S. Segal, I. Goldberg and M. Kol
Zirconium and Titanium Diamine Bis(phenolate) Catalysts for α -Olefin Polymerization: From Atactic Oligomers to Ultra-high Molecular-Weight Isotactic Polymers
Organometallics **24**, 200 – 202 (2005).
54. S. D. Bergman and M. Kol
 π -Stacking Induced NMR Spectrum Splitting in Enantiomerically Enriched Ru(II) Complexes: Evaluation of Enantiomeric Excess
Inorg. Chem. **44**, 1647 – 1654 (2005) (the cover paper of issue No. 6).
55. S. D. Bergman, I. Goldberg, A. Barbieri, and M. Kol
Mononuclear and Dinuclear Complexes of Isoeilatin
Inorg. Chem. **44**, 2513 – 2523 (2005).
56. S. Groysman, Ekaterina Sergeeva, I. Goldberg, and M. Kol
Salophan Complexes of Group IV Metals
Eur. J. Inorg. Chem. 2480 – 2485 (2005).

57. A. Yeori, S. Groysman, I. Goldberg and M. Kol
Diastereomerically-Selective Enantiomerically-Pure Titanium Complexes of Chiral Salan Ligands: Synthesis, Structure, and Preliminary Activity Studies
Inorg. Chem. **44**, 4466 – 4468 (2005).
58. S. Groysman, I. Goldberg, M. Kol, and Z. Goldschmidt
Vanadium(III) and Vanadium(V) Amine Tris(phenolate) Complexes
Inorg. Chem. **44**, 5073 – 5080 (2005).
59. S. D. Bergman, D. Gut, C. Sabatini, A. Barbieri, F. Barigelletti, and M. Kol
Eilatin Complexes of Ruthenium and Osmium. Synthesis, Electrochemical Behavior, and Near-IR Luminescence
Inorg. Chem. **44**, 7943 – 7950 (2005).
60. S. Groysman, Ekaterina Sergeeva, I. Goldberg, and M. Kol
Group IV Complexes of a Tetradentate Amine Mono(phenolate) Ligand: A Second Sidearm Donor Stabilizes Cationic Species
Inorg. Chem. **44**, 8188 – 8190 (2005).
61. S. Gendler, S. Groysman, I. Goldberg, Z. Goldschmidt and M. Kol
Polymerization of 4-Methylpentene and Vinylcyclohexane by Amine Bis(phenolate) Titanium and Zirconium Complexes
J. Polym. Sci. Part A: Polym. Chem. **44**, 1136 – 1146 (2006).
62. S. D. Bergman, R. Frantz, D. Gut, M. Kol and J. Lacour
Effective Chiral Recognition Among Ions in Polar Medium
Chem. Commun. 850 – 852 (2006).
63. S. Groysman, Ekaterina Sergeeva, I. Goldberg and M. Kol
Zinc Complexes of Amine Mono(phenolate) [NOO₂] Ligands: Controlling Coordination Modes by Bulk of Phenolate Substituents
Eur. J. Inorg. Chem. 2739 – 2745 (2006) (the cover paper of issue No. 14).
64. S. Gendler, S. Segal, I. Goldberg, Z. Goldschmidt and M. Kol
Titanium and Zirconium Complexes of Dianionic and Trianionic Amine-Phenolate Type Ligands in Catalysis of Lactide Polymerization
Inorg. Chem. **45**, 4783 – 4790 (2006).
65. A. Yeori, I. Goldberg, M. Shuster, and M. Kol
Diastereomerically-Specific Zirconium Complexes of Chiral Salan Ligands: Isospecific Polymerization of 1-Hexene and 4-Methyl-1-pentene and Cyclopolymerization of 1,5-Hexadiene
J. Am. Chem. Soc. **128**, 13062 – 13063 (2006).
66. S. D. Bergman, I. Goldberg, C. Carfagna, L. Mosca, M. Kol, and B. Milani
Palladium Complexes Containing Large Fused Aromatic N-N Ligand as Efficient Catalysts for the CO/Styrene Copolymerization
Organometallics **25**, 6014 – 6018 (2006).
67. A. Cohen, A. Yeori, I. Goldberg, and M. Kol
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Inorg. Chem. **46**, 8114 – 8116 (2007).

68. A. Yeori, I. Goldberg, and M. Kol
Cyclopolymerization of 1,5-Hexadiene by Enantiomerically-Pure Zirconium Salan Complexes.
Polymer Optical Activity Reveals α -Olefin Face Preference
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