

BIBLIOGRAPHY

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A. Journal Articles

1. Oxidation of Derivatives of p-Aminophenylthiocyanate, *J. Pharm. Chem. Soc. Japan*, 68 (1948), by M. Murakami and S. Oae.
2. Electronic Interpretation of the Organic Reaction Mechanism. IV. Studies of the "Lone Pair Effect", *Proc. Japan Acad.*, 25, No.11, 12 (1949), by M. Murakami and S. Oae.
3. Electronic Interpretation on the Organic Reaction Mechanisms. X. On the Effect Caused by Lone Pairs, *Memoirs of Institute of Sci. and Ind. Research in Osaka University*, VIII, 173 (1951), by M. Murakami and S. Oae.
4. Electronic Interpretation of the Organic Reaction Mechanism. VII. Reactions and Structures of Organic Halides in Replacement Reactions, *Bull. Chem. Soc. Japan*, 24, 1 (1951), by M. Murakami, S. Oae and S. Takeuchi.
5. The Synthesis of Some Fluorine Substituted Antimalarials, *J. Org. Chem.*, 16, 1450 (1951), by A. Sveinbjornsson, H.L. Bradlow, S. Oae and C. A. VanderWerf.
6. Electronic Interpretation of the Organic Reaction Mechanism. X. On the Effect Caused by the Lone Pair, *J. Chem. Soc. Japan*, 72, 595 (1951), by M. Murakami and S. Oae.
7. On the Reactivities of Chloromethyl Ethyl Sulfone and β -Haloethyl Ethyl Ether, *Waseda Appl. Chem. Bull.*, 21, 7 (1952), by S. Oae.
8. Reactivity of γ -Sulfur-Substituted Derivatives of Allyl Chloride, *Waseda Appl. Chem. Bull.*, 22, 8 (1953), by S. Oae.
9. Relative Reactivities of Organic Halides in Displacement Reactions. I. Allylic Chlorides, *J. Am. Chem. Soc.*, 75, 2724 (1953), by S. Oae and C. A. VanderWerf.
10. Relative Reactivities of Organic Halides in Displacement Reactions. II. Reaction of Mercuric Nitrate with Some Normal Chain Alkyl and Aralkyl Bromides, *J. Am. Chem. Soc.*, 75, 5037 (1953), by S. Oae and C. A. VanderWerf.
11. Reactions of Bis-alkylsulfonylmethanes and Their Halogen-Substituted Derivatives, *Bull. Chem. Soc. Japan*, 28, 41 (1955), by S. Oae.
12. Relative Reactivities of Organic Halides in Displacement Reactions. III. Reactions of Mercuric Nitrate with Some Bromoketones, Bromoesters and Bromoethers, *J. Am. Chem. Soc.*, 78, 4030 (1956), by S. Oae.
13. Relative Reactivities of Organic Halides in Displacement Reactions. IV. The Rates of Formolysis of Several Secondary Organic Bromides, *J. Am. Chem. Soc.*, 78, 4032 (1956), by S. Oae.
14. Effect of Substituent on the Reactivity of ω -Substituted Primary Alkyl Halide in the Reaction with Sodium Thiosulfate, *J. Am. Chem. Soc.*, 78, 4034 (1956), by K.

Akagi, S. Oae and M. Murakami.

15. A Further Study of the Dissociation and Association of Furoic and Thenoic Acids and of the Rates of Saponification of Their Ethyl Esters, *J. Am. Chem. Soc.*, **79**, 2547 (1957), by S. Oae and C. C. Price.
16. Reactivities of Several -Substituted Primary Alkyl Bromides with Tertiary Amines, *J. Am. Chem. Soc.*, **79**, 3118 (1957), by K. Akagi, S. Oae and M. Murakami.
17. Effects of Dimethylsulfonio and Trimethylammonio Groups on the Dissociation of Substituted Phenols, *J. Am. Chem. Soc.*, **80**, 3425 (1958), by S. Oae and C. C. Price.
18. The Effect of m-Dichloro and m-Dibromo Groups on the Dissociation and Ultraviolet Spectra of p-Dimethylsulfoniophenols. *J. Am. Chem. Soc.*, **80**, 4938 (1958), by S. Oae and C. C. Price.
19. Quarternary Ammonium Salts of 1,4-Diazabicyclo[2,2,2]otane, *J. Org. Chem.*, **24**, 1348 (1959), by S. Oae, B. Hovarth, C. Zalut and R. Harris.
20. Non-Oxygen Exchange in Sulphone Group in Alkaline Decomposition of Diphenyl Sulphone and in Alkaline Hydrolysis of Phenyl Benzenesulphonate, *Chem. & Ind. (London)*, 1251 (1959), by D. R. Christman and S. Oae.
21. Steric Effects of m-Methyl Groups on the Conjugative Abilities of Thia, Sulfinyl and Sulfonio Functions in p-Substituted Phenols, *J. Am. Chem. Soc.*, **82**, 5359 (1960), by S. Oae and C. Zalut.
22. Deuterium-Hydrogen Exchange Reactions of Bridgehead α -Deuterium in Bicyclic Trisulfide, *J. Am. Chem. Soc.*, **83**, 5036 (1961), by S. Oae, W. Tagaki and A. Ohno.
23. Mechanism of the Wallach Rearrangement, *Bull. Chem. Soc. Japan*, **34**, 1873 (1961), by S. Oae, T. Fukumoto and M. Yamagami.
24. Oxygen Exchange Reaction of Sulphoxides in Sulphuric Acid, *Chem. & Ind. (London)*, 291 (1961), by S. Oae, T. Kitao and Y. Kitaoka.
25. Mechanism of the Reaction of 2-Picoline N-Oxide with Acetic Anhydride, *Chem. & Ind. (London)*, 515 (1961), by S. Oae, T. Kitao and Y. Kitaoka.
26. The Mechanism of the Reaction of 2-Picoline N-Oxide with Acetic Anhydride, *J. Am. Chem. Soc.*, **84**, 3359 (1962), by S. Oae, T. Kitao and Y. Kitaoka.
27. The Mechanism of the Reaction of 4-Picoline N-Oxide with Acetic Anhydride, *J. Am. Chem. Soc.*, **84**, 3362 (1962), by S. Oae, T. Kitao and Y. Kitaoka.
28. The Mechanism of the Reaction of N,N-Dimethylaniline Oxide with Acetic Anhydride, *J. Am. Chem. Soc.*, **84**, 3366 (1962), by S. Oae, T. Kitao and Y. Kitaoka.
29. Acid-catalyzed Hydrogen-Deuterium Exchange Reactions of Deuterated Anisole, Thioanisole and Benzene, *Bull. Chem. Soc. Japan*, **35**, 681 (1962), by S. Oae, A. Ohno and W. Tagaki.
30. The Structure of Zincke's So-called O- and p-Nitrobenzenesulfenic Anhydrides, *Bull. Chem. Soc. Japan*, **35**, 1156 (1962), by S. Oae and S. Kawamura.

31. The Radiation-induced Oxidation of Stannous Chloride in Aqueous Hydrochloric Acid, *Bull. Chem. Soc. Japan*, **35**, 1159 (1962), by K. Sugimoto and S. Oae.
32. Radiation-induced Reaction of Silicon Hydride, *Bull. Chem. Soc. Japan*, **35**, 1540 (1962), by W. Ando and S. Oae.
33. Mechanism of the Formation of 1,1-bis(Ethylmercapto)prop-1-ene by Reaction of β -Chloropropionaldehyde Diethylmercaptal, *Chem. & Ind. (London)*, 304 (1962), by S. Oae, A. Ohno and W. Tagaki.
34. Products of the Radiolysis of Water Containing Benzene and Nitric Acid, *Bull. Chem. Soc. Japan*, **36**, 124 (1963), by K. Sugimoto, W. Ando and S. Oae.
35. The Tracer Study of the Reactions of Diphenyl Sulfone and Diphenyl Sulfoxide with Sulfur, *Bull. Chem. Soc. Japan*, **36**, 163 (1963), by S. Oae and S. Kawamura.
36. Non-Oxygen Exchange Reaction of Sulfone Group of Phenyl Benzenesulfonate in Acid Hydrolysis, *Bull. Chem. Soc. Japan*, **36**, 346 (1963), by S. Oae, T. Fukumoto and R. Kiritani.
37. The Quantitative Determinations of High-Boiling Divalent Organo Sulfur Compounds by Copper. Determinations of Divalent Sulfur Compounds Formed in the Reaction between Benzene and Sulfur, *Bull. Chem. Soc. Japan*, **36**, 477 (1963), by W. Ando, K. Sugimoto and S. Oae.
38. Mechanisms of the Wallach Rearrangement, *Bull. Chem. Soc. Japan*, **36**, 601 (1963), by S. Oae, T. Fukumoto and M. Yamagami.
39. The Mechanism of Azoxybenzene Formation, *Bull. Chem. Soc. Japan*, **36**, 728 (1963), by S. Oae, T. Fukumoto and M. Yamagami.
40. The Radiation-induced Reactions of Benzene with Sulfur and Sulfur Compounds, *Bull. Chem. Soc. Japan*, **36**, 893 (1963), by W. Ando, K. Sugimoto and S. Oae.
41. Model Pathways for Enzymatic Oxidative Demethylation. I. The Mechanism of the Reaction of Dimethyl sulphoxide with Acetic Anhydride, *Tetrahedron*, **19**, 817 (1963), by S. Oae, T. Kitao, S. Kawamura and Y. Kitaoka.
42. The Mechanisms of the Reactions of p-Toluenesulfonyl Chloride with Isoquinoline- and Pyridine N-Oxides, *Tetrahedron*, **19**, 827 (1963), by S. Oae, T. Kitao and Y. Kitaoka.
43. Model Pathways for Enzymatic Oxidative Demethylation. II. Polonovski Reaction of N,N-Dimethylaniline N-Oxide, Pummerer Reactions of Dimethyl, n-Butyl Methyl and Methionine Sulphoxide with Acetylating Agents and Their Implications in Enzymatic Demethylation, *Tetrahedron*, **19**, 1783 (1963), by S. Oae, T. Kitao and S. Kawamura.
44. Recoil Carbon-14 Labeling of Naphthalene, Phenanthrene and Anthracene under Neutron Irradiation, *Tetrahedron Lett.*, 563 (1963), by S. Oae, N. Furukawa, Y. Otsuji and M. Hamada.
45. Spectrophotometric Determination of Diphenyl Disulfide and Thianthrene, *Japan Analyst (Bunseki Kagaku)*, **12**, 38 (1963), by K. Sugimoto, W. Ando and S. Oae.

46. The Formation of Sulfur Compounds in the Radiolysis of a Toluene Solution of Sulfur, *Bull. Chem. Soc. Japan*, **37**, 353 (1964), by W. Ando, K. Sugimoto and S. Oae.
47. Decomposition and Energy Transfer in the Radiolysis of Sulfur Compounds in Toluene, *Bull. Chem. Soc. Japan*, **37**, 357 (1964), by W. Ando, K. Sugimoto and S. Oae.
48. The Radiation-induced Reaction of Benzyl Mercaptan and p-Tolyl Mercaptan in Various Organic Solvents, *Bull. Chem. Soc. Japan*, **37**, 360 (1964), by W. Ando, K. Sugimoto and S. Oae.
49. The Radiation-induced Addition of Hydrogen Sulfide to Propylene, *Bull. Chem. Soc. Japan*, **37**, 365 (1964), by K. Sugimoto, W. Ando and S. Oae.
50. The Radiation-induced Reaction of Sulfur in Various Solvents, *Bull. Chem. Soc. Japan*, **37**, 582 (1964), by W. Ando, K. Sugimoto and S. Oae.
51. The Nucleophilic Substitution of a Phenolic Hydroxy Group in Acidic Media, *Bull. Chem. Soc. Japan*, **37**, 770 (1964), by S. Oae and R. Kiritani.
52. 3d-Orbital Resonance in Divalent Sulphides. IV. Acidity of Hydrogen Atom Adjacent to Mercapto Groups, *Tetrahedron*, **20**, 417 (1964), by S. Oae, W. Tagaki and A. Ohno.
53. 3d-Orbital Resonance in Divalent Sulphides. V. Activity of α -Hydrogen Atom of Cyclic Mercaptals, *Tetrahedron*, **20**, 427 (1964), by S. Oae, W. Tagaki and A. Ohno.
54. 3d-Orbital Resonance in Divalent Sulphides. VI. Absorption Spectra of Some Mercaptals in the Near Ultraviolet Region, *Tetrahedron*, **20**, 437 (1964), by S. Oae, W. Tagaki and A. Ohno.
55. 3d-Orbital Resonance in Divalent Sulphides. VII. Mechanism of the Formation of 1,1-Bis(ethylmercapto)propene-1 by Reaction of 3-Chloro-1,1-bis(ethylmercapto)propane, *Tetrahedron*, **20**, 443 (1964), by S. Oae, A. Ohno and W. Tagaki.
56. Rearrangement of Tertiary Amine Oxides. IX. The Mechanism of the Reaction of Quinaldine N-Oxide with Benzoyl Chloride, *Tetrahedron*, **20**, 2671 (1964), by S. Oae and S. Kozuka.
57. Rearrangement of Tertiary Amine Oxides. X. The Mechanism of the Reaction of 4-Picoline N-Oxide with n-Butyric Anhydride, *Tetrahedron*, **20**, 2677 (1964), by S. Oae, Y. Kitaoka and T. Kitao.
58. Rearrangement of Tertiary Amine Oxides. XI. Solvent Effects on the Reactions of 2- and 4-Picoline N-Oxides with Acetic Anhydride, *Tetrahedron*, **20**, 2685 (1964), by S. Oae, Y. Kitaoka and T. Kitao.
59. Rearrangement of Tertiary Amine N-Oxides. XII. The Mechanism of the Reaction of 3-Picoline N-Oxide with Acetic Anhydride, *Tetrahedron*, **20**, 2691 (1964), by S. Oae and S. Kozuka.
60. The Reaction of Sulphides with N-Bromosuccinimide. Oxidation of Sulphide to Sulphoxide, *Chem. & Ind. (London)*, 1624 (1964), by W. Tagaki, K. Kikukawa, K. Ando and S. Oae.
61. O^{18} Studies on Anthranilate Hydroxylase. A Novel Mechanism of Double Hydroxylation, *Biochem. Biophys. Res. Commun.*, **16**, 556 (1964), by S. Kobayashi, S. Kuno, N.

- Itada, O. Hayaishi, S. Kozuka and S. Oae.
62. Diazotization of p-Aminothiophenol, *Memoirs of Fac. Eng. Osaka City Univ.*, **6**, 217 (1964), by W. Tagaki, M. Nakagawa and S. Oae.
 63. Rearrangements of Tertiary Amine Oxides. XIII. The Reactions of p-Nitrobenzenesulfonyl Chloride with Pyridine and α -Picoline N-Oxides, *Bull. Chem. Soc. Japan*, **38**, 58 (1965), by S. Oae and K. Ikura.
 64. The Mechanism of the Base-Promoted Rearrangement of N,N-Dichlorodiphenylethylamine to Desylamine, *Bull. Chem. Soc. Japan*, **38**, 62 (1965), by S. Oae and N. Furukawa.
 65. The Radiation-induced Addition of Hydrogen Sulfide to Olefins, *Bull. Chem. Soc. Japan*, **38**, 221 (1965), by K. Sugimoto, W. Ando and S. Oae.
 66. The Radiation-induced cis-trans Isomerization of 2-Butenes by Hydrogen Sulfide, *Bull. Chem. Soc. Japan*, **38**, 224 (1965), by K. Sugimoto, W. Ando and S. Oae.
 67. The Radiation-induced Isomerization of 2-Butenes, *Bull. Chem. Soc. Japan*, **38**, 226 (1965), by W. Ando, K. Sugimoto and S. Oae.
 68. The Reaction of Elemental Sulfur with Organic Compounds. II. The Reaction of Dibenzyl Sulfide, Sulfoxide and Sulfone, and Their Related Dibenzyl Compounds, *Bull. Chem. Soc. Japan*, **38**, 414 (1965), by W. Tagaki, S. Kiso and S. Oae.
 69. Sulfoxides. V. The Ionization of Sulfoxides in Sulfuric Acid, *Bull. Chem. Soc. Japan*, **38**, 543 (1965), by S. Oae, T. Kitao and Y. Kitaoka.
 70. Sulfoxides. VI. The Oxygen Exchange Reaction of Sulfoxides in Sulfuric Acid, *Bull. Chem. Soc. Japan*, **38**, 546 (1965), by S. Oae, T. Kitao, Y. Kitaoka and S. Kawamura.
 71. Acid and Basic Hydrolyses of p-Nitrophenyl Benzenesulfonate, *Bull. Chem. Soc. Japan*, **38**, 765 (1965), by S. Oae and R. Kiritani.
 72. A Study of the Acid Dissociation of Furan- and Thiophenedicarboxylic Acids and of the Alkaline Hydrolysis of Their Methyl Esters, *Bull. Chem. Soc. Japan*, **38**, 1247 (1965), by S. Oae, N. Furukawa, T. Watanabe, Y. Otsuji and M. Hamada.
 73. The Nucleophilic Replacement of the Phenolic Hydroxy Group by the Mercapto Group in Acidic Media, *Bull. Chem. Soc. Japan*, **38**, 1381 (1965), by S. Oae and R. Kiritani.
 74. The Reaction of 3,5-Dibromo-4-hydroxybenzenesulfonyl Chloride with Weak Bases (The Question of the "Quinoid Sulfene" Intermediate), *Bull. Chem. Soc. Japan*, **38**, 1543 (1965), by S. Oae and R. Kiritani.
 75. Rearrangement of Tertiary Amine N-Oxides. XIV. The Mechanism of the Reaction of Pyridine N-Oxide with Acetic Anhydride, *Tetrahedron*, **21**, 1971 (1965), by S. Oae and S. Kozuka.
 76. Mechanism of the Decomposition of β -Phenylisobutyryl Peroxide, *Chem. & Ind. (London)*, 1694 (1965), by S. Oae, T. Kashiwagi and S. Kozuka.

77. Concurrent Oxygen Exchange and Racemisation Reactions of Sulphoxides in Dinitrogen Tetroxide, *Chem. & Ind. (London)*, 1790 (1965), by S. Oae, N. Kunieda and W. Tagaki.
78. Effect of Substituents on the Reactivity of β -(para-Substituted-phenyl)ethyl Bromide in the Reaction with Sodium Thiosulfate, *Memoirs of Fac. Eng. Osaka City Univ.*, 7, 81 (1965), by S. Oae, K. Akagi and Y. Yano.
79. Salicylate Hydroxylase, a Monooxygenase Requiring Flavine Adenine Dinucleotide. II. The Mechanism of Salicylate Hydroxylation to Catechol, *J. Biol. Chem.*, 240, 3414 (1965), by M. Katagiri, M. Maeno, S. Yamamoto, O. Hayaishi, T. Kitao and S. Oae.
80. The Synthesis of Sulfoxides by the Oxidation of Sulfide with the Bromine Complex of 1,4-Diazabicyclo[2,2,2]octane, *Bull. Chem. Soc. Japan*, 39, 364 (1966), by S. Oae, Y. Ohnishi, S. Kozuka and W. Tagaki.
81. The Formation of Phenolic Ethers by the Acid-catalyzed Condensation of Phenols and Alcohols, *Bull. Chem. Soc. Japan*, 39, 611 (1966), by S. Oae and R. Kiritani.
82. The Reaction of Diphenyl Sulfoxide with Bromine in Aqueous Acetic Acid, *Bull. Chem. Soc. Japan*, 39, 614 (1966), by W. Tagaki, K. Kikukawa, N. Kunieda and S. Oae.
83. A Preliminary Study of the Carboxylation and Decarboxylation of Some Sulfides, *Bull. Chem. Soc. Japan*, 39, 917 (1966), by W. Tagaki, K. Uneyama, I. Minamida, Y. H. Kim, Y. Ikeda and S. Oae.
84. The Mechanism of the Alkaline Fusion of Benzenesulfonic Acid, *Bull. Chem. Soc. Japan*, 39, 1212 (1966), by S. Oae, N. Furukawa, M. Kise, M. Kawamura.
85. Rearrangements of Tertiary Amine Oxides. XV. The Reaction of Heterocyclic N-Oxides with pNitrobenzenesulfonyl Chloride, *Bull. Chem. Soc. Japan*, 39, 1306 (1966), by S. Oae and K. Ikura.
86. The Mechanism of the Oxidative Decarboxylation of Benzoic Acid, *Bull. Chem. Soc. Japan*, 39, 1329 (1966), by S. Oae, T. Watanabe and N. Furukawa.
87. The Oxygen Exchange Reaction of Phenol in Acidic Media, *Bull. Chem. Soc. Japan*, 39, 1961 (1966), by S. Oae, R. Kiritani and W. Tagaki.
88. The Mechanism of the Alkaline Fusion of Diphenyl Sulfone, *Bull. Chem. Soc. Japan*, 39, 2260 (1966), by S. Oae and N. Furukawa.
89. The Reaction of Optically Active Silver β -Phenylisobutyrate with Halogen, *Bull. Chem. Soc. Japan*, 39, 2441 (1966), by S. Oae, T. Kashiwagi and S. Kozuka.
90. The Stereochemistry of Sulfoxide in the Base-Catalyzed Hydrogen-Isotopic Exchange of Aryl Methyl Sulfoxide, *Bull. Chem. Soc. Japan*, 39, 2556 (1966), by Y. H. Kim, W. Tagaki, M. Kise, N. Furukawa and S. Oae.
91. Rearrangement of Tertiary Amine N-Oxides. XVI. The Mechanism of the Reaction of Acridine N-Oxide with Acetic Anhydride, *Tetrahedron*, 22, 3143 (1966), by S. Oae, S. Kozuka, Y. Sakaguchi and K. Hiramatsu.

92. Rearrangement of Tertiary Amine N-Oxide. XVII. The Reaction of Lepidine N-Oxide with Benzoyl Chloride, *Tetrahedron Lett.*, 1513 (1966), by S. Oae, S. Tamagaki, and S. Kozuka.
93. The Conjugative Effects of Thia, Sulfinyl and Sulfonyl Groups on the Dissociation of p-Substituted Phenols, *Bull. Chem. Soc. Japan*, **40**, 951 (1967), by S. Oae, M. Yoshihara and W. Tagaki.
94. Rearrangements of Tertiary Amine Oxide. XVIII. The Reaction of 4-Substituted Pyridine N-Oxides with p-Nitrobenzenesulfonyl Chloride and p-Nitrobenzenesulfinyl Chloride, *Bull. Chem. Soc. Japan*, **40**, 1420 (1967), by S. Oae and K. Ikura.
95. The Alkaline Hydrolyses of Chlorophenyl Phenyl Sulfoxides and Sulfones, *Bull. Chem. Soc. Japan*, **40**, 1716 (1967), by S. Oae and Y.H. Kim.
96. The Reaction of Di-n-butyl Sulfoxide and Related Compounds with Elemental Sulfur, *Bull. Chem. Soc. Japan*, **40**, 1722 (1967), by S. Kiso and S. Oae.
97. Oxygen Exchange and Racemization Reactions of Sulfoxides in Acetic Anhydride, *Tetrahedron Lett.*, 1409 (1967.), by S. Oae and M. Kise.
98. Novel Oxygen Exchange Reaction of Sulfoxides in Alkaline Media, *Tetrahedron Lett.*, 1415 (1967), by S. Oae, M. Kise, N. Furukawa, and Y.H. Khim.
99. Reaction between Benzyne and Dimethyl Sulphoxide, *Chem. & Ind. (London)*, 276 (1967), by M. Kise, T. Asari, N. Furukawa and S. Oae.
100. The Reaction of Disulfides with Dinitrogen Tetroxide, *Bull. Chem. Soc. Japan*, **41**, 233 (1968), by N. Kunieda and S. Oae.
101. Oxidative Decarboxylation of Phenylacetic Acid, *Bull. Chem. Soc. Japan*, **41**, 242 (1968), by T. Watanabe, N. Furukawa and S. Oae.
102. Concurrent Oxygen Exchange and Racemization Reactions of Diaryl Sulfoxides in Concentrated Sulfuric Acid, *Bull. Chem. Soc. Japan*, **41**, 696 (1968), by S. Oae and N. Kunieda.
103. The Mechanism of the Alkaline Fusion of Halodiphenyl Sulfone and Halobenzene-sulfinic Acids, *Bull. Chem. Soc. Japan*, **41**, 949 (1968), by N. Furukawa and S. Oae.
104. Concurrent Oxygen Exchange and Racemization Reactions of Diaryl Sulfoxides in Phosphoric Acid, *Bull. Chem. Soc. Japan*, **41**, 1025 (1968), by N. Kunieda and S. Oae.
105. Oxygen Exchange and Racemization Reactions of Sulfoxides in Acetic and Chloroacetic Acid, *Bull. Chem. Soc. Japan*, **41**, 1221 (1968), by S. Oae, M. Yokoyama and M. Kise.
106. The Mechanism of the Base Catalyzed Cleavage of Diphenyl Sulfide, Sulfone and Sulfonic Ester, *Bull. Chem. Soc. Japan*, **41**, 1463 (1968), by N. Furukawa, H. Tanaka and S. Oae.
107. 3d-Orbital Resonance in Divalent Sulfides. XIV. Free Radical Copolymerization of Ketene Diethylmercaptal with Styrene, *Bull. Chem. Soc. Japan*, **41**, 1696 (1968), by W. Tagaki, T. Tada, R. Nomura and S. Oae.

108. Hydrogen Abstraction Reaction of α -Heteroatom Substituted Compounds by t-Butoxy Radical, *Bull. Chem. Soc. Japan*, **41**, 1928 (1968), by K. Uneyama, H. Namba and S. Oae.
109. Polar Conjugative Effect of Aryldithia Group on the Dissociation and Ultraviolet Spectra of Substituted Phenols, *Bull. Chem. Soc. Japan*, **41**, 2082 (1968), by S. Oae and M. Yoshihara.
110. The Effect of the ω -Cyano Group on the Reactivity of Secondary Bromides in the Formolysis Reaction and on the Reactivity of Primary Bromides the Reaction with Silver Nitrate, *Bull. Chem. Soc. Japan*, **41**, 2165 (1968), by P. S. Strilko, H. Morita and S. Oae.
111. Oxygen-18 Tracer Study on the Reduction of Arylsulfonyl Chloride with Zinc, *Bull. Chem. Soc. Japan*, **41**, 3015 (1968), by N. Kunieda, K. Sakai and S. Oae.
112. 3d-Orbital Resonance in Divalent Sulphides IX. A Study on the Mechanism of the Base-Catalysed Decarboxylation of α -Mercaptocarboxylic Acids, *Tetrahedron*, **24**, 5271 (1968), by K. Uneyama, W. Tagaki, I. Minamida and S. Oae.
113. 3d-Orbital Resonance in Divalent Sulphide. X. The Effect of α -Aryl and α -Alkyl-mercapto Groups on the Rate of Decarboxylation of α -Substituted Carboxylic Acids, *Tetrahedron*, **24**, 5283 (1968), by S. Oae, W. Tagaki, K. Uneyama and I. Minamida.
114. Acid Dissociation, UV Spectra and Hydrolyses of Several α -Mercapto- and α -Alkoxyacetic Acids and Their Ethyl Esters, *Tetrahedron*, **24**, 5293 (1968), by I. Minamida, Y. Ikeda, K. Uneyama, W. Tagaki and S. Oae.
115. 3d-Orbital Resonance in Divalent Sulphides. XIII. The E2 Reaction of p-substituted- β -phenylmercapto Chlorides and the Corresponding Oxygen Analogues, *Tetrahedron*, **24**, 5721 (1968), by S. Oae and Y. Yano.
116. Kinetic Studies on the Reactions of 2- and 4-Alkyl-Substituted Heteroaromatic N-Oxides with Acetic Anhydride, *Tetrahedron Lett.*, 917 (1968), by S. Oae, S. Tamagaki, T. Negoro, K. Ogino and S. Kozuka.
117. Uneven Distribution of ^{18}O in the Resulting Esters Formed in the Reaction of 2-Picoline, 2,6-Lutidine and Quinaldine N-Oxide with Acetic Anhydride, *Tetrahedron Lett.*, 923 (1968), by S. Kozuka, S. Tamagaki, T. Negoro and S. Oae.
118. The Mechanism of the Reaction of Phenyl Methyl Sulfoxide with Acetic Anhydride, *Tetrahedron Lett.*, 2261 (1968), by S. Oae and M. Kise.
119. The Reaction of Diaryl Disulfides with Pyridine N-Oxides, *Tetrahedron Lett.*, 3791 (1968), by K. Ikura and S. Oae.
120. Oxygen Exchange Reaction of Sulfoxides with Dimethyl Sulfoxide, *Tetrahedron Lett.*, 4131 (1968), by S. Oae, M. Yokoyama, M. Kise and N. Furukawa.
121. Implication of Small Hydrogen-Deuterium Kinetic Isotope Effect in the Reaction of Quinaldine and 1-Methylisoquinoline N-Oxides with Acetic Anhydride, *Tetrahedron*

- Lett.*, 4765 (1968), by S. Tamagaki, S. Kozuka and S. Oae.
122. Intermolecular General-Base Catalysis of o-Carboxyl Group in the Iodine Oxidation of o-Methylthiobenzoic Acid in Aqueous Media, *Tetrahedron Lett.*, 6131 (1968), by W. Tagaki, M. Ochiai and S. Oae.
 123. The pKa's of Aryl Methyl Sulphoximines, *Chem. & Ind. (London)*, 1569 (1968), by S. Oae, K. Tsujihara and N. Furukawa.
 124. Recoil Labeling and Selective Radiation Labeling. A Novel Synthesis of Propanol-2,3-¹⁴C₁, *J. Labelled Compds.*, **IV**, 28 (1968), by S. Oae, C. S Redvanly and A. P Wolf.
 125. The Alkaline Hydrolysis of Halophenols, *Bull. Chem. Soc. Japan*, **42**, 177 (1969), by S. Oae, N. Furukawa and T. Asari.
 126. Reaction of Sulfides with t-Butyl Hypochlorite in the Presence of Water, ¹⁸O Tracer Study, *Bull. Chem. Soc. Japan*, **42**, 831 (1969), by W. Tagaki, N. Kunieda and S. Oae.
 127. Oxygen Exchange Reaction of Sulfoxides in Dinitrogen Tetroxide, *Bull. Chem. Soc. Japan*, **42**, 1090 (1969), by N. Kunieda, K. Sakai and S. Oae.
 128. The α-Effect. Aminolysis on a Saturated Carbon Atom, *Bull. Chem. Soc. Japan*, **42**, 1110 (1969), by S. Oae, Y. Kadoma and Y. Yano.
 129. Kinetic Studies of Oxygen Exchange and Racemization Reactions of Diaryl Sulfoxides in Sulfuric Acid of Various Concentrations, *Bull. Chem. Soc. Japan*, **42**, 1324 (1969), by N. Kunieda and S. Oae.
 130. The Alkaline Ethanolyses of Chlorophenyldiphenyl Sulfonium Halides, Chlorophenyl Phenyl Sulfones and Chloronitrobenzene in Aqueous Ethanol, *Bull. Chem. Soc. Japan*, **42**, 1622 (1969), by S. Oae and Y.H. Khim.
 131. The Dipole Moments of Diphenyl Sulfide, Sulfoxide, Sulfone and Their Derivatives, *Bull. Chem. Soc. Japan*, **42**, 1878 (1969), by Y. Toshiyasu, Y. Taniguchi, K. Kimura, R. Fujishiro, T. Yoshihara, W. Tagaki and S. Oae.
 132. The Basicities of Substituted Diphenyl Sulfoxides, *Bull. Chem. Soc. Japan*, **42**, 1964 (1969), by S. Oae, K. Sakai and N. Kunieda.
 133. The Mechanism of the Alkaline Decomposition of Triarylsulfonium Bromide with Phenyllithium, *Bull. Chem. Soc. Japan*, **42**, 1968 (1969), by Y.H. Khim and S. Oae.
 134. Sulfilimine. I. Synthesis and Formation Mechanism, *Bull. Chem. Soc. Japan*, **42**, 2631 (1969), by K. Tsujihara, N. Furukawa, K. Oae and S. Oae.
 135. Reaction of p-Nitrophenyl Benzenesulfonates with Thiophenoxides, *Bull. Chem. Soc. Japan*, **42**, 2894 (1969), by W. Tagaki, T. Kurusu and S. Oae.
 136. Alkaline Hydrolysis of Aryl Benzenethiolsulfonates, *Bull. Chem. Soc. Japan*, **42**, 2899 (1969), by S. Oae, Y. Yoshikawa and W. Tagaki.

137. Alkaline Hydrolysis of Aryl Benzenethiolsulfonates, *Bull. Chem. Soc. Japan*, **42**, 2903 (1969), by S. Oae, R. Nomura, Y. Yoshikawa and W. Tagaki.
138. The Mechanism of the Base-Promoted Rearrangement of N,N-Dichlorocyclohexylamine to 2-Aminocyclohexanone and the Deaminative Diazotization of 2-Aminocyclohexanone, *Bull. Chem. Soc. Japan*, **42**, 2917 (1969), by M. Nakai, N. Furukawa and S. Oae.
139. Alkaline Decomposition of Triarylsulfonium Halides with Various Bases, *Bull. Chem. Soc. Japan*, **42**, 3528 (1969), by S. Oae and Y. H. Kim
140. Solvent Effect in the Base-catalyzed Hydrogen Isotopic Exchange Reaction of α -Deuteriodiphenylthioacetal, *Bull. Chem. Soc. Japan*, **42**, 3609 (1969), by I. Minamida, K. Uneyama, W. Tagaki and S. Oae.
141. Rearrangement of Tertiary Amine N-Oxides. XXVII. Mechanism of the Reaction of Isoquinoline N-Oxide with Substituted Benzenesulfonyl Chlorides, *Tetrahedron*, **25**, 5761 (1969), by S. Oae, K. Ogino, S. Tamagaki and S. Kozuka.
142. The Effect of α -Epoxy and Episulfide Groups in the Solvolytic Reaction, *Tetrahedron Lett.*, 1347 (1969), by H. Morita and S. Oae.
143. The Rearrangement Mechanisms of N-Tosyloxyisocarbostyri1 and N-Tosyloxy-carbostyri1, *Tetrahedron Lett.*, 3559 (1969), by K. Ogino, S. Kozuka and S. Oae.
144. Formation and Chemical Fate of Triphenylthiomethyl Radical, *Tetrahedron Lett.*, 5193 (1969), by K. Uneyama, T. Sadakage and S. Oae.
145. Mass, N. M. R. and Infrared Spectroscopic Studies of Sulphoximines, *Chem. & Ind. (London)*, 266 (1969), by N. Furukawa, K. Tsujihara, Y. Kawakatsu and S. Oae.
146. Mass Spectra of Diaryl Disulfides, Diaryl Thiolsulfonates and Diaryl Thiolsulfonates, *Bull. Chem. Soc. Japan*, **43**, 129 (1970), by S. Kozuka, H. Takahashi and S. Oae.
147. Mass Spectra of Phenyl p-Toluenesulfonates. Substituent Effect in Fragmentation, *Bull. Chem. Soc. Japan*, **43**, 1408 (1970), by S. Kozuka, H. Takahashi, S. Tamagaki and S. Oae.
148. Reaction of Sulfoxides with Acylating Reagents. I. Mechanism of Oxygen Exchange Reaction of Diaryl Sulfoxides with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **43**, 1416 (1970), by S. Oae and M. Kise
149. Reaction of Sulfoxides with Acylating Reagents. II. Mechanism of the Reactions of Aryl Benzyl Sulfoxides with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **43**, 1421 (1970), by M. Kise and S. Oae.
150. Reaction of Sulfoxides with Acylating Reagents. III. Mechanism of the Reactions of Phenyl Methyl Sulfoxides with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **43**, 1426 (1970), by M. Kise and S. Oae.
151. Reaction of p-Nitrophenyl Sulfate with Thiophenol, *Bull. Chem. Soc. Japan*, **43**, 1553 (1970), by T. Kurusu, W. Tagaki and S. Oae.
152. Rearrangements of Tertiary Amine N-Oxides. XXVI. Reactions of Arylnitrones with Lead Tetraacetate, *Bull. Chem. Soc. Japan*, **43**, 1573 (1970), by S. Tamagaki and S. Oae.

153. Reaction of Sulfoxides with Acylating Reagents. IV. The Catalytic Effect of Both the Brønsted and Lewis Acids in the Oxygen Exchange Reaction of Diaryl Sulfoxides with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **43**, 1804 (1970), by M. Kise and S. Oae.
154. Sulfilimine. II. IR, UV and NMR Spectroscopic Studies, *Bull. Chem. Soc. Japan*, **43**, 2153 (1970), by K. Tsujihara, N. Furukawa and S. Oae.
155. Mechanisms of E2 Reactions. II. The E2 Reactions of p-Substituted Phenyl α -Chloroethyl Sulfones with a Few Tertiary Amines in Acetonitrile, *Tetrahedron*, **26**, 27 (1970), by Y. Yano and S. Oae.
156. Mechanism of Elimination. The E2 Reactions of Several p-Substituted Phenylthiopropyl Bromides and the Corresponding Oxygen Analogs in t-Butanol Containing Potassium t-Butoxide, *Tetrahedron*, **26**, 67 (1970), by Y. Yano and S. Oae.
157. Rearrangements of Tertiary Amine Oxides. XXIII. Reaction of α ,N-Diphenylnitrone with Acetic Anhydride, *Tetrahedron*, **26**, 1795 (1970), by S. Tamagaki, S. Kozuka and S. Oae.
158. The Decomposition of Diacyl Peroxides. I. The Thermal Decomposition of Primary and Secondary Diacyl Peroxide, *Tetrahedron*, **26**, 3619 (1970), by T. Kashiwagi, S. Kozuka and S. Oae.
159. The Decomposition of Diacyl Peroxides. II. Lewis Acid-Catalyzed Decomposition of β -Phenylisobutyryl Peroxide, *Tetrahedron*, **26**, 3631 (1970), by T. Kashiwagi and S. Oae.
160. The Decomposition of Diacyl Peroxide. III. The Photochemical Decomposition of β -Phenylisobutyryl Peroxide, *Tetrahedron*, **26**, 3639 (1970), by T. Kashiwagi, K. Fujimori, S. Kozuka and S. Oae.
161. The Decomposition of Diacyl Peroxide. IV. Baeyer-Villiger Reaction of Optically Active 3-Methyl-4-phenyl-2-butanone, *Tetrahedron*, **26**, 3647 (1970), by T. Kashiwagi, K. Fujimori, S. Kozuka and S. Oae.
162. The Mechanism of the Reactions of 2- and 4-Alkylpyridine N-Oxides with Acetic Anhydride, *Tetrahedron*, **26**, 4051 (1970), by S. Oae, S. Tamagaki, T. Negoro and S. Kozuka.
163. Reaction of Lepidine, Quinaldine and 1-Methylisoquinoline N-Oxides with Acetic Anhydride, *Tetrahedron*, **26**, 4675 (1970), by S. Tamagaki, K. Ogino, S. Kozuka and S. Oae.
164. The Elimination Reaction of N-Sulfonylsulfilimine, *Tetrahedron Lett.*, 2663 (1970), by S. Oae, K. Tsujihara and N. Furukawa.
165. Sulfilimine and Sulfoximine. VI. The Reaction of N-Sulfonylsulfilimine with Sulfoxide, *Tetrahedron Lett.*, 3415 (1970), by K. Tsujihara, T. Aida, N. Furukawa and S. Oae.
166. Rearrangement of Diphenyl Sulphide-1-¹⁴C on Treatment with Aluminium Chloride, *Chem. & Ind. (London)*, 1438 (1970), by S. Oae, N. Nakai and N. Furukawa.

167. Solvent Effects in the Intramolecular Rearrangement Reactions of Carboxy and Sulfoxy Groups, *Kogyo Kagaku Zasshi*, **73**, 2300 (1970), by K. Ogino and S. Oae.
168. Convenient Synthesis of p-Nitrobenzenesulfinyl Chloride, *Yuki Gosei Kagaku Kyokaiishi*, **28**, 80 (1970), by S. Oae, K. Ikura and Y. Shimano.
169. The Reaction of Azoxybenzene with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **44**, 442 (1971), by S. Oae, T. Maeda and S. Kozuka.
170. The Tracer Study of the Reaction of Diphenyl Sulfone-1-¹⁴C with Elemental Sulfur Using a Convenient Degradative Method, *Bull. Chem. Soc. Japan*, **44**, 445 (1971), by S. Oae, N. Nakai, Y. Tsuchida and N. Furukawa.
171. The Mechanism of Silver Perchlorate Catalyzed Solvolysis Reaction of 2-Chlorocyclohexanone-1-¹⁴C, *Bull. Chem. Soc. Japan*, **44**, 448 (1971), by T. Masuie, N. Furukawa and S. Oae.
172. Tracer Study of the Reactions of Diphenyl Sulfone and Diphenyl Sulfoxide with Diphenyl Disulfide, *Bull. Chem. Soc. Japan*, **44**, 451 (1971), by S. Oae, Y. Tsuchida and M. Nakai.
173. Formation and Properties of Phenylthiomethyl Radical. Anodic Oxidation of Sodium Phenylthioacetate and Thermal Decomposition of t-Butyl Phenylthioacetate, *Bull. Chem. Soc. Japan*, **44**, 815 (1971), by K. Uneyama, S. Torii and S. Oae.
174. Mass Spectra of Phenyl p-Toluates and Toluanihdes. Substituent Effect in Fragmentation. II., *Bull. Chem. Soc. Japan*, **44**, 1965 (1971), by S. Kozuka, H. Takahashi and S. Oae.
175. Effect of Ring Size on the Acid-Catalyzed Reduction of Cyclic Sulfoxides by Iodide Ion, *Bull. Chem. Soc. Japan*, **44**, 2456 (1971), by S. Tamagaki, M. Mizuno, H. Yoshida, H. Hirota and S. Oae.
176. A New Rearrangement Reaction of Azoxybenzene with Arenesulfonyl Chloride, *Bull. Chem. Soc. Japan*, **44**, 2495 (1971), by S. Oae, T. Maeda, S. Kozuka and M. Nakai.
177. Tertiary Amine N-Oxide. XXXIII. Reaction of α ,N-Diphenylnitron with Acylating Reagents, *Bull. Chem. Soc. Japan*, **44**, 2851 (1971), by S. Tamagaki and S. Oae.
178. Mechanism of the Oxygen Exchange Reaction of Diaryl Sulfoxides in Hydrochloric Acid, *Bull. Chem. Soc. Japan*, **44**, 2875 (1971), by H. Yoshida, T. Numata and S. Oae.
179. Pyrolysis of N-p-Toluenesulfonylsulphilimines, *Tetrahedron*, **27**, 4921 (1971), by K. Tsujihara, N. Furukawa and S. Oae.
180. Mechanism of Elimination Reactions. The E2 Reactions of Substituted α -Phenylethyl Bromides, *Tetrahedron*, **27**, 5343 (1971), by T. Yoshida, Y. Yano and S. Oae.
181. Mechanisms of the Reaction of Substituted Iso-quinoline and Quinoline N-Oxides with Arenesulfonyl Chlorides, *Tetrahedron*, **27**, 6037 (1971), by K. Ogino and S. Oae.
182. The Stereochemistry of Ei Reaction of N-p-Toluenesulphonyl Sulphilimines, *Tetrahedron*, **27**, 6101 (1971), by K. Tsujihara, K. Harada, N. Furukawa and S.

- Oae.
183. The Reaction of N-Sulfonyl Sulfilimine with Cyanide Ion in DMSO, *Tetrahedron Lett.*, 1145 (1971) by S. Oae, T. Aida, K. Tsujihara and N. Furukawa.
 184. The Alkaline Alcoholysis of N-p-Toluenesulfonyl Sulfilimine, *Tetrahedron Lett.*, 3109 (1971), by H. Kobayashi, N. Furukawa, T. Aida, K. Tsujihara and S. Oae.
 185. The Reaction of N-p-Tosylsulfilimine and Related Compounds with Thiophenolate Ion in DMF, *Tetrahedron Lett.*, 4255 (1971), by T. Aida, N. Furukawa and S. Oae.
 186. Catalytic Effect of the o-Carboxyl Group in the Oxygen-Exchange and Racemisation Reactions of Diaryl Sulphoxides in Sulfuric Acid of Various Concentrations, *Chem. & Ind. (London)*, 576 (1971), by T. Numata, K. Sakai, M. Kise, N. Kunieda and S. Oae.
 187. The Novel Reduction of Sulphoxides and Sulphilimines by the Use of O,O-Dialkyl Dithiophosphoric Acids, *Chem. & Ind. (London)*, 960 (1971), by A. Nakanishi and S. Oae.
 188. Acid-Catalyzed Oxygen Exchange and Racemization Reactions of Diaryl Sulfoxides. Neighboring Group Effect of the o-Carboxyl Group in the Oxygen Exchange Reaction, *Int. J. Sulfur Chem., A*, **1**, 1 (1971), by T. Numata, K. Sakai, M. Kise, N. Kunieda and S. Oae.
 189. Novel Intramolecular Oxygen Migration Reaction of o-Alkylthiophenyl Aryl Sulfoxides in Sulfuric Acid, *Int. J. Sulfur Chem., A*, **1**, 6 (1971), by T. Numata and S. Oae.
 190. The Reaction of Sulfonium Bis(methoxycarbonyl)methylide with Electrophilic Reagents, *Int. J. Sulfur Chem., A*, **1**, 159 (1971), by Y. Yagihara and S. Oae.
 191. The Reaction of α -Halosulfoxides with Amines, *Int. J. Sulfur Chem., A*, **1**, 215 (1971), by T. Numata and S. Oae.
 192. Cyclic Disulfides. The Reaction of 1,2-Dithiaacenaphthene with Carbenoids, *Bull. Chem. Soc. Japan*, **45**, 960 (1972), by S. Tamagaki and S. Oae.
 193. The photochemical Degradation of Diphenyl Sulfone-1-¹⁴C, *Bull. Chem. Soc. Japan*, **45**, 1117 (1972), by M. Nakai, N. Furukawa and S. Oae.
 194. Tracer Study of the Reaction of p-Toluenesulfonyl Chloride-³⁶C1 with Chloramine-T, *Bull. Chem. Soc. Japan*, **45**, 1268 (1972), by S. Oae, M. Nakai, N. Furukawa and R. Kiritani.
 195. Effect of Ring Size on the Mass Spectral Fragmentation of Cyclic Sulfoxides, *Bull. Chem. Soc. Japan*, **45**, 1767 (1972), by S. Tamagaki and S. Oae.
 196. The Reaction of Sulfilimine with Phenyl Grignard Reagents, *Bull. Chem. Soc. Japan*, **45**, 2019 (1972), by S. Oae, T. Yoshimura and N. Furukawa.
 197. Reaction of α -Halosulfoxides with Amines, *Bull. Chem. Soc. Japan*, **45**, 2794 (1972), by T. Numata and S. Oae.
 198. The Reaction of Elemental Sulfur with Organic Compounds. IV. The Reactions of N-

- Arenesulfonylsulfilimine and Sulfoximine with Sulfur and Diaryl Disulfide, *Bull. Chem. Soc. Japan*, **45**, 2856 (1972), by S. Oae, Y. Tsuchida, K. Tsujihara and N. Furukawa.
199. The Kinetic Study on the Reaction of Oxaziridine with Tri-n-Butylphosphine, *Bull. Chem. Soc. Japan*, **45**, 3179 (1972), by S. Tamagaki, K. Sakaki and S. Oae.
 200. Sulfilimine. XVII. Syntheses and Reactions of N-Carbamoylsulfilimines, *Bull. Chem. Soc. Japan*, **45**, 3586 (1972), by S. Oae, T. Masuda, K. Tsujihara and N. Furukawa.
 201. The Reaction of Phosphites with Sulphoxides, *Tetrahedron*, **28**, 549 (1972), by S. Oae, A. Nakanishi and S. Kozuka.
 202. The Rearrangement Reaction of Azoxybenzene with Arenesulfonic Anhydride, *Tetrahedron*, **28**, 2127 (1972), by S. Oae and T. Maeda.
 203. The Pummerer Rearrangement of Phenyl Methyl Sulfonium Bis(methoxycarbonyl)-methylide, *Tetrahedron*, **28**, 2759 (1972), by T. Yagihara and S. Oae.
 204. The Reduction of Semipolar Linkages by O,O-Dialkyl Dithiophosphoric Acid, *Tetrahedron*, **28**, 2981 (1972), by S. Oae, A. Nakanishi and N. Tsujimoto.
 205. Reduction of Semipolar Sulfur Linkages with Carbodithioic Acids and Addition of Carbodithioic Acids to Olefins, *Tetrahedron*, **28**, 3203 (1972), by S. Oae, T. Yagihara and T. Okabe.
 206. Decomposition of Diacyl Peroxide. V. A New Mode of Oxygen Scrambling in Benzoyl 1-Apocamphyl Carbonate, *Tetrahedron*, **28**, 5321 (1972), by S. Oae, K. Fujimori and Y. Uchida.
 207. Decomposition of Diacyl Peroxide. VI. ¹⁸O-Tracer Study on the Thermal Decomposition of 1-Apocamphoryl Benzoyl Peroxide, *Tetrahedron*, **28**, 5327 (1972), by S. Oae, K. Fujimori and S. Kozuka.
 208. Synthesis of New Classes of Thiocarbonyl Ylides and Imines, *Tetrahedron Lett.*, 1159 (1972), by S. Tamagaki and S. Oae.
 209. The Reaction of Elemental Sulfur with Organic Compounds. III. A New Reaction of Aromatic Displacement Reaction by Elemental Sulfur; Reaction with Halo Aromatics, *Tetrahedron Lett.*, 1283 (1972), by S. Oae and Y. Tsuchida.
 210. The Facile Thermal Racemization of Optically Active Aryl Methyl Sulfilimines, *Tetrahedron Lett.*, 1377 (1972), by N. Furukawa, K. Harada and S. Oae.
 211. A Convenient Preparation of "Free" Sulfilimines by Hydrolysis of N-p-Tosylsulfilimines in Sulfuric Acid, *Tetrahedron Lett.*, 1619 (1972), by N. Furukawa, T. Omata, T. Yoshimura, T. Aida and S. Oae.
 212. Oxygen-Sulphur Interchange Reaction of Carbonyl Compounds by O,O-Diethyl Dithiophosphoric Acid, *Chem. & Ind. (London)*, 575 (1972), by S. Oae, A. Nakanishi and N. Tsujimoto.
 213. A Novel Cyclisation Reaction of Alkyl o-Carboxyphenyl Sulphoxides, *Chem. & Ind. (London)*, 726 (1972), by T. Numata and S. Oae.
 214. Stabilization of the Transition State of the HO₂H⁺ Reaction by a Lone Pair of the β-

- Oxygen Atom, *J. Chem. Soc., Chem. Commun.*, 1115 (1972), by Y. Kadoma, S. Tamagaki and S. Oae.
215. Elimination Reactions of β -Phenylsulfonyl ethyl Chloride, -Bromide, -Tosylate and Dimethylsulfonium Iodide with Phenoxide Ion, *Int. J. Sulfur Chem., A*, **2**, 29 (1972), by S. Oae, Y. Kadoma and Y. Yano.
216. Mass, IR, NR and UV Spectroscopic Studies and pKa Values of Substituted Sulfoximines, *Int. J. Sulfur Chem., A*, **2**, 49 (1972), by S. Oae, K. Harada, K. Tsujihara and N. Furukawa.
217. The Reactions of S-Aryl Tetra- and Pentamethylene Sulfonium Perchlorates with Base, *Int. J. Sulfur Chem., A*, **2**, 169 (1972), by Y. Yano, M. Ishihara, W. Tagaki and S. Oae.
218. Halide Ion-Catalyzed Rearrangement Reaction of N-p-Toluenesulfonylsulfilimine, *Int. J. Sulfur Chem., A*, **2**, 181 (1972), by N. Furukawa, T. Aida and S. Oae.
219. Reaction of O,O-Dialkyl Dithiophosphoric Acid. III. Reductive Cleavage Reactions of Nitrogen-Nitrogen Bond by O,O-Diethyl Dithiophosphoric Acid, *Bull. Chem. Soc. Japan*, **46**, 535 (1973), by S. Oae, N. Tsujimoto and A. Nakanishi.
220. The Reaction of Elemental Sulfur with Organic Compounds. V. Reaction of Optically Active Sulfoximines with Elemental Sulfur and with Diphenyl Disulfide, *Bull. Chem. Soc. Japan*, **46**, 648 (1973), by S. Oae, Y. Tsuchida, and N. Furukawa.
221. The Reaction of Elemental Sulfur with Organic Compounds. VI. ^{35}S -Tracer Study of Aromatic Displacement Reaction of Thianthrene, Phenoxathine, Dibenzothiophene and Their Oxidation Compounds by Sulfur, *Bull. Chem. Soc. Japan*, **46**, 650 (1973), by S. Oae, S. Makino and Y. Tsuchida
222. Derivatives of Cyclic Disulfides. II. Alkaline Hydrolysis of 1,2-Dithiaacenaphthene S-Oxide, *Bull. Chem. Soc. Japan*, **46**, 1247 (1973), by S. Tamagaki, H. Hirota and S. Oae.
223. Oxygen-18 Scrambling Reaction of Aryl Alkyl Carbonates, *Bull. Chem. Soc. Japan*, **46**, 1741 (1973), by S. Oae, Y. Uchida, K. Fujimori and S. Kozuka.
224. Mechanism of Oxygen Exchange Reaction of Diaryl and Alkyl Aryl Sulfoxides in Sulfuric Acid, *Bull. Chem. Soc. Japan*, **46**, 1745 (1973), by N. Kunieda and S. Oae.
225. Derivatives of 1,2-Dithiole-3-thione. II. Thermal Rearrangement of Iminothiocarbonyl Compounds, *Bull. Chem. Soc. Japan*, **46**, 2608 (1973), by S. Tamagaki, K. Sakaki and S. Oae.
226. Kinetic Study of the Pyrolysis of 1- and 2-Phenylethyl Phenyl N-Tosylsulfilimines, *Bull. Chem. Soc. Japan*, **46**, 3482 (1973), by S. Oae, K. Harada, K. Tsujihara and N. Furukawa
227. Decomposition of Diacyl Peroxide. VII. Oxygen Scrambling in 1-Apocamphoryl Peroxide and Related Diacyl Peroxides - General Remarks on the Relationship between the Stability of Acyloxy Radical and Amounts of Cage Recombinations and Ester Formation in the Decomposition of Diacyl Peroxide, *Tetrahedron*, **29**, 65 (1973), by K. Fujimori and S. Oae.

228. The Reaction of O,O-Dialkyl Dithiophosphoric Acid. VI. Reaction of Carbostyryl with O,O-Dialkyl or O,O-Diphenyl Dithiophosphoric Acid, *Tetrahedron*, **29**, 2023 (1973), by A. Nakanishi and S. Oae.
229. Preparation and Properties of Diphenyl N-Halosulfilimines, *Tetrahedron Lett.*, 2113 (1973), by N. Furukawa, T. Yoshimura and S. Oae.
230. Catalytic Reduction of Dimethyl Sulfoxide and Other Sulfoxides with Bromine-Hydrobromic Acid System, *Tetrahedron Lett.*, 3853 (1973), by T. Aida, N. Furukawa and S. Oae.
231. Kinetic Study of Nucleophilic Substitution Reaction on Nitrogen Atom, *Tetrahedron Lett.*, 5143 (1973), by S. Oae and F. Yamamoto.
232. Reaction of N-p-Tosylsulfilimine with Trivalent Phosphorus Compounds, *Chem. Lett.*, 805 (1973), by T. Aida, N. Furukawa and S. Oae.
233. Preparation of Alkyl Bromides from the Corresponding Alcohols and Me_2SBr_2 , *J. Chem. Soc., Chem. Commun.*, 212 (1973), by N. Furukawa, T. Inoue, T. Aida and S. Oae.
234. Synthesis of N-Toluene-p-sulphonylsulphone Di-imines, *J. Chem. Soc., Chem. Commun.*, 590 (1973), by N. Furukawa, T. Omata and S. Oae.
235. Reaction of the Nitrile Group with O,O-Dialkyl Dithiophosphoric Acids, *Chem. & Ind. (London)*, 274 (1973) by A. Nakanishi and S. Oae.
236. Acetyl Chloride as Reducing Agent. A Facile Reduction of Sulphoxides, Sulphilimines and Sulphonium Ylids, *Chem. & Ind. (London)*, 277 (1973), by T. Numata and S. Oae.
237. Enzymatic Studies on the Metabolism of the Tetrahydrofurfuryl Mercaptan Moiety of Thiamine Tetrahydrofurfuryl Disulfide. II. Sulfide and Sulfoxide Oxygenases in Microsomes, *J. Biochem.*, **74**, 723 (1973), by T. Fujita, Z. Suzuoki, S. Kozuka and S. Oae.
238. Mechanism of Reaction of N-Tosylsulfilimines with Cyanide Ion, *Int. J. Sulfur Chem.*, **8**, 401 (1973), by S. Oae, I. Aida and N. Furukawa.
239. The Reaction of Sulfinic Acids with N,N-Dimethylaniline, *Bull. Chem. Soc. Japan*, **47**, 166 (1974), by S. Oae, O. Yamada and T. Maeda.
240. Mechanism of the Oxygen Exchange Reaction of n-Butyl Methyl Sulfoxide in Sulfuric Acid, *Bull. Chem. Soc. Japan*, **47**, 179 (1974), by S. Oae, M. Moriyama, T. Numata and N. Kunieda.
241. Derivatives of Cyclic Disulfides. III. A New Method of Deoxygenation of Thiolsulfonates and Thiolsulfonates with Inorganic Cyanide, *Bull. Chem. Soc. Japan*, **47**, 2075 (1974), by S. Tamagaki, H. Hirota and S. Oae.
242. Reaction of Sulfilimine and Sulphonium Ylide with Hydroxide or Methoxide Ion in Methanol, *Bull. Chem. Soc. Japan*, **47**, 2247 (1974), by N. Furukawa, T. Masuda, N. Yakushiji and S. Oae.

243. Derivatives of 1,2-Dithiole-3-thiones. VII. Study of Reaction of Thiocarbonyl 5-Imide with Amines, *Bull. Chem. Soc. Japan*, **47**, 3084 (1974), by S. Tamagaki, K. Sakaki and S. Oae.
244. Mechanism of the Reaction of N-p-Tosylsulphilimine and Related Compounds with Thiophenolate Ion, *Tetrahedron*, **30**, 947 (1974), by S. Oae, T. Aida, M. Nakajima, and N. Furukawa.
245. A Novel Cyclization Reaction of o-Carboxyphenyl and o-Carbamoylphenyl Sulfoxides. Formation of Benzoxathiane, Dihydrobenzothiazine and Benzoisothiazoline Derivatives, *Tetrahedron*, **30**, 2641 (1974), by S. Oae and T. Numata.
246. Reaction of Selenocarbonyl Imide with Amines and Mercaptans, *Tetrahedron Lett.*, 1059 (1974), by S. Tamagaki, K. Sakaki and S. Oae.
247. A 1,3-Dipole in Sulfilimine-Phosphine System. II. The Reaction of Sulfilimine-Phosphine System with Alcohols, *Chem. Lett.*, 121 (1974), by T. Aida, N. Furukawa and S. Oae.
248. Nucleophilic Substitution and Elimination Reactions on Nitrogen Atom: Reaction of N,N-Dibenzyl-O-p-nitrobenzoylhydroxylamine with Various Nucleophiles in Dipolar Aprotic Solvent, *Chem. Lett.*, 621 (1974), by S. Oae, T. Sakurai and S. Kozuka.
249. Oxygen-18 Tracer Study of the Rearrangement of O-Benzoyl-N-(p-toluene-sulfonyl)arylhydroxylamines, *Chem. Lett.*, 671 (1974) by S. Oae, T. Sakurai, H. Kimura and S. Kozuka.
250. Cleavage of Semipolar Linkages by a Free Radical. Reactions of Amine N-Oxides and Betaines with Tri-n-butyltin Hydride, *Chem. & Ind. (London)*, 452 (1974), by S. Kozuka, T. Akasaka, S. Furumai and S. Oae.
251. Cleavage of a Semipolar Linkage by a Free Radical. The Reaction of Sulphoxides and Sulphilimines with Tributyltin Hydride, *Chem. & Ind. (London)*, 496 (1974), by S. Kozuka, S. Furumai, T. Akasaka and S. Oae.
252. pKa Values and Nucleophilic Reactions of Free Diarylsulphilimines, *Chem. & Ind. (London)*, 702 (1974), by N. Furukawa, T. Yoshimura, T. Omata and S. Oae.
253. Derivatives of 1,2-Dithiole-3-thiones. III. A Novel Desulfurization of 4,5- Benzo-1,2-dithiole-3-thione Imide or Its Selenium Analogue, *Heterocycles*, **2**, 39 (1974), by S. Tamagaki, K. Sakaki and S. Oae.
254. Derivatives of 1,2-Dithiole-3-thiones. IV. Oxidation of 4,5-Benzo-3-selenoxo-1,2-dithiole, *Heterocycles*, **2**, 45 (1974), by S. Tamagaki, K. Sakaki and S. Oae.
255. Derivatives of 1,2-Dithiole-3-thiones. VIII. Reduction of N-Benzenesulfonyl Thione S-Imides with Trivalent Phosphines, *Heterocycles*, **2**, 631 (1974), by S. Tamagaki, K. Sakaki and S. Oae.
256. Reaction of N-p-Tolylsulphonylsulphimides with Halide Ion in Dimethylformamide, *J. Chem. Soc., Perkin II*, 1231 (1974), by S. Oae, T. Aida and N. Furukawa.
257. Decomposition of Diacyl Peroxides. VIII. Mechanism of Thermal Decomposition of Cyclopropaneacetyl Peroxide, *J. Chem. Soc., Perkin II*, 1844 (1974), by S. Oae, K. Fujimori, S. Kozuka and Y. Uchida.

258. Synthesis of Optically Active N-(p-Toluenesulfonyl)sulfoximine by Sulfoxide and Chloramine T - Copper, *Org. Prep. Proced., Int.*, **6**, 207 (1974), by M. Moriyama, T. Numata and S. Oae.
259. Nucleophilic Substitution on Trivalent Nitrogen Atom. Menshutkin Type Reaction of O-2,4-Dinitrophenylhydroxylamine with Uncharged Nucleophiles, *Bull. Chem. Soc. Japan*, **48**, 77 (1975), by F. Yamamoto and S. Oae.
260. The Reaction of 3H-1,2-Benzodithiole-3-thione with Diphenyldiazomethane, *Bull. Chem. Soc. Japan*, **48**, 355 (1975), by S. Tamagaki, R. Ichihara and S. Oae.
261. The Reactions of Cyclic Sulfilimines with Cyanide Ion and Phosphine. Evidence for Substitution on Trivalent Sulfur, *Bull. Chem. Soc. Japan*, **48**, 723 (1975), by T. Aida, M. Nakajima, T. Inoue, N. Furukawa and S. Oae.
262. A Novel Reduction of the O-(3,5-Dinitrobenzoyl)-N,N-(aroylaryl)hydroxylamines by the Cyanide Ion in Dipolar Aprotic Solvents, *Bull. Chem. Soc. Japan*, **48**, 1075 (1975), by S. Oae and T. Sakurai.
263. Pyrolysis of 1,2-Epithiocyclohexane, *Bull. Chem. Soc. Japan*, **48**, 1665 (1975), by S. Inoue and S. Oae.
264. The Reaction of N-phenylsulfonyl Thione S-Imide with Acyl Halides, *Bull. Chem. Soc. Japan*, **48**, 2983 (1975), by S. Tamagaki, K. Sakaki and S. Oae.
265. Kinetic Studies of the Thiol-catalyzed Rearrangement of N-Phenylsulfonyl Thione S-Imide, *Bull. Chem. Soc. Japan*, **48**, 2985 (1975), by S. Tamagaki, K. Sakaki and S. Oae.
266. Derivatives of 1,2-Dithiole-3-thione. XI. A Kinetic Study of the Reduction of N-Phenylsulfonyl Thione S-Imide with Halide, *Bull. Chem. Soc. Japan*, **48**, 2987 (1975), by S. Tamagaki, K. Sakaki and S. Oae.
267. Reaction of N-Aroyl-N-arylhydroxylamines with o-Nitrobenzenesulfonyl Chloride, *Bull. Chem. Soc. Japan*, **48**, 3759 (1975), by S. Oae and T. Sakurai.
268. Fragmentation Reaction of Ylides. IV. Reaction of Sulfide and Carbene, *J. Am. Chem. Soc.*, **97**, 2553 (1975), by Y. Hata, M. Watanabe, S. Inoue and S. Oae.
269. Abnormal Displacement Reaction of 2-(Chloromethyl)furan with Cyanide Ion, *Heterocycles*, **3**, 1 (1975), by F. Yamamoto, H. Morita and S. Oae.
270. Specific Effects of Acetic Acid on the Reaction of 2,4-Dimethylpyridine N-Oxide with Acetic Anhydride, *Tetrahedron Lett.*, 123 (1975), by Y. Kitaoka and S. Oae.
271. Preparation and Properties of Selenium Imides, *Tetrahedron Lett.*, 649 (1975), by S. Tamagaki, S. Oae and K. Sakaki.
272. A 1,3-Dipole in Sulfilimine-Phosphine System. III. Acid Anhydride-, Ester-, and Amide-Condensations by Sulfilimine-Phosphine System, *Chem. Lett.*, 29 (1975), by T. Aida, N. Furukawa and S. Oae.
273. A Convenient Preparation of Vinylic Sulphide by the Reaction of N-p-Tosylsulphilimines with Potassium t-Butoxide in Benzene, *Chem. & Ind. (London)*,

- 396 (1975), by N. Furukawa, S. Oae and T. Masuda.
274. A 1,3-Dipole in Sulfilimine-Phosphine System. IV. Preparations of Acid Anhydride, Amide, Ester and Thioester, *Chem. Pharm. Bull.*, **23**, 3011 (1975), by S. Oae, T. Aida and N. Furukawa.
275. Elimination and Nucleophilic Substitution on Nitrogen Atom. Reactions of O-Aroyl-N,N-di(p-substituted benzyl)- and O-Aroyl-N-benzoyl-N-benzylhydroxylamines with Various Nucleophiles in Dipolar Aprotic Solvents, *Bull. Chem. Soc. Japan*, **49**, 730 (1976), by S. Oae and T. Sakurai.
276. Catalytic Reduction of Sulfoxide by Bromine-Hydrogen Bromide System, *Bull. Chem. Soc. Japan*, **49**, 1117 (1976), by T. Aida, T. Akasaka, N. Furukawa and S. Oae.
277. Catalytic Oxidation of Mercaptans by Iodine-Hydrogen Iodide System in Dimethyl Sulfoxide, *Bull. Chem. Soc. Japan*, **49**, 1441 (1976), by T. Aida, T. Akasaka, N. Furukawa and S. Oae.
278. Pyrolysis of S-[2-(Phenylthio-, Phenylsulfinyl-, and phenylsulfonyl)ethyl-N-p-tosylsulfilimine, *Bull. Chem. Soc. Japan*, **49**, 2337 (1976), by N. Furukawa, T. Hatanaka, K. Harada and S. Oae.
279. Preparation and Physical and Chemical Properties of "Free" Sulfilimines, *J. Org. Chem.*, **41**, 1728 (1976), by T. Yoshimura, T. Omata, N. Furukawa and S. Oae.
280. Mechanism of the Exclusive Cyclic 1,3-Rearrangement of O-Benzoyl-N-(p-Toluene-Sulfonyl)-N-Arylhydroxylamines, *Tetrahedron*, **32**, 2289 (1976), by S. Oae and T. Sakurai.
281. Reaction of o-Carboxyphenyl Sulfoxides with Acetic Anhydride. Kinetic Studies on the Neighboring Group Effect of ortho-Carboxyl Group in the Oxygen Exchange and Pummerer Reactions, *Tetrahedron*, **32**, 2699 (1976), by T. Numata and S. Oae.
282. Steric Effects in the Reaction of Alkyl-Phenyl and Dialkyl-Sulphides with Chloramine-T, *Tetrahedron*, **32**, 2763 (1976), by F. Ruff, K. Komoto, N. Furukawa and S. Oae.
283. Synthesis, Stereochemistry, and Circular Dichroism of Optically Active o-Substituted Diphenyl Sulphilimines and Related Compounds, *Tetrahedron*, **32**, 3003 (1976), by M. Moriyama, T. Yoshimura, N. Furukawa, T. Numata and S. Oae.
284. Asymmetric Synthesis of Optically Active Selenonium Ylide, *Tetrahedron Lett.*, 3703 (1976), by K. Sakaki and S. Oae.
285. Thermal Racemization of Various S-o-Anisyl S-Phenyl N-(Substituted)-sulfilimines, *Chem. Lett.*, 275 (1976), by M. Moriyama, N. Furukawa, T. Numata and S. Oae.
286. Absolute Configuration and Circular Dichroism of S-o-Methoxyphenyl-S-phenyl Sulfilimides and Sulfoximides, *Chem. Lett.*, 363 (1976), by M. Moriyama, K. Kuriyama, T. Iwata, N. Furukawa, T. Numata and S. Oae.
287. The Michael Type Addition of Free Sulfilimine, *Synthesis*, 30 (1976), by N. Furukawa, S. Oae and T. Yoshimura.

288. Direct Synthesis of Optically Active o-Substituted Diaryl Sulphilimines, Sulphonium Ylides and Sulfoxides, *Chem. & Ind.* (London), 163 (1976), by M. Moriyama, S. Oae, T. Numata and N. Furukawa.
289. Reduction of Sulfoxides with Methane- and p-Nitrobenzene-Sulfinyl Chlorides by Oxygen Transfer Reaction, *Org. Prep. Proced., Int.*, **8**, 119 (1976), by T. Numata, K. Ikura, Y. Shimano and S. Oae.
290. The Reaction of ω -Vinyl Primary Disulfide with Halogen, *Heterocycles*, **5**, 29 (1976), by H. Morita and S. Oae.
291. Photolysis of Alkenyl Disulfide, *Heterocycles*, **5**, 35 (1976), by H. Morita and S. Oae.
292. Pyrolysis of S-Alkyl-S-phenyl-N-p-tolylsulphonylsulphimides with No β -Hydrogen Atoms, *J. Chem. Soc., Perkin II*, 1432 (1976), by T. Aida, N. Furukawa and S. Oae.
293. Mechanism of the Reaction of N-Arylsulphonylsulphimides with Trivalent Phosphorus Compounds, *J. Chem. Soc., Perkin II*, 1438 (1976), by T. Aida, N. Furukawa and S. Oae.
294. Nucleophilic Substitution on Nitrogen Atom. Oxygen Exchange Reaction between Sulfoxides and Compounds bearing a Semipolar Nitrogen-oxygen Bond, *Memoirs of Fac. Eng., Osaka City Univ.*, **17**, 109 (1976), by T. Sakurai, S. Kozuka and S. Oae.
295. Reaction of N-Aroyl-N-arylhydroxylamines with p-Substituted Benzenesulfinyl Chlorides, *Memoirs of Fac. Eng., Osaka City Univ.*, **17**, 117 (1976), by T. Sakurai and S. Oae.
296. Diphenyl N-Halosulfilimines. Preparation, Decomposition and Reactions with Nucleophiles, *Tetrahedron*, **33**, 1061 (1977), by T. Yoshimura, N. Furukawa, T. Akasaka and S. Oae.
297. The Oxidation of Unsymmetrical Thiolsulfinate. Evidence for α -Disulfoxide as an Intermediate, *Tetrahedron Lett.*, 1195 (1977), by S. Oae, Y. H. Kim, T. Takata and D. Fukushima.
298. Transfer of Chirality from Sulfur to α -Carbon in the Pummerer Reaction of α -Cyanomethyl Aryl Sulfoxide, *Tetrahedron Lett.*, 1337 (1977), by T. Numata and S. Oae.
299. New Rearrangement of α -Keto Sulfoxide and Thiolsulfinate with Acetic Anhydride, *Tetrahedron Lett.*, 1653 (1977), by N. Furukawa, T. Morishita, T. Akasaka and S. Oae.
300. No Oxygen Exchange in Alkaline Hydrolysis of n-Hexyl Nitrite, *Tetrahedron Lett.*, 2103 (1977), by S. Oae, N. Asai and K. Fujimori.
301. Reaction of Sulfoximines with Diazomalonate in the Presence of Cu-salt. A New Synthesis and Stereochemistry of Optically Active Oxosulfonium Ylids, *Tetrahedron Lett.*, 3633 (1977), by N. Furukawa, F. Takahashi, T. Yoshimura and S. Oae.
302. Alkaline Hydrolyses of Unsymmetrical Thiolsulfinate. Evidence for Selective Attacking of Hydroxide Ion on Sulfinyl Sulfur Atom, *Tetrahedron Lett.*, 4219 (1977),

by S. Oae, T. Takata and Y. H. Kim.

303. Photolysis of N-Acyl-S,S-diphenylsulphimides, *J. Chem. Soc., Perkin I*, 96 (1977), by N. Furukawa, M. Fukumura, T. Nishio and S. Oae.
304. The Halogen-Dimethyl Sulphoxide System as an Oxidizing Reagent. A Convenient Method for Preparation of Diaryl Di- and Tri-ketones, *J. Chem. Soc., Perkin I*, 372 (1977), by N. Furukawa, T. Akasaka, T. Aida and S. Oae.
305. Thermal Racemisation of N-Unsubstituted and Various N-Substituted S-o-Methoxyphenyl S-Phenyl Sulphimides by Pyramidal Inversion, *J. Chem. Soc., Perkin II*, 1783 (1977), by M. Moriyama, N. Furukawa, T. Numata and S. Oae.
306. Novel Method of Activating Thiols by their Conversion into Thionitrites with Dinitrogen Tetroxide, *J. Chem. Soc., Chem. Commun.*, 407 (1977), by S. Oae, D. Fukushima and Y. H. Kim.
307. Mild Reductions of Sulfoxides with Trifluoroacetic Anhydride/Sodium Iodide System, *Synthesis*, 404 (1977), by J. Drabowicz and S. Oae.
308. A Possible Sulfurane. N-Diphenylsulfiliminylium Sulfonium Salt, *Chem. Lett.*, 143 (1977), by N. Furukawa, F. Takahashi, T. Akasaka and S. Oae.
309. Non-Carbonium Ion Character of the Intermediate in the Pummerer Reaction of Phenyl sulfinylcyclopropanes and (Phenylsulfinylmethyl)cyclopropanes with Acetic Anhydride, *Chem. Lett.*, 745 (1977), by T. Masuda, T. Numata, N. Furukawa and S. Oae.
310. Mild and Selective Reduction of Sulfoxides in the Mixture with Other Sulfinyl Compounds with Trifluoroacetic Anhydride - Hydrogen Sulfide System, *Chem. Lett.*, 767 (1977), by J. Drabowicz and S. Oae.
311. New Simple Syntheses of Unsymmetrical Disulfides and Thiolsulfonates, *Chem. Lett.*, 893 (1977), by S. Oae, Y. H. Kim, D. Fukushima and T. Takata.
312. Stereoselective Pummerer Rearrangement of Phenylsulfinylcyclopropanes with Acetic Anhydride, *Chem. Lett.*, 903 (1977), by T. Masuda, T. Numata, N. Furukawa and S. Oae.
313. Partial Asymmetric Pummerer Reaction of Aryl Prop-2-ynyl Sulfoxide with Acetic Anhydride, *Chem. Lett.*, 909 (1977), by T. Numata, O. Itoh and S. Oae.
314. Facile Reduction of Selenoxide with Phosphine Selenide, *Chem. Lett.*, 1003 (1977), by K. Sakaki and S. Oae.
315. Chlorination of Phenylthiocyclopropanes and Phenylsulfinylcyclopropanes with Chlorinating Agents. Preparation of 1-Chloro-1-(phenylthio)-cyclopropanes and 1-Chloro-1-(phenylsulfinyl)cyclopropanes, *Chem. Lett.*, 1103 (1977), by T. Masuda, N. Furukawa and S. Oae.
316. A Study of the Solvent Effect of Dimethyl Sulfoximine on the Rate of S_N2 Reactions, *Chem. Lett.*, 1359 (1977), by N. Furukawa, F. Takahashi, N. T. Yoshimura and S. Oae.
317. Oxygen Exchange and Racemization reactions of Diaryl Sulfoxide in Sulfuric Acid in the Presence of Potassium Chloride, *Phosphorus and Sulfur*, 3, 1 (1977), by N. Kunieda,

- T. Numata and S. Oae.
318. Pummerer-Type Reaction of Sulfilimines with Acetic Anhydride, *Phosphorus and Sulfur*, **3**, 277 (1977), by N. Furukawa, T. Yoshimura and S. Oae.
 319. Substitution Reaction of 3-Thiacycloalkyl Derivatives, *Heterocycles*, **6**, 1593 (1977), by H. Morita and S. Oae.
 320. Rearrangements of t-Amine Oxides, *Heterocycles*, **6**, 583 (1977), by S. Oae and K. Ogino.
 321. One Step Synthesis of Optically Active Aziridine with Optically Active o-Methoxyphenyl Phenyl Sulfilimine and Olefin, *Heterocycles*, **7**, 287 (1977), by T. Yoshimura, T. Akasaka, N. Furukawa and S. Oae
 322. Oxidation of Some Biologically Active and Related Sulfur Containing Compounds, *Pure & Appl. Chem.*, **49**, 153 (1977), by S. Oae, Y. H. Kim, D. Fukushima and T. Takata.
 323. Reactions of Heteroaromatic and Aromatic Amine Oxides with Acylating Agents, *Lectures in Heterocyclic Chemistry*, **IV**, S-69 (1977), by S. Oae.
 324. Ei Reaction of Sulphilimines and Related Compounds (Tetrahedron Reports No. 37), *Tetrahedron*, **33**, 2359 (1977), by S. Oae and N. Furukawa.
 325. Chlorination of Phenylsulfinylcyclopropanes and phenylthiocyclopropanes, *Bull. Chem. Soc. Japan*, **51**, 2659 (1978), by T. Masuda, N. Furukawa and S. Oae.
 326. Thermal Curtius Rearrangement of N-AcyI-S,S-diphenylsulfilimine, *Bull. Chem. Soc. Japan*, **51**, 3599 (1978), by N. Furukawa, M. Fukumura, T. Nishio and S. Oae.
 327. Racemization of Sulfinic Esters with Trichloroacetic Anhydride, *Tetrahedron*, **34**, 63 (1978), by J. Drabowicz and S. Oae.
 328. New Selective Oxidation of Thiols to the Corresponding Thiolsulfonates with Dinitrogen Tetroxide. One Pot Syntheses of Thiolsulfonates from Thiols, *Tetrahedron Lett.*, 1211 (1978), by Y. H. Kim, K. Shinhama, D. Fukushima and S. Oae.
 329. Study of the Mechanism for the Rearrangement of Thiolsulfinate with Acetic Anhydride by ¹³C- and ¹⁸O-Tracer Experiments, *Tetrahedron Lett.*, 1567 (1978), by N. Furukawa, T. Morishita, T. Akasaka, S. Oae and K. Uneyama.
 330. New Selective Oxidation of Unsymmetrical Thiolsulfonates to the Corresponding Thiolsulfonates with Sodium Metaperiodate, *Tetrahedron Lett.*, 2305 (1978), by Y. H. Kim, T. Takata and S. Oae.
 331. Unusual Chemical Shifts ¹H- and ¹³C NMR Spectra of Unsymmetrical Disulfides, Thiolsulfonates and Thiolsulfonates, *Tetrahedron Lett.*, 4303 (1978), by T. Takata, Y. H. Kim, S. Oae and K. T. Suzuki.
 332. Direct Conversion of Amines to the Corresponding Halides by Deamination with t-Butyl Thionitrite and Copper(II) Halides, *Tetrahedron Lett.*, 4519 (1978), by Y. H. Kim, K. Shinhama and S. Oae.
 333. Mild and Catalytic Oxidative Cleavage of C-S Bond of Sulfides with Co(II)(bzacen)

- under Oxygen Atmosphere, *Tetrahedron Lett.*, 4933 (1978), by T. Numata, Y. Watanabe and S. Oae.
334. Thermal and Photochemical Curtius Type Rearrangement of N-Acyl-S,S-diphenylsulfimides, *Chem. Lett.*, 209 (1978), by N. Furukawa, T. Nishio, M. Fukumura and S. Oae.
335. Multi-step Oxidations of the Unsymmetrical Disulfide and Thiolsulfinates. New Evidence for the Formation of the Thionitrite and the Sulfinyl Derivatives as the Intermediates, *Chem. Lett.*, 279 (1978), by S. Oae, D. Fukushima and Y. H. Kim.
336. Stereochemistry of the Alkaline Hydrolysis of N-Chlorosulfimides to Sulfoximides, *Chem. Lett.*, 417 (1978), by T. Akasaka, T. Yoshimura, N. Furukawa and S. Oae.
337. The Molecular Structure of Methylphenyl (diphenylsulfilimino)sulfonium Perchlorate, *Chem. Lett.*, 447 (1978), by Y. Nishikawa, Y. Matsuura, M. Kakudo, T. Akasaka, N. Furukawa and S. Oae.
338. Reaction of Alkyl Aryl Sulfoxide with Methyl Phenyl N-Chlorosulfoximide. Direct Synthesis of Optically Active α -Chloro Sulfoxide with Optically Active N-Chlorosulfoximide, *Chem. Lett.*, 817 (1978), by H. Morita, H. Itoh, N. Furukawa and S. Oae.
339. The Reaction of Dimethyl Halosulfonium Salts. II. The Reaction of $(\text{CH}_3)_2\text{SBr}_2$ with Carbanions and Amide Anions, *Phosphorus and Sulfur*, 4, 15 (1978), by N. Furukawa, T. Inoue, T. Aida, T. Akasaka and S. Oae.
340. Mechanism of the Reaction of Diphenyl N-Bromosulfilimines with Sulfides, Phosphines and Tertiary Amines, *Phosphorus and Sulfur*, 4, 211 (1978), by T. Akasaka, T. Yoshimura, N. Furukawa and S. Oae.
341. A New Type of Photochemical Addition Reaction of Elemental Sulfur to Olefins, *Phosphorus and Sulfur*, 4, 219 (1978), by S. Inoue, T. Tezuka and S. Oae.
342. New Syntheses of Thionitrites and Their Chemical Reactivities, *J. Chem. Soc., Perkin I*, 913 (1978), by S. Oae, Y. H. Kim, D. Fukushima and K. Shinham.
343. Alkaline Hydrolyses of Alkyl Nitrites and Related Carboxylic Esters, *J. Chem. Soc., Perkin II*, 571 (1978), by S. Oae, N. Asai and K. Fujimori.
344. The Kinetics and Mechanism of the Aminolysis of Phenetyl Nitrite, *J. Chem. Soc., Perkin II*, 1124 (1978), by S. Oae, N. Asai and K. Fujimori.
345. Stereochemical and Kinetic Studies on the Pummerer Reaction of Arylsulphinyl cyclopropanes and Phenylsulphinylmethyl cycloalkanes with Acetic Anhydride, *J. Chem. Soc., Perkin II*, 1302 (1978), by T. Masuda, T. Numata, N. Furukawa and S. Oae.
346. Photochemical and Thermal E-Z-Isomerization of γ -Keto Vinyl Sulfide, Sulfoxide, Sulfone, *Phosphorus and Sulfur*, 5, 191 (1978), by N. Furukawa, M. Fukumura, T. Nishio and S. Oae.
347. Intramolecular Trapping of the Nitrene Generated by Photolysis of S,S-Diphenyl N-

- Acylsulfilimine, *Phosphorus and Sulfur*, **5**, 231 (1978), by N. Furukawa, M. Fukumura, T. Nishio and S. Oae.
348. Reaction of 4-Nitrobenzenesulfenamide with Liquid Ammonia, *Phosphorus and Sulfur*, **5**, 245 (1978), by R. Sato, K. Araya, Y. Takikawa, S. Takizawa and S. Oae.
349. Enzymatic Oxidation of Disulfides and Thiolsulfinates by Both Rabbit Liver Microsomes and a Reconstituted System with Purified Cytochrome P-450, *J. Biochem.*, **83**, 1019 (1978), by D. Fukushima, Y. H. Kim, T. Iyanagi and S. Oae.
350. Induction Period in the Dehydration Reaction of 2-Methyl-2-butanol with Anhydrous Antimonyl Tribromide, *Nippon Kagaku Kaishi*, 718 (1978), by E. Tsukurimichi, N. Inagaki and S. Oae.
351. Structure Dependent Reactivity in the Oxygenation of Thiane Analogs by a Cytochrome P-450 Reconstituted Enzyme System, *Heterocycles*, **10**, 229 (1978), by T. Takahashi, Y. H. Kim, D. Fukushima, K. Fujimori, S. Oae and T. Iyanagi.
352. Reaction of Sulphoximides with Diazomalonate in the Presence of Cu-Salt. A New Synthesis and Stereochemistry of Optically Active Oxosulphonium Ylides, *Tetrahedron*, **35**, 317 (1979), by N. Furukawa, F. Takahashi, T. Yoshimura and S. Oae.
353. Stereoselective Pummerer Reaction of 4-p-Chlorophenylthiane S-Oxide with Acetic Anhydride, *Tetrahedron Lett.*, 161 (1979), by T. Numata, O. Itoh and S. Oae.
354. Reaction of Organic Sulfur Compounds with Superoxide Anion: Oxidation of Disulfides, Thiolsulfinates and Thiolsulfonates to Their Sulfinic and Sulfonic Acids, *Tetrahedron Lett.*, 821 (1979), by T. Takata, Y. H. Kim and S. Oae.
355. Oxygenation of Alkyl Sulfides with Ferrous Perchlorate/Ascorbic Acid/Oxygen System, *Tetrahedron Lett.*, 1411 (1979), by T. Numata, Y. Watanabe and S. Oae.
356. Unusually High Asymmetric Induction in the Pummerer Reaction of Optically Active Sulfoxides, *Tetrahedron Lett.*, 1869 (1979), by T. Numata, O. Itoh and S. Oae.
357. Sulfoximidoyl Radical. Homolytic Addition of N-Halosulfoximides to Olefins, *Tetrahedron Lett.*, 2035 (1979), by T. Akasaka, N. Furukawa and S. Oae.
358. Oxidation of Sulfinic Acids with Dinitrogen Tetraoxide: Isolation of Sulfonyl Nitrites, *Tetrahedron Lett.*, 3307 (1979), by S. Oae, K. Shinhama and Y. H. Kim.
359. The Reaction of Thiolsulfinates with Trifluoroacetic Anhydride: A Convenient Preparation of β -Trifluoro- and β -chloroacetoxysulfides, *Tetrahedron Lett.*, by N. Furukawa, T. Morishita, T. Akasaka and S. Oae.
360. Reaction of Aromatic Nitro, Nitroso, Hydroxylamino, Azoxy, Azo and Hydrazo Compounds with Selenol, *Tetrahedron Lett.*, 4397 (1979), by K. Fujimori, H. Yoshimoto and S. Oae.
361. Facile Reduction of Sulfoxides and Sulfimides with Thiol/Trimethylsilyl Chloride System, *Chem. Lett.*, 329 (1979), by T. Numata, H. Togo and S. Oae.
362. Homolytic Halogenation of Toluene with N-Halosulfoximides, *Chem. Lett.*, 529 (1979), by T. Akasaka, N. Furukawa and S. Oae.

363. Direct Conversion of Arylamines to the Corresponding Halides, Biphenyls and Sulfides with, t-Butyl Thionitrate, *Chem. Lett.*, 939 (1979), by S. Oae, K. Shinhama and Y. H. Kim.
364. Reactions of t-Alkyl Thionitrates with p-Aminophenols: One Pot Syntheses of N-(t-Alkylthio)-p-benzoquinoneimines, *Chem. Lett.*, 1077 (1979), by S. Oae, K. Shinhama and Y. H. Kim.
365. Kinetics of the Reaction of Sulfimides with Potassium Hydroxide in Methanol, *Phosphorus and Sulfur*, **6**, 429 (1979), by T. Masuda, T. Aida, N. Furukawa and S. Oae.
366. Reaction of 4,4'-Dinitrodiphenyl Disulfide with Liquid Ammonia, *Phosphorus and Sulfur*, **7**, 185 (1979), by R. Sato, S. Takizawa and S. Oae.
367. Reaction of 4-Chloronitrobenzene with Elemental Sulfur in Liquid Ammonia, *Phosphorus and Sulfur*, **7**, 217 (1979), by R. Sato, T. Sato, K. Segawa, Y. Takikawa, S. Takizawa and S. Oae.
368. Reaction of Aromatic Nitro Compounds with Elemental Sulfur in Liquid Ammonia and Amines, *Phosphorus and Sulfur*, **7**, 229 (1979), by R. Sato, S. Takizawa and S. Oae.
369. Reaction of 4-Nitrophenyl-4'-Nitrobenzenethiolsulfonate with Liquid Ammonia, *Phosphorus and Sulfur*, **7**, 281 (1979), by R. Sato, K. Araya, Y. Takikawa, S. Takizawa and S. Oae.
370. Reaction of α -Chlorotoluene with Elemental Sulfur in Liquid Ammonia, *Phosphorus and Sulfur*, **7**, 289 (1979), by R. Sato, T. Goto, K. Kakuta, Y. Takikawa, S. Takizawa and S. Oae.
371. A. Modified Synthesis of Diaryl Sulfone Diimides, *Synthesis*, 289 (1979), by N. Furukawa, K. Akutagawa, T. Yoshimura, T. Akasaka and S. Oae.
372. Reinvestigation of the Mechanism of the Reaction of N,N-Dimethylaniline N-Oxide with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **52**, 2409 (1979), by S. Oae, N. Asai and K. Fujimori.
373. New Synthesis of Alkyl Polysulfides by Treatment of Thiols, Disulfides and Thionitrites with Anhydrous Copper(II) Chloride, *Bull. Chem. Soc. Japan*, **52**, 3117 (1979), by Y. H. Kim, K. Shinhama and S. Oae.
374. Physical Properties and Various Reactions of Thionitrites and Related Substances, *Bull. Chem. Soc. Japan*, **53**, 775 (1980), by S. Oae, K. Shinhama, K. Fujimori and Y. H. Kim.
375. Direct Conversion of Arylamines to the Halides by Deamination with Thionitrite or Related Compounds and Anhydrous Copper(II) Halides, *Bull. Chem. Soc. Japan*, **53**, 1065 (1980), by S. Oae, K. Shinhama and Y. H. Kim.
376. Reactions of Thionitrites or Thionitrates with Carbanions, *Bull. Chem. Soc. Japan*, **53**, 1771 (1980), by K. Shinhama, Y. H. Kim and S. Oae.
377. Direct Conversion of Arylamines to the Corresponding Halides, Biphenyls, and Sulfides with t-Butyl Thionitrate, *Bull. Chem. Soc. Japan*, **53**, 2023 (1980), by S. Oae, K. Shinhama and Y. H. Kim.

378. One Step Synthesis of Aziridines by the Michael Type Addition of Free Sulfinimides, Preparation and Absolute Configuration of Optically Active Acylaziridines, *Tetrahedron*, **36**, 73 (1980), by N. Furukawa, T. Yoshimura, M. Ohtsu, T. Akasaka and S. Oae.
379. A. Convenient Preparation of Nitriles by Reaction of Free Sulfinimide with Aldehydes, *Tetrahedron Lett.*, **21**, 761 (1980), by N. Furukawa, M. Fukumura, T. Akasaka, T. Yoshimura and S. Oae.
380. Direct Reduction of Sulfonic Acid to the Corresponding Thiol with Trifluoroacetic Anhydride/Tetrabutylammonium Iodide System, *Tetrahedron Lett.*, **21**, 1235 (1980), by T. Numata, H. Awano and S. Oae.
381. Mode of Oxidation of Organosulfur Compounds: Example of Nucleophilic Oxygenations of Thiolsulfonates, *Tetrahedron Lett.*, **21**, 3213 (1980), by S. Oae and T. Takata.
382. Reduction with Organic Selenium Compounds II. Reduction of Schiff Bases with Selenophenol, Reductive Alkylation of Amines with Carbonyl Compounds, *Tetrahedron Lett.*, **21**, 3385 (1980), by K. Fujimori, H. Yoshimoto and S. Oae.
383. Kinetic Study of Enzymatic S-Oxygenation Promoted by a Reconstituted System with Purified Cytochrome P-450, *Tetrahedron Lett.*, **21**, 3685 (1980), by Y. Watanabe, T. Iyanagi and S. Oae.
384. New Epoxidation of Olefins with Superoxide Anion in the Presence of Organic Sulfur Compounds, *Tetrahedron Lett.*, **21**, 3689 (1980), by S. Oae and T. Takata.
385. Iodine Catalyzed Reduction of Arenesulfonic Acid to the Arenethiol with Triphenylphosphine, *Tetrahedron Lett.*, **21**, 4921 (1980), by K. Fujimori, H. Togo and S. Oae.
386. Facile Reduction of Sulfinic Acid to Disulfide with Thiol and Chlorotrimethylsilyl, *Chem. Lett.*, 1193 (1980), by S. Oae, H. Togo, T. Numata and K. Fujimori.
387. Stereochemistry of Sulfoxides by Enzymatic Oxygenation of Sulfides with Rabbit Liver Microsomal Cytochrome P-450, *Chem. Lett.*, 1441 (1980), by T. Takata, M. Yamazaki, K. Fujimori, Y. H. Kim, S. Oae and T. Iyanagi.
388. Syntheses and Some Chemical Properties of Sulfoxides, Sulfilimines and Sulfoximines Containing Pyridine Nuclei, *Heterocycles*, **14**, 1273 (1980), by N. Furukawa, F. Takahashi, K. Kishimoto, H. Morita, and S. Oae.
389. A New Acid-catalysed Rearrangement of Thiosulphinates to α -Acetylthiosulphoxides in Acetic Anhydride, *J. Chem. Soc., Perkin II*, 432 (1980), by N. Furukawa, T. Morita, T. Akasaka and S. Oae.
390. Homolytic Reaction of N-Halogenosulphoximides with Olefins and Toluene, *J. Chem. Soc., Perkin I*, 1257 (1980), by T. Akasaka, N. Furukawa and S. Oae.
391. Enhanced Reactivities in Substitution and Elimination Reactions in Dimethylsulphoximide, *J. Chem. Soc., Perkin II*, in Press, by N. Furukawa, F. Takahashi, T. Yoshimura, H. Morita and S. Oae.

392. Enzymatic Oxidation of Alkyl Sulfides by Cytochrome P-450 and Hydroxy Radical, *Bull Chem. Soc. Japan*, **54**, 1163 (1981), by Y. Watanabe, T. Numata, T. Iyanagi and S. Oae.
393. Selective Oxidation of Unsymmetrical Thiosulfinic S-Esters to the Corresponding Thiosulfonic S-Esters with NaO_4 , *Bull Chem. Soc. Japan*, **54**, 1443 (1981), by T. Takata, Y.H. Kim and S. Oae.
394. Reaction of Organic Sulfur Compounds with Superoxide Anion III, Oxidation of Organic Sulfur Compounds to Sulfinic and Sulfonic Acids, *Tetrahedron*, **37**, 37 (1981), by S. Oae, T. Takata and Y.H. Kim.
395. Reductive Deimination of Sulfinimides and Sulfoximides with p-Toluenesulfonyl Nitrite, A New Nitrosating Reagent, *Tetrahedron Lett.*, 573 (1981), by S. Oae, K. Iida and T. Takata.
396. Mild and Facile Preparation of Sulfoxides from Sulfides Using Titanium (III) Chloride Hydrogen Peroxide, *Synthesis*, 204 (1981), by Y. Watanabe, T. Numata, and S. Oae.
397. Facile Conversions of Aliphatic Sulfonic Acids, Sulfinic Acids, Thiols, Sulfinates, Thiolsulfonates, and Disulfides to the Corresponding Alkyl Iodides by Triphenylphosphine/Iodine, *Synthesis*, 371 (1981), by S. Oae and H. Togo.
398. ^{13}C -NMR Chemical Shifts and Coupling Constants C-H of Six-membered Ring Systems Containing Sulfur-Sulfur Linkage, *Heterocycles*, **15**, 847 (1981), by T. Takata, K. Iida, and S. Oae.
399. Isomer Distribution Ratios of Phenols in Aromatic Hydroxylation with the Hydroxyl Radical Generated from α -Azohydroperoxide in Anhydrous Organic Media. Comparison with Fenton's Reagent, *J. Am. Chem. Soc.*, **103**, 3045 (1981), by T. Tezuka, N. Narita, W. Ando, and S. Oae.
400. Reaction of Organic Sulfur Compounds with Hyperoxide Anion (O_2^-). IV. Evidence for Formation of Peroxysulfur Intermediates: Oxidation of Sulfoxides, Phosphines, and Olefins with Intermediary Peroxysulfur Species, *Bull. Chem. Soc. Japan*, **54**, 2712 (1981), by S. Oae, T. Takata, and Y. H. Kim.
401. The Pschorr Cyclization of Aromatic Amines with t-Butyl Thionitrate in Non-aqueous Media, *Bull. Chem. Soc. Japan*, **54**, 2374 (1981), by S. Oae, K. Iida, K. Shinhama, and T. Takata.
402. Reaction of Thiolsulfonates with Trihaloacetic Anhydrides-I. Evidence for the Formation of Sulfenyl and Sulfinyl Carboxylates, *Tetrahedron*, **37**, 3115 (1981), by T. Morishita, N. Furukawa and S. Oae.
403. Preparation and Reaction of N-Tosyl- and N-Acylselenylimines, *Phosphorus and Sulfur*, **10**, 153 (1981), by S. Oae, M. Fukumura and N. Furukawa.
404. Reductive Deimination of Sulfoximides and Sulfinimides with p-Toluenesulfonyl Nitrite and t-Butyl Thionitrate, *Phosphorus and Sulfur*, **12**, 103 (1981), by S. Oae, K. Iida and T. Takata.
405. Intervention of Sulfinyl Sulfone in the Oxidation Pathway of Thiosulfonic S-Ester to α -Disulfone, *Chem. Lett*, 1293 (1981), by T. Takata, N. Furukawa, and S. Oae.

406. Tetrakis-sulfoxides as Phase Transfer Catalysts, *Chem. Lett.*, 1293 (1981), by H. Fujihara, K. Imaoka, N. Furukawa, and S. Oae.
407. Biomimetic Reduction of Sulfuric Acid, *Chem. Lett.*, 1387 (1981), by S. Oae and H. Togo.
408. Synthesis of New Macrocyclic Polythiaether, *Heterocycles*, **16**, 1701 (1981), by H. Fujihara, K. Imaoka, N. Furukawa, and S. Oae.
409. Utilization of Sulfoxides Containing Pyridine Nuclei as Phase Transfer Catalysts: III, *Heterocycles*, **16**, 1927 (1981), by N. Furukawa, S. Ogawa, T. Kawai, K. Kishimoto, H. Fujihara, and S. Oae.
410. A Convenient Preparation of N-(Arenesulfonyl)sulfoximines by Oxidation of N-(Arenesulfonyl)sulfilimines with Sodium Hypochlorite in a Two Phase System, *Tetrahedron Lett.*, **22**, 3989 (1981), by N. Furukawa, K. Akutagawa, T. Yoshimura and S. Oae.
411. Organic Sulfur Compounds Containing Heterocycles. II. Methyl 2-Pyridyl Sulfoxide as Phase Transfer Catalyst, *Tetrahedron Lett.*, **22**, 4409 (1981), by N. Furukawa, K. Kishimoto, S. Ogawa, T. Kawai, H. Fujihara, and S. Oae.
412. Reaction of Thiolsulfonates with Trihaloacetic Anhydrides. II. Addition of Sulfenyl Trihaloacetates to Olefins, *Tetrahedron*, **37**, 2539 (1981), by T. Morishita, N. Furukawa and S. Oae.
413. Facile Synthesis of N-H Sulfoximines, *Synthesis*, 77 (1982), by N. Furukawa, K. Akutagawa, T. Yoshimura and S. Oae.
414. Mechanisms of Enzymatic S-Oxygenation of Thioanisole Derivatives and O-Demethylation of Anisole Derivatives Promoted by Both Microsomes and a Reconstituted System with Purified Cytochrome P-450, *Bull. Chem. Soc. Japan*, **55**, 188 (1982), by Y. Watanabe, S. Oae, and T. Iyanagi.
415. One Electron Transfer Mechanism in the Enzymatic Oxygenation of Sulfoxide to Sulfone Promoted by a Reconstituted System with Purified Cytochrome P-450, *Tetrahedron Lett.*, **23**, 533 (1982), by Y. Watanabe, T. Iyanagi, and S. Oae.
416. Reaction of Haloazoxybenzenes with Sulfuric Acid, *Bull. Chem. Soc. Japan*, **55**, 546 (1982), by I. Shima, K. Fujimori, and S. Oae.
417. Preparation and Assignment of Selenium Analogs of Benzo-1,2-dithiole-3-thione, *Heterocycles*, **19**, 657 (1982), by S. Oae, K. Sakaki, M. Fukumura, S. Tamagaki, Y. Matsuura and M. Kakudo.
418. Biomimetic Oxidation of Organic Sulfides with TPPFe(III)Cl/Imidazole/Hydrogen Peroxide, *Tetrahedron Lett.*, **23**, 1189 (1982), by S. Oae, Y. Watanabe, and K. Fujimori.
419. Unusual Reaction of Azoxybenzenes with p-Toluenesulfonic Acid in Acetic Anhydride, *Bull. Chem. Soc. Japan*, **55**, 1538 (1982), by I. Shima, K. Fujimori, and S. Oae.
420. Oxidative S-Dealkylation Reaction of Sulfide Catalyzed by Co(bzcn), *Bull. Chem. Soc. Japan*, **55**, 1915 (1982), by Y. Watanabe, T. Numata, and S. Oae.

421. Unusual Chemical Behavior of 1,2-Dithiaacene in the Reactions with Dinitrogen Tetraoxide and Aqueous Bromine - In Contrast to the Ordinary Oxidation with Fenton Reagent, *Heterocycles*, **18**, 41 (1982), by S. Oae, T. Nabeshima and T. Takata.
422. Reduction of Diaryl Disulfides with 1-Benzyl-1,4-dihydropyridinamide, *Tetrahedron Lett.*, **23**, 3189 (1982), by S. Oae, T. Nagata, T. Yoshimura and K. Fujimori.
423. Polysulfoxides as New Type of Phase Transfer Catalysis in Two Phase Alkylation, *Chem. Lett.*, 1421 (1982), by N. Furukawa, K. Imaoka, H. Fujihara, and S. Oae.
424. Deoxygenation of Tertiary Amine N-Oxides with Carbon Disulfide, *Bull. Chem. Soc. Japan*, **55**, 3000 (1982), by T. Yoshimura, K. Asada, and S. Oae.
425. Oxidation of Unsymmetrical Disulfide and Thiosulfinic S-Esters with Peroxyacids. Search for Formation of α -Disulfoxide as an Intermediate in the Electrophilic Oxidation of Thiosulfinic S-Esters, *Bull. Chem. Soc. Japan*, **55**, 2484 (1982), by S. Oae, T. Takata, and Y. H. Kim.
426. Facile Conversion of Thiosulfinic S-Esters to Sulfinic Ester, *Bull. Chem. Soc. Japan*, **55**, 3937 (1982), by T. Takata and S. Oae.
427. Reduction of Sulfonic Acids with Phosphorus Pentasulfide, *Tetrahedron Lett.*, **23**, 4701 (1982), by S. Oae and H. Togo.
428. Utilization of Sulfoxides Containing Pyridine Nuclei as A New Type of Phase Transfer Catalysts: IV, *Heterocycles*, **19**, 2041 (1982), by N. Furukawa, S. Ogawa, T. Kawai, K. Kishimoto, H. Fujihara, and S. Oae.
429. Facile Reduction of Sulfonic Acids and Sodium Sulfonates to the Corresponding Disulfides with Polyphosphoric Derivatives/Potassium Iodide/Tetrabutylammonium Iodide Systems, *Synthesis*, 152 (1982), by S. Oae and H. Togo.
430. Nucleophilic Substitution on Sulfur with Retention of Configuration in the Formation of *o*-Methoxyphenyl Phenyl-N-polyhaloacetylsulfilimines, *Chem. Lett.*, 1723 (1982), by S. Oae, K. Kikuchi, M. Moriyama, and N. Furukawa.
431. Nucleophilic Substitution on 4-Methylbenzyl Thiocyanate with Nucleophiles, *Bull. Chem. Soc. Japan*, **56**, 248 (1983), by S. Oae, N. Yamada, K. Fujimori, and O. Kikuchi.
432. The Wallach Rearrangement of Some 4,4'-Disubstituted Azoxybenzenes, *Bull. Chem. Soc. Japan*, **56**, 643 (1983), by I. Shimao and S. Oae.
433. The Mechanistic Mode of Oxidation of Substituted N,N-Dimethylanilines Thioanisoles, and Methyl Phenyl Sulfoxides by 5-Ethyl-4a-hydroperoxy-3-methyl-lumiflavin (4a-FLEt-OOH), *Tetrahedron Lett.*, **24**, 1265 (1983), by S. Oae, K. Asada and T. Yoshimura.
434. Intramolecular Stereospecific Pummerer Reactions of Aryl (Substituted methyl) Sulfoxides Bearing Electron-withdrawing Groups with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **56**, 257 (1983), by T. Numata, O. Itoh, T. Yoshimura, and S. Oae.
435. Predominant Intramolecular Pummerer Reactions of Substituted Benzyl *p*-Tolyl Sulfoxides with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **56**, 266 (1983), by O. Itoh, T. Numata, T. Yoshimura, and S. Oae.

436. Intermolecular Stereoselective Pummerer Reactions of 4-(p-Chlorophenyl) thiane 1-Oxides and trans-1-Thiadecaline 1-Oxides and 2-Thiadecaline 2-Oxides with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **56**, 270 (1983), by S. Oae, O. Itoh, T. Numata, and T. Yoshimura.
437. Intermolecular Pummerer Rearrangement Reactions of Alkyl Phenyl and Dialkyl Sulfoxides with Acetic Anhydride, *Bull. Chem. Soc. Japan*, **56**, 343 (1983), by O. Itoh, T. Numata, T. Yoshimura, and S. Oae.
438. Enzymatic Oxygenation of Sulfides with Cytochrome P-450 from Rabbit Liver. Stereochemistry of Sulfoxide Formation, *Bull. Chem. Soc. Japan*, **56**, 2300 (1983), by T. Takata, M. Yamazaki, K. Fujimori, Y. H. Kim, T. Iyanagi, and S. Oae.
439. Reduction of Sulfonic Acids and Related Organosulfur Compounds with Triphenylphosphine-Iodine System. I, *Bull. Chem. Soc. Japan*, **56**, 3802 (1983), by S. Oae and H. Togo.
440. Reduction of Organic Sulfonic Acids, Sodium Sulfonates, and Sulfonic Esters to the Corresponding Disulfides with Polyphosphoric Acid Derivatives, Potassium Iodide and Tetrabutylammonium Iodide System. III, *Bull. Chem. Soc. Japan*, **56**, 3813 (1983), by S. Oae and H. Togo.
441. Biomimetic Reduction of Sulfuric Acid, *Bull. Chem. Soc. Japan*, **56**, 3818 (1983), by S. Oae and H. Togo.
442. Flavin Catalyzed Reduction of Diaryl Disulfide with 1-Benzyl-1,4-Dihydronicotinamide, *Tetrahedron Lett.*, **24**, 5231 (1983), by K. Fujimori, T. Nagata and S. Oae.
443. Ligand Coupling Through σ -Sulfurane-- Complete Retention of Configuration of 1-Phenylethyl Group in the Reaction of 1-Phenylethyl 2-Pyridyl Sulfoxide with Grignard Reagent, *Tetrahedron Lett.*, **25**, 69(1984), by S. Oae, T. Kawai and N. Furukawa.
444. Reduction of Sulfoxides and Sulfilimines Catalyzed by Metalloporphins, *Tetrahedron Lett.*, **25**, 341 (1984), by N. Nagata, N. Yoshimura, K. Fujimori and S. Oae.
445. Preparation of S,S-Diphenyl Sulfilimines, -sulfoximines, and N-(p-Tolylsulfonyl)-sufonedimines N-Substituted with Sulfur Groups of Different Oxidation States, *Bull. Chem. Soc. Japan*, **57**, 518 (1984), by K. Akutagawa, N. Furukawa, and S. Oae.
446. Thermolyses and Reactions with Nucleophiles of N-Sulfur-group-substituted Sulfoximines, *Phosphorus and Sulfur*, **19**, 223 (1984), by S. Oae, K. Akutagawa, and N. Furukawa.
447. Internal 1,2-Aryl Migration in the Thermolysis of N-Unsubstituted S-p- and o-Nitrophenyl Sulfilimines, *Phosphorus and Sulfur*, **19**, 255 (1984), by K. Akutagawa, N. Furukawa, and S. Oae.
448. Copper Catalyzed Reactions of S,S-Diaryl N-Tosylsulfilimines with Sulfoxides: New Synthesis of N-Tosylsulfoximines, *Phosphorus and Sulfur*, **19**, 213 (1984), by K. Akutagawa, N. Furukawa, and S. Oae.
449. Oxidation of S,S-Diaryl-N-p-(tolylsulfonyl) sulfilimines and N-Unsubstituted S,S-Diaryl Sulfilimines with Potassium Hyperoxy Radical Anion (O_2^-) in the Presence of 1-Bromopropane, Carbon Tetrachloride, Chloroform or Dichloromethane in Aprotic

- Media; *Bull. Chem. Soc. Japan*, **57**, 1104 (1984), by K. Akutagawa, N. Furukawa, and S. Oae.
450. Reduction of Sulfonic Acids with Triphenylphosphine-Diaryl Disulfide System. II, *Bull. Chem. Soc. Japan*, **57**, 232 (1984), by S. Oae and T. Togo.
451. A Convenient Preparation of Bipyridines through Ligand Coupling Reaction with σ -Sulfurane formed by Treatment of Methyl 2-pyridyl Sulfoxide with Grignard Reagents, *Tetrahedron Lett.*, **25**, 2549 (1984), by T. Kawai, N. Furukawa, and S. Oae.
452. pKa Values of 2- and 2,6-Disubstituted Pyridine Derivatives Containing Sulfenyl and Sulfinyl Groups and σ^* and E_s Values of Several Sulfenyl and Sulfinyl Groups, *Phosphorus and Sulfur*, **19**, 239 (1984), by N. Furukawa, K. Iida, T. Kawai, S. Ogawa, and S. Oae.
453. Reduction of Sulfilimines and Sulfoximines to Sulfides Using Aqueous Potassium Hydroxide/Chloroform Phase Transfer System, *Synthesis*, 317 (1984), by N. Furukawa, K. Hoshino, T. Morishita and S. Oae.
454. Preparation of N-(Arylsulfonyl)sulfoximines by Oxidation of N-(Aryl sulfonyl)sulfilimines with Sodium Hypochlorite in a Two-phase System, *J. Org. Chem.*, **49**, 2282 (1984), by K. Akutagawa, N. Furukawa and S. Oae.
455. Reduction of Sulfoxides. A Review, *Org. Prep. Proced. Int.*, **16**, 171 (1984), by J. Drabowicz, H. Togo, M. Mikolajczyk and S. Oae.
456. pKa Values of 2- and 2,6-Disubstituted Pyridine Derivatives Containing Sulfenyl and Sulfinyl Groups and σ^* and E_s Values of Several Sulfenyl and Sulfinyl Groups, *Phosphorus and Sulfur*, **19**, 239 (1984), by N. Furukawa, K. Iida, T. Kawai, S. Ogawa and S. Oae.
457. A Facile Conversion of Sulfoximines and Sulfonediimines to Sulfoxides and Sulfilimines with tert-Butyl Nitrite, *Phosphorus and Sulfur*, **12**, 369 (1984), by K. Akutagawa, N. Furukawa and S. Oae.
458. Convenient Preparation and Spectroscopic Studies of Sulfoximines and Sulfonediimines: N-Chloro sulfilimines as Key Intermediate, *Phosphorus and Sulfur*, **20**, 1 (1984), by N. Furukawa, K. Akutagawa and S. Oae.
459. Sulfoxide Substituted Pyridines as Phase-transfer Catalysts for Nucleophilic Displacements and Alkylations, *J. Chem. Soc. Perkin Trans. 1*, 1833 (1984), by N. Furukawa, S. Ogawa, T. Kawai and S. Oae.
460. Ipso-Substitution of a Sulphinyl or Sulphonyl Group Attached to Pyridine Rings and its Application for the Synthesis of Macrocycles, *J. Chem. Soc. Perkin Trans. 1*, 1839 (1984), by N. Furukawa, S. Ogawa, T. Kawai and S. Oae.
461. Mechanical Resolution of 1-Phenylethyl 2-Pyridyl Sulfide and Determination of its Absolute Configuration, *Synthesis*, 746 (1984), by N. Furukawa, T. Kawai, S. Oae, and F. Iwasaki.
462. Reaction of N-Halosulfoximines with Disulfides, *Phosphorus and Sulfur*, **21**, 277 (1985), by T. Akasaka, N. Furukawa and S. Oae.

463. Photochemical Reduction of N-Tosylsulfilimines with Thiolate Anion, *Tetrahedron Lett.* **26**, 775 (1985), by K. Fujimori, H. Togo, Y. Pelchers, T. Nagata, N. Furukawa and S. Oae.
464. Nucleophilic Substitution at Tricoordinate Sulfur. Hydrolysis of N-Diarylsulfonio-dimethylsulfoximinium Salt in Basic Aqueous Acetonitrile, *Phosphorus and Sulfur*, **24**, 291 (1985), by K. Kikuchi, N. Furukawa, and S. Oae.
465. Comparison of Sulfide Oxygenation Mechanism for Liver Microsomal FAD-Containing Monooxygenase with That for Cytochrome P-450, *Biochem. Biophys. Res. Commun.*, **131**, 567 (1985), by S. Oae, A. Mikami, T. Matsuura, K. Oawa-Asada, Y. Watanabe, K. Fujimori and T. Iyanagi.
466. Nucleophilic Substitution of Tricoordinate Sulfur Atom of Sulfonium Salt with Retention of Configuration. Different Stereochemistry of Substitution by Amidate Anions, *Bull. Chem. Soc. Jpn.*, **58**, 1934 (1985), by K. Kikuchi, N. Furukawa, M. Moriyama and S. Oae.
467. Thermal Racemization of Optically Active Aminosulfonium Salts, *Phosphorus and Sulfur*, **25**, 155 (1985), by K. Kikuchi, N. Furukawa and S. Oae.
468. Importance of Repulsion of Lone Electron Pairs in the Enhanced Reactivity of 1,8-Naphthyridine and the Large α -Effect of Hydrazine in the Aminolyses of p-Toluenesulfonyl Chloride, *Can. J. Chem.*, **64**, 1184 (1986), by S. Oae and Y. Kadoma.
469. Tetrakis-Sulphoxides: A New Type of Phase-transfer Catalyst for Nucleophilic Displacements and Alkylations, *J. Chem. Soc. Perkin Trans. 1*, 333 (1986), by H. Fujihara, K. Imaoka, N. Furukawa and S. Oae.
470. Ligand Coupling through Hypervalent Intermediates. Reaction of Heteroaryl Sulfoxides with Organometallic Reagents and their Implications, *Phosphorus and Sulfur*, **27**, 13 (1986), by S. Oae.
471. Importance of Axial Ligands in meso-Tetraphenylporphyratoiron (III) Promoted N-O and O-O Bond Cleavages, *Tetrahedron Lett.*, **27**, 581 (1986), by K. Fujimori, S. Fujiwara, T. Takata and S. Oae.
472. Kinetic Solvent Deuterium Isotope Effect on the Oxygenation of N,N-Dimethylaniline with the Pig Liver Microsomal FAD-Containing Monooxygenase, *Tetrahedron Lett.*, **27**, 1179 (1986), by K. Fujimori, M. Yaguchi, A. Mikami, T. Matsuura, N. Furukawa, S. Oae and T. Iyanagi.
473. Intervention of N,N-Dimethylanilinium Cation Radical in the Polonovski Type Reaction of N,N-Dimethylaniline N-Oxide Catalyzed by meso-Tetraphenylporphyratoiron/Imidazole, *Tetrahedron Lett.*, **27**, 1617 (1986), by K. Fujimori, T. Takata, S. Fujiwara, O. Kikuchi and S. Oae.
474. Ligand Coupling Reactions through Hypervalent and Similar Valence-Shell Expanded Intermediates, *Croat. Chem. Acta*, **59**, 129 (1986), by S. Oae.
475. Synthesis and Phase-transfer Properties of Macrocyclic Polythiaether Sulphoxides, *J. Chem. Soc. Perkin Trans. 1*, 465 (1986), by H. Fujihara, K. Imaoka, N. Furukawa and S. Oae.

476. Reactions of Pyridyl and Quinolyl Sulfoxides with Grignard Reagent: A Convenient Preparation of Pyridyl and Quinolyl Grignard Reagents, *Tetrahedron Lett.*, **27**, 3899 (1986), by N. Furukawa, T. Shibutani, K. Matsumura, H. Fujihara and S. Oae.
477. Ligand Coupling within σ -Sulfurane Intermediates Formed in the Reaction of Benzyl 2-Pyridyl and Related Sulfoxides with Grignard Reagents, *J. Chem. Soc. Perkin Trans. 2*, 405 (1987), by S. Oae, T. Kawai, N. Furukawa and F. Iwasaki.
478. Ligand Coupling and Pseudorotation in the Reaction of Alkyl 2-Pyridyl Sulfoxide with Grignard Reagents, *Phosphorus and Sulfur*, **34**, 133 (1987), by S. Oae, T. Takeda, T. Kawai and N. Furukawa.
479. Occurrence of Ligand Coupling in the Reactions of Various Sulfoxides with Grignard Reagents, *Phosphorus and Sulfur*, **34**, 139 (1987), by T. Kawai, Y. Kodera, N. Furukawa, S. Oae, M. Ishida, T. Takeda and S. Wakabayashi.
480. Reactions of *o*-(*N*-Methylcarbamoyl)phenyl Sulfoxides with Electrophiles, *Gazz. Chim. Ital.*, **117**, 649 (1987), by Y. Uchida and S. Oae.
481. Ligand Exchange and Ligand Coupling via the σ -Sulfurane Intermediate in the Reaction of Alkyl 2-Pyridyl Sulfoxide with Grignard Reagents: Convenient Preparation of 2,2'-Bipyridines, *Phosphorus and Sulfur*, **34**, 123 (1987), by S. Oae, T. Kawai and N. Furukawa.
482. Sensitive Nature of Ligand Coupling and Pseudorotation to Electronic Effect of Substituent. Ligand Coupling in the Reactions of Benzylic Aryl Sulfoxides with Benzylic Grignard Reagents, *Tetrahedron Lett.*, **29**, 4441 (1988), by S. Wakabayashi, M. Ishida, T. Takeda and S. Oae.
483. Ligand Coupling through σ -Sulfurane. Complete Retention of Geometric Configuration of Allylic and Vinylic Groups in the Reactions of Allylic and Vinylic Sulfoxides with Grignard Reagents, *Tetrahedron Lett.*, **29**, 4445 (1988), by S. Oae, T. Takeda and S. Wakabayashi.
484. Formation of Phenyl Substituted Heteroaromatics by Ligand Coupling in the Reaction between Heteroaryl Sulfoxides with Phenyl Grignard Reagent, *Heterocycles*, **28**, 99 (1989), by S. Oae, T. Takeda and S. Wakabayashi.
485. Ligand Coupling Reaction on the Phosphorus Atom, *Tetrahedron Lett.*, **30**, 567 (1989), by Y. Uchida, K. Onoue, N. Tada, F. Nagao and S. Oae.
486. Several Unsolved Problems of Chemical Behavior of the Sulfur Atom in Organic Sulfur Chemistry, *J. Molecular Structure(Theochem)*, **186**, 321 (1989), by S. Oae.
487. meso-Tetraphenylporphyratoiron Catalyzed Reductive Cleavage of Some S-O, S-N, and S-C Bonds in Sulfoxides and Sulphilimines, *J. Chem. Soc. Perkin Trans. 1*, 1431(1989), by T. Nagata, K. Fujimori, T. Yoshimura, N. Furukawa and S. Oae.
488. Decomposition of Diacyl Peroxides. Part 9. Mechanism of the Carboxyinverson Process in the Thermal Decomposition of Benzoyl Cyclohexanecarbonyl Peroxide and Related Diacyl Peroxides, *J. Chem. Soc. Perkin Trans. 2*, 1335 (1989), by K. Fujimori and S. Oae.
489. Ligand-Coupling through σ -Sulfurane Formed on Treatment of Sulfilimines with

- Hydride, *Tetrahedron Lett.*, **30**, 1087 (1989), by K. S. Kim, I. B. Jung, Y. H. Kim and S. Oae.
490. Synthesis and Reaction of 2,2'-Biquinolyl, *Bull. Chem. Soc. Jpn.*, **62**, 2338 (1989), by S. Wakabayashi, Y. Kubo, T. Takeda, J. Uenishi and S. Oae.
491. Formation of 2,2'-Bipyridyl by Ligand Coupling on the Phosphorus Atom, *Tetrahedron Lett.*, **30**, 6365 (1989), by Y. Uchida, H. Kozawa and S. Oae.
492. A Cross-Coupling Reaction of Methylsulfinylarene, *Bull. Chem. Soc. Jpn.*, **62**, 3848 (1989), by S. Wakabayashi, T. Tanaka, Y. Kubo, J. Uenishi and S. Oae.
493. Stereochemistry of Oxygenation of Organic Sulphides with Pig Liver Microsomal FAD-Containing Mono-Oxygenase: Comparison with Cytochrome P-450_{pb} Oxidations, *J. Chem. Soc. Perkin Trans. 1*, 1435 (1990), by K. Fujimori, T. Matsuura, A. Mikami, Y. Watanabe, S. Oae and T. Iyanagi.
494. Retention of Configuration in Ligand Coupling Reactions in σ -Sulphuranes, *J. Chem. Soc. Perkin Trans. 2*, 273 (1990), by S. Oae, T. Takeda, S. Wakabayashi, F. Iwasaki, N. Yamazaki and Y. Katsube.
495. Reaction of Triheteroarylphosphines with Organolithium Reagents. Concurrent Ligand Exchange and Ligand Coupling, *Heterocycles*, **30** (1, Spec. Issue), 347 (1990), by Y. Uchida, Y. Takaya and S. Oae.
496. Ipso Substitution of 2-Alkylsulfinylpyridine by 2-Pyridyllithium; A New Preparation of Oligopyridine and their Bromomethyl Derivatives, *Tetrahedron Lett.*, **31**, 4625 (1990), by J. Uenishi, T. Tanaka, S. Wakabayashi, S. Oae and H. Tsukube.
497. Ligand Coupling of 2-Pyridyl Sulfoxides Having an sp² Stereocenter at the α -position: A Novel Preparation of α -Stilbazoles, *Heteroat. Chem.*, **1**, 225 (1990), by S. Wakabayashi, Y. Kiyohara, S. Kameda, J. Uenishi and S. Oae.
498. A Novel Simple Dethioacetalization of Thioacetals and Thioketals with *tert*-Butyl Thionitrite, *Heteroat. Chem.*, **1**, 237 (1990), by Y. J. Park, Y. H. Kim and S. Oae.
499. Reactions of 2-Pyridyl Substituted Phosphine Oxides and Phosphonium with Organometallic Reagents and in Aqueous Media, *Heteroat. Chem.*, **1**, 295 (1990), by Y. Uchida, K. Onoue, N. Tada, F. Nagao, H. Kozawa and S. Oae.
500. Ligand-coupling Reactions of Hypervalent Species, *Acc. Chem. Res.*, **24**, 202-208 (1991), by S. Oae and Y. Uchida.
501. Oxidation of Amines with 4a-FlEt-OOH: an Enzyme Model of FAD-containing Monooxygenase, *Heterocycles*, **33**, 189-94 (1992), by S. Oae, K. Asada, K. Ogawa, T. Yoshimura and K. Fujimori.
502. Retention of Stereochemistry in Ligand Coupling Reaction of Optically Active (1R)-Phenylethyl 2-Quinolyl (R)- and (S)-Sulfoxide with Methylmagnesium Bromide, *Heteroat. Chem.*, **3**, 73-9 (1992), by J. Uenishi, A. Yamamoto, T. Takeda, S. Wakabayashi and S. Oae.
503. Ligand Exchange Reactions of Aryl Pyridyl Sulfoxides with Grignard Reagents: Convenient Preparation of 3- and 4-Pyridyl Grignard Reagents and Examination of the

- Leaving Abilities of Pyridyl Anions, *Heteroat. Chem.*, **2**, 521-31 (1991), by T. Shibutani, H. Fujihara, N. Furukawa and S. Oae.
504. Proximity Effect in the Oxidation of Dithiols with 3-Methylumiflavin, *Heteroat. Chem.*, **3**, 529-34 (1992), by T. Nagata, K. Fujimori and S. Oae.
505. Synthesis of Flavins Bearing a Sulfur Functional Group and Their Catalytic Activities for Reduction of Disulfides, *Heteroat. Chem.*, **3**, 81-85 (1992), by T. Nagata, K. Fujimori and S. Oae.
506. Synthesis of ω -(Bromomethyl)bipyridines and Related ω -(Bromomethyl)pyridinohetero-aromatics: Useful Functional Tools for Ligands in Host Molecules, *J. Org. Chem.*, **58**, 4382-4388 (1993), by J. Uenishi, T. Tanaka, K. Nishiwaki, S. Wakabayashi, S. Oae and H. Tsukube.
507. Side Arm Effects on Cation Binding, Extraction, and Transport Functions of Oligopyridine-Functionalized Aza-crown Ethers, *J. Org. Chem.*, **58**, 4389-97 (1993), by H. Tsukube, J. Uenishi, H. Higaki, K. Kikkawa, T. Tanaka, S. Wakabayashi and S. Oae.
508. Why the Central Sulfur or Any Other Atom in Main Group Elements Attracts the Attack of Free Radicals and Nucleophiles?, *Phosphorus, Sulfur Silicon Relat. Elem.*, **74**, 349-363 (1993), by S. Oae.
509. Reactions of Triarylphosphines with Organolithium Reagents. Formation of Biaryls, *Heteroat. Chem.*, **4**, 421-6 (1993), by Y. Uchida, M. Kawai, H. Masauji and S. Oae.
510. Occurrence of Ligand Coupling in the Reaction of the 2-Thienyl Sulfoxides with Organometallic compounds, *Heteroat. Chem.*, **4**, 185-8 (1993), by S. Oae, Y. Inubushi and M. Yoshihara.
511. Thionyl Chloride. A Good Ligand Coupling Reagent, *Phosphorus, Sulfur, and Silicon*, **95-96**, 361-365 (1993), by S. Oae, Y. Inubushi, M. Yoshihara and Y. Uchida.
512. Reactions of Heteroaryllithium Compounds with Phosphorus Trichloride, Phosphorus Oxychloride, and Thionyl Chloride. Formation of Heterocyclic Biaryls, *Heteroat. Chem.*, **5**, 409-413 (1994), by Y. Uchida, N. Echikawa and S. Oae.
513. Prior Ligand Exchange, Followed by Ligand Coupling in the Reaction of 2-Pyridyl 2-Thienyl Sulfoxide with 2-Thienyllithiums or 2-Selenophenyllithium, *Heteroat. Chem.*, **5**, 223-228 (1994), by S. Oae, Y. Inubushi and M. Yoshihara.
514. Small Ring Compounds Containing Sulfur Atoms, *Heterocycles*, **37**, 1359 (1994), by S. Oae.
515. Unusual Formation of 5-Halo-2,2'-bipyridyls by Treatment of Tris(2-pyridyl)phosphine Derivatives with Halogens, *Tetrahedron Lett.*, **36**, 4077-4080 (1995), by Y. Uchida, R. Kajita, Y. Kawasaki, Yoshikane and S. Oae.
516. Reaction of Triphenylsulfonium Salt with Heteroaryllithium Reagents, *Khim. Geterotsykl. Soedin.*, (8), 1053-8 (1995), by S. Oae, H. Ishihara and M. Yoshihara.
517. A Novel One-pot Synthesis of 6,6'-Dibromo-2,2':6',2''-terpyridine, *Synthesis*, 939-940 (1995), by Y. Uchida, M. Okabe, H. Kobayashi and S. Oae.

518. Reactions of Biheteroaryl Sulfoxides with Heteroaryllithiums --- Ligand Coupling and Exchange Reactions, *Heteroat. Chem.*, in press (1995), by S. Oae, Y. Inubushi and M. Yoshihara.
519. Thionyl Chloride --- A Good Ligand Coupling Reagent, *Phosphorus, Sulfur Silicon Relat. Elem.*, **103**, 101-110 (1995), by S. Oae, Y. Inubushi and M. Yoshihara.
520. Electrophilic Substitutions on Tris(pyridyl)phosphine, *Phosphorus, Sulfur, Silicon, Related Elem.*, **109**, 1-4 (1996), **110**, 1-4 (1996), by Y. Uchida and S. Oae.
521. Ligand Coupling Reactions of 2-Pyridyl, 4-Pyridyl and 2-Pyrimidyl Sulfoxides with the Grignard Reagents, *Phosphorus and Sulfur*, in press (1996), by S. Oae, T. Takeda, J. Uenishi and S. Wakabayashi.
522. Thermal Decomposition of Diacyl Peroxide. Part 10, Evidence for Acyloxy Radical Pair Mechanism for ^{18}O -Scrambling of ^{18}O -Labelled Cyclopropanecarbonyl Peroxide, *J. Chem. Soc. Perkin Trans. 2*, 405 (1996), by K. Fujimori, Y. Hirose and S. Oae.
523. Thermal Decomposition of Diacyl Peroxide. Part 11, ^{18}O -Scrambling in Carbonyl ^{18}O -Labelled Phthaloyl Peroxide, a Cyclic Case III Diacyl Peroxide Extremely Large Return of Unescapable Acyloxy Radical Pair, *J. Chem. Soc. Perkin Trans. 2*, 414 (1996), by K. Fujimori, Y. Oshibe, Y. Hirose and S. Oae.
524. Thermal Decomposition of Diacyl Peroxide. Part 12, Ring Size Effect on Kinetics for Decomposition and Oxygen Scrambling of Cycloalkane Carbonyl Peroxides, *J. Chem. Soc. Perkin Trans. 2*, in press (1996), by K. Fujimori, Y. Hirose, Y. Oshibe and S. Oae.
525. Ligand Coupling Reactions of Hypervalent Species, *Polish. Chem. Soc.*, in press (1996), by S. Oae.
526. Ligand Coupling Reactions of Hypervalent Species, *Pure, Appl. Chem.*, in press (1996), by S. Oae.

B. Reviews and Chapters Contributed in Books and Monographs

1. Structure and Reactivities of Organic Halogeno Compounds, *Kagaku no Ryoiki*, **4**, 337 (1950), by M. Murakami and S. Oae.
2. On Elimination Reactions, *Annual Reports of the Department of Applied Chemistry in Waseda University* (1950), by S. Oae.
3. On Steric Hindrances, *Annual Reports of the Department of Applied Chemistry in Waseda University* (1950), by S. Oae.
4. "Preparation of Organic Halides", Chapter 5 in Vol. 20 of "Experimental Treatise for Organic Compounds", Chemical Society of Japan, (1956), by S. Oae.
5. Role of d-Orbital Resonance in Organic Sulfur Compounds, *Annual Reports of the Department of Applied Chemistry in Waseda University*, **24**, 56 (1957), by S. Oae.
6. Elucidation of Organic Reaction Mechanism Using 180 Tracer, *Yuki Gosei Kagaku Kyokaiishi*, **19**, 880 (1961), by S. Oae and T. Kitao.
7. Direct Labeling of Organic Compounds with Neutron Produced from Nuclear Reactor. Hot-Atom Chemistry of Carbon-14, *Doitai to Hosityasen*, **4**, 1 (1961), by S. Oae.
8. Chemistry with Heavy Oxygen Atom (I), *News of Radiation Center of Osaka Prefecture* (1961), by S. Oae and T. Kitao.
9. Chemistry with Heavy Oxygen Atom (II), *News of Radiation Center of Osaka Prefecture* (1961), by S. Oae, H. Taniguchi and T. Kitaoka.
10. Chemistry with Heavy Oxygen Atom (III), *News of Radiation Center of Osaka Prefecture* (1961), by S. Oae and T. Kitao.
- II. Chemistry with Heavy Oxygen Atom (IV), *News of Radiation Center of Osaka Prefecture* (1961), by S. Oae and T. Kitao.
12. On Chemical Glass Apparatus, *News of Radiation Center of Osaka Prefecture* (1961), by S. Oae.
13. "Investigations of Organic Reaction Mechanisms with Isotopes", Chapter 9 in Vol. 14 of "Recent Chemistry and Its Applications", Kagaku Dojin, Inc., (1962), by S. Oae.
14. Reaction of Organic Compound with Elemental Sulfur, *Kagaku*, **18**, 779 (1963), by S. Oae.
15. Reaction Mechanisms of Organic Sulfur Compounds (I), *Kagaku*, **18**, 1028 (1963), by S. Oae.

16. Reaction Mechanisms of Organic Sulfur Compounds (II), *Kagaku*, **18**, 1151 (1963), by S. Oae.
17. Elucidation of Organic Reaction Mechanism Using Isotopes, *Kagaku Kojo*, **7**, 65 (1963), by S. Oae.
18. English for Chemist (IV). How to Write Manuscripts of Organic Chemistry, *Kagaku no Ryoiki*, **17**, 323 (1963), by S. Oae.
19. English for Chemist (V). How to Write English Letters, *Kagaku no Ryoiki*, **17**, 404 (1963), by S. Oae.
20. English for Chemist (VI). Discussion Meeting, Readers and Authors, *Kagaku no Ryoiki*, **17**, 459 (1963), by S. Oae et al.
21. Clarification of Organic Reaction Mechanism Utilized Radio Isotopes, *Kagaku no Ryoiki*, **17**, 506 (1963), by S. Oae.
22. Application to Analysis Using Radiation", pp 61-92 in "Gas Chromatography", Nankodo, Inc., (1963), by N. Furukawa and S. Oae.
23. "Cannizzaro Reaction" by A. L. Powell, (Translation), *Kagaku to Kogyo*, **16**, 42 (1963), by S. Oae and A. Ohno.
24. Elucidation of Organic Reaction Mechanism Using Heavy Oxygen Atom (I), *Kagaku to Kogyo*, **16**, 762 (1963), by S. Oae and T. Kitao.
25. Elucidation of Organic Reaction Mechanism Using Heavy Oxygen Atom (II), *Kagaku to Kogyo*, **16**, 874 (1963), by S. Oae and T. Kitao.
26. "Carbanion", Chapter 8 in "Advanced Physical Organic Chemistry", Kagaku Dojin, Inc., (1964), by S. Oae.
27. Reaction Mechanisms of Organic Sulfur Compounds (III), *Kagaku*, **19**, 220 (1964), by S. Oae.
28. Reaction Mechanisms of Organic Sulfur Compounds (IV), *Kagaku*, **19**, 462 (1964), by S. Oae.
29. Reaction Mechanisms of Organic Sulfur Compounds (V), *Kagaku*, **19**, 795 (1964), by S. Oae.
30. Reaction Mechanisms of Organic Sulfur Compounds (Final). *Kagaku*, **19**, 1138 (1964), by S. Oae.
31. Photochemistry and Radiation Chemistry of Organic Sulfur Compounds, *Kagaku no Ryoiki*, **18**, 1069 (1964), by S. Oae and W. Ando.
32. Reaction of Organosulfur Compounds Mainly Concerning Mercaptans, *Kagaku Kogyo*,

- 434 (1964), by S. Oae.
33. Organic Reaction Mechanisms and Kinetic Isotope Effects, *Kagaku*, **20**, 3 (1965), by S. Oae.
 34. Reactions and Mechanism of Sulfinic Acids and Esters, *Kagaku*, **20**, 582 (1965), by S. Oae and N. Kunieda.
 35. Chemistry of Polysulfides, *Kagaku*, **20**, 786 (1965), by S. Oae and K. Ikura.
 36. Reactions and Mechanisms of sulfonic Acids and its Derivatives (Part 1), *Kagaku*, **20**, 902 (1965), by S. Oae and M. Kise.
 37. Reactions and Mechanisms of Sulfonic Acids and its Derivatives (Part 2), *Kagaku*, **20**, 1119 (1965), by S. Oae and M. Kise.
 38. Recollection of 18th Annual Meeting of Chemical Society of Japan --- Organic and Physical Organic Chemistry, *Kagaku to Kogyo*, **18**, 883 (195), by S. Oae.
 39. "Hot-Atom Chemistry of Organic Compounds", Chapter 6 in Vol. 4 of "Experimental Treatise for Organic Compounds, Supplement", Chemical Society of Japan, (1966), by S. Oae, N. Furukawa and Y. Kitaoka.
 40. Reaction Mechanism of Decarboxylation of Organic Carboxylic Acids, *Kagaku*, **21**, 132 (1966), by S. Oae and K. Uneyama.
 41. Discussion Meeting --- Impression of New Mainland China Viewed by Chemist, *Kagaku*, **21**, 374 (1966), by S. Oae et al.
 42. Carbanion Directly Bonded with Hetero Atom, *Kogyo Kagaku Zasshi*, **69**, 836 (1966), by K. Uneyama and S. Oae.
 43. Differences between Sulfur Atom and Oxygen Atom in Organic Compounds, *Kagaku Kogyo*, 217 (1966), by S. Oae and Y. Yano.
 44. Photooxidation Reaction of Organic Compounds, *Kagaku*, **22**, 814 (1967), by W. Ando, T. Kashiwagi and S. Oae.
 45. "Oxidation and Reduction of Organic Compounds with Organic Metal Complexes" by J. K. Kochi, (Translation, Part 1), *Kagaku*, **22**, 1005 (1967), by S. Kozuka and S. Oae.
 46. "Oxidation and Reduction of Organic Compounds with Organic Metal Complexes" by J. K. Kochi, (Translation, Part 2), *Kagaku*, **22**, 1118 (1967), by S. Kozuka and S. Oae.
 47. On Sulfur Bonding, *Kagaku no Ryoiki*, **21**, 705 (1967), by S. Oae.
 48. Fact Finding Tour of Sulfur Chemistry, *Kagaku no Ryoiki*, **21**, No. 9, i-iv (1967), by S. Oae.

49. Fact Finding Tour of Sulfur Chemistry, Part 2, Europe, *Kagaku no Ryoiki*, No. 10, i-iv (1967), by S. Oae.
50. Reactions and Mechanisms of Organic Sulfur Compounds. *Farumasia*, **3**, 642 (1967), by S. Oae.
51. Reaction of Thiols and Related Compound, *Gosei Kagaku Kokaishi*, **26**, 327 (1968), by S. Oae.
52. Topics in 3rd International Symposium of Organic Sulfur Chemistry, *Yuki Gosei Kagaku Kyokaishi*, **26**, 1078 (1968), by S. Oae.
53. The Symposium of Organic Sulfur Chemistry and Visits to a Few Universities in Europe, *Kagaku*, **23**, 1020 (1968), by S. Oae.
54. Chemistry of Fine Chemicals --- Mainly Concerning Reactions in DMF and DMSO, *Kagaku Kogyo*, 241 (1968), by S. Oae.
55. Substitution Reactions on Sulfur Atom, *Yuki Gosei Kagaku Kyokaishi*, **27**, 793 (1969), by S. Oae and H. Tanaka.
56. Chemistry of Sulfilimines, *Kagaku*, **24**, 702 (1969), by S. Oae and K. Tsujihara
57. Chemistry of Sulfoximines and Sulfonediimines, *Kagaku*, **24**, 828 (1969), by S. Oae and K. Tsujihara.
58. HMPA --- Application to Organic Reactions, *Kagaku*, **24**, 1128 (1969), by H. Tanaka and S. Oae.
59. Reactions with Elemental Sulfur, *Nippon Gomu Kyokaishi*, **42**, 370 (1969), by S. Oae and Y. Tsuchida.
60. Mechanism of the Alkaline Fusion and Related Reactions of Sulfur Compounds, *Mechanisms of Reactions of Sulfur Compounds*, **4**, 25 (1969), by N. Furukawa and S. Oae. (In English)
61. 3d-Orbital Resonance in the Bivalent Sulfur Atom, *Mechanisms of Reactions of Sulfur Compounds*, **4**, 167 (1969), by Y. Yano and S. Oae. (In English)
62. Chemistry of Thiolsulfonates, *Kagaku*, **25**, 52 (1970), by S. Oae and T. Kurusu.
63. Oxygen Exchange Reactions of Sulfoxides, *Kagaku no Ryoiki*, **24**, 1023 (1970), by S. Oae.
64. Solvent Effects in the Reactions of Carbanions, *Kogyo Kagaku Zasshi*, **73**, 2251 (1970), by Y. Yano and S. Oae.
65. Oxygen Exchange Reactions of Sulfoxides, *Quart. Reports on Sulfur Chem.*, **5**, 53 (1970), by S. Oae. (In English)

66. Organic Reactions with Elemental Sulfur, *Sekiyu Gakkaishi*, **13**, 341 (1970), by S. Oae.
67. "Synthetic Reactions Using HMPA", Chapter in "Convenient Synthetic Procedures in Dipolar Aprotic Solvent", Kagaku Dojin, Inc. (1971), by H. Tanaka and S. Oae.
68. "The Chemistry of Thiophene and Thio-Heterocycles", Chapter 1 in Vol. 13, Supplement, of λ Chemistry of Heterocycles", Nankodo, Inc., (1971), by S. Oae and H. Morita.
69. "Syntheses and Uses of ^{18}O -Labelled Hydroxylic Compounds", Chapter 15 in S. Patai's Series, "The Chemistry of the Hydroxylic Group", John Wiley & Sons, New York, N. Y., (1971), by S. Oae and S. Tamagaki. (In English)
70. Chemistry of Thiolsulfinates, *Kagaku*, **26**, 172 (1971) by S. Oae and G. Tsukamoto.
71. Introduction to Organic Chemistry Course, *Kagaku*, **26**, 863 (1971) by S. Oae.
72. Chemistry of Bunte Salts, *Kagaku*, **26**, 1066 (1971), by S. Oae, G. Tsukamoto and T. Kurusu
73. Discussion Meeting held before 3rd International Conference of Heterocyclic Chemistry, *Kagaku no Ryoiki*, **25**, 656 (1971), by S. Oae et al.
74. How to Write Manuscripts in Chemical English, *Sen-i to Kogyo*, **4**, 415 (1971), by S. Oae.
75. Chemistry of Fine Chemicals --- Mainly Concerning Organic Sulfur Compounds, *Kagaku Kogyo*, 900 (1971), by S. Oae.
76. "Application of Organic Reaction Mechanism to Bioorganic Chemistry", Chapter 2 in "Bioorganic Chemistry", Kagaku Dojin, Inc., (1972) by S. Oae
77. Role of Sulfur Atom in Biochemical Reactions, *Taisha (Metabolism)*, **8**, 792 (1972), by S. Oae.
78. New Reactions of Heterocyclic Compounds Containing Sulfur Atom, *Yuki Gosei Kagaku Kyokaiishi*, **30**, 251 (1972), by S. Oae and T. Aida.
79. Are $\text{S}_{\text{N}}2$ and E_2 Reactions Concerted Ones?, *Kagaku*, **27**, 432 (1972), by S. Oae.
80. Chemistry of Dithiocarboxylic Acids and Dithiophosphoric Acids (Part 1), *Kagaku*, **27**, 589 (1972), by S. Oae, T. Yagihara and A. Nakanishi.
81. Chemistry of Dithiocarboxylic Acids and Dithiophosphoric Acids (Part 2), *Kagaku*, **27**, 673 (1972), by S. Oae, T. Yagihara and A. Nakanishi.

82. What is the α -Effects ?, *Kagaku*, **27**, 1045 (1972), by S. Oae and Y. Kadoma.
83. Introduction to Organic Synthetic Chemistry, *Kagaku no Ryoiki*, **26**, 290 (1972), by S. Oae.
84. Basic and Advanced Chemistry of Fine Chemicals, *Kagaku Kojo*, **16**, 16 (1972), by S. Oae.
85. Study of Simple Organic Reaction --- Hydrolysis of Aryl Sulfonates, *Gendai Kagaku*, **49** (1972), by S. Oae.
86. Synthesis and Reaction of Organic Sulfur Compounds, *Kagaku to Kogyo*, **46**, 63 (1972), by S. Oae.
87. "HMPA --- Application to Organic Synthetic Reactions", pp 155-166 in "Reaction in Solution", Shibundo Press (1973), by H. Tanaka and S. Oae.
88. Application of the Reaction of Diphenyl Sulfone with Elemental Sulfur to make PCB Non-Poisons, *Gendai Kagaku*, **20** (1974), by S. Oae.
89. Synthetic Reaction with Elemental Sulfur. Reaction of Aromatics with Elemental Sulfur and Very Acidic Thiols, *Sekiyu Gakkaishi*, **17**, 752 (1974), by S. Oae.
90. On Organic Sulfur Compounds, *Ryusan to Kogyo*, **27**, 1 (1974), by S. Oae.
91. "Carbanion", Chapter 9 in "Advanced Physical Organic Chemistry", 2nd ed., Kagaku Dojin, Inc., (1974), by S. Oae and T. Sakurai.
92. Usefulness of Elemental Sulfur, *Kagaku*, **30**, 8 (1975), by S. Oae.
93. Biochemistry and Bioorganic Chemistry of Organo-Sulfur and Organo-Nitrogen Compounds, *Kagaku no Ryoiki, Zokan*, **113**, 127 (1976), by S. Oae, D. Fukushima and K. Watanabe.
94. Electronic Structures of σ -Hypervalent Sulfur Compounds (Part I), *Kagaku no Ryoiki*, **31**, 117 (1977), by S. Oae and S. Tamagaki.
95. Electronic Structure of σ -Hypervalent Sulfur Compounds (Part II), *Kagaku no Ryoiki*, **31**, 218 (1977), by S. Oae and S. Tamagaki.
96. Mechanisms and Synthetic Applications of the Pummerer Reaction, *Yuki Gosei Kagaku Kyokaiishi*, **35**, 126 (1977), by T. Numata and S. Oae.
97. Deoxygenation of Sulfoxides. A Review, *Org. Prep. Proced., Int.*, **9**, 63 (1977.), by J. Drabowicz, T. Numata and S. Oae. (In English)
98. Preparation of Organic Compounds for Polymers, Chapter 36 in "Unit Monomers II. Experimental Polymer Chemistry", Kyoritsu Publishing Co., (1977), by S. Oae.

99. Ei Reaction of Sulphilimines and Related Compounds, Tetrahedron Report No. 37, *Tetrahedron*, **33**, 2359 (1977), by S. Oae and N. Furukawa.
100. Phantom Compound: α -Disulfoxide, *Kagaku*, **33**, 240 (1978), by S. Oae.
101. The Pummerer Rearrangements, pp 289-336 in Plenary Lectures of the 8th International Symposium on Organic Sulfur Chemistry, Portoroz, Yugoslavia, University Press, Ljubljana, (1978), by S. Oae.
102. Oxidation of Organic Sulfur Compounds (I), *Kagaku*, **34**, 756 (1979), by S. Oae and T. Takata.
103. Oxidation of Organic Sulfur Compounds (II), *Kagaku*, **34**, 891 (1979), by S. Oae and T. Takata.
104. Oxidation of Organic Sulfur Compounds (III), *Kagaku*, **34**, 961 (1979), by S. Oae and T. Takata*
105. The Reaction of Thionitrites and Related Compounds (I), *Kagaku*, **35**, 520 (1980), by S. Oae and K. Shinhama.
106. The Reaction of Thionitrites and Related Compounds (II), *Kagaku*, **35**, 609 (1980), by S. Oae and K. Shinhama.
107. The Cyclization Reaction of Organic Sulfur Compounds, *Kagaku no Ryoiki, Zokan*, **124**, 189 (1980), by S. Oae and H. Morita.
108. Chemical and Biochemical Oxidations of Organic Sulfur Compounds (I) --- Electrophilic Oxidations of Sulfides and Sulfoxides, *Kagaku no Ryoiki*, **34**, 344 (1980), by S. Oae.
109. Chemical and Biochemical Oxidations of Organic Sulfur Compounds (II) --- Nucleophilic and Biochemical Oxidations of Sulfides and Sulfoxides, *Kagaku no Ryoiki*, **34**, 445 (1980), by S. Oae.
110. General Synthetic Procedures of Various Organic Sulfides, *Koryo*, **130**, 11 (1981), by S. Oae and F. Takahashi.
111. Sulfur Around Us, *Science and Humanity*, (translation in Russian) in Press, (1981), by S. Oae.
112. Reaction Mechanism and Stereochemistry, Chapter 7 in "Modern Chemistry series 7", Iwanami Publishing Co., (1981), by S. Oae.
113. Sulfilimines. Synthetic Application and Potential Utilizations, *Ind. Eng. Chem.*, in Press, (1981), by N. Furukawa and S. Oae. (in English)
114. Oxidations of Organosulfur Compounds with -S-S- linkages, *Acc. Chem. Research*, in Press, by S. Oae. (in English)

115. Compounds with S=N Functional Groups, Chapter 2 (III) in Vol. 6, "Organic Compounds of Sulfur, Selenium, and Tellurium", The Chemical Society, the University Press, Cambridge, in Press, by S. Oae and N. Furukawa. (in English)
116. The Pummerer and Pummerer Type Reactions, Chapter 2 in Vol. 5, "Isotopes in Organic Chemistry", Elsevier Scientific Publishing Co., Amsterdam, (1980), by S. Oae and T. Numata. (in English)
117. "Heterosulfonium Salts", Chapter 9 in S. Patai's Series, "The Chemistry of the Sulfonium Group", John Wiley & Sons, New York, N. Y., pp. 571-672, by S. Oae, T. Yoshimura and T. Numata. (in English)
118. Ylides of Sulfur, Selenium, and Tellurium, and Related Structures, *Org. Compd. Sulphur, Selenium, Tellurium*, **6**, pp. 79-147 (1981), by E. Block, D. L. J. Clive, Furukawa, S. Oae.
119. Oxidation Reactions, *Yuki Ioo Kagaku* (Hanno Kiko-hen), pp. 263-365 (1982), Kagaku Dojin, Kyoto, by S. Oae.
120. Thiosulfates and Thiosulfonates, *Yuki Ioo Kagaku* (Gosei Hanno-hen), pp. 131-162 (1982), Kagaku Dojin, Kyoto, by S. Oae.
121. Sulfur Bonding, *Yuki Ioo Kagaku* (Hanno Kiko-hen), pp. 1-40 (1982), Kagaku Dojin, Kyoto, by S. Oae, S. Tamagaki.
122. Steric Electronic Effects of Sulfur Groups, *Yuki Ioo Kagaku* (Hanno Kiko-hen), pp. 41-81 (1982), Kagaku Dojin, Kyoto, by S. Oae.
123. Stereochemistry, *Yuki Ioo Kagaku* (Hanno Kiko-hen), pp. 83-163 (1982), Kagaku Dojin, Kyoto, by S. Oae and N. Kunieda.
124. Substitution Reactions, *Yuki Ioo Kagaku* (Hanno Kiko-hen), pp. 165-262 (1982), Kagaku Dojin, Kyoto, by S. Oae.
125. Reduction of Sulfur Compounds. I, *Kagaku*, **37**, 812-818 (1982), by S. Oae, H. Togo.
126. Reduction Reactions, *Yuki Ioo Kagaku* (Hanno Kiko-hen), pp. 367-403 (1982), Kagaku Dojin, Kyoto, by S. Oae.
127. Rearrangement Reactions, *Yuki Ioo Kagaku* (Hanno Kiko-hen), pp. 405-447 (1982), Kagaku Dojin, Kyoto, by S. Oae.
128. Elemental Sulfur and its Reactions, *Yuki Ioo Kagaku* (Gosei Hanno-hen), pp. 1-28 (1982), Kagaku Dojin, Kyoto, by S. Oae and R. Sato.
129. Disulfides and Polysulfides, *Yuki Ioo Kagaku* (Gosei Hanno-hen), pp. 85-130 (1982), Kagaku Dojin, Kyoto, by S. Oae and Y. H. Kim.
130. Reduction of Sulfur Compounds. II, *Kagaku*, **37**, 909-917 (1982), by S. Oae, H. Togo.

131. Reinvestigation and New Interpretation of the Wallach Rearrangement, *Kagaku*, **37**, 111-117 (1982), by S. Oae and I. Shimano.
132. Reduction of Sulfur Compounds. III, *Kagaku*, **38**, 48-53 (1983), by S. Oae and H. Togo.
133. Reduction of Sulfur Compounds. IV, *Kagaku*, **38**, 201-206 (1983), by S. Oae and H. Togo.
134. Reduction of Sulfur Compounds. V, *Kagaku*, **38**, 280-284 (1983), by S. Oae and H. Togo.
135. Reduction of Sulfur Compounds. VI, *Kagaku*, **38**, 347-351 (1983), by S. Oae and H. Togo.
136. Organic Thionitrites and Related Substances. A Review, *Org. Prep. Proced. Int.*, **15**, 165-98 (1983), by S. Oae and K. Shinhama.
137. Reduction of sulfur compounds. VII, *Kagaku*, **38**, 506-512 (1983), by S. Oae and H. Togo.
138. Mechanism and Stereochemistry in the Oxygenation of Organosulfur Compounds with Cytochrome P 450- and FAD-containing Monooxygenase, *Yuki Gosei Kagaku Kyokaiishi*, **41**, 848-60 (1983), by S. Oae and K. Fujimori.
139. Sulfilimines and Related Derivatives, *ACS Monogr.*, **179**, 340 pp. (1983), by S. Oae and N. Furukawa.
140. Preparation and Uses of Isotopically Labeled Peroxides, *Chem. Peroxides*, pp. 585-648 (1983), Ed. S. Patai, Wiley, UK., by S. Oae and K. Fujimori.
141. Sulfur in Nature and in the Laboratory, *Nauka i Chelovechestvo*, 1983. *Mezhdunar. Ezhegod.*, *M.* 275, From Ref. *Zh.*, *Khim.* 1984, Abstr. No. 9A8 1, by S. Oae.
142. Sulfur Around Us, by S. Oae (Manuscript 453 in English).
143. "Sulfur Cycle in Nature. How Can We Approach For Our Benefit?" *Nauka i Chelovechestvo*, 1984. *Mezhdunar. Ezhegod.*, *M.* by S. Oae.
144. "Sulfur Cycle in Nature. How Can We Approach For Our Benefit?" by S. Oae (Manuscript 455 in English).
145. Reduction of Sulfoxides. A Review, *Org. Prep. Proced. Int.*, **16**, 171 (1984), by J. Drabowicz, H. Togo, M. Mikolajczyk and S. Oae.
146. Historical Development of Sulfur Bonding: A View of an Experimental Organosulfur Chemist, *Stud. Org. Chem. (Amsterdam)*, **19** (*Org. Sulfur Chem.*), 1(1985), by S. Oae.
147. Reagents Containing Phosphorus and Sulfur (Rin-Iou-Shiyaku), *Kagaku Sosetsu*, **47**, 64 (1985), by S. Oae.
148. Synthesis and Uses of Isotopically Labelled Selenium and Tellurium Compounds, in "The Chemistry of Organic Selenium and Tellurium Compounds. Vol. 1", 369 (1986), John Wiley & Sons Lit., Edited by S. Patai, by S. Oae.

149. Historical and Future Development of Heteroatom Chemistry, *Chemistry and Industry (Kagaku to Kogyo)*, **40**, 64 (1987), by S. Oae.
150. Mechanisms of Oxygenations of Organic Sulfur Compounds, *Stud. Org. Chem. (Amsterdam)*, **33** (Role Oxygen Chem. Biochem.), 23 (1988), by S. Oae.
151. Behavior of α -Sulfinyl and α -Sulfonyl Carbanions, "The Chemistry of Sulfones and Sulphoxides", Chap. 12, 583 (1988), John Wiley & Sons Lit., Edited by S. Patai, by S. Oae and Y. Uchida.
152. Initial Stage of Thermal Decomposition of Diacyl Peroxides *Medical, Biochemical and Chemical Aspects of Free Radicals*, Proceedings of the 4th Biennial General Meeting of the Society for Free Radical Research, Kyoto, Japan, Abstr. 989 (1988), by K. Fujimori and S. Oae.
153. Chemical Behavior of Elemental Sulfur, *Rev. Heteroat. Chem.*, **1**, 1(1988), by S. Oae.
154. Ligand Coupling Reactions within Hypervalent Species, *Rev. Heteroat. Chem.*, **1**, 304 (1988), by S. Oae.
155. Book Review about "Methods in Enzymology, Vol. 143, Sulfur and Sulfur Amino Acids", *Analytical Biochemistry*, 177 (1989), by S. Oae.
156. Validity of Our New Concept of Ligand Coupling through Hypervalent and Similar Valence-Shell Expanded Intermediates, *Rev. Heteroat. Chem.*, **2**, 76(1989), by S. Oae and Y. Uchida.
157. Heteroaromatic Sulfoxides and Sulfones: Ligand Exchange and Coupling in Sulfuranes and ipso-Substitutions, *Adv. Heterocycl. Chem.*, **48**, 1(1990), by S. Oae and N. Furukawa.
158. A Report on the 17th Symposium on Heteroatom Chemistry of the Chemical Society of Japan Held at Kitakyushu on January 25 and 26, 1990, *Heteroatom Chemistry*, **1**, 343 (1990), by S. Oae and T. Okuyama.
159. Sulfur Chemistry in the Next Few Decades: Will Several Unsolved Problems Be Clarified?, *Phosphorus, Sulfur Silicon Relat. Elem.*, **59**, 373-407 (1991), by S. Oae.
160. Ligand Coupling Reactions within Hypervalent Species I: on Sulfur and Related Atoms of Group IV Elements, *Rev. Heteroat. Chem.*, **4**, 195(1991), by S. Oae.
161. Synthesis and Uses of Isotopically Labeled Sulfinic Acid Derivatives, in "Chemistry of Sulphinic Acids, Esters and Their Derivatives.", Ed. S. Patai, Wiley, UK.475-490 (1990), by S. Oae and H. Togo.
162. A report on the 18nd Symposium on Heteroatom Chemistry of the Chemical Society of Japan, *Heteroat. Chem.*, **2**, 431-437 (1991), by S. Oae.
163. Oxygenation and Oxidation of Sulfur Compounds, in "Org. Sulfur Chem.: Biochem. Aspects", Ed. S. Oae and T. Okuyama, CRC Press, Boca Raton, Fla., 195-222 (1992), by S. Oae.

164. A report on the 19th Symposium on Heteroatom Chemistry of the Chemical Society of Japan, *Heteroat. Chem.*, **3**, 617-624 (1992), by R. Sato, Ryu; T. Okuyama and S. Oae.
165. Reduction of sulfur compounds, in "Org. Sulfur Chem.: Biochem. Aspects", Ed. S. Oae and T. Okuyama, CRC Press, Boca Raton, Fla., 223-260 (1992), by H. Togo and S. Oae.
166. Plastics and Potteries, *Kobunshi-kako*, **41**, 16 (1993), by S. Oae.
167. Ligand Coupling within Hypervalent Species. II. Copper Atom, *Rev. Heteroat. Chem.*, **9**, 123-153 (1993), by T. Negoro and S. Oae.
168. Ligand coupling within hypervalent species. III. On transition metal elements, *Rev. Heteroat. Chem.*, **13**, 235-272 (1993), by T. Negoro and S. Oae.
169. A report on the 20th Symposium on Heteroatom Chemistry of the Chemical Society of Japan, *Heteroat. Chem.*, **4**, 269-378 (1993), by S. Oae.
170. Distribution of Research Money Fairly, *Chem. & Ind. (Kagaku-to-kogyo)* (in Japanese), **46**, 954 (1993) by S. Oae.
171. Elemental Sulfur and its Application, *Kobunshi-kako*, **42**, 117 (1994), by S. Oae.
172. Elemental Sulfur and its Application, *Kobunshi-kako*, **42**, 332 (1994), by S. Oae.
173. A report on the 21th Symposium on Heteroatom Chemistry of the Chemical Society of Japan, *Heteroat. Chem.*, **5**, 159-165 (1994), by S. Oae and H. Togo.
174. To Strengthen Bull. Chem. Soc. Jpn., *Chem. & Ind. (Kagaku-to-kogyo)* (in Japanese), **47**, 954 (1994) by S. Oae.
175. A report on the 22nd Symposium on Heteroatom Chemistry of the Chemical Society of Japan, *Heteroat. Chem.*, **6**, 507-12 (1995), by S. Oae and H. Togo.
176. Ligand Coupling Reactions of Hypervalent Species, The 5th International Conference of Heteroatom Chemistry in Soul, Korea (1995), by S. Oae.
177. Ligand Coupling in Sulfurane and Phosphorane, *Chem. Ind. (Kagaku-to-kogyo)* (in Japanese), in Press (1996), by S. Oae.
178. Ligand Coupling within Hypervalent Species, *MGCN* (Main Group Chemistry News), **4**, 10 (1996), by S. Oae.
179. Pure and Applied Chemistry, *IUPAC*, in press (1996), by S. Oae.

C. Books

1. "Named Organic Reactions. (Jinmei Yuki Hanno-shu)", 2 Volume, by M. Murakami, S. Oae, Y. Yukawa and I. Moritani, Asakura Press, Tokyo (1954, 1955).
2. "Sulfur Bonding", by C.C. Price and S. Oae, Ronald Press, New York, N. Y. (1962). (In English)
3. "Physical Organic Chemistry (Riron Yuki Kagaku)", by K. Ichikawa, E. Imoto, S. Oae, O. Hayaishi, I. Moritani and Y. Yukawa (Editors), Kagaku Dojin, Inc., Kyoto (1964).
4. "Elimination Reactions (Datsuri Hanno)", by S. Oae, Tokyo Kagaku Dojin, Inc., Tokyo (1965).
5. "Physical Organic Chemistry (Yuki Hanno Riron)", 2 Volumes, by S. Oae, Asakura Press, Tokyo (1966).
6. "Chemistry of Organosulfur Compounds (Yuki Io-Kagobutsu no Kagaku)", 2 Volumes, by S. Oae, Kagaku Dojin, Inc., Kyoto (1968, 1969). This book has been translated into Russian.
7. "Saishin no Yuki Kagaku", 2 Volumes, Translation of J. March's "Advanced Organic Chemistry", McGraw-Hill, Inc. (1968), by S. Oae, W. Tagaki, A. Ohno and W. Ando, Tokyo Kagaku Dojin, Inc., Tokyo (1971).
8. "Bioorganic Chemistry", by S. Oae, T. Mukaiyama and Z. Yoshida (Editors), Kagaku Dojin, Inc., Kyoto (1972).
9. "Reduction (Kangen Hanno)", by S. Oae and S. Tamagaki, Marzen, Inc., Tokyo (1975).
10. "Drills of English for Chemists (Kagaku Eigo Enshu)", by S. Oae and Y. Yano, Asakura Press, Tokyo (1975).
11. "Organic Chemistry of Sulfur", by S. Oae, Plenum Press, New York, N. Y. (1977). (In English)
12. "High School Chemistry (Koko Kagaku)", edited by S. Oae, Ohara Publishing Co., Tokyo (1977).
13. "Physical Organic Chemistry", by S. Oae and N. Furukawa, Sankyo Press, Tokyo (1980).
14. "Chemistry of Sulfilmines and Related Derivatives", A. C. S. Research Monograph, in Press, by S. Oae and N. Furukawa. (in English)
15. "Organosulfur Chemistry", 2 Volumes, by S. Oae, Kagaku Doojin, in Press.
16. Chemistry (Kagaku), by S. Oae, T. Ibata, T. Negoro, M. Hamaguchi, K. Maeda, H.

Morita, Sankyou Shuppan Co., Ltd., Tokyo (1990)

17. *Organic Sulfur Chemistry: Biochemical Aspects*, by S. Oae and T. Okuyama, CRC Press, Boca Raton, Fla., (1992) (In English).
18. *Organic Sulfur Chemistry* by S. Oae, CRC Press, Boca Raton, Fla., (1992) (In English).
19. *Reviews on Heteroatom Chemistry*, Vol. 1, Ed. by S. Oae, Myu Press, Tokyo, (1988).
20. *Reviews on Heteroatom Chemistry*, Vol. 2, Ed. by S. Oae, Myu Press, Tokyo, (1989).
21. *Reviews on Heteroatom Chemistry*, Vol. 3, Ed. by S. Oae, Myu Press, Tokyo, (1990).
22. *Reviews on Heteroatom Chemistry*, Vol. 4, Ed. by S. Oae, Myu Press, Tokyo, (1991).
23. *Reviews on Heteroatom Chemistry*, Vol. 5, Ed. by S. Oae, Myu Press, Tokyo, (1991).
24. *Reviews on Heteroatom Chemistry*, Vol. 6, Ed. by S. Oae, Myu Press, Tokyo, (1992).
25. *Reviews on Heteroatom Chemistry*, Vol. 7, Ed. by S. Oae, Myu Press, Tokyo, (1992).
26. *Reviews on Heteroatom Chemistry*, Vol. 8, Ed. by S. Oae, Myu Press, Tokyo, (1993).
27. *Reviews on Heteroatom Chemistry*, Vol. 9, Ed. by S. Oae, Myu Press, Tokyo, (1993).
28. *Reviews on Heteroatom Chemistry*, Vol. 10, Ed. by S. Oae, Myu Press, Tokyo, (1994).
29. *Reviews on Heteroatom Chemistry*, Vol. 11, Ed. by S. Oae, Myu Press, Tokyo, (1994).
30. *Reviews on Heteroatom Chemistry*, Vol. 12, Ed. by S. Oae, Myu Press, Tokyo, (1995).
31. *Reviews on Heteroatom Chemistry*, Vol. 13, Ed. by S. Oae, Myu Press, Tokyo, (1995).
32. *Reviews on Heteroatom Chemistry*, Vol. 14, Ed. by S. Oae, Myu Press, Tokyo, (1996).