

REFERENCES

1. Spessard, G. O. and Miesslar, G. L. *Organometallic chemistry*. New Jersey: Prentice – Hallupper Saddle River, 1997. p. 245.
2. Satterfield, C. N. *Heterogeneous catalysis in practice*. New York: McGraw - Hill Company, 1980. p. 22.
3. Hagens, J. *Industrial catalysis*. New York: Wiley-VCH, 1980. p. 17.
4. Lukehart, C. M. *Fundamental transition metal organometallic chemistry*. California: Brooks/Cole Publishing Company, 1985. p. 388.
5. Gibson, S. E. *Transition metals in organic synthesis*. New York: A practical approach, 1997. p. 1.
6. Crabtree, R. H. *The organometallic chemistry of the transition metals*. 3rd edition. Canada: A Wiley –Interscience publication, John Wiley & Sons, 2001. p. 37.
7. Cotton, E. A. and Wilkinson, G. *Advanced inorganic chemistry*. 5th edition. New York: A Wiley-Interscience publication, John Wiley & Sons, 1988. p. 687.
8. Collman, J. P.; Hegedus, L. S.; Norton, J. R. and Finke, R. G. *Principles and applications of organotransition metal chemistry*. California: University Science Books, 1987. p. 749.
9. Olah, G. A. and Molnar, A. *Hydrocarbon chemistry*. Canada: A Wiley-Interscience publication, John Wiley & Sons, 1995. p. 362.
10. Corey, E. J. and Suggs, J. W. Pyridinium chlorochromate. An efficient reagent for oxidations of primary and secondary alcohols to carbonyl compounds. *Tetrahedron lett.* **1975**: 2647-2650.
11. Fleet, G. W. J. and Little, W. Oxidation of alcohols by heterocyclic complexes of oxodiperoxychromium(VI), CrO₅. *Tetrahedron Lett.* **1977**: 3749-3750.
12. Mizukami, F. and Imamura, J. Liquid-phase oxidation of hydrocarbons with molecular oxygen. I. The effects of metal ions and their ligands on product distribution in the oxidation of tetralin in acetic acid. *Bull. Chem. Soc. Jpn.* **51(1978)**: 1404-1412.

13. Chakraborty, T. K. and Chandrasekaran, S. Oxidation of alcohols to carbonyl compounds with chromium(V) reagents. *Tetrahedron Lett.* **1980**: 1583-1586.
14. Kanemoto, S.; Oshima, K.; Matsubaru, S.; Takai, K. and Nozaki, H. Transition-metal catalyzed oxidation of alcohols to aldehydes and ketones by means of $\text{Me}_3\text{SiOOSiMe}_3$. *Tetrahedron Lett.* **24(1983)**: 2185-2188.
15. Muzart, J. Practical chromium^{VI} oxide-catalyzed benzylic oxidation using 70% *tert*-butylhydroperoxide. *Tetrahedron Lett.* **28(1987)**: 2131-2132.
16. Muzart, J. Chromium^{VI} oxide-70% *tert*-butylhydroperoxide, a simple catalytic system for oxidation of alcohols to carbonyl compounds. *Tetrahedron Lett.* **28(1987)**: 2133-2134.
17. Muzart, J. and Olivier, P. Oxidation of alkynes into conjugated acetylenic ketones with *tert*-butyl hydroperoxide catalyzed by chromium^{VI} oxide. *Tetrahedron Lett.* **29(1988)**: 2321-2324.
18. Kitajima, N.; Sunaga, S.; Moro-oka, Y.; Yoshikuni, T.; Akada, M.; Tomotaki, Y. et. al. The Liquid-phase oxidation of *p*-methoxytoluene to *p*-anisaldehyde with $\text{Co}(\text{OAc})_2/\text{Ce}(\text{OAc})_3/\text{Cr}(\text{OAc})_3$ catalyst. *Bull. Chem. Soc. Jpn.* **61(1988)**: 967-971.
19. Muzart, J. Chromium-catalyzed oxidations in organic synthesis. *Chem. Rev.* **92(1992)**: 113-140.
20. Ishihara, K.; Kurihara, H. and Yamamoto, H. Bis(pentafluorophenyl)borinic acid as a highly effective Oppeneaur oxidation catalyst for allylic and benzylic alcohols. *J. Org. Chem.* **62(1997)**: 5664-5665.
21. Man, S. T.; Ramshaw, C.; Scott, K.; Clark, J.; Macquarrie, D. J. and Jachuck, R. The effect of dehydration in the oxidation of ethylbenzene to acetophenone with supported catalysts. *Organic Process Research & Development.* **5(2001)**: 204-210.
22. Shi, M. and Feng, Y. S. Oxidation of benzyl chlorides and benzyl bromides to benzoic acids with 30% hydrogen peroxide in the presence of Na_2WO_4 , Na_2VO_4 , or Na_2MoO_4 under organic solvent free conditions. *J. Org. Chem.* **66(2001)**: 3235-3237.

23. Nicolaou, K. C.; Montagnon, T.; Baran, P. S. and Zhong, Y. L. Iodine(V) reagents in organic synthesis. Part 4. *o*-Iodoxybenzoic acid as a chemospecific tool for single electron transfer-based oxidation processes. *J. Am. Chem. Soc.* 124 (2002): 2245-2258.
24. Weissermel, K. and Arpe, H. J. *Industrial organic chemistry*. 3rd edition. Germany: VCH, A Wiley Company, 1997. p. 311.
25. Silverstein, R. M. and Francis, X. *Spectrometric identification of organic compounds*. 6th edition. Canada: John Wiley & Sons, 1998. p. 71.
26. Parker, S. P. *Encyclopedia of chemistry*. 2nd edition. New York: McGraw - Hill, 1981. p. 219.
27. Kitajima, N.; Takemura, K.; Moro-oka, Y.; Yoshikuni, T.; Akada, M.; Tomotaki, Y. et. al. The selective liquid-phase oxidation of 3,4,5-trimethoxytoluene to 3,4,5-trimethoxybenzaldehyde. *Bull. Chem. Soc. Jpn.* 61(1988): 1035-103.
28. Maeda, Y.; Kakiuchi, N.; Matsumura, S.; Nishimura, T.; Kawamura, T. and Uemura, S. Oxovanadium complex-catalyzed aerobic oxidation of propargylic alcohols. *J. Org. Chem.* 67(2002): 6718-6724.
29. Peterson, K. P. and Larock, R. C. Palladium-catalyzed oxidation of primary and secondary allylic and benzylic alcohols. *J. Org. Chem.* 63(1998): 3185-3189.
30. Chidambaram, N. and Chandrasekaran, S. *Tert*-butylhydroperoxide – pyridinium dichromate : A convenient reagent system for allylic and benzylic oxidations. *J. Org. Chem.* 52(1987): 5048-5051.
31. Nicolaou, K. C.; Baran, P. S. and Zhong, Y. L. Selective oxidation at carbon adjacent to aromatic systems with IBX. *J. Am. Chem. Soc.* 123(2001): 3183-3185.
32. Kesteleyn, B.; Puyvelde, L. V. and Kimpe, N. D. Synthesis of isagarin, a new type of tetracyclic naphthoquinone from *Pentas longiflora*. *J. Org. Chem.* 64(1999): 438-440.
33. Wipf, P. and Jung, J. K. Total synthesis of the spiroketal naphthoquinone (\pm) diepoxin. *J. Org. Chem.* 64(1999): 1092-1093.
34. Parshall, G. W. *The application and chemistry of catalysis by soluble transition metal complexes*. New York: Wiley Interscience, 1998. p. 237.

35. Wells, G. M. *Handbook of petrochemical and processes*. New York: Bsc, FPRI, Gower, 1991. p. 78.
36. Katritzky, A. R.; Cohn, O. M. and Rees, C. W. *Comprehensive organic functional group transformations*. Volume 5. New York: Pergamon, 1995. p.182.
37. Inoue, M.; Uragaki, T.; Kashiwagi, H. and Enomoto, S. The oxidation of methacrylic acids ester with H_2O_2 in the presence of chromium catalyst. A novel route to pyruvic acid esters. *Chem. Lett.* **1989**: 99-100.
38. Emerson, W. S.; Heyd, J. W.; Lucas, V. E., Chapin, E. C.; Owens, G. R. and Shorridge, R. W. The use of liquid phase oxidation for the preparation of nuclearly substituted styrenes. I. Methyl *p*-vinylbenzoate. *J. Am. Chem. Soc.* **68(1946)**: 674-676.
39. Bougiou, D. J. and Smonou, I. Chloroperoxidase-catalyzed oxidation of conjugated dienoic esters. *Tetrahedron Lett.* **43(2002)**: 339-342.
40. Wipf, P. and Jung, J-K. Total synthesis of palmarumycin CP₁ and (+) deoxypreussomerin A. *J. Org. Chem.* **63(1998)**: 3530-3531.
41. Barrett, A. G. M.; Hamprecht, D. and Meyer, T. Total synthesis of palmarumycins CP₁ and CP₂ and C_J-12, novel spiroketal fungal metabolites. *Chem. Commun.* **1998**: 809-810
42. Ragot, J. P.; Alcarez, M. L. and Taylor, R. J. K. Synthesis of palmarumycin CP₁ and CP₂, C_J-12,371 and novel analogues. *Tetrahedron Lett.* **39(1998)**: 4921-4924.
43. Pretsch, E.; Buhlmann, P. and Affolter, C. *Structure determination of organic compounds. Tables of spectral data*. 3rd edition. New York: Springer, 2000. p. 289.
44. Alexakis, A. and Amiot, F. Enantioselective addition of organolithium reagents on isoquinoline. *Tetrahedron*. **13(2002)**: 2117-2122.
45. Yamaguchi, R.; Tanaka, M.; Matsuda, T.; Okano, T.; Nagura, T. and Fujita, K. Regio- and stereoselective α -alkylation of quinolines activated by chloroformate and trifate ion by means of chiral allylsilane: a synthesis of chiral 2-substituted 1,2-dihydroquinoline. *Tetrahedron Lett.* **43(2002)**: 8871-8874.

46. Pestovsky, O.; Bakae, A. and Espenson, J. H. Kinetics and mechanism of the oxidation of 10-methyl-9,10-dihydroacridine by chromium(VI, V, IV): electron VS hydrogen atoms VS hydride transfer. *J. Am Chem. Soc.* **120**(1998): 13422-13428.
47. Greene, T. W. and Wuts, P. G. M. *Protective groups in organic synthesis*. 3rd edition. New York: John Wiley & Sons, 1999. p. 179.

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