

(A) Books

1. D. Kost, "Principles of Organic Chemistry" a study unit textbook. Open University, Tel Aviv, 1979 (Hebrew).

(B) Chapters

2. D. Kost and M. Raban, "Stereochemistry and Chiroptical Properties", Invited chapter in "The Chemistry of Sulfenic Acids and Their Derivatives", S. Patai, Editor, Wiley, 1990, pp. 23 - 83.
3. M. Raban and D. Kost, "Torsional and Inversional Barriers in Compounds with Nitrogen-Heteroatom Bonds", Invited chapter in "Acyclic Organonitrogen Stereodynamics", J. B. Lambert and Y. Takeuchi, Editors, VCH (New York), 1992, pp. 57 - 88.
4. D. Kost and I. Kalikhman, "Hypervalent Silicon Compounds", Invited chapter in "The Chemistry of Organic Silicon Compounds", Z. Rappoport and Y. Apeloig, Editors, Wiley, Chichester UK, 1998, pp 1339 - 1445.
5. D. Kost and I. Kalikhman, "Hydrazide-Based Hypercoordinate Silicon Compounds", invited chapter in *Advances in Organomet. Chem.*, **50**, 1-106 (2004).

(C) Refereed Journal Articles

6. M. Sprecher and D. Kost, "The Rearrangement of Dialkyl α - β -Epoxyphosphonates" *Tetrahedron Lett.*, 703 (1969).
7. D. Kost and M. Sprecher, "The Schmidt Reaction of Dialkyl Aroylphosphonates" *Tetrahedron Lett.*, 2535 (1970).
8. J. Klein, S. Glily and D. Kost, "Metalation Reactions V: The Metalation of Octadecadienyl Alcohols and Methyl Ethers" *J. Org. Chem.*, **35**, 1281 (1970).
9. D. Kost, E. H. Carlson and M. Raban, "The Validity of Approximate Equations for k_C in DNMR Spectroscopy" *Chem. Commun.*, 656 (1971).
10. M. Raban and D. Kost, "Barriers to Rotation about Nitrogen-Oxygen Single Bond in Substituted Hydroxylamines" *J. Org. Chem.*, **37**, 499 (1972).
11. D. Kost and M. Raban, "Axial Pseudoasymmetry in Sulfenamides. A Method for Assignment of Configuration to *meso* and *dl* secondary amines" *J. Am. Chem. Soc.*, **94**, 2533 (1972).
12. D. Kost, W. Stacer and M. Raban, "Stereochemistry in Trivalent Nitrogen Compounds XIX. Absence of Rate Acceleration to Nitrogen Inversion in Sulfenyl Aziridines due to d-Orbital Conjugation" *J. Am. Chem. Soc.*, **94**, 3233 (1972).
13. M. Raban and D. Kost, "Stereochemistry in Trivalent Nitrogen Compounds XX. Effect of σ - π Conjugation (Negative Hyperconjugation) on Nitrogen Inversion in Sulfenyl Aziridines" *J. Am. Chem. Soc.*, **94**, 3234 (1972).
14. D. Kost and A. Zeichner, "A Simple Method for the Determination of Rate Constants at Coalescence of Exchanging AB Systems in Dynamic NMR" *Tetrahedron Lett.*, 4533 (1974).
15. D. Kost and E. Gurfinkel, "The Isolation and Structure Determination of Two Diastereomers from N-Tridecyl-2,6-dimethylmorpholine (Tridemorph)" *J. Chromatogr.*, **108**, 207 (1975).
16. M. Raban, S. K. Lauderback and D. Kost, "Pseudoasymmetry as a Means for Distinguishing *meso* and *dl* Diastereomers" *J. Am. Chem. Soc.*, **97**, 5178 (1975).
17. D. Kost and A. Zeichner, "Effect of Polar Substituents on Hindered Rotation about Sulfur-Nitrogen and Carbonyl-Nitrogen Bonds in Methyl N-Arenesulfenyl-N-benzyl-urethanes" *Tetrahedron Lett.*, 3239 (1975).
18. D. Kost and M. Sprecher, "Rearrangements in Organophosphorus Compounds. The Reaction of Dialkyl Acyl- and Aroyl-phosphonates with Diazomethane" *Tetrahedron Lett.*, 4483 (1975).
19. D. Kost and M. Raban, "Barriers to Nitrogen Inversion in Cyclic and Acyclic Substituted Hydroxylamines. A Theoretical Study" *J. Org. Chem.*, **41**, 1748 (1976).

20. D. Kost, "Isolation and Characterization of a Fish Toxin" Research Report, classified, submitted to the Ministry of Defense, 1976.
21. D. Kost and M. Raban, "Torsional and Inversional Barriers in Sulfenyl Aziridines" *J. Am. Chem. Soc.*, **98**, 8333 (1976).
22. D. Kost and A. Pross, "On the Misuse of Energy Profiles in Mechanistic Studies" *Educ. in Chem.*, **14**, 87 (1977).
23. D. Kost and M. Raban, "A Molecular Orbital Study on Rotation Inversion Phenomena in Substituted Hydroxylamines" *Progr. Theor. Org. Chem.*, **2**, 20 (1977).
24. D. Kost and M. S. Sprecher, "A Simple MO Model to Explain Substituent Effects on Sulfenamide Rotational Barriers" *Tetrahedron Lett.*, 1089 (1977).
25. S. Wolfe and D. Kost, "Quantitative PMO Analysis of the S_N2 Transition State" *Nouv. J. Chim.*, **2**, 441 (1978).
26. D. Kost and N. Kornberg, "The Role of Hyperconjugation in Amide Rotation. Torsional Barriers in Aryl N,N-Dimethylcarbamates" *Tetrahedron Lett.*, 3275 (1978).
27. D. Kost, D. J. Mitchell, H. B. Schlegel and S. Wolfe, "Molecular Orbitals from Group Orbitals 9. The Problem of Hybrid Lone Pairs" *Can. J. Chem.*, **57**, 729 (1979).
28. N. Kornberg and D. Kost, "Torsional Barriers in Substituted N,N-Dimethylcarbamates. A Probe for Perturbational Molecular Orbital Analyses of Amide Rotation" *J. Chem. Soc., Perkin 2.*, 1661 (1979).
29. R. J. Wroczynski, M. W. Baum, D. Kost, K. Mislow, S. C. Vick and D. Seyferth, "Unusual Lithium Transfer Reactions in Lithium Substituted Organosilicon Compounds. Reinvestigation of the Reaction of 1,8-Dilithionaphthalene with Trichlorosilane" *J. Organomet. Chem.*, **170**, C29 (1979).
30. D. Kost, F. Cozzi and K. Mislow, "The Barrier to Carbon-Phosphorus Bond Rotation in Tribenzoylphosphine. An Experimental Reinvestigation" *Tetrahedron Lett.*, 1983 (1979).
31. D. Kost, A. Zeichner and (in part) M. S. Sprecher, "Barriers to Rotation about the Amide (N-CO) and Sulfenamide (N-S) Bonds in Methyl N-Benzyl-N-Arenesulfonylurethanes. A Simple Molecular Orbital Model to Explain Substituent Effects on Sulfenamide Rotational Barriers" *J. Chem. Soc., Perkin 2*, 317 (1980).
32. D. Kost and E. Berman, "Barriers to Rotation in Substituted O-Arylhydroxylamines" *Tetrahedron Lett.*, 1065 (1980).
33. D. Kost, J. Klein, A. Streitwieser, Jr., and W. G. Schriver, "Ab-initio Calculations of Dilithiopropenes" *Proc. Nat. Acad. Sci.*, **79**, 3922 (1982).
34. D. Kost and M. Raban, "Theoretical Investigation of the Hyperconjugation Effect on Nitrogen Inversion Barriers in Aziridines" *J. Am. Chem. Soc.*, **104**, 2960 (1982).
35. D. Kost and K. Aviram, "α-Substituent Effects and Nonbonding Interactions at the S_N2 Transition State, an Ab-initio Study" *Tetrahedron Lett.*, **23**, 4157 (1982).
36. D. Kost and K. Aviram, "Effect of Equatorial Substituents on the S_N2 Transition State" *Bull. Soc. Chim. Belg.*, **91**, 357 (1982).
37. D. Kost and Z. Roth, "Torsional Barriers in N,N'-Dibenzylhydrazobenzenes" *Tetrahedron Lett.*, **23**, 4619 (1982).
38. D. Kost, K. Aviram and M. Raban, "Torsional Barriers Resulting from Two-electron and Four-electron Interactions; Hydrazyl Cation and Hydrazyl Anion" *Isr. J. Chem.*, **23**, 124 (1983).
39. A. Pross, K. Aviram, R. C. Klix, D. Kost and R. D. Bach, "S_N2 Reactivity of α-Carbonyl Derivatives. A Theoretical Approach" *Nouv. J. Chim.*, **8**, 711 (1984).
40. M. Raban and D. Kost, "Stereo-labile Configurational Units. Torsional and Inversional Stereochemistry in Sulfenamides and Hydroxylamines" *Tetrahedron Report 171, Tetrahedron*, **40**, 3345 (1984).

41. M. Raban, K. Aviram, and D. Kost, "The Three Electron π -Bond in Hydrazyl Radical. An Ab-Initio SCF-MO Investigation of Torsional and Inversional Stereomutation" *Tetrahedron Lett.*, **26**, 359 (1985).
42. D. Kost, M. Raban, and K. Aviram, "Allylic and Allenic Capto-dative Stabilization in Nitrogen Centered Free Radicals" NATO Advanced Study Institutes series on "Substituent Effects in Radical Chemistry", C 189, Reidel, Netherland, p. 83.
43. D. Kost, M. Raban, and K. Aviram, "Capto-Dative Stabilization in Nitrogen Centered Push Pull Radicals. An Ab-Initio SCF-MO Study." *J. Chem. Soc., Chem. Comm.*, 346 (1986).
44. D. Kost and K. Aviram, "The S_N2 Transition State. 4: α -Substituents and the S_N2 - S_N1 Borderline Problem in the S_N2 Identity Reaction" *J. Mol. Struct., Theochem.*, **138**, 163 (1986).
45. D. Kost and K. Aviram, "The S_N2 Transition State. 5: Effect of α -Substituents on S_N2 Reactivity and the S_N2 - S_N1 Borderline Problem. A Molecular Orbital Approach". *J. Am. Chem. Soc.*, **108**, 2006 (1986).
46. D. Kost and K. Aviram, "The S_N2 Transition State. 6: Breakdown of the Reactivity Selectivity Principle in the S_N2 Reaction of α -Halocarbonyl Compounds. A Molecular Orbital Analysis" *Isr. J. Chem.*, **26**, 349 (1985).
47. E. Ben-Izhak Monselise, D. Kost, D. Porath and M. Tal, "A ^{15}N -NMR Study of Short Term Ammonium Ion Assimilation in *Lemna Gibba*" *New Phytol.*, **107**, 341 (1987).
48. P. v. R. Schleyer and D. Kost, "A Comparison of the Energies of Double Bonds of Second Row Elements with Carbon and Silicon" *J. Am. Chem. Soc.*, **110**, 2105 (1988).
49. D. Kost, K. Aviram and M. Raban, "Structural and MO Analyses of the Hydrazyl Cation, Radical and Anion: A Paradigm for Stereomutations in Stereolabile Configurational Units" *J. Org. Chem.*, **54**, 4903 (1989).
50. D. Kost and H. Egozy, "NMR Study of the Effect of Hyperconjugation on Amide and Sulfenamide Rotational Barriers in Methyl *N*-Benzyl-*N*-(trihalomethanesulfonyl)carbamates" *J. Org. Chem.*, **54**, 4909 (1989).
51. D. Kost, "Simultaneous Transfer of Saturation and Overhauser Enhancement in Difference NMR Spectroscopy" *J. Magn. Reson.*, **84**, 648 (1989).
52. D. Kost, H. Egozy and G. Elhanati, "Measurement of Two Rotational Barriers, About S-N and N-CO Bonds, in Sulfenamides. Evidence for Hyperconjugation" *Bull. Magn. Reson.*, **11**, 298 (1989).
53. D. Kost and G. Elhanati, "Signals Arising Simultaneously due to NOE and NOE Transfer in Double Resonance Difference Spectroscopy" *Bull. Magn. Reson.*, **11**, 294 (1989).
54. E. Ben-Izhak Monselise and D. Kost, " ^{15}N -NMR Spectroscopic Study of Ammonium Ion Assimilation by *Spirodela Oligorrhiza* - Lemnaceae. *Physiol. Plant.* **79**, A82 (1990).
55. E. Ben-Izhak Monselise and D. Kost, "Phytochrome Control of Ammonium Assimilation - Alanine Formation - in Etiolated *Spirodela Oligorrhiza* - Lemnaceae. A ^{15}N -NMR Spectroscopic Study." *Physiol. Plant.* **85**, A91 (1992).
56. D. S. Dudis, A. T. Yeates, D. Kost, D. A. Smith and J. Medrano, "Do Bipolarons or Nitrenium Ions Exist in Oxidatively Doped Polyazazines?" *Polymer Preprints*, **33**, 1166 (1992).
57. D. Kost, H. Strul and S. Bittner, "NMR Study of the Dynamic Stereochemistry of Substituted Bicyclo[4.2.2]decanes and Bicyclo[5.2.2]undecane". *Isr. J. Chem.* **32**, 263 (1992).
58. D. Kost, A. T. Yeates, and D. S. Dudis, "Linear Molecular Weight Dependence of Second Hyperpolarizabilities: Lack of Polar Enhancement in Nonconjugated Molecules". *J. Chem. Soc., Chem. Commun.* 83 (1993).
59. E. Ben-Izhak Monselise and D. Kost, "Different Ammonium Ion Uptake, Metabolism and Detoxification Efficiencies in Two Higher Plants of the Lemnaceae. A Nitrogen-15 NMR Study". *Planta.* **189**, 167 (1993).

60. D. S. Dudis, A. T. Yeates, D. Kost, D. A. Smith and J. Medrano, "Iodine Doped Polyazines: Evidence Against Bipolarons and Nitrenium Ions". *J. Am. Chem. Soc.*, **115**, 8770 (1993).
61. M. Raban, D. L. Burch, E. R. Hortelano, D. Durocher and D. Kost, "Complete Conformational Switching in a Calcium Ionophore," *J. Org. Chem.*, **59**, 1283 (1994).
62. M. S. Sprecher and D. Kost "The Schmidt Reaction of Dialkyl Acylphosphonates", *J. Am. Chem. Soc.* **116**, 1016 - 1026 (1994).
63. D. S. Dudis, A. T. Yeates, and D. Kost, "Prediction of Third-Order Nonlinear Optical Properties of Organic Molecules", invited Research News article, *Adv. Mater.* **6**, 248 - 251 (1994).
64. I. Kalikhman, D. Kost, and M. Raban, "Stereodynamics of neutral hexacoordinate silicon chelates: evidence for two nondissociative rate processes." *J. Chem. Soc., Chem. Commun.* 1253 (1995).
65. D. Kost, I. Kalikhman, and M. Raban, "Neutral hexacoordinate silicon complexes. Synthesis, structure and stereodynamics: evidence for two nondissociative ligand-exchange mechanisms." *J. Am. Chem. Soc.* **117**, 11512 - 11522 (1995).
66. D. Kost and I. Kalikhman, "NMR study of ligand exchange in hexacoordinate silicon chelates." *Bull. Magn. Reson.*, **17**, 108 (1995).
67. E. Ben-Izhak Monselise and D. Kost, "Ammonium ion uptake and metabolism in *Lemna gibba* is affected by the direction of illumination but not by root size - a ^{15}N -NMR study." *Plant Physiol. Biochem. Special Issue* 155, (1996).
68. I. Kalikhman, S. Krivonos, A. Ellern, and D. Kost, "Crystal Structure and Unambiguous Assignment of Two Ligand Exchange Barriers in Neutral Pentacoordinate Silicon Complexes; Correlation of ^{29}Si , ^{15}N Chemical Shifts and Si-N Cleavage Barriers", *Organometallics*, **15**, 5073 (1996).
69. D. Kost, S. Krivonos, and I. Kalikhman, "Ligand Exchange Mechanism in Novel Hexacoordinate Silicon Complexes" in "Organosilicon Chemistry III", N. Auner and J. Weis, Eds., VCH-Wiley, Weinheim 1997, pp. 435-445.
70. I. Kalikhman and D. Kost, "Ligand Exchange via Coordinative Si-N Bond Cleavage and Pseudorotation in Neutral Pentacoordinate Silicon Complexes" in "Organosilicon Chemistry III", N. Auner and J. Weis, Eds., VCH-Wiley, Weinheim 1997, pp. 446-451.
71. D. Kost and M. Frailich, "Charge Transfer Complexes Studied by Semiempirical and *Ab-Initio* Methods; The Effect of Geometrical Constraints on Complex Stability." *Theochem, J. Mol. Struct.*, **399**, 265 (1997).
72. M. Ben-David Blanca, E. Maimon, and D. Kost "The S-N Chiral Axis in Sulfenamides: First Enantiomeric Resolution, Direct Demonstration of Optical Activity, and Kinetics of Interconversion." *Angew. Chem.* **109**, 2294-2297 (1997); *Angew. Chem. Int. Ed. Engl.* **36**, 2216-2219 (1997).
73. I. Kalikhman, S. Krivonos, D. Stalke, T. Kottke, and D. Kost, "Unusual Spin-Spin Interactions Across the Coordination Bond in Hexacoordinate Silicon Complexes: Crystal-Structure Coupling Relationship," *Organometallics*, **16**, 3255 (1997).
74. E. Ben-Izhak Monselise and D. Kost, " ^{15}N NMR spectroscopic study of ammonium ion assimilation by *Spirodela oligorrhiza* - (Lemnaceae) I. Effect of light and carbon supply on ammonium ion assimilation in green and etiolated *S. oligorrhiza*." *Israel J. of Plant Sciences*, **46**, 255 (1998).
75. D. Kost, I. Kalikhman, S. Krivonos, D. Stalke and T. Kottke "Crystal Structures and Stereodynamics of Neutral Hexacoordinate Silicon Chelates: Use of an Optically Active Ligand for Assignment of an Intramolecular Ligand Exchange Process." *J. Am. Chem. Soc.* **120**, 4209-4214 (1998).
76. M. Raban, J. Quin III, A. Belguise, D. Durocher and D. Kost "Conformationally Switched-On Polyether Ionophores", *Chirality* **10**, 78-87 (1998).

77. I. Kalikhman, S. Krivonos, T. Kottke, D. Stalke, and D. Kost, "Coupling Constants through a Rapidly Dissociating-Recombining N→Si Dative Bond in Pentacoordinate Silicon Chelates," in "Organosilicon Chemistry IV", N. Auner and J. Weis, Eds., VCH-Wiley, Weinheim, 1999, p. 494.
78. I. Kalikhman, O. Girshberg, L. Lameyer, D. Stalke, and D. Kost, "Irreversible Rearrangement in Hexacoordinate Silicon Complexes: from Neutral *bis*-(N→Si)-Chelates to *mono*-(N→Si)-Zwitterionic λ^6 -Silicates" *Organometallics*, **19**, 1083 (2000).
79. D. Kost, I. Kalikhman, S. Krivonos, R. Bertermann, C. Burschka, R. E. Neugebauer, M. Pulm, R. Willeke, R. Tacke, "New Zwitterionic Pentacoordinate Silicates with *SiONFC*₂, *SiONF*₂C, *SiO*₂N₂C Frameworks; Synthesis, Structure, and Dynamic Stereochemistry" *Organometallics*, **19**, 1927 (2000).
80. M. Ben-David Blanca, C. Yamamoto, Y. Okamoto, S. E. Biali, and D. Kost "Resolution and Rotational Barriers of Quinolinone and Acridone Sulfenamide Derivatives: Demonstration of the S-N Chiral Axis" *J. Org. Chem.*, **65**, 8613-8620 (2000).
81. E. B.-I. Monselise, G. Gurty, A. H. Parola and D. Kost "15N NMR Spectroscopic study of Ammonium Ion Assimilation by Etiolated *Spirodela oligorrhiza* (*Lemnaceae*), affected by Sinusoidally Varying Magnetic Fields." *Plant Physiology and Biochemistry* **38**, S14-05L s 146 (2000).
82. I. Kalikhman, S. Krivonos, L. Lameyer, D. Stalke, and D. Kost "Pentacoordinate Silyl Cations Stabilized by Coordination with Oxygen Donors; Crystal Structure, Charge Distribution and Stereodynamics" *Organometallics*, **20**, 1053 (2001).
83. I. Kalikhman, O. Girshberg, L. Lameyer, D. Stalke, and D. Kost "Tautomeric Equilibrium between Penta- and Hexacoordinate Silicon Chelates. A Chloride Bridge between Two Pentacoordinate Silicons" *J. Am. Chem. Soc.*, **123**, 4709, (2001).
84. V. Kingston, B. Gostevskii, I. Kalikhman, and D. Kost "Equilibrium between Neutral Hexacoordinate Silicon Complexes and Ionic Pentacoordinate Siliconium Salts through Fast Dissociation-Recombination of the Si-Cl bond" *Chem. Commun.* 1272 (2001).
85. I. Kalikhman, V. Kingston, O. Girshberg, and D. Kost "Neutral Hexacoordinate Silicon Tris-Chelates: Structure and Stereodynamics" *Organometallics*, **20**, 4713 (2001).
86. D. Kost, V. Kingston, B. Gostevskii, A. Ellern, D. Stalke, B. Walfort and I. Kalikhman "Donor-Stabilized Silyl Cations. 3. Ionic Dissociation of Hexacoordinate Silicon Complexes to Pentacoordinate Siliconium Salts Driven by Ion Solvation" *Organometallics*, **21**, 2293 (2002).
87. I. Kalikhman, B. Gostevskii, O. Girshberg, S. Krivonos and D. Kost "Donor-Stabilized Silyl Cations 4: N-Isopropylidene Hydrazides, Novel Bidentate Ligands for Penta- and Hexacoordinate Silicon Chelates" *Organometallics*, **21**, 2551 (2002).
88. D. Kost, N. Peor, G. Sod-Moriah, Y. Sharabi, D. T. Durocher and M. Raban "Conformationally Controlled Intramolecular Charge Transfer Complexes" *J. Org. Chem.*, **67**, 6938 (2002).
89. I. Kalikhman, V. Kingston, B. Gostevskii, V. Pestunovich, D. Stalke, B. Walfort, and D. Kost "Donor-Stabilized Silyl Cations. 5. Comparison between Mono- and Binuclear Siliconium Chelates" *Organometallics*, **21**, 4468 (2002).
90. D. Kost, I. Kalikhman, V. Kingston and B. Gostevskii "Low-Temperature Ionization of Neutral Hexacoordinate- to Ionic Pentacoordinate Silicon Complexes. Unusual Temperature, Solvent and Substituent Effects." *J. Phys. Org. Chem.* **15**, 831 (2002).
91. D. Kost, V. Kingston and I. Kalikhman, "Novel Pentacoordinate Siliconium Complexes Stabilized by Oxygen and Nitrogen Donors; Highly Sensitive and Unusual Equilibrium between Ionic Penta- and Neutral Hexacoordinate Compounds" in "Organosilicon Chemistry V", N. Auner and J. Weis, Eds., VCH-Wiley, Weinheim, 2003, p. 55.

92. I. Kalikhman, V. Kingston, D. Kost, D. Stalke and B. Walfort "Binuclear Ethylene-Bridged Silicon Chelates: Equilibrium between Neutral Hexacoordinate and Ionic Pentacoordinate Siliconium Complexes" in "Organosilicon Chemistry V", N. Auner and J. Weis, Eds., VCH-Wiley, Weinheim, 2003, p. 61.
93. D. Kost, B. Gostevskii and I. Kalikhman "An Unexpected Sterically-Driven Methyl-Halide Elimination in Pentacoordinate Siliconium Halide Salts; First Silicon Chelates with Equatorial Nitrogen Coordination." *Angew. Chem. Int.. Ed.* **42**, 1023 (2003).
94. E. B-I. Monselise, A. H. Parola and D. Kost, "Low Frequency Electromagnetic Fields Induce a Stress Effect upon Higher Plants, as Evident by the Universal Stress Signal, Alanine." *Biochem. Biophys. Research Commun.* (BBRC), **302**, 427 (2003).
95. I. Kalikhman, B. Gostevskii, O. Girshberg, A. Sivaramakrishna, N. Kocher, D. Stalke and D. Kost, "Donor-Stabilized Silyl Cations. 7. Neutral Hexacoordinate and Ionic Pentacoordinate Silicon Chelates with *N*-Isopropylideneimino-Acylimidato Ligands", *J. Organomet. Chem.* **686**, 202-214 (2003).
96. O. Girshberg, I. Kalikhman, D. Stalke, B. Walfort, and D. Kost, "Diastereomeric Hexacoordinate Silicon Complexes: Preparation, Structure and Epimerization", *J. Molecular Struct.* **661-662**, 259 (2003).
97. N. Kocher, J. Henn, B. Gostevskii, D. Kost, I. Kalikhman, B. Engles and D. Stalke, "Si-E (E = N, O, F) Bonding in a Hexacoordinate Silicon Complex – New Facts from Experimental and Theoretical Charge Density Studies", *J. Am. Chem. Soc.* **126**, 5563 (2004).
98. B. Gostevskii, K. Ahear, A. Sivaramakrishna, G. Silbert, D. Stalke, N. Kocher, I. Kalikhman and D. Kost, "Neutral and Ionic Dissociation Patterns in Hexacoordinate Silicon Chelates: a Model Nucleophilic Substitution at Pentacoordinate Silicon", *Chem. Commun.* 1644, (2004)..
99. I. Kalikhman, B. Gostevskii, A. Sivaramakrishna, N. Kocher, S. Deuerlein, D. Leusser, D. Stalke and D. Kost "Donor-Stabilized Silyl Cations. 8. Carbon-Carbon Bond Formation through a Novel Interchelate Molecular Rearrangement in Pentacoordinate Siliconium-Ion Salts", *Organometallics*, **23**, 4346 (2004).
100. N. Kocher, C. Selinka, D. Leusser, D. Kost, I. Kalikhman, D. Stalke, "Experimental charge density studies of cyclotetrasilazane and metal complexes containing the di- and tetraanion." *Zeitschrift fuer Anorganische und Allgemeine Chemie*, **630**, 1777-1793, (2004).
101. E. P. Kramarova, A. A. Korlyukov, S. Yu. Bylikin, A. G. Shipov, Yu. I. Baukov, D. Kost, "Ionic structure of the bischelate dichlorosilane stabilized by O→Si coordination, the product of reaction of *N*-methyl-*N*-trimethylsilylacetamide with (ClCH₂)₂SiCl₂" *Russian Chemical Bulletin (Translation of Izvestiya Akademii Nauk, Seriya Khimicheskaya)* **53**, 1135, (2004).
102. I. Kalikhman, B. Gostevskii, A. Sivaramakrishna, D. Kost, N. Kocher, D. Stalke "Steric Effect on the Formation, Structure and Reactions of Pentacoordinate Siliconium-Ion Salts", in "Organosilicon Chemistry VI", N. Auner and J. Weis, Eds., VCH-Wiley, Weinheim, *in press*.
103. B. Gostevskii, G. Silbert, K. Ahear, A. Sivaramakrishna, D. Stalke, S. Deuerlein, N. Kocher, M. G. Voronkov, I. Kalikhman, D. Kost, "Donor-Stabilized Silyl Cations. 9. Two Dissociation Patterns of Hexacoordinate Silicon Complexes: A Model Nucleophilic Substitution at Pentacoordinate Silicon" *Organometallics* **24**, 2913-2920, (2005).
104. B. Gostevskii, I. Kalikhman, C. A. Tessier, M. J. Panzner, W. J. Youngs, and D. Kost, "Hexacoordinate Complexes of Silacyclobutane: Spontaneous Ring Opening and Rearrangement." *Organometallics* **24**, 5786 (2005).
105. E. Maimon, I. Zilbermann, H. Cohen, D. Kost, R. v. Eldik, and D. Meyerstein, "Mechanism of Isomerization of Ni(cyclam) in Aqueous Solutions" *Eur. J. Inorg. Chem.*, **24**, 4997-5004 (2005).
106. I. Kalikhman, B. Gostevskii, M. Botoshansky, M. Kaftory, C. A. Tessier, M. J. Panzner, W. J. Youngs and D. Kost, "Octahedral and Bicapped-Tetrahedral Silicon Configurations in the Solid State and Their Dynamic Coexistence in Solution." *Organometallics*, **25**, 1252 (2006).

107. S. Yu. Bylikin, A. G. Shipov, V. V. Negrebetsky, Yu. I. Baukov, Yu. E. Ovchinnikov, S. A. Pogozhikh, S. V. Pestunovich, L. I. Belousova, E. F. Belogolova, V. F. Sidorkin, M. G. Voronkov, V. A. Pestunovich, I. Kalikhman, D. Kost, "Reaction of N-trimethylsilyl derivatives of amides and lactams with chloro(chloromethyl)dimethylstannane: Crystal and molecular structure of 1-(chlorodimethylstannylmethyl)-2-piperidone." *J. Organomet. Chem.* **691**, 779 (2006).
- 108 I. Kalikhman, B. Gostevskii, V. Pestunovich, N. Kocher, D. Stalke and D. Kost "Penta- and Hexacoordinate Silicon Mixed Dichelates with the SiC₂O₂N(Cl) Ligand Environment" *ARKIVOC*, 2006 (v) 63 – 77.
- 109 A. Sivaramakrishna, I. Kalikhman, E. Kertsus, A. A. Korlyukov, D. Kost "Donor-Stabilized Silyl Cations. 10. Pentacoordinate Siliconium-Ion Salts with a Triphenylphosphinimino-*N* Ligand Group: Two-Bond P-N-Si Coupling as a Measure for Coordination Strength" *Organometallics* **25**, 3687 (2006).
- 110 B. Gostevskii, N. Zamstein, A. A. Korlyukov, Yu. I. Baukov, M. Botoshansky, M. Kaftory, N. Kocher, D. Stalke, I. Kalikhman, D. Kost "Donor Stabilized Silyl Cations 11. Bis-Zwitterionic Penta- and Hexacoordinate Silicon Dichelate Complexes Derived from (ClCH₂)₂SiCl₂ through Double Internal Displacement of Chloride" *Organometallics* **25**, 5416, (2006).