

1.4 Všeobecná literatura

1. N. Anand, J.S. Bindra, S. Ranganathan: Art in Organic Synthesis. Holden-Day, Inc., San Francisco, 1970.
2. J.S. Bindra, R. Bindra: Creativity in Organic Synthesis. Academic Press, N. York, 1975. Cambridge University Press, Cambridge, 1971.
5. C. Ferri: Reaktionen der organischen Synthese. G. Thieme Verlag, Stuttgart, 1978.
6. J. Fuhrhop, G. Penzlin: Organic Synthesis. Verlag Chemie GmbH, Weinheim, 1983.
7. I.T. Harrison, S. Harrison/L.S. Hegedus, L. Wade : Compendium of Organic Synthetic Methods, Vol. I-III, J. Wiley, N. York, 1971/1974/1977.
8. H.O. House: Modern Synthetic Reactions, W.A. Benjamin, Menlo Park, 1972.
9. S. Turner: The Design of Organic Syntheses. Elsevier, Amsterdam, 1976.
10. S. Warren: Designing Organic Syntheses. J. Wiley, N. York, 1978.

2.7 Literatura

- Methoden der organischen Chemie (Houben-Weyl), Bd. 4/1c, 4/1d.
Reduktion. G. Thieme, Stuttgart, 1980.
- M. Hudlický: Reductions in organic chemistry. J. Wiley, N. York,
1983.
- A. Hajos: Complex hydrides and related reducing agents in organic
synthesis. Elsevier, Amsterdam, 1979.
- B. R. James: Homogeneous hydrogenations. J. Wiley, N. York 1973.
- J. Rudinger, M. Ferles: Hydrid lithno-hlinity a příbuzná činidla
v organické chemii. Academia, Praha 1956.
- P. N. Rylander: Catalytic hydrogenation over platinum metals.
Acad. Press, N. York, 1967.
- P. N. Rylander: Catalytic hydrogenation in organic synthesis.
Acad. Press, N. York, 1979.
- O. Štrouf, B. Čásenský, V. Kubánek: Sodium Dihydrido-bis(2-metho-
xyethoxy)aluminate (SDMA). Academia, Praha, 1985.
- R. L. Augustine: Organic functional group hydrogenation. Catal.
Rev. 13, 285 (1976).
- A. J. Birch, H. Smith: Reduction of metal amine solutions. Quart.
Rev. 12, 17 (1958).
- A. J. Birch, D. H. Williamson: Homogenous hydrogenation in
organic synthesis. Org. Reactions 24, 1 (1976).

- G. Brieger, T. J. Nestrick: Catalytic transfer hydrogenation. Chem. Rev. **74**, 567 (1974).
- J. G. S. C. Buchanan, P. D. Woodgate: Clemmensen reduction of difunctional ketones. Quart. Rev. **23**, 522 (1969).
- D. C. Caine: Reductions and related reactions of α,β -unsaturated compounds with metals in liquid ammonia. Org. Reactions **23**, 1 (1976).
- J. I. G. Cadogan: Reductions of nitro- and nitroso-compounds by tervalent phosphorus reagents. Quart. Rev. **22**, 222 (1968).
- N. C. Deno, H. J. Peterson, G. S. Saines: The hydride transfer reactions. Chem. Rev. **60**, 7 (1960).
- W. S. Emerson: The preparation of amines by reductive alkylation. Org. Reactions **4**, 174 (1948).
- A. Furst, R. C. Berlo, S. Hooton: Hydrazine as a reducing agent for organic compounds. Chem. Rev. **65**, 51 (1965).
- T. A. Griesman: The Cannizzaro reaction. Org. Reactions **2**, 94 (1944).
- J. R. Hanson: Applications of chromium (II) salts in preparative organic chemistry. Synthesis 1974, 1.
- S. Höning, H. R. Müller, W. Thier: Zur Chemie des Diimins. Angew. Chem. **77**, 368 (1965).
- S. L. Ioffe, V. A. Tartakovskij, S. S. Novikov: Selektivnoje vosstanovlenije alifatičeskich nitrosoedinenij. Usp. Chim. **35**, 43 (1966).
- E. E. Kaiser: A comparison of methods using lithium/amine and Birch reduction systems. Synthesis 1972, 391.
- E. I. Klabanovskij: Stereochimija gidrogenizaciji i hidrogenoliza. Usp. Chim. **35**, 1294 (1966).
- D. N. Kursanov, Z. N. Parnes, N. M. Loim: Applications of ionic hydrogenation to organic synthesis. Synthesis 1974, 633.
- C. F. Lane: Sodium cyanoborohydride - a highly selective reducing agent for organic functional groups. Synthesis 1975, 135.
- E. L. Martin: The Clemmensen reduction. Org. Reactions **1**, 155 (1942).
- E. N. Marvell, T. Li: Catalytic semihydrogenation of the triple bond. Synthesis 1973, 457.
- M. L. Moone: The Leuckart reaction. Org. Reactions **5**, 301 (949).
- E. Mosetig: The synthesis of aldehydes from carboxylic acids. Org. Reactions **8**, 218 (1954).

- E. Mosetig, R. Mozingo: The Rosenmund reduction of acid chlorides to aldehydes. Org. Reactions **4**, 362 (1949).
- J. Newham: Catalytic hydrogenolysis of small carbon rings. Chem. Rev. **63**, 123 (1963).
- G. R. Petit, E. E. van Tamelen: Desulfurisation with Raney nickel. Org. Reactions **12**, 356 (1962).
- F. D. Popp, H. P. Schultz: Elektrolytic reduction of organic compounds. Chem. Rev. **62**, 19 (1962).
- H. K. Porter: The Zinin reduction of nitroarenes. Org. Reactions **20**, 455 (1973).
- D. Todd: The Wolff-Kishner reduction. Org. Reactions **4**, 378 (1948).
- E. Vedejs: Clemmensen reduction of ketones in anhydrous organic solvents. Org. Reactions **22**, 401 (1975).
- A. L. Wilds: Reduction with aluminium alkoxides. Org. Reactions **2**, 178 (1944).
- E. Winterfeldt: Applications of diisobutylaluminium hydride (DIBAH) and triisobutylaluminium (TIBA) as reducing agent in organic synthesis. Synthesis 1975, 617.
- J. Málek, M. Černý: Reduction of organic compounds by alkoxyaluminohydrides. Synthesis 1972, 217.

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3.8 Literatura

M. Hudlický: Preparativní reakce v organické chemii I. Redukce a oxidace. ČSAV, Praha 1954.

Houben-Weyl: Methoden der organischen Chemie, Vierte Auflage, Bd. 4/1a, 4/1b. Oxidation. G. Thieme, Stuttgart 1975.

R. L. Augustine (redakt.): Oxidation. Techniques and application in organic synthesis. M. Dekker, N. York 1969.

K. B. Wiberg (redakt.): Oxidation in organic chemistry, Part A, Acad. Press, N. York 1965.

W. S. Trahanowski (redakt.): Oxidation in organic chemistry, Part B (1973), Part C (1978), Part D (1982), Part E, Acad. Press, N. York.

W. J. Mijs, C. R. H. I. de Jonge (redakt.): Organic synthesis by oxidation with metal compounds. Plenum Press, N. York 1986.

P. M. Henry: Palladium catalyzed oxidation of hydrocarbons. Reidel, Dordrecht 1980.

D. Swern (redakt.): Organic peroxides. Vol. 1, 2, 3. J. Wiley, N. York 1970, 1971, 1972.

H. Arzoumanian, J. Metzger: Oxidation of olefins with mercuric salts. Synthesis 1971, 527.

- J. B. Aylaward: Oxidation of organic nitrogen compounds with lead tetraacetate. Quart. Rev. 25, 407 (1971).
- P. S. Bailey: The reactions of ozone with organic compounds. Chem. Rev. 58, 925 (1958).
- J. Cason: Synthesis of benzoquinones by oxidation. Org. Reactions 4, 305 (1949).
- V. G. Drjuk: Uspechi v razvitiu metodov epoksidirovaniya olefinov. Usp. Chim. 54, 1684 (1985).
- V. G. Dryuk: The mechanism of epoxidation of olefins by peracids. Tetrahedron 32, 2855 (1976).
- C. Djerassi: The Oppenauer oxidation. Org. Reactions 6, 207 (1951).
- W. W. Epstein, F. W. Sweat: Dimethylsulphoxide oxidations. Chem. Rev. 67, 247 (1967).
- H. J. Fatiadi: New applications of periodic acid and periodates in organic and bioorganic chemistry. Synthesis 1974, 229.
- A. J. Fatiadi: Active manganese dioxide oxidation in organic chemistry. Synthesis 1976, 65, 133.
- R. Filler: Oxidation with N-bromsuccinimide and related N-haloimides. Chem. Rev. 63, 21 (1963).
- M. V. George, K. S. Palachandran: Nickel peroxide oxidation of organic compounds. Chem. Rev. 75, 491 (1975).
- A. A. Gorman, M. A. J. Rodgers: Singlet molecular oxygen. Chem. Soc. Rev. 10, 205 (1981).
- C. H. Hassall: The Baeyer-Villiger oxidation of aldehydes and ketones. Org. Reactions 9, 73 (1957).
- T. L. Ho: Ceric ion oxidation in organic chemistry. Synthesis 1983, 347.
- E. L. Jackson: Periodic acid oxidation. Org. Reactions 2, 341 (1944).
- M. Janda, M. Němec: Elektrochemické oxidace v organické chemii. Chem. Listy 66, 225 (1972).
- S. P. Koršunov, L. I. Vereščagin: Okislenie organičeskich soedinenij aktivnoj dvuokisju marganca. Usp. Chim. 35, 2255 (1966).
- N. Rabjohn: Selenium dioxide oxidation. Org. Reactions 5, 331 (1949), 24, 261 (1976).
- D. J. Rawlinson, G. Sosnowski: One step substitutive acyloxylation at carbon. Synthesis 1972, 1; 1973, 567.

D. T. Sawyer, M. J. Gibian: The chemistry of superoxide ion.
Tetrahedron 35, 1471 (1979).

M. Schröder: Osmium tetroxide cis hydroxylation of unsaturated substrates. Chem. Rev. 80, 187 (1980).

R. A. Sheldon, J. K. Kochi: Oxidative dekarboxylation by lead tetraacetate. Org. Reactions 19, 279 (1972).

D. Swern: Epoxidation and hydroxylation of ethylenic compounds with organic peracides. Org. Reactions 7, 378 (1953).

M. Strašák: Oxidace alkenů thalitými solemi. Chem. Listy 72, 673 (1978).

C.L. Stevens, C. R. Bryant: Oxidation with ruthenium dioxide and hypochlorite. Methods Carbohydr. Chem. 6, 337 (1972).

D. Walker, J. Hiebert: 2,3-Dichloro-5,6-dicyanobenzoquinone and its reactions. Chem. Rev. 67, 153 (1967).

N. L. Weiberg, H. R. Weinberg: Electrochemical oxidation of organic compounds. Chem. Rev. 68, 449 (1968).

4.3 Literatura

1. Preparativní reakce v organické chemii. NČSAV Praha. Svazek II, Hudlický M.: Halogenace (1950).
 2. Houben I., Weyl T.: Methoden der organischen Chemie, 4.
 4. vyd. Thieme, Stuttgart.
- Band V/3, Forsche E.: Herstellung, Reaktivität und Umwandlung von Fluorverbindungen (1962).
- G.A. Bosswell, Jr., W.C. Ripka, R.M. Scribner, C.W. Tullock: Fluorination with Sulfur Tetrafluoride.
Org. Reactions 21, 1 (1974).
- B.R. Casteo: Replacement of Alcoholic Hydroxy Groups by Halogens and other Nucleophiles. Org. Reactions 29, 1 (1983).
- A.L. Henne: The Preparation of Aliphatic Fluorine Compounds.
Org. Reactions 2, 49 (1944).
- M. Hudlický: Fluorination with Diethylaminosulfur Trifluoride and Related Aminofluorosulfuranes. Org. Reactions 35, 513 (1988).
- E.B. Merkushev: Advances in the Synthesis of Iodoaromatic Compounds. Synthesis 1988, 923.
- A. Roe: Preparation of Aromatic Fluorine Compounds from Diazonium Fluoroborates. The Schiemann Reaction.
Org. Reactions 5, 193 (1949).
- W.A. Sheppard: Modern Methods to Prepare Monofluoroaliphatic Compounds. Org. Reactions 21, 125 (1974).
- Cia-Lin J. Wang: Fluorination by Sulfur Tetrafluoride.
Org. Reactions 34, 319 (1985).
- J.A. Wilkinson: Recent Advances in the Selective Formation of the C-F Bond. Chem. Rev. 92, 505 (1992).
- C.V. Wilson: The Reaction of Halogens with Silver Salts of Carboxylic Acids. Org. Reactions 9, 332 (1957).

5.3 Literatura

- H. Feuer (Ed.): The Chemistry of the Nitro and Nitroso Groups.
J. Wiley, New York 1969.
- S. S. Novikov: Chimija alifatičeskich i alicikličeskich
nitrosoedinenij, Chimija, Moskva 1974.
- E. E. Gilbert: Sulfonation and related Reactions, J. Wiley, New
York 1965.
- J. Kovář, J. Novák: Preparativní reakce v organické chemii III,
Nitrace, ntrosace a sulfonace, Academia, Praha 1956.
- Houben-Weyl: Methoden der Organischen Chemie, Bd. X/1. G. Thieme,
Stuttgart 1971.
- H. Feuer: Alkyl nitrate nitrations in The Chemistry of Functional
Groups, S. Patai, Ed., Part 2, Suppl. F, J. Wiley, New York 1982.
- H. Suzuki: Synthesis 1977, 217.
- G. A. Olah et al.: Recent aspects of nitration: New preparative
methods and mechanistic studies,
Proc. Natl. Acad. Sci. USA 79, 4494 (1982).

6.6. Literatura:

- G. A. Olah (Ed.): Friedel-Crafts and Related Reactions, J. Wiley, New York 1964.
- J K. Whitesell, M. A. Whitesell: Synthesis 1983, 517.
- I. Ernest, S. Heřmánek: Preparativní reakce v organické chemii IV, Academia, Praha 1959.
- W. P. Weber, G. W. Gokel: Alkylation reactions in Phase Transfer Catalysis in Organic Synthesis, Springer Verlag, Berlin 1977.
- C. A. Buehler, D. E. Pearson: Survey of Organic Syntheses, J. Wiley, New York 1970.
- G. A. Olah, L. Ohannesian, M. Arvanaghi: Formylating Agents, Chem. Rev. 87, 671 (1987).
- N. Katajima, Y. Ono: Chem. Phys. 17, 31 (1987).
- J. March: Advanced Organic Chemistry, J. Wiley Interscience, New York, 1985.
- F. A. Carey, R. J. Sundberg: Advanced Organic Chemistry, Plenum Press, New York 1990.

7.3 Literatura

- Bláha K.: Preparativní reakce v organické chemii VI. Reakce organokovových činidel. NČSAV, Praha 1961.
- Hartley F., Patai S. (Eds.): Chemistry of the Metal-Carbon bonds. Vols. I-V. J. Wiley, New York 1985.
- Ashby G.C.: Quart. Rev. 21, 259 (1967).
- Benseker R.A., Foster D.J., Sauve D.M., Nabis J.F.: Chem. Rev. 57, 867 (1957).
- Flemming I.: Chem. Soc. Rev. 10, 83 (1981).
- Ivanov D., Vasilev G., Panayotov I.: Synthesis 1975, 83.
- Mallan J.M., Bebb R.L.: Chem. Rev. 69, 693 (1969).
- Normant J.F.: Synthesis 1972, 63.
- Okavara R.: Usp. Chim. 41, 1220 (1972).
- Posner G.H.: Org. Reactions 19, 1 (1972).
- Posner G.H.: Org. Reactions 22, 253 (1975).
- Simmons H.E., Cairns T.L., Vladuchik S.A., Haines C.M.: Org. Reactions 20, 1 (1973).
- Toma S.: Chem. listy 73, 1049 (1979).
- Cannone P., Foscolos G.B., Lemay G.: Tetrahedron Lett. 1980, 155.
- Boersma J.: Comprehensive Organometallic Chemistry. Pergamon Press, Oxford 1982.
- Picotin G., Miginiac P.: J. Org. Chem. 52, 4796 (1987).
- Hannick S.M., Kishi Y.: J. Org. Chem. 48, 3833 (1983).
- Lombardo L.: Tetrahedron Lett. 23, 4293 (1982).
- Jones P.R., Desio P.J.: Chem. Rev. 78, 491 (1978).
- Lee A.G.: Quart. Rev. 24, 310 (1970).
- Kresge A.J., Dobeck M., Bown H.C.: J. Org. Chem. 32, 745 (1967).
- Kitching W.: Organomet. Chem. Rev. 3, 35 (1968).
- Taylor E.C., McKillop A.: Acc. Chem. Res. 3, 338 (1970).
- Lipshutz P.H.: Org. Reactions 41, 135 (1992).

8.6 Literatura

- J.Kovář, J. Novák : Preparativní reakce v organické chemii III.
Nakl.ČSAV, Praha, 1956, str. 306.
- Houben-Weyl, Methoden der organischen Chemie. Vierte Auflage,
Band X/3, Teil 3. G. Thieme, Stuttgart, 1965.
- H. Zollinger : Azo and diazochemistry, Interscience, N.York,
1961.
- W.E.Bachmann, R.A.Hoffman : The preparation of unsymmetrical
biaryls by the diazo reaction and the nitrosoamine reaction. Org.
reactions 2, 224 (1947).
- B.I.Belov, V.V.Kozlov: Uspechi chimii aromatičeskich diazosoe-
dinenij. Uspechi Chim. 32, 121 (1963).
- R.N. Butler : The diazotisation of heterocyclic primary amines.
Chem.Rev. 75, 241 (1975).
- W.A.Cowdrey, D.S.Davies : Sandmeyer and related reactions.
Quart.Rev. 6. 358 (1952).
- F. DeLos, DeTar : The Pschorr synthesis and related diazonium
ring closure reactions. Org. Reactions 9, 409 (1957).

- A.V.Dombrovskij : Reakcii aromatičeskich diazosoedinenij s nepredelnymi soedinenenijami. Usp. Chim. 26, 689 (1957).
- T.I.Godovikova, O.A.Rakitin, L.I.Chmelnickij : Diazotirovaniye v silněkislych sredach slaboosnovnykh aromatičeskikh i geterociklických aminov. Usp.Chim. 52, 777 (1983).
- P.H.Leake : The Pschorr synthesis. Chem. Rev. 56, 27 (1956).
- S.M.Parmerter : The coupling of diazonium salts with aliphatic carbon atoms. Org. Reactions 10, 1 (1959).
- R.R.Phillips : The Japp-Klingemann reaction.
Org. Reactions 10, 143 (1959).
- J.H.Ridd : Deamination, nitrosation and diazotisation.
Quart.Rev. 15, 418 (1961).
- A.Roe : Preparation of aromatic fluorine compounds from diazonium fluoroborates. The Schiemann reaction.
Org. Reactions 5, 193 (1949).
- C.S.Rondstvedt : Arylation of unsaturated compounds by diazonium salts. Org. reactions 11, 189 (1960), 24, 225 (1976).

9.8 Literatura

March J.: Advanced Organic Chemistry. Reactions, Mechanisms and Structure. McGraw-Hill Book Company, New York 1977.

Večeřa M., Panchartek J.: Laboratorní příručka organické chemie, SNTL/Alfa, Praha 1987.

Šrogl J., Liška F., Valenta M.: Organická syntéza. Učební text VŠCHT. SNTL Praha 1973.

Lešetický L. a kolektiv: Organická syntéza. Učební text UK. SPN Praha 1983.

Shono T.: Electroorganic Chemistry as a New Tool in Organic Synthesis. Springer Verlag Berlin 1984.

Phase Transfer Catalysis. Properties and Applications. Propagační materiál fy Merck-Schuchardt.

10.4 Literatura:

Cook A.G. (Ed.): Enamines: Synthesis, Structure and Reactions.

Marcel Dekker, New York 1988.

Carey F.A., Sundberg R.J.: Advanced Organic Chemistry, Part B.

Plenum Press, New York 1990.

Patai S. (Ed.): The Chemistry of Carbonyl Group, Vol. 1. J.Wiley, New York 1966, Vol. 2, J.Wiley, New York 1970.

Patai S. (Ed.): The Chemistry of Amides. J. Wiley, New York 1969.

Patai S. (Ed.): The Chemistry of Carboxylic Acids and Esters. J.Wiley, New York 1969.

Svoboda J., Paleček J.: Chem. listy 83, 803 (1989).

Gawley R.E.: The Beckmann Reactions. Org.Reactions, Vol. 35.

J.Wiley, New York 1988.

Sutherland I.O. (D.Barton, W.D. Olis, Eds.): Esters. Comprehensive Organic Chemistry, Vol. 2, str. 869. Pergamon Press, London 1979.

Challis B.C., Challis J.A. (D.Barton, W.D. Olis, Eds.) : Amides and Related Compounds. Comprehensive Organic Chemistry, str. 957. Pergamon Press, London 1979.

Tennant G. (D.Barton, W.D. Olis, Eds.) : Imines, Nitrones, Nitriles and Isocyanides, str. 385. Pergamon Press, London 1979.

Klamann D., Hageman H.: Houben-Weyl: Methoden der Organischen Chemie, Bd. E14b. G.Thieme Verlag, Stuttgart 1990.

Falbe J.: Houben-Weyl: Methoden der Organischen Chemie, Bd. E5. G.Thieme Verlag, Stuttgart 1985.

11.8 Literatura:

- J.F.W. McOmie (Ed.): Protective Groups in Organic Chemistry,
Plenum Press, London 1973.
- Greene T.W., Wuts P.G.M.: Protective Groups in Organic Synthesis,
J.Wiley, New York 1991.
- Haslam E.: Tetrahedron 36, 2409 (1980).
- Houben-Weyl: Methoden der Organischen Chemie, Bd. E5/1, str. 496.
G.Thieme, Stuttgart 1985.
- Houben-Weyl: Methoden der Organischen Chemie, Bd. 15/1, str. 736.
G.Thieme, Stuttgart 1975.
- Lalonde M., Chan T.H.: Synthesis 1985, 847.
- Paleček J., Žák B.: Sb.Vys.Šk.Chem.Technol. C30, 143 (1988).
- Paleček J., Svoboda J.: Chem.listy 83, 372 (1989).
- Svoboda J., Paleček J.: Chem.listy 83, 463 (1989).
- Svoboda J., Paleček J.: Chem.listy 83, 803 (1989).
- Seyferth D., Nestle M.O., Wehman A.T.: J.Am.Chem.Soc. 97, 7417
(1975).
- Palmer C.J., Casida J.E.: Tetrahedron Lett. 31, 2857 (1990).
- Anthony J., Diederich F.: Tetrahedron Lett. 32, 3787 (1991).
- Coles D.F., Walton D.R.M.: Synthesis 1975, 390.
- Bantherope D.V., Fitton H., Lewis J.:
J.Chem.Soc., Perkin Trans. 1, 1973, 2051.
- Nicholas K.M.: J.Am.Chem.Soc. 97, 3254 (1975).
- Husstedt U., Schaefer H.J.: Tetrahedron Lett. 22, 623 (1982).